# BRONX COMMUNITY COLLEGE CATALOG $20114-20015$ 



## BRONX COMMUNITY COLLEGE CATALOG | 2014-2015

## Table of Contents

8 INTRODUCING BRONX COMMUNITY COLLEGE

8 Mission and Goals of the College
8 History of Bronx Community College
9 Accreditation
9 Charter
9 Statement of Nondiscrimination and Sexual Harassment

10 Grievance Procedures
10 General Education
10 Writing Intensive Courses
11 Summer Session
12 Campus Services and Facilities
13 Library and Learning Resources Center

14 ADMISSION TO THE COLLEGE

31 Refund of Tuition and Other Fees

## 20 FINANCIAL AID

 AND SCHOLARSHIPS20 Office of Financial Aid
10 Who is Eligible for Financial Aid?
20 Continued Eligibility
21 Withdrawing from Classes
22 New York State Programs
25 Federal Financial Aid Programs
27 Scholarships and Awards

30 REGISTRATION AND STUDENT RECORDS
30 Office of the Registrar
30 Readmission
30 Registration
31 Matriculation
31 Withdrawal from College
32 Access to Student Records

33 ACADEMIC POLICIES AND PROCEDURES
33 Office of Academic Affairs
33 Academic Success Center
33 Academic Advising
33 Class Attendance
34 Grading Policy
35 Academic Standing
35 Probation/Suspension
36 Academic Appeals
36 Committee on Academic Standing (CAS)
36 Graduation
36 Honors
36 Dean's and President's Lists
37 Honor Societies
37 CUNY Policy on Academic Integrity
38 College Senate Policy on Academic Integrity
39 Religious Beliefs and Attendance

41 CAMPUS POLICIES AND PROCEDURES

41 Campus Behavior Code
41 Public Order (Education Law)
43 Student Disciplinary Procedures (Section 15.3)
45 Computer Resources Acceptable Use Policy
46 College E-mail Policy
47 Policy Against Sexual Harassment
48 The CUNY Workplace Violence Policy and Procedures

## 50 STUDENT SERVICES

50 Student Affairs and Enrollment Management
55 Office of General Counseling
55 College Discovery Program (CD)
53 Career and Transfer Services
54 Transfer Application Essentials
55 Psychological Services
54 Office of Disability Services
53 Health Services
52 Office of Student Life
52 Athletics
56 Special Programs

57 ACADEMIC DEPARTMENTS, DEGREE PROGRAMS AND COURSE DESCRIPTIONS
57 Degree Requirements
57 Important Notice of Possible Changes
57 Explanation of Credit
59 CUNY Pathways
61 Inventory of Degree Programs

## 63 Liberal Arts Degrees

63 Associate in Arts
65 Associate in Science
67 Art and Music
67 Digital Arts (A.A.S.)
69 Art and Music Course Description
69 Art
71 Music

## 73 Biological Sciences

73 Animal Care and Management (Certificate)

74 Biotechnology (A.S.)
75 Liberal Arts, Biology Option (A.S.)
76 Medical Laboratory Technician (A.A.S.)
77 Ornamental Horticulture (A.A.S.)
80 Biological Sciences Course Descriptions
80 Animal Care and Management
80 Biology
82 Botany
82 Floristry
83 Gardening
83 Horticulture

## 84 Business and Information Systems

85 Accounting (A.A.S.)
87 Business Administration with options in Accounting, Computer Programming Management and Marketing Management (A.S.)
90 Computer Information Systems (A.A.S.)

92 Marketing Management (A.A.S.)
94 Medical Office Assistant (A.A.S.)
95 Office Administration and Technology (A.A.S.)

97 Paralegal Studies (A.A.S.)
99 Paralegal (Certificate)
100 Business and Information Systems Course Descriptions
100 Accounting
100 Business
101 Computer Literacy
101 Data Processing
102 Finance
102 Keyboarding
102 Law
104 Marketing Management
105 Office Administration and Technology and Medical Assistant Programs
105 Taxation
105 Word Processing

106 Chemistry and Chemical Technology
107 Environmental Technology (A.A.S.)
108 Liberal Arts and Sciences with options in Chemistry and Earth Systems and Environmental Science (A.S. Degree)

110 Pharmaceutical Manufacturing Technology (A.A.S.)
111 Science for Forensics (A.S.)
113 Chemistry and Chemical Technology Course Descriptions

113 Chemistry
115 Earth Systems and Environmental Science
115 Environmental Technology
116 Pharmaceutical Manufacturing Technology
116 Science
117 Communication Arts and Sciences
117 Liberal Arts and Sciences with options in Media Studies, Performing Arts, and Speech Pathology (A.A. Degree)
122 Media Technology (A.A.S.)
123 Communication Arts and Sciences Course Descriptions
123 Communications
124 Media and Digital Film
125 Film Studies
125 Media Studies
125 Theatre
126 Education and Reading
126 Education Associate (A.A.S.)
128 Liberal Arts and Sciences with an option in Education (A.A.)
130 Assistant of Children with Special Needs Certificate Program
130 Bilingual Early Childhood Assistant Certificate Program
131 Early Childhood Assistant Certificate Program
131 Education and Reading Course Descriptions
131 Education
133 Learning to Learn

134 Reading
133 English
135 English Course Descriptions
135 English
137 ESL
138 First Year Courses
139 Health, Physical Education and Wellness
139 Community/School Health Education (A.S.)

141 Dietetics and Nutrition Science (A.S.)
142 Therapeutic Recreation (A.S.)
144 Health, Physical Education and Wellness Course Descriptions
144 Cardiopulmonary Resuscitation
144 Health
145 Health Care Management
145 Physical Education
147 Therapeutic Recreation
147 Workplace First Aid Training
148 History
148 Liberal Arts and Sciences with an option in History (A.A.)
150 History Course Descriptions
150 Geography
150 History
151 Philosophy
152 Mathematics and Computer Science
152 Computer Science (A.S.)
153 Mathematics (A.S.)
155 Mathematics Course Placement
158 Mathematics Course Descriptions

|  | 158 Computer Science |  | 180 Pharmacology |  | 216 Sociology |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 158 Mathematics |  | 181 Radiologic Technology |  |  |
| 161 | Modern Languages | 183 | Physics and Technology | 217 | STRATEGIC INITIATIVES |
| 161 | Liberal Arts and Sciences with an option in Spanish (A.A.) | 184 | Automotive Technology (Certificate) | 217 | Office of Strategic Initiatives |
|  |  | 184 | Automotive Technology (A.A.S.) | 217 | Office of Workforce Development |
|  | 163 Modern Languages Course Descriptions | 185 | Electronic Engineering (A.A.S.) | 217 | Office of Grants and Contracts |
|  | 163 Arabic | 187 | Energy Services and Technology (A.A.S.) | 218 | Office of Development |
|  | 163 French | 188 | Engineering Science (A.S.) | 218 | and Alumni Relations |
|  | 164 Italian | 189 | Liberal Arts and Sciences with an |  | and Marketing |
|  | 164 Language |  | option in Physics (A.S.) |  |  |
|  | 164 Portuguese | 191 | Nuclear Medicine Technology (A.A.S.) | 219 | GOVERNANCE OF THE COLLEGE |
|  | 164 Spanish | 193 | Telecommunications Technology <br> (A.A.S.) | 219 | Board of Trustees of the City University of New York |
| $168$ | Nursing and Allied Health Sciences | 194 Physics and Technology Course Descriptions |  | 219 | University Staff |
|  | Licensed Practical Nursing (Certificate) |  |  | 220 | University Directors and Deans |
| 169 | (Registered) Nursing (A.A.S.) |  | 194 Automotive Technology | 221 | Bronx Community College Officers of Administration |
| 174 | Radiologic Technology (A.A.S.) <br> 177 Nursing and Allied Health Sciences Course Descriptio <br> 177 Clinical Education <br> 179 Nursing <br> 179 Nutrition |  | 196 Electronic Engineering |  |  |
|  |  |  | Technology |  |  |
|  |  |  | 197 Energy Services and Technology | 222 | DIRECTIONS TO THE COLLEGE |
|  |  |  | 197 Engineering | 222 | Public Transportation |
|  |  |  | 198 Nuclear Medicine Technology |  |  |
|  |  |  | 199 Physics | 223 | DIRECTORY OF BUILDINGS, OFFICES AND FACILITIES |
|  |  |  | 200Telecommunications | 223 | President's Office |
|  |  | 202 | Social Sciences | 223 | Vice Presidents' Offices |
|  |  | 202 | Criminal Justice (A.A.) | 223 | Department Offices |
|  |  | 204 | Human Services (A.A.S.) | 224 | CAMPUS MAP |
|  |  | 205 | Liberal Arts and Sciences <br> with option in Human Services, International Studies <br> Option, Political Science, Psychology, and Sociology (A.A.) | 225 | APPENDICES |
|  |  |  | 212 Social Sciences Course Descriptions |  |  |
|  |  |  | 212 Anthropology |  |  |
|  |  |  | 212 Criminal Justice |  |  |
|  |  |  | 213 Economics |  |  |
|  |  |  | 213 Human Services |  |  |
|  |  |  | 214 Political Science |  |  |
|  |  |  | 215 Psychology |  |  |



BCC MISSION, VISION, AND GOALS

(Approved by the College Senate - December 8, 2006)

## Mission Statement

Bronx Community College serves students of diverse backgrounds, preparations, and aspirations by providing them with an education that is both broad in scope and rigorous in standards. Our mission is to give our students the foundation and tools for success, whether they choose to continue their education and/or enter a profession immediately upon graduation and to instill in them the value of informed and engaged citizenship and service to their communities.

## Vision Statement

Bronx Community College will lead the way in providing students with an education that enables them to move with equal facility into productive and rewarding careers or increasingly advanced higher education programs. BCC will graduate students who are prepared to live within, profit from and contribute to a 21st century global environment marked by diversity, change and expanded opportunities for learning and growth.

## Ongoing Goals

1. Ensure academic excellence
2. Enrich the academic experience and promote student success
3. Sustain fiscal stability and enhance management effectiveness
4. Provide leadership (and engage in partnerships) on local, national and global issues

## HISTORY OF BRONX COMMUNITY COLLEGE

Classes began with 120 students at Hunter College in February 1959 and moved to the former site of the Bronx High School of Science at Creston Avenue and West 184th Street the following year. With Dr. Morris Meister as its first president, the College soon developed into a much-acclaimed comprehensive community college offering a broad range of academic programs.

In April 1961, The City University of New York was created by the State Legislature, with Bronx Community College as one of its seven constituent undergraduate colleges. Dr. James A. Colston became the second president of Bronx Community College on August 1, 1966, following Dr. Meister's retirement. For the next decade, the College grew dramatically, spurred in 1970 by the introduction of open admissions. By 1972,
the College was occupying seven additional locations within walking distance of the main building.

In July 1973, the Dormitory Authority of the State of New York acquired the New York University Heights Campus for the use of Bronx Community College. Beginning with the fall 1973 semester, operations were moved to the present 44.6-acre site high above the Harlem River. Today there are modern classrooms, lecture halls and laboratories; a student center, cafeteria and lounges; shaded walks and a grassy mall; athletic fields, tennis courts, and a swimming pool. The campus features the architectural masterpieces of Stanford White and Marcel Breuer and includes the landmarked Hall of Fame for Great Americans.

Upon Dr. Colston's retirement in 1976, Dr. Morton Rosenstock was named acting president. On September 1, 1977, Dr. Roscoe C. Brown, Jr. became the third president of Bronx Community College. During his 17-year tenure, the College intensified its outreach to New York City's economic and educational institutions through partnerships with business and industry to better ensure the success of graduates. New programs were developed for high growth professions in the fields of health, technology and human services.

Dr. Leo A. Corbie was named acting president after Dr. Brown's retirement in June 1993. On August 26, 1996, Dr. Carolyn G. Williams became the College's fourth president. During her 15-year tenure, more than 10,000 students were enrolled in 30 associate degree and certificate programs. Additionally, more than 14,000 individuals took advantage of BCC's Continuing and Professional Studies and Community and Workforce Development programs. During this time, the College also became home to the Center for Sustainable Energy, which promotes the use of renewable and efficient energy technologies in urban communities through research, education, training, workforce development and small business incubation.

On July 5, 2011, following Dr. Williams' retirement, Dr. Carole M. Berotte Joseph became the College's fifth president. Continuing a career that included some 25 years as a faculty member and administrator in the CUNY system, her years in office thus far have seen the opening of North Hall and Library and the designation of the campus and its classic buildings as a National Historical Landmark - making BCC the only community college in the country to achieve that distinction. Dr. Berotte Joseph inaugurated the First Year Seminar, an orientation course that produced dramatic and measurable improvement in student performance in its very first year. She is also the guiding force behind the President's Lecture Series, which first brought the campus and the community together
for a powerful exchange of views on gun violence and more recently featured a debate among the candidates for New York City mayor.

Doctor Berotte Joseph has overseen the revitalization of BCC's Center for Sustainable Energy, a globally influential non-profit organization devoted to researching and promoting renewable energy, particularly in urban areas. She has also embarked on efforts to advance several major workforce development initiatives - including BCC's role in "START-UP NY," which offers tax-free status for enterprises that align with the College's academic mission.

## ACCREDITATION

Bronx Community College is accredited by the Middle States Association of Colleges and Secondary Schools-Commission on Higher Education (3624 Market Street, Philadelphia, PA 19104-2680; 267.284.5000).
Website: http://www.msche.org/
The Automotive Technology Program is accredited by the National Automotive Technicians Education Foundation (NATEF, 101 Blue Seal Drive, Suite 101, Leesburg,
Virginia 20175; 703.669.6650)
Website: http://www.natef.org/Home.aspx
The programs in Business and Information Systems are accredited nationally by the Association of Collegiate Business Schools and Programs (ACBSP, 11520 West 119th Street, Overland Park, KS 66213; 913-339-9356).
Website: http://www.acbsp.org/page/main
The Electronic Engineering Technology Program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET, 111 Market PI., Suite 1050, Baltimore, MD 21202-4012; 410.347.7700). Website: http://www.abet.org/

The Nuclear Medicine Technology Program is accredited by the Joint Review Committee on Education in Nuclear Medicine Technology (JRCNMT, 2000 W. Danforth Rd., Suite 130, No. 203, Edmond, OK 73003; 405-285-0546). Website: http://jrcnmt.org/

The Paralegal Studies Program is approved by the American Bar Association (ABA, 321 North Clark St., Chicago, IL 606547598; 312-988-5000).
Website: http://www.americanbar.org/aba.html
The Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT, 20 N. Wacker Drive, Suite 2850, Chicago, IL 606063182; 312-704-5300).
Website: http://www.jrcert.org/
The RN Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN, 3343 Peachtree Road, NE, Suite 850, Atlanta, GA 30326; 404-975-5000). Website: http://acenursing.org/

## CHARTER

The New York State Board of Regents, through the Division of Higher Education of the New York State Department of Education, has chartered and approved all curricula and programs of Bronx Community College.

## Statement of Nondiscrimination and Sexual Harassment

It is the policy of The City University of New York and the constituent colleges and units of The University to recruit, employ, retain, promote, and provide benefits to employees and to admit and provide services for students without regard to race, color, creed, national origin, ethnicity, ancestry, religion, age, sex, sexual orientation, gender identity, marital status, legally registered domestic partnership status, disability, predisposing genetic characteristics, alienage, citizenship, military or veteran status, or status as a victim of domestic violence.

Sexual harassment, a form of sex discrimination, is prohibited under the University's Policy Against Sexual Harassment.

The City University of New York, as a public university system, adheres to federal, state, and city laws and regulations regarding non-discrimination and affirmative action including among others Section 1324b of the Immigration and Nationality Act (INA), Executive Order 11246, as amended, Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Section 402 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, the Equal Pay Act of 1963, the Age Discrimination in Employment Act of 1967, as amended, and the Age Discrimination Act of 1975, the New York State Human Rights Law and the New York City Human Rights Law. The "protected classes," as delineated in Executive Order 11246: (i.e., Black, Hispanic, Asian/Pacific Islander, American Indian/Alaskan Native and Women), were expanded on December 9, 1976 by the chancellor of The City University of New York to include ItalianAmericans. The Office of Management and Budget further expanded these protected classes in 2006 to include two or more races (not Hispanic or Latino) and replaces Asian/Pacific Islander with Asian (not Hispanic or Latino) and Native Hawaiian (not Hispanic or Latino). Black was renamed Black or African American (not Hispanic or Latino).

Should any federal, state or city law or regulation be adopted that prohibits discrimination based on grounds or characteristics not included in this policy, this policy shall be read to prohibit discrimination based on those grounds or characteristics as well.

## GRIEVANCE PROCEDURES

Any student or employee of Bronx Community College who wishes to file a claim of discrimination or a violation of any affirmative action regulation may contact the affirmative
action officer for written procedures and information. Office: Language Hall [LH], Room 27; 718.289.5151.

A student whose complaint is related to a handicap or disability condition may contact the director of Disability Services for written procedures and complaint forms. Office: Loew Hall [LO], Room 213; 718.289.5880.

## GENERAL EDUCATION

Students who graduate from Bronx Community College fulfill New York State Education Department (SED) requirements for courses in the liberal arts and sciences in four subject areas: humanities, social sciences, mathematics and natural sciences. Each BCC program meets the percentage of liberal arts and science credits that SED requires for associate degrees:

## Associate in Arts (AA): 45 credits (3/4 of coursework)

Associate in Sciences (AS): 30 credits (1/2 of coursework)
Associate in Applied Sciences (AAS):
20 credits ( $1 / 3$ of coursework)
The courses that fulfill these requirements are indicated according to degree program for each major within the categories of Core Requirements and Required Areas of Study. Some programs also include some of these courses within Specialization Requirements.

Students in all majors take ENG 10/11 (Fundamentals of Composition and Rhetoric / Composition and Rhetoric I). Almost all majors also take CMS 11 (Fundamentals of Interpersonal Communication) and HIS 10/11 (History of the Modern World / Introduction to the Modern World). Other liberal arts and science courses, specified according to major, are in the humanities (e.g., art, geography, literature, history, modern languages, music, and philosophy); the social sciences (e.g., anthropology, economics, political science, psychology, and sociology); the natural sciences (e.g., astronomy, biology, chemistry, earth science, and physics); and mathematics (e.g., survey of mathematics, calculus, and statistics).

General education at BCC is reflected in the statement that was approved by the College Senate to emphasize general education goals for all students in all curricula:

## General Educational Objectives

Graduates from BCC will have acquired and demonstrated the knowledge and proficiencies they need to successfully transfer to a four-year baccalaureate program and/or work in their chosen fields. They will be well-informed, globally aware, and engaged world citizens making a meaningful contribution to society. They will be self-directed and committed to their physical and mental well-being, and to lifelong learning.

## General Education Proficiencies

A. Communication - Use reading, writing, listening and speaking to find, interpret, and communicate information in various modes, including aesthetic, statistical, symbolic and graphic.
B. Reasoning and Analysis - Use abstract reasoning, including the ability to analyze, interpret, evaluate and integrate information; apply the results; and formulate and solve problems.
C. Mathematical Methods - Use mathematics/statistics to solve problems.
D. Scientific Methods - Use the scientific method to understand the natural and physical worlds.
E. Information Literacy - Use information technology to support professional and academic careers.
F. Personal Growth and Professional Development - Use continued self-development to examine personal values and civic responsibilities. Navigate college and career requirements with academic, personal, and professional integrity and accountability.

BCC faculty and staff are dedicated to helping students become proficient in these areas throughout all of their educational experiences at the College - from liberal arts and science courses to learning experiences outside the classroom. Consistent use of integrative learning experiences provides students with multiple opportunities to learn from a wide scope of perspectives.

## WRITING INTENSIVE COURSES

To help students develop writing proficiency, all associate degree students are required to take two Writing Intensive (WI) courses, including courses in the major or area of specialization that use writing to advance learning. WI courses are taught by faculty who have special training in Writing Across the Curriculum teaching techniques and view writing as both an important tool for learning and a product for communication. A key goal is to introduce students to the different forms of writing and habits of thinking that are prominent in academic subjects and professional career areas. WI courses provide students with opportunities for drafting and revision, with individual feedback on work in progress. Students in WI courses also have opportunities to work closely with Writing Fellows, who serve as writing consultants and work with WI courses across the disciplines.

A course section designated as WI has both informal (for example, reading logs) and graded formal writing assignments, with writing intensive objectives incorporated into the course syllabus or outline. Students write papers of 12 pages (approximately 3,000 words) or more. Formal writing assignments may include some short papers and/or a longer assignment, which is staged into smaller parts. WI course grades are based in significant part on written assignments, such as response papers, lab reports, book reviews, or research papers. At least one quarter of the course assignments that count towards the final grade involve writing.

A course section designated as Writing Intensive is a section of a course, given in a department other than English (with the exception of 3-credit, 3-hour literature courses).

English courses focused on writing are not considered as
fulfilling the WI requirement, but English literature courses do fulfill the WI requirement. Therefore, any ENG course may fulfill the WI requirement except for the following courses: ENG O1, ENG 02, ENG 09, ENG 10, ENG 11, ENG 12, ENG 14, ENG 15, ENG 16 and ENG 223. All other ENG courses will fulfill the writing intensive requirement. Each semester, a list of courses that fulfill the WI requirement is published in the Schedule of Classes. This list may include English literature courses as well as courses in other departments, including courses in the major.

The prerequisites and/or co-requisites for WI sections are identical to the prerequisites and/or co-requisites for non-WI sections of such courses, as listed in the BCC Catalog. Students may take any designated WI course as their first selection. However, it is recommended that WI courses have at least a prerequisite or co-requisite of English 02 and/or RDL 02. Further, it is recommended that students take their second WI course after completing or while taking English 11.

## SUMMER SESSION

Announcements and a bulletin of courses offered in day and evening classes in the Summer Session are issued in the spring by the College.

## CAMPUS SERVICES AND FACILITIES

Bronx Community College is situated on a beautiful 44.6-acre campus high above the Harlem River. The buildings originally housed the New York University School of Engineering and include several landmark structures, including the first "Hall of Fame" in this country.

## Auditoriums

The BCC campus has three major auditoriums. The largest is in the Gould Memorial Library [GM]. Its capacity of 650 allows its use for a variety of events, including College convocations, cultural programs, and community activities.

The Hall of Fame Playhouse in the Roscoe Brown Student Center [BC], with a capacity of 350, is used as a theater for dramatic productions, musicals, and concerts. Schwendler Auditorium in Meister Hall, which seats 186, is also used for concerts and community activities.

## Bookstore

The bookstore in the Roscoe Brown Student Center [BC], stocks all required and supplementary textbooks and supplies, in addition to greeting cards, stationery and College branded sportswear.

## Cafeteria

A cafeteria, located in the Roscoe Brown Student Center [BC], is operated for the convenience of students and faculty. In addition to the meals and refreshments available, the cafeteria offers catering services for meetings and receptions throughout the campus. The faculty/staff lounge located in Language Hall [LH], has snack and beverage vending machines.

## Early Childhood Center

The mission of the ECC is to provide and promote the delivery of developmentally appropriate, quality early care and education for the children of Bronx Community College students in a safe and nurturing environment. The Center provides a multicultural, educational, social, recreational and nutritional program to children between two years and nine months to 12 years of age. One of the first childcare centers within The City University of New York, it has been committed to offering excellent childcare since its founding in 1972. The Center offers affordable service to children of BCC students. With such services, students can continue their studies with peace of mind, knowing their young ones are in a safe and secure environment.

The Early Childhood Program is licensed to service 66 preschool children between the ages of two and five years. It offers a free Universal Pre-K Program (UPK), funded by the NYC Department of Education, for 2-1/2 hours a day that can be extended to a full day based on a sliding fee scale.

The School-Age program is licensed to serve children 5 to 12 years old. The program operates afternoons and evenings while the semester is in session.

Enrollment is on a first-come, first-served basis.
718.289.5461|718.289.6432

## Office of Communications and Marketing

The College's Office of Communications and Marketing is located in Language Hall [LH], room 16. Information about College activities and cultural events is available there. This office compiles the College catalog; prepares brochures for academic departments and special programs; and develops press releases, posters, flyers, Update newsletter, the faculty/staff newsletter (Voice), the alumni newsletter (Gateway), the CONNECT@BCC e-newsletter and the College's annual report.
The office also monitors the official College website.
Phone: 718.289.5145.

## Disability Services

Loew Hall [LO], Room 211 | 718.289.5874
The Office of Disability Services provides access and equal educational opportunity for students with disabilities, enabling them to succeed academically, socially and professionally.

The Office of Disability Services also acts as a liaison between the student, faculty and staff. Once students have selfidentified, applied for services, and provided documentation
of their disability, staff works to determine eligibility for reasonable accommodations. Under the Americans with Disabilities Act (ADA), both the student and the College must carry out these responsibilities in a timely manner.

The Office of Disability Services is an official New York State Voter Registration site. Individuals who visit our office are given the opportunity to register as NYS voters. Assistance is available to complete the registration.

## Evening and Weekend Office

Evening, Saturday and Sunday classes are scheduled each semester to accommodate students' work and home commitments. Many BCC courses are available during evening and weekend hours. The Evening Office, located in Colston Hall [CO], room 506A, provides referral services, support and information to evening/weekend faculty, students and the general public. During the semester, the office is open as follows when classes are in session:
Monday: Thursday: 2 p.m.-9 p.m.
Friday: 11 a.m. -6 p.m.
Saturday: 8 a.m.-3 p.m.
Sunday: 8 a.m. 1 p.m.

## Gymnasium, Cardio Fitness Center, and Swimming Pool

The gymnasium, cardio fitness center, swimming pool and weight training areas-located in Alumni Gym-are used by the College's Department of Health, Physical Education and Wellness classes. The facilities are also available for student and faculty recreational use during specified hours.

## Health Services

The services offered include physical assessments with counseling and referrals. Treatment for minor injuries and over-the-counter medication for minor health problems are provided. Free immunization for measles, mumps, rubella, hepatitis B and flu (in season) is offered. Confidential oral HIV testing sponsored by the Hispanic AIDS Forum, with pre and post counseling.
Comprehensive educational literature on health and social issues is available. Visit or check our website for this information.

## Information Technology Department

The Information Technology group consists of four main areas: Academic Computing, Administrative Computing, Technology Service Center/Training Services and Telecommunications, Networking and Computer Support.

The Academic Computing Center consists of 18 diverse facilities. The main multi-purpose center is in Sage Hall with 17 satellites ( 15 computer labs and 2 lounges) located in Brown Annex [BA], Colston Hall [CO], Loew Hall [LO], Carl Polowczyk Hall [CP], Meister Hall [ME], New Hall [NH] and Roscoe Brown Student Center [BC]. More than 475 PC Windows/Macintosh users may use various site-licensed applications as well as commercial educational programs. Networked desktop computers, such as Apple iMacs and Dell Pentium systems,
are available for students, faculty and staff use under the guidance of trained support staff. Wireless connectivity is available in several facilities. For more information, please visit our website at www.bcc.cuny.edu/AcademicComputing.

The Administrative Computing Center provides technologybased services for students, faculty, staff and administrators. One of these services is OSSES (One Stop Shop eServices), a web-based interface providing the College community with access to information and communication technologies. Administrative departments have access to the Fully Integrated Resources and Services Tool (CUNYfirst), which provides quick and efficient access to student information. Students can access their records via CUNYfirst, a webbased interface. The Administrative Computing Center works closely with the College community to develop and implement new and useful technology tools to maximize the College's efficiency and success in accordance with the College's mission and goals.

The Technology Service Center (formely Helpdesk) is a centralized facility designed to serve the College community in all of its requests and inquiries demanding immediate assistance or scheduled technical services. The Technology Service Center will analyze, prepare and dispatch work orders to the appropriate unit of the Information Technology Department. More specifically, the Technology Service Center is responsible for:

- providing assistance to faculty, staff and students on all available information technologies at the College;
- supporting electronic mail, CUNY Portal inquiries and requests for email and portal accounts;
- assisting in resolving computer hardware/software problems and College licensed applications;
- disseminating information on hardware/software standards and site licensing at the College;
- management of laptop loaners for administrative staff;
- provision and maintenance of a Self-Service (RightAnswers ${ }^{\text {™ }}$ ) knowledge-base (accessible through the College's website);
- providing training and assistance to faculty using Smart Boards and Video Conferencing facilities on campus; and
- primary contact on CUNYfirst ${ }^{\text {TM }}$ Customer Relationship Management (CRM).

The Technology Service Center (formerly Help Desk) staff may be reached at extension 5970, or by email: helpdesk@ bcc.cuny.edu. For more specific details, please consult the College's website at www.bcc.cuny.edu.

Telecommunications, Networking and Computer Support manages and maintains the centralized telecommunications, data infrastructure network, internet access, wireless, remote access, information security and email services available on campus. Maintenance and repair services, new telephone line installations, and other telephone system configurations are just a few of the types of support work performed by the
telecommunications staff. The network team provides data services to students, faculty and staff offices, classrooms and computer facilities. Our trained personnel provide physical computer and network installation services for administrative and instructional servers, as well as computer setups for individual departments, faculty and staff. We strive to support a secure computing environment, as this is an important component to building robust and confident networks of information. For further information please visit our website at www.bcc.cuny.edu/InformationTechnology.

## Center for Teaching, Learning, and Technology (CTLT)

The Center for Teaching, Learning, and Technology was formed through a merger of two formerly independent units: the Office of Instructional Technology (OIT) and the Center for Teaching Excellence. As the comprehensive center for faculty development activity at BCC, the CTLT is committed to building an environment in which Bronx Community College instructional staff explore innovative approaches to teaching and learning, establish a common understanding of tested best practices, and collaborate with colleagues to share their efforts. The CTLT is committed to supporting BCC's key academic goals: strengthening students' engagement with learning and increasing the numbers of students who persist and graduate. In pursuit of these goals, the CTLT fosters collaborative relationships across disciplines, across the BCC campus, and across the University. CTLT programs may focus on digital technologies, on assessment, on disciplinary knowledge, or on theories of learning. All such programs, and all CTLT activities, are centered on academic goals and the pursuit of effective pedagogy. Wherever possible, CTLT development programs are designed and led by faculty.

## Public Safety

The Department of Public Safety operates on a Campus Community Policing Model consisting of sworn peace officers who patrol all of the campus and exterior on a 24 -hour-a-day, 7-day-a-week schedule, as well as Campus Security Assistants (Non-Sworn Security Guards) who conduct access control and on campus patrols. The department maintains a 24 -hour day emergency operator in the Public Safety Communications and Surveillance Center, who dispatches Peace Officers and Campus Security Assistants to all reported incidents. Everyone is encouraged to report all crimes / fire conditions / medical conditions and any suspicious conditions to the Public Safety Department. All crimes are reported to the New York Police Department and records are maintained on campus as well. The Public Safety Communications and Surveillance Center can be reached at 718.289.5911 for Emergencies and 718.289.5390 for information / non emergencies. As Per the Cleary Act, a yearly crime report is issued, which can be obtained from the College's website at www.bcc.cuny.edu/ publicsafety.

Copies may also be obtained at the Department of Public Safety and the Offices of Admissions, Human Resources and Continuing and Professional Studies.

The director of Public Safety can be reached at 718.289.5922. Individuals requesting campus crime
statistics will be mailed a copy within 10 days of the request, and that information will include all of the statistics that the campus is required to ascertain under Title 20 of the United States Code, Section 1092(f).

## LIBRARY

Office: North Hall and Library [NL], Levels II and III
Chairperson and Acting Chief Librarian: Prof. Michael J. Miller Professors: D. Koenigstein, Teresa L. McManus, J. Skurdenis
Associate Professors: M. Padnos
Assistant Professors: C. Andrews, A. de Laszlo,
G. Herbert, L. Lawton, J. Sanabria, Z. Shen, J. Watson

Lecturer: K. Parsons
Instructor: J. Pollack
Higher Education Assistant: D. Billups
Sr. College Laboratory Technicians: E. Nieves, M. Sanchez
College Laboratory Technicians: B. Atkinson, J. Canales
The BCC Library provides essential support for academic success. Come browse the collection at the new Library in North Hall, and visit the library website at http://www.bcc. cuny.edu/library.Collections include resources for every discipline taught at the College, in diverse formats including books, CDs, DVDs, videocassettes, periodicals, reference sources and full text digital delivered via licensed electronic databases. Copiers, computers, and printers are available for student use.

The BCC Library offers students, faculty and staff privileges, including access to all CUNY Libraries' collections and remote access to full text electronic resources. BCC Library also provides access to collections of other research libraries through resource sharing initiatives. Librarians have faculty rank, and are dedicated to providing learning, support for academic success. Students should seek out reference librarians, ask questions, and learn about resources available to support their academic achievement.

Faculty may schedule library instruction classes for hands-on, customized instruction focusing on specific assignments. BCC faculty and librarians collaborate to empower students to master information literacy competencies to achieve life-Iong learning and career goals. To schedule a class, contact the Head of Learning Services at 718.289.5348, or the Learning Services staff at 718.289.5347. Faculty may place materials on reserve for student use. Call 718.289.5947 for assistance with reserve services. Research needs of faculty members are supported via Inter-Library Loan, Document Delivery and cooperative agreements with other research libraries.

This is your library. Use it and learn about the resources and services available to you. Open seven days a week during the fall and spring academic semesters, with many resources available 24/7, the BCC Library delivers essential access to technology, information sources, and research tools.
We welcome your input; please direct any questions to Professor Michael J. Miller, Acting Chief Librarian, at 718.289.5439.

# Admission to the College 

## OFFICE OF ADMISSIONS AND RECRUITMENT

Director: Patricia Ramos

Assistant Director of Admissions: Thomas Bracken

Assistant Director of Recruitment: John Rosa
Loew Hall [LO], Room 224 | Phone: 718.289.5895

## GENERAL ADMISSIONS INFORMATION

Bronx Community College accepts both entering freshman and transfer students. Students may attend Bronx Community College either full-time or part-time and may attend classes whenever they are in session.

All admissions inquiries and information requests should be sent to:

## Office of Admissions and Recruitment

City University of New York
Bronx Community College
2155 University Avenue, Bronx, N.Y. 10453
www.admissions.bcc.cuny.edu
The admissions office assists applicants in completing their application and obtaining academic advisement prior to registration. Prospective students are sent information about admission to the college upon request. Transfer students may contact the admissions office to receive a preliminary transfer credit evaluation for possible advance standing.

## Requirements for Admission:

All applicants must fulfill the following admissions requirements to be accepted into the College:

- Official high school transcript, a copy of a diploma from an accredited high school, or General Equivalency Diploma (GED) scores. A New York State Equivalency Diploma may be substituted for a high school diploma. A United States Armed Forces Institute (USAFI) Diploma must be converted to a New York State Equivalency Diploma.
- Students applying with a New York State Equivalency Diploma (GED) must submit:

1. Copies of the Equivalency Diploma (total score of 2250 or higher) and General Educational Development Test Scores (with a minimum standard score of 410 on each content area test)
AND
2. Official copies of any high school or official transcripts from any college or university they may have attended.

## Note:

1) As of January 2, 2014, New York State has implemented the Test Assessing Secondary Completion exam (TASC) to replace the General Education Development exam(GED). For more information regarding the TASC Exam, please visit http://www.acces.nysed.gov/ged/.
2) Applicants must obtain and provide official transcripts. The Office of Admissions is unable to obtain transcripts on behalf of the applicant.
3) Bronx Community College does not accept high school certificates or Individualized Education Plan (IEP) Diplomas.

## Residence

The residency of students under 24 years of age is governed by the residence of their parents or legal guardian.

## New York City Residency Requirements:

A student may be eligible for residency tuition rate if the student has continuously maintained his/her principal place of residence in the City of New York for:

- At least six consecutive months immediately preceding the first day of classes and
- At least 12 consecutive months in the State of New York immediately preceding the first day of classes.


## New York State Residency Requirements:

To be eligible for the out-of-city New York State residency tuition rate, the student must have continuously maintained his/her principal place of residence in the State of New York for at least 12 consecutive months immediately preceding the first day of classes. All New York State residents who reside outside of New York City and plan to register at Bronx Community College must complete Residence Forms B80 and B81 before registration. The forms are available in the Bronx Community College Bursar's Office. Tuition for out-of-city New York State residents who have a valid Certificate of Residence on file, issued by their county of residence, will be charged the same tuition as New York City residents (See Tuition and Fees Schedule in the "Admission to the College" section of this catalog).

## Determination of Residency Rate Tuition for Non-Residents of New York State, including Undocumented and Out-ofStatus Immigrants:

Chapter 327 of the New York State Laws mandates that payment of tuition by any student, who is not a resident of New York State, other than those in lawful non-immigration status, shall be at a rate no greater than that imposed for students who are residents of the state, provided that they meet one of the following conditions: (1) they have attended
an approved New York high school for two or more years, graduated, and applied to attend CUNY within five years of receiving the New York State diploma; (2) they have attended an approved New York State Program for General Equivalency Diploma (GED exam preparation, received the GED issued within New York State), and applied to attend CUNY within five years of receiving the New York State GED; (3) they were enrolled in CUNY in the Fall 2001 semester or quarter and were authorized by CUNY to pay tuition at the resident rate. Thus, a student who attended CUNY in the Fall 2001 semester and paid the resident rate does not have to satisfy either condition 1 or 2 above. (It should be noted that any student meeting one of the three conditions set forth in the law does not need to prove residency in New York State.) Students without lawful immigration status must file a notarized affidavit with CUNY stating that they have filed an application to legalize their immigration status or will file an application as soon as they are eligible to do so.

## College Preparatory Initiative (CPI)

The City University of New York has instituted a program for entering students called the College Preparatory Initiative.
Students entering a community college as of 2000 must have at least 16 units of high school academic courses (CPI), which include:

- A minimum of two units of laboratory science;
- Three units of mathematics;
- Four units of English;
- Four units of social sciences;
- One unit of fine arts; and
- Two units of foreign language.

High school students should consult with guidance counselors to ascertain what courses are considered to be academic courses within the English, science, mathematics, social science, foreign language, and fine and performing arts curricula. Students who have not completed the expected units of academic study prior to enrolling in the University will be required to demonstrate skills and knowledge in the discipline areas. In most cases, this will be accomplished by taking a designated college course.

## APPLICATION PROCEDURE

## How to Apply:

Applicants may complete the online application at www.cuny.edu/undergraduate. The following applicants should complete the regular freshman application form:

- A student must have completed at least six semesters (11th year) of high school to apply. High school graduation is required for enrollment.
- Students who have earned an Equivalency Diploma and passed the General Education Development (GED) Examination.
- Students who graduated from high school and have never attended an institution of higher learning.
- Students with international education backgrounds who have had one year of secondary schooling or less outside the United States.


## The Freshman Application

The City University of New York provides an application for undergraduate freshman admission that permits students to apply to as many as six City University schools on a single form. Even if the six programs are in six different CUNY colleges, only one application and one fee is necessary. The application includes a section for students who wish to be considered for SEEK or College Discovery.

## The Transfer Application

An applicant who has previously attended another college, university or postsecondary institution must report that fact in a transfer application. The applicant must also have the former institution(s) submit official transcript(s), including an official statement of the conditions of withdrawal, directly to UAPC, Box 359023, Bay Station, Brooklyn, NY 11235-9023. Even if attendance at such a college was for a short period of time and no grades are recorded, an official college transcript is required.

## The International Student Application

International students who are neither U.S. citizens nor permanent residents must file the appropriate freshman or transfer student application and meet the corresponding admission requirements. Students who were educated in a language other than English are required to take the Test of English as a Foreign Language exam (TOEFL) and obtain a minimum TOEFL score of 500 on the paper-based exam, or 61 on the Internet-based exam. A score of 5 or higher on the International English Language Testing System exam (IELTS) is also acceptable. Once a student has been admitted to Bronx Community College by the University Admissions Processing Center (UAPC), he or she will be asked to submit financial information and other documents that will satisfy the requirements for the issuance of the $1-20$ form. Once an $\mathrm{I}-20$ form is issued to the student, he/she can request an appointment at a United Stated Embassy in their home country to request a student visa. Inquiries regarding $1-20$ issuance and student visas may be directed to the International Student Office in the Gould Memorial Library, room 102, Telephone Number, 718.289.5921.

## Non-Degree Student Application

The admission requirements for non-degree students are the same as the admissions requirements for matriculated students. Non-degree students (non-matriculated) must apply directly to the Bronx Community College Admissions office.

## Application Fee

All applicants are required to pay a $\$ 65$ freshmen application fee or $\$ 70$ transfer fee. Online applicants are encouraged to pay with a credit card. If this is not possible, applicants should submit a money order payable to University Applications Processing Center (UAPC) to the Admissions Office, located in Loew Hall [LO], Room 224. This fee is not refundable.

## Deadline

The deadline date for fall and spring admission will be determined each semester by the CUNY Welcome Center. International applicants should apply at least six to ten months before the start of the semester in which he/she would like to attend. The college reserves the right to deny admission to any student if in its judgment, the presence of that student on campus poses an undue risk to the safety or security of the college or the college community. That judgment will be based on an individualized determination taking into account any information the college has about a student's criminal record and the particular circumstances of the college, including the presence of a child care center on the campus.

## Test Requirements

## CUNY Assessment Tests

Entering students are tested in three areas: reading, writing, and mathematics. In each of these areas, the University has set standards defining readiness to do college work, which may be subject to change. The ability to enroll in college-level courses is contingent upon test results and below exemption criteria.

1. Students hold an accredited/documented bachelor's degree.
2. Students are considered proficient in reading and writing if they can document any of the following:
a) SAT 1 verbal score of 480 or higher.
b) ACT English score of 20 or higher.
c) NY State English Regents score of 75 or higher.
3. Students are considered proficient in mathematics if they can document any of the following:
a) SAT 1 math score of 500 or better.
b) ACT Math score of 20 or better.
c) NY State Regents score of 75 or better in one of the following: Math A, Math B, Sequential 2, or Sequential 3.
d) New Math Regents Proficiency Criteria effective for fall 2011 and spring 2012 only: Applicants for freshmen admission for fall 2011 and spring 2012 only may demonstrate proficiency in mathematics for all CUNY colleges by scoring a 75 or higher on the New York State Regents examinations in Integrated Algebra, or Geometry, or Algebra 2 and Trigonometry, and successfully completing each course in the three-course Regents sequence: Integrated Algebra; Geometry; and Algebra 2 and Trigonometry.
e) Effective for freshman and transfer admission for fall 2012 and thereafter, applicants may demonstrate proficiency by scoring 80 or higher on any one of the new Regents examinations (Integrated Algebra, Geometry, or Algebra 2 and Trigonometry) and successfully completing Algebra 2 and Trigonometry or a higher-level course.
4. Transfer Exemptions: Transfer students who have taken a 3-credit Freshman Composition course (or higher level English course for which Freshman Composition is a pre-requisite) at an accredited college and earned a grade of " C " or higher are exempt from remedial courses in English. Transfer students who have taken a 3-credit college level math course at an accredited college and earned a grade of " C " or higher are exempt from remedial courses in Math.

Exempt students are required to take the elementary algebra, college algebra and trigonometry part of the COMPASS math exam for placement into appropriate mathematics courses. Skills assessment exams are administered at Bronx Community College and CUNY's sixteen other colleges. Students are notified by the University Application Processing Center about dates and times of exam administration. Students who at first fail to meet CUNY standards and must repeat any of the exams after appropriate study will be notified of collegewide retesting dates. Detailed information about each of the exams, including sample questions, is available at www.bcc.cuny.edu/testing.
Any further inquiries can be directed to the College Testing Office in Nichols Hall [NI], Room 200 (or by calling 718-289-5760/5638 and/or emailing bcctesting@bcc.cuny.edu).

## BCC Placement Exams

In addition to the Skills Assessment Examinations, some applicants must take separate departmental placement tests in speech, keyboarding and/or a foreign language and chemistry, depending on their choice of curriculum. For more information about departmental exams please contact the following departments:
Speech-General Orientation/Screening 718.289.5756
Modern Language-Oral/Written Assessment 718.289.5633
Chemistry- Placement Test 718.289.5569
For further information visit: http://www.bcc.cuny.edu/Chemistry/ ?page=ChemistryPlacementTest

## Health Requirements

Mandated New York State Immunization Requirements: Public Health Law 2165 (Measles Mumps Rubella) All college students born January 1st 1957 and after must show documented proof of immunity to measles, mumps and rubella. Acceptable proof of immunity includes: immunization cards from childhood, records from elementary school, high school or college or medical records from your primary care physician or clinic. Blood test (titers) for measles, mumps and rubella are also acceptable. Students with a medical condition that prohibits immunization are given medical waivers. The condition must be documented by the attending physician. Students with temporary medical conditions such as pregnancy must have blood test (titers)to prove immunity.

The New York City Department of Health offers free MMR immunization. Call 311 for information for the closest clinic in your neighborhood.

## Public Health Law 2167-Meningococcal Meningitis

This law requires that all students be informed of the disease meningococcal meningitis and the value of vaccination against this disease. At this time immunization is not required but students must document that information was given by the school or provide proof of vaccination.
Physical examination records are required for all physical education classes and students participating in team sports.

## Advanced Standing Admission

Student are allowed a maximum of 30 credits advanced standing (transfer credits) in equivalent courses completed at accredited institutions of collegiate rank. The total number of credits allowed toward the associate degree by BCC may not exceed 30 , regardless of whether the courses were taken at other institutions before admission, during attendance at, or after leaving Bronx Community College. See the Registration and Student Records section in this catalog for terminal transfer limitations that apply to returning students who are readmitted to complete a BCC curriculum. Some courses taken at accredited institutions may be accepted for credit at Bronx Community College. Courses passed at BCC or another college with a grade of C or higher may not be repeated, except as an auditor (no credit). A student wishing to repeat a course that has already been transferred can request its removal in writing to the Admission and Recruitment Office.
Exceptions and clarifications to these rules may apply to programs such as Nursing, Radiologic Technology, and other academic programs. Please see the program description in "The Curricula and Programs" section in this catalog for additional information.

## Advanced Placement (AP)

At the time of matriculation, students who have completed Advanced Placement (AP) college-level courses while in high school may apply for college credit if they have taken the corresponding AP exam, which is administered by the College Entrance Examination Board (www.collegeboard.com). Students must apply to the Admission and Recruitment Office in writing and arrange to have an official copy of their test scores sent to the Admission and Recruitment Office.

## CLEP Credit

The College Board administers the College Level Examination Program (CLEP), offering examinations in several college level subject areas. The academic department in which the equivalent course is given, determines equivalency of the CLEP exam, the number of course credits awarded, and the CLEP score that will allow a student exemption from the equivalent BCC course. Students who want to apply for CLEP credit must apply in writing to the Academic Department before taking the CLEP examination to verify if BCC will grant credits for the particular CLEP subject area.

## Tuition and Other Fees

Tuition is charged each semester and must be paid in full at the time of registration. All fees and tuition charges are subject to change at any time by action of The City University of New York (CUNY) and the New York State Legislature without prior notice. In the event of an increase in the fees or tuition charges, payments already made to the College will be treated as a partial payment, and notification will be given of the additional amount due and the time and method for payment.

All applications for financial aid grants or loans needed to cover the cost of tuition and fees must be completed in advance of registration. All grants and loans must be available to be used during registration.

Where tuition charges are reduced by place of residence, legal proof of such is required to establish eligibility. All students who are not residents of New York City but who are residents of New York State are required to file a Certificate of Residence form with the Bursar's Office three weeks prior to registration. Certificates of Residence are valid for one year from the date of issue and must be renewed each year. The blank forms may be obtained from the Admission Office, Bursar's Office or from the Office of the Chief Fiscal Officer of the county in which the applicant resides. Those who qualify will receive a Certificate of Residence issued by the county. This form must be submitted to the Bursar's Office three weeks prior to registration. A student must have a current, valid Certificate of Residency on file in order to be eligible to register.

## Tuition - Installment Payment Plan

Bronx Community College does not defer the payment of tuition/fees. The College offers participation in the Higher One (formerly Sallie Mae) installment payment plan. Participation in the Higher One plans allows students to pay approximately one-third of their tuition/fees at registration, this must be done directly with Higher One, see contact information below.
The balance of tuition/fees is to be paid in two equal installments approximately 30 days and 60 days after the first day of class. The student may choose to enroll early and may contact Higher One directly either online at www.tuitionpay.com or by phone at 1(866) 267-2869 to begin payments before the semester begins. Students may register in December for the spring semester or June for the fall semester and begin payments prior to the start of classes. On this plan all tuition/fees installment payments must be completed by the due date. There is a $\$ 35.00$ fee due Higher One for this service.

## TUITION FEES*

Full-Time Students | \$2,250 per semester New York City Resident, or New York State resident with a Certificate of Residence

Non-New York State Resident, including international (foreign) $\$ 300.00$ per credit/hour students and New York State residents not eligible for a Certificate of Residence

Part-Time Students | $\$ 195.00$ per credit/hour
(fewer than 12 credit weight)
New York City resident, or New York State resident with Certificate of Residence

Non-degree Students | \$250.00 per credit/hour $\dagger \dagger$
New York City resident

## Non-degree Students

Non-resident, including international student \$395.00 per credit/hour $\dagger \dagger$

* CITY UNIVERSITY OF NEW YORK RESERVES THE RIGHT TO MAKE CHANGES OR INCREASES TO THE TUITION AND FEES AS SET FORTH IN THIS PUBLICATION, WITHOUT ADVANCE NOTICE TO STUDENTS.


## ** Courses where tuition is based on hours rather than credits:

Remedial courses at the College are charged based on the number of contact hours, not credits (except CHM 02*), that the courses are scheduled to meet.

Developmental Courses, of which there are two, are also calculated based on the number of contact hours that the course is scheduled to meet. The two Developmental Courses currently offered at the College are ENG 10 which is a three credit course, tuition is calculated based on the six hours it meets per week, and HIS 11 which is a 3 credit course and the tuition is calculated based on the 4 hours it is scheduled to meet each week.

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## Student Activity Fees*

The student activity fee must be paid by all studentsmatriculated and non-degree. This fee is nonrefundable and includes laboratory, technology, breakage, and student activities.

Full-time students: $\$ 77.60$ per semester**
(12 or more credits/hours)
Part-time students: \$52.60 per semester**
(fewer than 12 credits/hours)

## Technology Fee*

Full-time students: $\$ 100.00$ per semester**
(12 or more credits/hours)
Part-time students: $\$ 50.00$ per semester**
(fewer than 12 credits/hours)

* Subject to change.
** This includes the $\$ 15$ Consolidated Fee, which is required of all students each semester in addition to the Student Association Fee and tuition. These fees are non-refundable.


## Special Fees (for all students)

These non-refundable fees are subject to change.
a. Application for Admission
Freshman Student* $\$ 65.00$

Transfer Student* \$70.00
Non-Degree Student** \$70.00
b. Transcript \$7.00
(there is no charge for transcripts sent to other CUNY colleges)
c. Make-up and special examinations

First examination per semester \$25.00
Each additional examination \$5.00
(maximum fee of $\$ 35.00$ per semester for three or more examinations)
d. Late registration $\$ 25.00$
e. Late payment $\$ 15.00$
f. Change of program \$18.00 (adding a course or changing from one section to another; a fee is charged for each change)
g. Duplicate ID card \$10.00
h. Duplicate Record \$1.00 (i.e., grade report, registration receipt)
i. Duplicate Bursar's Receipt $\$ 5.00$
j. Readmission application \$20.00
k. Diploma $\$ 30.00$
I. Return check \$20.00
*Money order payable to UAPC
**Money order payable to Bronx Community College

## Financial Aid and Scholarships

## OFFICE OF FINANCIAL AID

Colston Hall [CO], Room 504 | Phone: 718.289.5700 http://www.bcc.cuny.edu/Financial-Aid/

The Office of Financial Aid administers federal, state and college funded aid programs and all students are encouraged to apply for assistance.

Each applicant should complete the Free Application for Federal Student Aid (FAFSA) by April 15th of each year.

Please use the FAFSA link at www.fafsa.ed.gov to file your FAFSA online each year.

The six-digit code for Bronx Community College is 002692.
You can contact the Financial Aid Office by calling 718.289.5700, with any questions you may have, or stop by our office, which is located in Colston Hall [CO], Room 504.

Once the FAFSA application has been processed, you will receive an email from the federal processor. If you have been chosen for verification, your financial aid cannot be processed until documentation has been submitted for additional review. The Financial Aid Office will contact you regarding this requirement and you may also review your financial aid record through your CUNY portal account. Please note that if your FAFSA data has changed from the prior year, you will need to update your information to reflect the most recent tax year.

We encourage all students to apply early in order to maximize your eligibility for financial aid. All students must reapply for financial aid every academic year and the information reported on the FAFSA is subject to verification by the Financial Aid Office in any given year.

## WHO IS ELIGIBLE FOR FINANCIAL AID?

## Financial Aid Eligibility

In order to be eligible for federal and state aid, students must meet the following criteria:

- A U.S. citizen, permanent resident or eligible non-citizen
- Meet the Satisfactory Academic Progress (SAP) standard for federal student aid programs
- A valid Social Security Number
- A high school or state-approved home school graduate or have a high school equivalency diploma or have been home-schooled
- Not be convicted of possessing or selling illegal drugs while receiving financial aid
- Registered for Selective Service if you are a male between the ages of 18 and 25 .
- Not be in default of a Federal loan or owe an overpayment on a federal grant or Federal Perkins Loan


## SATISFACTORY ACADEMIC PROGRESS (SAP) REQUIREMENTS

## Federal Satisfactory Academic Progress

Students must be making satisfactory academic progress towards completing an associate degree in order to remain eligible for federal financial aid (PELL, FSEOG, Federal Work-Study, Federal Perkins Loans and Federal Direct Loan). Students must meet all the following satisfactory academic progress requirements:

## Minimum GPA

A student must achieve at least the minimum Grade Point Average (GPA) required to meet the college's retention standard.
Refer to the Minimum GPA Chart for more details.

## Minimum GPA Chart

| Attempted Credits | Minimum GPA |
| :--- | :--- |
| $.05-12$ | 1.50 |
| $13-24$ | 1.75 |
| $25-$ Upwards | 2.00 |

## Pace of Progress

A student must successfully earn a minimum number of credits based upon the number of attempted credits.

Refer to the Pace of Progress Chart for more details.

## Pace of Progress Chart

Attempted Credits 61218243036424854606672788490 Credits Earned $\begin{array}{llllllllllllll} & 0 & 2 & 4 & 6 & 13 & 27 & 33 & 39 & 44 & 49 & 55 & 60\end{array}$

## Maximum Time Frame

A student may attempt no more than $150 \%$ of the credits required for completion of a degree.
Refer to the example on Maximum Time Frame.

## Maximum Time Frame <br> For example, students need a minimum of 60 credits to earn a degree at BCC.

$150 \%$ of 60 credits is 90 . A student may attempt no more than 90 credits to earn 60. If a student has attempted 91 credits and only have earned 50 credits they are no longer eligible for federal aid.

## Federal Title IV Financial Aid Appeal Process

Students must be making Satisfactory Academic Progress (SAP) towards completing an Associate Degree in order to remain eligible for Federal Financial Aid. The following is a list of all the SAP requirements:

- Minimum GPA
- Pace of Progress
- Maximum Time Frame


## Reasons for Appeal

Appeals will be evaluated to determine if events are beyond a student's control. The following is a list of some unforeseen circumstances:

- Situation resulting from personal illness or injury
- Death in the family
- Loss of employment
- Changes in your academic program

In addition, the student's academic history will be considered to determine if there is a reasonable expectation that the student can meet the standard.

## Submitting an Appeal

In accordance with Federal Title IV regulations, students may appeal their eligibility for Title IV funds by submitting a written appeal with supporting documentation to the College Committee on Financial Aid Standing (CCFAS). A student appeal must include:
Appeal Application: A Written Explanation for not meeting Academic Satisfactory Progress (SAP) and what has changed in your situation to allow you to meet the appropriate progress standard in a future evaluation

Supporting Documentation to validate your written appeal statement.

Academic Plan to ensure a student will achieve completion of degree requirements or will make substantial progress toward program completion for the terms.

Completed Appeal Form - If you meet the stated guidelines for appeal, complete the Federal Title IV Financial Aid Eligibility Appeal Form and return the form with supporting documents to the Financial Aid Office

## Appeal Granted

An approved appeal would result in the granting of a onesemester probation period for you to improve your academic record to meet the appropriate standard for the degree program in which you are enrolled.

At the end of the probationary semester, the College Committee on Financial Aid Standing must review the student's academic progress to determine whether the student has met the SAP standard and has fulfilled the requirements specified in the student's academic plan.

Once academic progress has been met, the student will continue to receive Title IV assistance until the next scheduled SAP evaluation.

## Appeal Denied

If you choose to remain enrolled without the receipt of Title IV Federal student assistance, you may request a review of your academic record at the end of the following term to determine whether you have met the appropriate SAP standard.

Students will be measured against all three components of the SAP standard as stated above in order to meet the requirements for Satisfactory Academic Progress. This will be done on an annual basis, at the end of the spring term, to determine eligibility for the receipt of Federal Title IV Student Financial Assistance for the upcoming academic year.

Readmitted students, based on their prior academic performance, will need to appeal if they are not meeting Satisfactory Academic Progress upon readmission to the College.

Students who are delinquent and/or in default on a federal loan or owe a repayment on a refund or federal grant, are not permitted to register or receive a copy of an official transcript until the default or repayment has been satisfied.

## Effects of Withdrawal on Financial Aid

## Federal Pell Grant

Pell award amounts are based on whether a student enrolled full-time - 12 or more equated units (credits), three-quarter ( $3 / 4$ ) time $-9-11$ equated units (credits), half-time - 6-8 equated units (credits), or less than half-time -1-5 equated unit (credits) by the end of the add/drop period.

If you withdraw from one or more of your classes after the first day of classes but before the official withdrawal date listed in the schedule of classes and remain with at least 1.0 tuition unit through 5.5 tuition units, the amount of Pell funds you receive for the session will be reduced. If this amount is less than the amount you are charged or credited towards tuition/fees and a book advance, you will immediately have to pay the difference to the college.

## Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Perkins Loan (FPL), Federal Work Study (FWS)

If the class or classes you withdraw from by the official withdrawal date reduce (s) your enrollment status to less than half-time status (check the Academic Calendar for withdrawal date) you will not receive any funds for the term from these programs. If you work in the Federal Work Study Program, you must stop working the day you withdraw, officially or unofficially - to below half-time status.

## Federal Direct Loan Program (FDL)

You must maintain at least a half-time enrollment status throughout the semester; otherwise you are not eligible for funds from the Federal Direct Loan programs. If you drop to less than a half -time status, you immediately start using your grace period and must contact your loan service for an Exit Interview and repayment information.

## Tuition Assistance Program (TAP)

If you withdraw from all of your classes after the first day of classes but before the last day of the tuition refund period (check the Academic Calendar for all important dates), TAP will pay only the amount of any tuition liability. You will use a semester's worth of TAP eligibility and you may lose TAP eligibility for future semesters depending on TAP standards for Progress and Pursuit.

If you withdraw from part or all of your classes after the last day of the tuition refund period (check the Academic Calendar for all important dates) you will receive your TAP award charged or credited towards tuition for the semester, but you may lose TAP eligibility for future semesters depending on TAP standards for Progress and Pursuit.

## College Discovery Program:

You must be enrolled full time to be eligible for College Discovery funds. However, there are exceptions.

College Discovery Director may give written approval for a student to carry only courses needed for graduation in the student's last semester of enrollment, even if it is less than full time.

College Discovery Director may give written approval for a student to carry less than full -time load due to extenuating circumstances.

Total Withdrawals and the Return of Title IV Funds
Students earn their Financial Aid based on the period of time they remain enrolled.

- Any student attending Bronx Community College who totally withdraws either officially or unofficially during the first $60 \%$ of the term and is receiving Federal Title IV Funds (PELL, SEOG, Federal Loans, etc.) will be subject to federal regulations regarding the amount of their financial aid entitlement.
- The percentage of federal financial aid granted is based on the official date of withdrawal from class, and is calculated based on a formula mandated by the federal government.


## Students will owe the college if:

- Any portion of their tuition and fees, book advance and/ or loan is not paid by financial aid.
- They are no longer eligible for the Financial Aid they received in advance due to registration changes or non-attendance.

Students who remain enrolled beyond the 60\% point of the term are considered to have earned all their aid and do not have to return any Title IV funds.

## NEW YORK STATE PROGRAMS

## Tuition Assistance Program (TAP)

The New York State Higher Education Services (HESC) provides grants to full-time students to assist them in paying tuition in the form of a TAP (Tuition Assistance Program) award.
Bronx Community College's TAP school code is 1400.

## What is the application process?

Students may apply for TAP by completing the Free Application for Federal Student Aid (FAFSA). New York State (NYS) residents attending NYS schools can link directly to the TAP application from the FAFSA submission confirmation page. The TAP application deadline is June 30 of the academic year for which aid is sought.

## What are the eligibility requirements?

- Be a legal resident of New York State (that is, lived in NYS for at least one year prior to the first day of the semester for which you are seeking payment).
- Be a U.S. citizen, permanent resident or hold an I-94 visa as a refugee, paroled refugee or conditional entrant.
- Be enrolled in a degree program at Bronx Community College.
- Be enrolled full-time in at least 12 credits that meet the requirements of your major. In your first TAP semester, you must have at least 3 degree credits as part of your full-time course load. After your first semester, you must have at least 6 degree credits as part of your full-time course load.
- Be in good academic standing for New York State financial aid by meeting Satisfactory Academic Progress* standards.
- Have a high school diploma from a U.S. high school, a recognized GED certification, or pass an approved ability-to-benefit test.
- Meet the economic criteria.


## New York State Satisfactory Academic Progress

New York State Satisfactory Academic Progress standing consists of making satisfactory academic progress and pursuit towards completing an associate's degree at Bronx Community College.
Progress is evaluated by a student's cumulative GPA and total credits earned in comparison with the number of TAP payment points they have used. Pursuit is evaluated by the number of credits a student completes with a grade of $A, B, C, D, F, S$ or $R$ in their last TAP payment semester in comparison with the number of TAP payment points they have used.

NOTE: New York State requirements for satisfactory academic progress differ from those established for federal financial aid.

## What are Payment Points?

- A point value is assigned each time a student receives an award from New York State.
- A full-time award utilizes six payment points.
- A part-time award utilizes three payment points.
- A student is eligible for a maximum of 36 payment points at a two-year institution.


## Academic Progress

Students who received their first NYS award in 2007-2010 or meet the NYS definition of remedial students must meet the following Satisfactory Academic Progress requirements:

## Academic Progress Chart from 2007-2010

For associate degree students who receive their first award in the 2007-08 through the 2009-10 academic years or Meet the NYS definition of remedial students

| To be certified for payment \#. <br> This refers to the number of <br> semester(s) | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Payment points to be accrued | 6 | 12 | 18 | 24 | 30 | 36 |
| At the end of the prior <br> semester, students must <br> have earned this \# of credits | 0 | 3 | 9 | 18 | 30 | 45 |
| With at least this GPA | 0 | 0.5 | 0.75 | 1.3 | 2.0 | 2.0 |

## Academic Progress

Students who received their first NYS award in 2010-2011 or do not meet the NYS definition of remedial students must meet the following Satisfactory Academic Progress requirements:

## Academic Progress Chart as of Fall 2010

For associate degree students who receive their first award in the 2010-11 academic year and thereafter or do not meet the NYS definition of remedial student.

| To be certified for payment \#. <br> This is referring to the number <br> of semester(s) | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Payment points to be accrued | 6 | 12 | 18 | 24 | 30 | 36 |
| At the end of the prior <br> semester, students must have <br> earned this \# of credits | 0 | 6 | 15 | 27 | 39 | 51 |
| With at least this GPA | 0 | 1.3 | 1.5 | 1.8 | 2.0 | 2.0 |

## Program Pursuit

Program Pursuit is determined each time a NYS award is received whether the award is for full-time or part-time study. After every TAP payment a student must complete a minimum number of credits as follows:

| To be certified for payment \# | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Minimum Credits Completed <br> with an A, B, C, D, F, S, R Grade | 0 | 6 | 6 | 9 | 9 | 12 |

## Failure to Make Satisfactory Academic Progress

Students who fail to meet the above mentioned TAP standards for academic progress and pursuit may apply for a TAP waiver in "exceptional or extraordinary cases". In submitting a TAP appeal, a student will be considered for a one time waiver or a C-GPA waiver. A student may only receive one NYS TAP Waiver in their undergraduate career and two C-GPA waivers at Bronx Community College.
NOTE: A student must be enrolled full-time ( 12 credits) to be eligible for TAP and must complete the number of credits per semester as stated in the above charts. Students who have received four semesters of TAP (two years), or the equivalent, must have a minimum of a 2.00 GPA or higher to maintain eligibility. Each TAP payment is 6 points, with a maximum of 36 points allowable for a two-year institution.
Continuing students are eligible to receive assistance from TAP if they complete a minimum number of credits the prior semester, earn the appropriate number of cumulative credits, and have the required grade point average at the beginning of each semester of study. Please consult the information on the above stated charts.

## Aid for Part-time Study (APTS)

Aid for Part-time Study (APTS) is a grant from New York State for students pursuing a degree as a part-time undergraduate student. The amount of the grant is determined by CUNY and is based upon the availability funds from New York State.

## Application Process

- To apply you must first complete the FAFSA then the TAP application. Second, complete a CUNY Supplement form. Log on to the CUNY Portal and click on the "Filing your CUNY Financial Aid Supplement Form" link for complete instructions on filing the CUNY Supplement.
- After you complete the CUNY Supplement, the Portal will confirm that it has been submitted and will allow you the opportunity to print a copy of the CUNY Supplement for your records.


## Eligibility Requirements

- Be enrolled part time in a minimum of 6 to 11 credits in a degree program or registered certificate program at Bronx Community College.
- Meet the program income limits.
- Be a New York State resident.
- Not have used up Tuition Assistance Program (TAP) eligibility.
- Be in good academic standing for New York State financial aid by meeting Satisfactory Academic Progress standards
- Be free of debt from any defaulted student loan that HESC guaranteed.
- You must maintain a "C" average after having received the equivalent of two full years of payment of Statesponsored student financial aid.
- Have a high school diploma from a U.S. high school, a recognized GED certification.
- Income Requirements
- To meet the New York State taxable income criteria for APTS: Students claimed by parents as a tax exemption or students who claim dependents of their own must have a New York State net taxable income below \$50,501. Students not eligible to be claimed by parents as a tax exemption or who are single with no tax dependents must have a net taxable income below $\$ 34,251$.


## Part-Time TAP (PTAP)

- Students must be part-time and enrolled in 6-11 credit. To apply students you must complete a FAFSA and a TAP application.


## Eligibility Requirements

First-time TAP recipient 2006-2007 and after

- Be a New York State Resident
- Be admitted into a degree program
- Earn 12 credits or more in each of two consecutive preceding semesters, for a total of 24 credits
- Maintain a cumulative grade point average of 2.0 or higher

NOTE: A student receiving APTS or PTAP will be evaluated for the credit accrual and GPA requirements after each accrual of 6 payment points.

## College Discovery (CD)

College Discovery (CD) is a special program funded by New York City for financially and educationally disadvantaged students who are New York City residents. Students who are in the CD program may receive money for books and fees. These funds are grants and do not have to be repaid. CD students also receive additional counseling and tutorial services through the Department of Student Affairs.

## Selection for the program

You must indicate on your freshman admissions application that you want to be considered for the CD program when you first apply to the College. Once you receive your notification of acceptance to Bronx Community College, you will also be notified whether or not you have been selected for the CD program.
In order to establish your eligibility for CD financial aid, you must file the following applications:

- Free Application for Federal Student Aid (FAFSA)
- New York State Tuition Assistance Program (TAP)
- You must also meet the following criteria to qualify for this program:
- New York City resident for 12 consecutive months
- Academically and economically disadvantaged according to the Board of Regents guidelines
- Admitted freshman applicant to a CUNY associate degree program

There may be additional documentation you will have to submit to the Financial Aid Office to finalize your eligibility.
When your applications have been processed and your CD eligibility determined, you will receive an award letter from the Financial Aid Office. You may also check your award status by logging into the CUNY Portal, clicking on the "Admissions/ Financial Aid" tab, and then on the "eFAP (Financial Aid)" icon.

## FEDERAL FINANCIAL AID PROGRAMS

- Federal Pell Grant Program
- Federal Supplemental Educational Opportunity Grant Program (FSEOG)
- Federal Work-Study Program
- Federal Perkins Loan and Federal Direct Student Loan Programs


## Federal Pell Grant

- A Federal Pell Grant is money awarded by the federal government that can be used to pay students tuition, or, if tuition is covered by other means, help to buy books and supplies, or pay for transportation costs.
- PELL is available only to students who have not earned a bachelor's degree or professional certificate.
- Students must be in good satisfactory academic standing and making Satisfactory Academic Progress towards completing a degree.
- The amount of your Federal Pell Grant depends on your cost of attendance, expected family contribution, enrollment status and whether you attend school for a full academic year or less.
- Students may not be in default on a previous student loan or owe the federal government a refund of financial aid previously received.
- Students must be willing to verify the information provided on the FAFSA.
- If you are male between 18 and 25 years of age you must register with Selective Service.
- Pell Grant Program will be limited to a maximum of 12 full-time equivalent semesters or $600 \%$ ( $100 \%$ per academic year) of Pell Grant eligibility per student.

To learn more visit general Student Eligibility requirements.

## Application Process

Bronx Community College School Code is 002692
The FAFSA is the application that is used for federal government grants.

## Remedial Courses

The federal government restricts the use of Federal Aid/ Loans for students to take up to 30 hours of non-credit remedial course work. After the student has reached the 30 hour limit on remedial course work, the student may not receive PELL or other forms of federal student aid/loans for any additional remedial hours.

## Pell/SEOG Advance Payments

Pell advance payments are available for eligible students at the beginning of the Fall and Spring semesters. Pell advance payments are intended to give students a portion of their award at the beginning of the semester to help purchase books and supplies.

- In order to provide an advance payment, students must have file early, finalize their FAFSA information and settle their semester tuition bill.
- Students may chose either the CUNY Scholar Support Prepaid Card or direct deposit methods to receive financial aid disbursements. If not the default is a paper check.
- Pell advance payments do not represent any additional financial aid. If a student receives an advance payment, the amount of this payment will be deducted from their regular Federal Pell/SEOG Grant disbursement.

NOTE: Students who receive a Pell Advance but do not begin attendance in classes, must return the payment immediately to the college.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

A Federal Supplemental Educational Opportunity Grant (FSEOG) is an award given to undergraduate students who show exceptional financial need.

## Eligibility Requirements

- To receive FSEOG, students must meet the Student Eligibility requirements for federal financial aid.
- Students must enroll for and maintain enrollment status of half-time (6 credits or equated credits)
NOTE: Students who receive an FSEOG payment but do not begin attendance in classes, must return the payment immediately to the college


## Application Process

Apply for FSEOG by filing a Free Application for Federal Student Aid (FAFSA).

## Award notification for FSEOG

Students will receive an award letter from the college indicating whether or not FSEOG has been awarded. Check your award status by logging into the CUNY Portal.
NOTE: CUNY automatically considers a student for this award if his/her FASFA application indicates Federal Work-Study or Federal Perkins Loan assistance. File your FAFSA early. FSEOG college funding is limited.

## Federal Work Study

Federal Work-Study (FWS) is campus-based federal Title IV financial aid that comes in the form of employment.The FWS program provides students with an opportunity to be placed in a part-time job that accommodates their academic schedule.

## Application Process

The FAFSA is the application that is used for federal government grants.

## Eligibility Requirements

- Students must enroll in a matriculated course of study and register for at least six credits.
- Students receive FWS funds according to the number of hours worked. The rate of pay is at least minimum wage.
- Students are encouraged to choose job placements with an eye towards community service and/or future vocational interests.
- FWS funds are limited and are awarded to students on a first come, first served basis. File early for the best possibility of receiving FWS funds.


## Federal Perkins Loan:

A Federal Perkins Loan is a low-interest (five percent) Ioan that can be awarded to students with an exceptional financial need. This is a loan, not a grant it must be repaid. The loan is made with government funds with a share contributed by Bronx Community College. You must repay this loan to Bronx Community College. To be considered for this loan you must complete the FAFSA. Perkins loan is awarded on a first-come basis, so you are encouraged to file your FAFSA early. The amount that you could be awarded is based on when you apply, your level of need, and the amount of money that the school has been allotted for this program. Freshman students are not eligible. For further information. Please contact the Federal Perkins Loan Coordinator at the Financial Aid Office, located in Colston Hall [CO], Room 504.

## Application Process

To be considered for a Federal Perkins Loan, a student must complete the Free Application for Federal Student Aid (FAFSA). File early to be considered.

## Award Amount

Unlike the Federal Direct Loan Program, a student cannot request to borrow a specific amount of money in Federal Perkins Loan. The amount awarded will be determined by CUNY based on a student financial need and the amount of money available for the program. The annual maximum amount awarded is $\$ 2000.00$.

## Eligibility Requirements

- A student must register for and maintain an enrollment status of half-time ( 6 credits or equated credits) or greater to be eligible to receive Federal Perkins Loan. If, for any reason, a student course load falls below halftime, payments of the loan will be stopped.
- A student must be enrolled in a degree program at Bronx Community College.
- A student must have earned 28 or more degree credits to be eligible to receive a Federal Perkins Loan.
NOTE: A freshman student is not eligible for a Federal Perkins Loan


## Loan Disbursement

- Before picking up a loan check, a student must complete the online Perkins Loan Entrance Counseling. During entrance counseling a student will be advised of their rights and responsibilities as a student borrower.
- A student must sign a promissory note. A promissory note is a binding legal document that lists the terms and conditions under which you are borrowing and agreeing to pay back the money.


## Federal Direct Loan Program

The Federal Direct Loan Program provides federally insured, low-interest, long-term loans to help you and your parents cover the costs of attending college. The federal government is your lender; though most of the contact will be with the loan servicer (assigned by the Department) not a bank or other lending institution. The loans are made directly to you or your parents through the college. The college determines your eligibility, calculates the loan amount, and disburses the money. Once the loan is made, it is managed and collected by the U.S. Department of Education. Your direct loan is money that is borrowed and must be repaid with interest after you leave school.

## Application Procedures

A student is required to first file a FAFSA and receive a valid response, with an official EFC (Expected Family Contribution) from the federal government.

## Eligibility Requirements

- Be a U.S. Citizen or eligible non-citizen
- Be enrolled in a degree program at Bronx Community College
- Be enrolled at least half-time ( 6 units) in the semester
- Be in good academic standing and meet Satisfactory Academic Progress


## Loan Disbursement

Before disbursing a loan check, a student must complete a Direct Loan Entrance Counseling. A student must sign a Direct Loan Master Promissory Note. A Master Promissory Note is a binding legal document that lists the terms and conditions under which you are borrowing and agreeing to pay back the money. The student will be required to complete an Exit counseling if he or she drops below half-time status, leave college, transfer to another institution, withdraw from college or graduate.

## Federal Direct Subsidized Loan

- Eligibility for this loan is based on financial need, as determined by the federal government once a student completes a FAFSA.. No interest is charged while student is in college at least half-time, during the grace period, and during deferment periods.
- Direct Subsidized and Unsubsidized loans made to undergraduate students have different fixed interest rates depending on the date the first loan was disbursed. A loan with a first disbursement date of July 1, 2009 through June 30, 2010 has a fixed interest rate of 5.6\%.
- Direct Subsidized loans made to undergraduate students between July 1, 2010 through June 30, 2011 have a fixed interest rate of $4.5 \%$.
- Direct Subsidized loans made to undergraduate students between July 1, 2011 through June 30, 2012 have a fixed interest rate of $3.4 \%$.
- Direct Subsidized loans made to undergraduate students on or after July 1, 2012 have an interest rate of 6.8\%.
- Direct Subsidized loans for undergraduate students with a first disbursement date between July 1, 2013 and June 30, 2014 is 3.86\%.
- Direct Subsidized loans first disbursed before July 1, 2006 have a variable interest rate.


## Federal Direct Unsubsidized Loan

- Allows you to borrow money in addition to any subsidized loan amounts for which you may be eligible. You will be charged interest from the time an unsubsidized loan is disbursed until you pay the loan in full.
- All Direct Unsubsidized Loans first disbursed on or after July 1, 2006 have a fixed interest rate for the life of the Ioan of 6.8\%.
- All Direct Unsubsidized Loans first disbursed before July 1, 2006 have a variable interest rate. The interest rate on these variable rate loans is changed on July 1st of each year.


## Federal Direct PLUS Loan

- Direct PLUS Loan allows the parents of dependent students to borrow up to the cost of attendance less any other financial aid received.. PLUS Loan borrowers cannot have an adverse credit history. An authorization to check the parents credit must be submitted to the Financial Aid Office when applying for a PLUS Loan.
- The federal government charges your parent(s) interest from the date of the first disbursement until the loan is paid in full. Although there is no grace period you may defer repayment of the loan while the student is enrolled at least half-time and for an additional six months after the student drops below half-time.
- Direct PLUS loans first disbursed before July 1, 2006 have a variable interest rate. The interest rate on these variable rate loans is changed on July 1st of each year.
- Direct PLUS loans first disbursed on or after July 1, 2006 have a fixed interest rate for the life of the loan of 7.9\%.
- You will have the option of paying the interest that accrues on a Direct Plus Loan while you are in school and during all periods (for example, during periods of deferment or forbearance.) If you do not pay the interest that is charged on a PLUS Loan, the federal government will add it to the unpaid principal amount of the loan. This is called "Capitalization.
- The Direct Loan Servicer assigned to monitor the PLUS Loan will send a statement to the borrower specifying how much interest has accrued on the loan(s) and the options for paying the interest accumulated.


## Loan Fees

An origination fee will be charged by the Department on Direct Subsidized Loans, Direct Unsubsidized Loans, and Direct PLUS Loans. The loan fee is a percentage of the amount of each loan you receive, and is subtracted proportionately from each loan disbursement. This means the money you will receive will be less than the amount borrowed. The loan fee varies depending on the first disbursement date of the loan. Loans first disbursed prior to December 1, 2013, have a different loan fees. Subsidized and Unsubsidized Loans with a first disbursement date of December 1, 2013 and thereafter have a fee of $1.072 \%$. For Direct PLUS Loans the fee is $4.288 \%$.

## SCHOLARSHIPS AND AWARDS

Bronx Center for Scholarship Information Phone: 718.289.5903

The Bronx Center for Scholarship Information assists students of all socio-economic backgrounds and levels of financial need to research and apply for scholarships; develop essential writing skills for essays, resume and professional letters; and assist students in finding financial assistance for paying the cost of higher education.

## Bronx Community College Based Scholarships

Many CUNY colleges have scholarship programs that are available for their students. Information about these scholarships can be found in the BCC Center for Scholarship Information, located in Colston Hall, room 528; on the BCC website; and in the campus offices of admissions and financial aid.

## Prestigious External Scholarships

## Jack Kent Cooke <br> Undergraduate Transfer Scholarship Program

Must be a current student at an accredited U.S. community college or two-year institution with sophomore status OR a recent graduate. Have a cumulative GPA of 3.5 or better. Plan to transfer to a four-year college or university to begin studies in the fall. Be nominated by his/her two-year institution and have an unmet financial need.

## Kaplan Leadership Foundation Program

Student must: be enrolled in an accredited associate degree program in the New York City area; have a minimum GPA of 3.3 (on a 4.0 scale); have earned 12 to 30 non-remedial college credits at time of application; be a U.S. citizen or permanent resident; be a current recipient of federal and/ or state financial aid; be a member of an underserved or underrepresented population; have the desire to transfer to a bachelor's program immediately upon completion of an associate degree.

## College Awards

Listed below are some awards for which students can apply to or nominate themselves for if they meet the criteria. These scholarships usually are at or above $\$ 300$. Applications are available for each scholarship on the College's website or with Financial Aid's scholarship specialist in Colston Hall, room 528. A Scholarship Committee reviews all applications and selects the student(s) who meet(s) the criteria. All awards are subject to change based on funding.

## Presidential Academic Excellence Scholarship

Presented to the valedictorian and salutatorian of the graduating class. No nomination forms. Selected by the Registrar's Office based on grade point average. \$500-\$1,000.

## Bronx CUNY Scholars Award

Awarded to students with a GPA of 3.0 or better, with financial need, and have at least 6 degree credits. Must be eligible for and receiving Financial aid. Awards up to $\$ 500$.

## Carl J. Polowczyk Memorial Scholarship

Presented to a student in science who will transfer to a senior college and plans to major in a scientific field.

## Dr. James A. Colston Memorial Award

Given to a student with a superior academic record who intends to pursue a career in higher education.

## Wayne D. Cooper Memorial Award

Awarded to a student who has exhibited a concern for others and who inspires in others academic and social progress, excellence in scholarship and high moral character. Selfnominations accepted.

## Harry Lesser Memorial Award

Given to a student who is a resident of the Bronx who has demonstrated outstanding service to the College community, has a GPA of 2.5 or better, and demonstrates financial need.

Virgil H. Logan, Jr., Memorial
Presented to a student who has demonstrated superior scholarship and outstanding service to the College community.

The Dr. Joe Louis Rempson Scholarship
Presented by Unity and Strength Minority Faculty and Staff Association to students exhibiting academic excellence, high moral character, and leadership ability.

## Mel Winter Memorial Award

Presented to a student who has shown outstanding qualities of leadership in an official position in student government and/or in a chartered student organization.

Association of Latino Faculty and Staff Scholarship Given to a student of Hispanic or Latino origin who has excelled academically in his or her chosen major at BCC, and has made a contribution to the College or the community.

## Bronx Rotary Scholarship

Given to four students who have made a contribution to BCC or the Bronx with a GPA of 3.0 or better and 30 degree credits.

## Barnes and Noble Scholarship

Awarded to a student with financial need and a 2.7 GPA with $15-20$ degree credits. It is to be used for books and other educational expenses.

## Mavis and Ephraim Hawthorne

## Golden Krust Scholarship

Awarded to a student of Caribbean descent, majoring in liberal arts or business with a GPA of 3.5 or better with at least 15 degree credits. Two to four scholarships from \$500\$1,000 are awarded.

## Departmental and Curricula Awards and Scholarships

The following scholarships and/or awards are awarded annually to graduating students. Most are departmental awards that are based upon recommendations by the chairperson of the department, and academic achievement. The amounts vary from year to year. Some awards do not have a monetary value, and all monetary awards are subject to change based on funding. Contact the Bronx Center for Scholarship Information at 718.289.5903 for details regarding these scholarships and awards.

## Art and Music

Harvey L. Bass Memorial Scholarship
J. Kling Scholarship

Art Award
Music Award
Biology and Medical Laboratory Technology
Bernard Bates Memorial Scholarship
Biology Faculty Memorial Scholarship
Dr. and Mrs. Israel Gottesman Memorial Scholarship
Business and Information Systems
Accounting Award
Business Administration Award
Programming and Systems Award
Marketing, Management, Sales Award
Benjamin Cutler Memorial Scholarship
Marilyn Flood Memorial Scholarship
Office Administration and Technology
and Medical Assistant Programs Awards
Stella H. Kubis Memorial Scholarship
Edith White Rosenfeld Memorial Scholarship
Paralegal Studies
Paralegal Studies Award
Peter Morganti Paralegal Studies Scholarship

## Chemistry and Chemical Technology

Chemistry Award
Pre-Pharmacy Award
Patricia Babnis Memorial Award
William Hodge Scholarship

## Communication Arts and Sciences <br> Communication Arts and Sciences Award <br> Media Technology Award <br> Performing Arts Award

Education and Reading<br>Education Associate Award<br>Mary and Ika Goodwin Memorial Scholarship

English
English Award
Eleanor Corrigan-Gosselin Memorial Award
Marsha Cummins Award
Health, Physical Education and Wellness
Health, Education and Wellness Award
Physical Education and Wellness Award
History
Mark D. Hirsch Award
Mathematics and Computer Science
Michael E. Bennett Memorial Scholarship
Irving Handel Memorial Scholarship
Gerald S. Lieblich Memorial Scholarship
Modern Languages
Professor John E. D'Andrea Award
French Award
Italian Award
Nursing and Allied Health Sciences
Spirit of Nursing Award
Gertrude L. Dourdounas Certificate of Achievement
Radiologic Technology Faculty Award
Nursing and Allied Health Sciences Award
Allstate Excellence in Nursing Scholarship
Maxine Church Memorial Scholarship
Beatrice Perlmutter Memorial Scholarship

## nglish

Eleanor Corrigan-Gosselin Memorial Award
Marsha Cummins Award
ealth, Physical Education and Wellness
Health, Education and Wellness Award
Physical Education and Wellness Award
History
Mark D. Hirsch Award
Mathematics and Computer Science
Michael E. Bennett Memorial Scholarship
Irving Handel Memorial Scholarship
Gerald S. Lieblich Memorial Scholarship

## Modern Languages

Professor John E. D'Andrea Award
French Award
Italian Award

Nursing and Allied Health Sciences

Gertrude L. Dourdounas Certificate of Achievement Radiologic Technology Faculty Award Nursing and Allied Health Sciences Award Maxine Church Memorial Scholarship Beatrice PerImutter Memorial Scholarship

## Physics and Technology

Electrical Technology Award
Engineering Award
Automotive Technology Award
Lewis Carlin Memorial Award
Morris Meister Memorial Award
Telecommunications Technology Award
Nuclear Medicine Award
Yonny Segel Memorial Award
Union Carbide Mechanical Scholarship
Social Sciences
Human Services Award
Psychology Award
Economics Award
David M. Gordon Memorial Award
William Wahlin Memorial Scholarship
Student Development
Dr. Warren Baron Memorial Scholarship Rosario Santa Rita Memorial Scholarship

# Registration and Student Records 

## OFFICE OF THE REGISTRAR

Registrar: Sanjay Ramdath<br>Colston Hall [CO], Room 513 | Phone: 718.289.5710

Associate Registrars: Vacant<br>Assistant Registrars: Clifford Marshall II, Anita Rivers, Syria Carrington

The Registrar's Office supplies information to students about registration, grades, scholastic indexes and requirements for graduation. Grade reports that include information on scholastic index and matriculation status are available to students by accessing CUNYfirst and OSSES (One Stop Shop E -Services).

## READMISSION

After one or more semesters (fall and/or spring) of absence from the College, a student must apply for readmission. Readmission applications are available within the Registrar's Office and webpage. Students must pay a $\$ 20$ non-refundable readmit fee to the Bursar's Office. Deadlines for the receipt of applications for readmission are: Fall Semester, August 15; Spring Semester, January 15; Summer Session, May 15. Readmitted students who have been away from the College for more than a year must prove residency.

## REGISTRATION

All students must register for courses during the official registration period each semester. Students may register using CUNYfirst at the time designated for their classification beginning with the Early Registration period (late April and late November). The Schedule of Classes Search function and Registration Guide are available online before the announced registration period. Prior to and during registration each semester, students must meet with their academic advisor in order to register. Late registrants will be charged a late registration fee. The College reserves the right to cancel late registration.

## Auditing Classes

A student may audit a course only with official approval. Audit request forms are available in the Registrar's Office. Approval of the department chairperson is required. Students must register for an audit class in the same manner prescribed for regular classes. Students must also pay the required fees as if registering for credit in the course. Once registration is completed as an auditor, no credit for that course can be granted retroactively. Auditors are required to observe attendance regulations of the College and must participate in class to the extent deemed reasonable, desirable and necessary by the instructor.

## Requests to Take Courses at Other Colleges

A student desiring to take a course or courses at another college or at another unit of The City University of New York while at Bronx Community College must use the E-Permit System. The E-Permit system is a link between all CUNY schools found on the website (www.cuny.edu) through the CUNY Portal. In order to gain access to the E-Permit System, log onto the website and create a CUNY Portal account. A non-CUNY Permit Form should be used for all students attending a CUNY college and wishing to register at a nonCUNY institution. Permission will be granted according to College regulations.

## Students on Permit from Other Colleges

Students from other colleges are advised to secure written permission from their home colleges before applying to register for any courses at BCC. The City University of New York matriculants with an approved e-permit may, subject to prior approval of the BCC Office of the Registrar, register at time reserved for BCC matriculants listed in the Registration Guide. Students with permits from colleges outside of City University must register as non-matriculants regardless of status in their own colleges. Students should present a copy of a validated Bursar's receipt from their home college at the time of registration.

## Program Allowances and Course Loads

Programs Exceeding Limits - A matriculated student may apply to the Vice President of Academic Affairs or designee for permission to exceed the maximum permissible student load of 18 hours after consulting with his or her advisor. Taking more than 18 credits will incur additional costs.

Enrolled Student: A student who has paid all tuition and fees or has a payment plan through Higher One (Sallie Mae) and attending classes is considered enrolled. The College will debar from classes any student who has never attended during the first three weeks or did not attend for weeks four and five. The student will be given a grade of "WN" without academic penalty for the course. See "Absence from Class" in the "Academic Policies and Procedures" section of this catalog. A student maintains standing at the College as long as he or she is enrolled. A student on probation is considered to be warned that he or she is compiling a record that could lead to loss of matriculation and/or suspension. Students on probation have standing with the College.

## CUNY Student Identification Card

Each student receives a CUNY ID card with his or her picture. This card must be carried and displayed at all times for purposes of identification. The ID card is also used as the College library card. A replacement fee is charged for lost or mutilated cards. ID cards must be validated every semester.

PLEASE NOTE: Registration is not complete until satisfactory payment arrangements have been made with the Bursar's Office.

## MATRICULATION

Upon admission to the College, a student is designated as matriculant or non-degree. Matriculation status determines the course load a student may carry during a semester and the order of priority in registration. Official determination of scholastic index and certification of matriculation status of students already in attendance are made by the Registrar's Office, in accordance with standards set by the College's Committee on Academic Standing.

## Classification and Categories (Definitions)

Matriculated Student: A student who is a candidate for an associate degree or certificate and has met the basic College admission requirements is classified as a matriculant. A matriculant may carry a full or part-time program of courses leading to a degree. A matriculant may register for day and/ or evening classes, according to choice and the availability of class space. A full-time course load is a minimum of 12 credits or equated credits up to the number listed for that semester on the curriculum in the Curriculum Patterns (found in "The Curricula and Programs" section of this catalog). To graduate in four semesters, a minimum of 15 credits is to be taken and passed in each semester. For purposes of Selective Service, state scholarships, and foreign student visa status, a student must carry a full-time load or its equivalent. Students taking fewer than 12 credits, or the equivalent, are not considered full time for purposes of Scholar Incentive Awards, Selective Service or U.S. Immigration Service.

Non-degree Student: A non-degree student is one who is not admitted into a degree-granting program. A non-degree student may apply for matriculated status.

## Senior Citizens

Residents of New York City, 60 years and older, may enroll in undergraduate courses on a space-available basis, tuition-free at any unit of the University. Individuals seeking this waiver must present proof of age at the time of Admission and specify that they wish to participate in this program to receive the CUNY Senior Citizen rate. They are charged $\$ 65$ per semester and a \$15 City University consolidated fee, as well as any penalty fees that may incur (e.g., late registration payment, reprocessing fees, library fines). They are not charged any other regular fees. The $\$ 80$ is non-refundable and considered a noninstructional fee.

## Change of Curriculum Plan

For a change of curriculum plan and/or sub-plan, a student must contact the Registrar's Office and complete a Change of Curriculum Plan form. This form can also be downloaded from the Bronx Community College website. A student may change a curriculum no later than 21st day of each semester. Once the change has been approved, a student must meet the prescribed requirements for the new curriculum. Credits taken and earned in the student's former curriculum may not necessarily be applicable to the new curriculum. A determination of the transferability of credits from one curriculum to another rests with the new Curriculum Coordinator.

It is strongly recommended for students to consult with a Financial Aid Counselor regarding TAP eligibility and conduct a preliminary degree audit (DegreeSolutions) to understand the impact of the change in curriculum.

## WITHDRAWAL FROM COLLEGE

Students officially withdrawing from the College during the refund liability period may do so online using their CUNYfirst Account. Students withdrawing for medical reasons may do so by mail or in person. All written documentation submitted within the refund liability period will be reviewed by the Registrar's Office. All written documentation submitted after the refund liability period should be forwarded to the Vice President of Student Affairs in Loew Hall [LO], room 201. The date of the medical withdrawal will be determined by the date specified on the documentation submitted. The letter should include:

- The reason for withdrawal;
- A listing of the student's courses and section numbers;
- Any supporting documentation.

To avoid academic penalty, students should be certain to receive and keep written acknowledgment of their withdrawal. Students are urged to seek guidance before withdrawing from the College. Counseling and advisement prior to the final decision to withdraw may make it feasible to remain in College. If a student does not withdraw officially, there may be financial and academic penalties (see "Withdrawal Procedure"). Under special circumstances, if withdrawal is made within the third week after opening of classes, proportional refunds of tuition fees only may be made according to a schedule prescribed by the Board of Trustees. An application for a refund of tuition fees should be made to the Registrar.

## Withdrawal Procedure

Students wishing to officially withdraw from any course in which they are registered may do so at any time through to the 10th week of class. No grade will be assigned if the student withdraws during the Refund Liability period (usually through the third week of classes). After the third week of classes, a student will be assigned a "W" grade indicating that he/she officially withdrew from the course. To be eligible for a grade of "W", a student must initiate the official withdrawal process online through their CUNYfirst account. Official withdrawals will not be processed after the official withdrawal period has ended.

## Medical Emergencies

A student who experiences a medical emergency during the semester should consider discussing alternatives with a counselor regarding current and future academic plans. Some of these alternatives are continuation of attendance, a leave of absence, or a program adjustment. A recommendation from a physician will help in determining what options are feasible. This recommendation, which is filed in the Health Service Office, is useful information to the College and beneficial to the student should the student require any medical services while on campus.

## Military Leave

Students who enlist in the armed forces or who are inducted or recalled into service must present and place on file at the College a copy of the official induction notice indicating the exact date on which they must report for duty. Additional information regarding special provisions for students in the military can be found in Appendix C.

## Transcripts

Transcripts may be requested in the Registrar's Office or through the College's website at www.bcc.cuny.edu/ Registrar/Transcripts/Transcripts sent to colleges within The City University of New York are forwarded free of charge. For all other requests, there is a standard fee of $\$ 7$. Official transcripts bear the College seal and the signature of the Registrar. Official transcripts are sent to other institutions or agencies at the request of the student. For faster service, all transcripts (official and unofficial) may be ordered online using "TranscriptsPlus" from the Registrar's Office webpage. A student may print unofficial transcripts free of charge for personal use through CUNYfirst

## ACCESS TO STUDENT RECORDS

The Federal Education Rights and Privacy Act of 1974 and regulations grant students the right to be advised of:

- The types of student records and the information contained therein which are maintained by the college.
- The name and position of the official responsible for the maintenance of each type of record, the persons who have access to those records, and the purposes for which they have access.
- The policies of the college for reviewing and expunging those records.
- The procedures for granting students access rights to their student records.
- The procedures for challenging the content of their student records.
- The cost, if any, which will be charged to students for reproducing copies of their records.

A student must file a Directory Information Non-Disclosure Form with the Registrar's Office to prevent the disclosure of directory information such as name, address, telephone number, etc.

# Academic Policies and Procedures 

## OFFICE OF ACADEMIC AFFAIRS

Vice President for Academic Affairs and Provost:

Dr. Claudia V. Schrader
Acting Dean of Academic Affairs: Dr. David L. Hadaller
Associate Dean for Curriculum Matters
and Faculty Development: Dr. Alexander Ott

The Office of Academic Affairs provides leadership for all of the College's academic programs, with particular emphasis on curriculum and faculty development, student success and evening and weekend classes. Working in close partnership with the BCC faculty, this office helps students reach their post-BCC goals, whether they plan to transfer to a four-year college or pursue a career in their chosen field. Among Academic Affairs' educational initiatives: study abroad, in places as diverse as China and South Africa; the ASAP program, which enables students to graduate at an accelerated pace; and the Freshman Year Seminar, a bold new approach to preparing first year students for academic success. Such innovative tools inspire our scholars to think critically, communicate persuasively and act ethically and creatively in a competitive world.

## ACADEMIC ADVISING

BCC defines academic advising as a developmental process designed to engage and assist students in formulating sound and sensible long range educational plans that are consistent with their personal and professional aspirations. Academic advising also helps students graduate in a timely fashion by assisting them in choosing the right courses in the right sequence for their chosen curriculum.

Every semester, before registration, students are required to meet with their academic advisor who will review course selections, explain graduation requirements, and clarify institutional policies.

The Office of Academic Affairs collaborates with the Office of Student Affairs to organize the delivery of academic advising at BCC. Counseling faculty is responsible for the advisement and registration of incoming freshmen during their first year. Afterwards, students in good academic standing are assigned to faculty in their academic department, and those on academic warning or probation are assigned to professional advisors in the Academic Success Center.

Academic advising is most effective when done early and often. Therefore, all students are strongly encouraged to contact and schedule an appointment with their assigned academic advisor as early as possible during the semester.

## ACADEMIC SUCCESS CENTER

Mr. Octavio Melendez, Interim Director
Sage Hall [SA], Room 201
718.289.5401| Octavio.melendez@bcc.cuny.edu

Focused on supporting freshman students' academic progress, the Academic Success Center delivers comprehensive academic advising services, and assists freshmen in developing clear and sound educational plans after an evaluation of their strengths, skills and interests.

## The Academic Success Center's staff also serves as a valuable resource for freshman students by:

- Providing accurate and timely information regarding testing, placement and graduation requirements.
- Clarifying academic policies and institutional procedures.
- Promoting the use of DegreeWorks, CUNY web-based degree audit tool, that allows students to easily track their progress toward degree completion.
- Providing effective referral to institutional and/or electronic resources.
The Academic Success Center is open Monday through Saturday with evening hours available. For further information call 718-289-5401 or visit our website at: www. bcc.cuny.edu/AcademicAdvising/AcademicSuccessCenter/.


## CLASS ATTENDANCE

Class attendance and participation are significant components of the learning process and play a major role in determining overall student academic achievement. Therefore, students are strongly encouraged to attend and participate in all class sessions of the courses in which they are registered. For further details, please refer to course syllabi.

In the event of excessive absences, faculty have the option to lower the grade, request completion of additional assignments, or assign a failing grade.

Faculty members will verify by the end of the fifth week of each semester, or at least $1 / 3$ into the duration of any semester, through the Commencement of Attendance (COA) process, whether or not a student has ever attended the course. Afterwards, faculty are encouraged to monitor class participation in order to facilitate and support the College's student retention efforts.

## LATENESS

Classes begin promptly at the times indicated in the Schedule of Classes. Arrival in class after the scheduled starting time constitutes lateness.

## GRADING POLICY

## Mid-Term and Final Grades

Instructors assign and inform students of mid-term and final grades during a period designated in the Academic Calendar.

The following grades may be assigned by instructors:

| Grade | \%Equivalent | Achievement | Value Point |
| :---: | :---: | :---: | :---: |
| A+ | $97-100$ | Exceptional | 4 |
| A | $93-96.9$ | Excellent | 4 |
| A- | $90-92.9$ | Very Good | 3.7 |
| B+ | $87-89.9$ | Very Good | 3.3 |
| B | $83-86.9$ | Good | 3.0 |
| B- | $80-82.9$ | Good | 2.7 |
| C+ | $77-79.9$ | Above Average | 2.3 |
| C | $73-76.9$ | Average | 2.0 |
| C- | $70-72.9$ | Below Average* | 1.7 |
| D+ | $67-69.9$ | Below Average* | 1.3 |
| D | $63-66.9$ | Below Average* | 1.0 |
| D- | $60-62.9$ | Below Average* | 0.7 |
| F** | $0-59.9$ | Failing | 0.0 |
| R+ | Repeat | 0.0 |  |

*Students should be aware that although these grades are considered passing, they have the effect of lowering the GPA below the level necessary for graduation. Consistent performance at this grade level will result in probation and subsequently suspension from the College.

## **F Grade Policy

When a student receives the grade of " $F$ " or an administrative failing grade, and that student subsequently retakes that course and receives a grade of " C " or better, the initial grade will no longer be computed into the Grade Point Average. The original grade will remain on the transcript with the notation "not calculated in Grade Point Average."

The number of failing credits that can be deleted from the Grade Point Average is limited to 16 for the duration of the
student's undergraduate enrollment in The City University of New York. All 16 credits may be used at the associate degree level, but once used; they are unavailable at the CUNY senior college level. For this reason, students should be advised of the desirability of holding some or the entire credit bank for later studies at the senior college. Students should make written request for such exclusions to the Registrar who is responsible for informing students of their rights with regard to this regulation. This policy is effective Sept. 1, 1990, at all colleges of CUNY. For additional information, contact the Registrar's Office
†lssued only in remediation courses (equated credit skills improvement courses) to designate significant achievement on the part of the student. Students receiving the grade of " $R$ " are required to repeat the course. The grade of " $R$ " may not be assigned more than once in a single course and assigned only during the final grading period.

## Administrative Grades

During the semester, and under circumstances described below, instructors may assign the following special grades:

| Grade | Explanation |
| :--- | :--- |
| W | Withdrew Officially-3rd week 10th week only. <br> Student initiated. No Impact on GPA |
| WA | Administrative Withdrawal-non-punitive grade <br> assigned to students who had registered for <br> classes at the beginning of the term but did not <br> provide proof of immunization by compliance date <br> No impact on GPA |
| WU | Unofficial Withdrawal - 4th week through end <br> of semester. Student attended at least one class <br> session, but failed to withdraw officially. May <br> be assigned only during the final grading period <br> (Counts as a failure in GPA.) |
| WN | Never Attended.-No impact for credit or grade. |
| *AUD | Audit - Course not taken for credit or grade |

*AUD - Once classes have begun, students cannot change a course from audit status to credit status or from credit status to audit status. Credits in audited courses are not counted for financial aid.

## Temporary Grades

An instructor may assign a temporary grade at the end of the semester only for one of the reasons given below:

| Grade | Explanation |
| :---: | :--- |
| INC | Work in course incomplete (but student <br> otherwise passing in course) Absent from the final <br> exam (but student otherwise passing in course). <br> No impact of GPA. May resolve to A+, A, A-, B+, <br> B, B-, C+, C, C-, D+, D, D-, F or FIN equivalent to <br> F if unresolved. (Refer to Regulations below). |
| PEN | Grade Pending <br> It is also used to facilitate the implementation <br> of the Procedures for Imposition of Sanctions <br> whereby the college must hold a student's <br> grade in abeyance pending the outcome of the <br> academic review process. |

Registration in subsequent level courses: A student with the grade of INC or PEN in any course may not register for the subsequent level course in a sequence without written permission to do so from the Chairperson of the Department in which the course is given.

The deadline for a student to resolve a temporary grade (INC) by completing coursework shall be the end of the 10th week of the semester immediately following the one in which the grade was given.

If a student cannot comply with the 10th week deadline for submission of required coursework, he/she may file for an extension of the temporary grade only with the approval of the instructor and/or the department chair. The instructor and/or the department chair will then specify the period of time by which the coursework must be completed (no later than the 10th week of the semester following the one in which the extension was granted).

The INC grade will automatically convert from INC to FIN at the end of the 10th week of the semester immediately following the one in which the grade was given unless the student has completed the coursework or has been granted an extension. FIN impacts GPA.

The PEN grade will not lapse to F. Final determination of a grade will depend on final evaluation by the instructor or the outcome of college's academic review process.

## ACADEMIC STANDING

CUNY Board of Trustees policy requires that all students must achieve the following minimum cumulative Grade Point Average (GPA) standards to be considered in good academic standing.

| Cumulative Credits <br> Attempted | Minimum Cumulative GPA |
| :--- | :--- |
| $0-12$ | 1.5 |
| $13-24$ | 1.75 |
| 25 -Higher | 2.0 |

## PROBATION/SUSPENSION

Students are placed on academic probation for the following semester if they do not meet the minimum GPA in the above chart. Students who are unable to bring their GPA to the required standards while on probation will be suspended, and must be separated from the University for at least one semester. Students who have been suspended twice may not be readmitted at BCC.

## At-Risk Academic Standing Chart

$\begin{array}{|c|c|c|c|}\hline \begin{array}{c}\text { Credits } \\ \text { Attempted }\end{array} & \begin{array}{c}\text { Cumulative } \\ \text { GPA Index }\end{array} & \begin{array}{c}\text { First } \\ \text { Occurrence }\end{array} & \begin{array}{c}\text { Second } \\ \text { Occurrence }\end{array} \\ \hline 12 \\ \begin{array}{c}\text { Credits } \\ \text { or below }\end{array} & \text { Below } 1.5 & \begin{array}{c}\text { Probation } \\ \text { (13 credits/ } \\ \text { equated credits } \\ \text { max) }\end{array} & \begin{array}{c}\text { Suspension } \\ \text { (One-semester) }\end{array} \\$\cline { 2 - 5 } \& $\left.1.5-1.99 & \begin{array}{c}\text { Academic } \\ \text { Warning } \\ \text { (13 credits/equated } \\ \text { credits rec.) }\end{array} & \begin{array}{c}\text { Academic } \\ \text { Warning } \\ \text { (13 credits/equated } \\ \text { credits rec.) }\end{array} \\ \hline 13-24 & \text { Below } 1.75 & \begin{array}{c}\text { Probation } \\ \text { (13 credits/ } \\ \text { equated credits } \\ \text { max) }\end{array} & \begin{array}{c}\text { Suspension } \\ \text { (One-semester) }\end{array} \\ \hline 25 \text { and } & \text { Below } 2.0 & \begin{array}{c}\text { Academic } \\ \text { Warning }\end{array} & \begin{array}{c}\text { Wcademic } \\ \text { Warning } \\ \text { (13 credits/equated } \\ \text { credits rec.) }\end{array}\end{array} \begin{array}{c}\text { (13 credits/equated } \\ \text { credits rec.) }\end{array}\right]$

## ACADEMIC APPEALS

Students may appeal their probationary or suspension status to the Appeals Agent of the Committee on Academic Standing (CAS). Students should contact the Office of Student Affairs to find out who is the current appeals agent. Appeals are intended for students who have WUs that could be converted to Ws, or for students who have poor academic grades that are older than 7 years and who have shown academic progress seven years after those grades were earned. FIN grades are resolved with the instructor who issued the grades. Usually, a student has 10 weeks into the semester following the semester in which the grade was given to resolve the INC grade, but an instructor may file an extension form to allow a student more time.

## COMMITTEE ON ACADEMIC STANDING (CAS)

The Committee on Academic Standing formulates policy on matters regarding the maintenance of matriculation, grading structure, satisfaction of requirements for degrees and certificates, and advanced standing. It adjudicates and takes final action on waivers of suspension, statute of limitation and administrative grade appeals. Communications with the Committee should be made through the Registrar, who serves as its Executive Secretary. The College Community may review a copy of the Codification of Academic Rules and Regulations on the College website.

## GRADUATION

## Graduation Requirements

To be considered for graduation at Bronx Community College, students must meet five requirements.
They must have:

- Completed all the required courses in the curriculum
- An overall academic index of at least C (2.0)
- Completed the minimum degree credits required
- Passed the CUNY Assessment Test in Writing Exam (CATW).
- Completed two designated Writing Intensive (WI) courses (students who entered BCC in Fall 2004 or later).


## To Apply for Graduation

Students file as a "Candidate for Degree" in the semester they expect to graduate. The candidate for degree card is available in the Registrar's Office, Colston Hall, Room 513. Students who fail to submit a candidate degree card will not be evaluated for graduation purposes. The diploma will be dated the semester that the degree is conferred, not necessarily the semester that the coursework was completed.

## Multiple Degrees

An applicant for a second degree must complete a minimum of fifteen (15) additional credits required by the second degree at BCC. A student may earn only one Associate in Arts (A.A.) degrees. However, a student may earn multiple Associate in Science (A.S.) degrees, or multiple Associate in Applied Sciences (A.A.S.) degrees where the curricula is distinct.

Course requirements for the second degree are those curriculum requirements in effect when application for the second degree is approved. For more information, consult the Codification of Academic Rules and Regulations available on the College website.

## HONORS

The Honors Program at Bronx Community College fosters academic excellence. It challenges students with rigorous assignments and creates opportunities for education beyond an A.A. or A.S. degree.

The Honors Program is open to all students who meet the following criteria: a GPA of at least 3.2; all course prerequisites met; and at least nine college credits earned. Students may also enter the program when recommended by a faculty member. Incoming freshmen who meet specific criteria are also eligible.

Qualified students are eligible to take honors courses in a variety of subjects in the liberal arts and sciences. Honors classes are generally limited in size and offer greater opportunities for individual attention and interaction with faculty. Students receive special recognition on their transcripts for those honors courses in which they attain a grade of B+ or better. For more information please consult the Honors Program webpage https://bcc-cuny.digication.com/ honors/Welcome.

## DEAN'S LIST

Students shall be eligible for inclusion on the Dean's List if they have been assigned academic grades for a minimum of twelve (12) college-level credits in a semester with an average of 3.3 or higher. Students shall be evaluated for the Dean's List upon successful completion of 12 or more college credits in a semester.

No student may be included on the Dean's List more than six (6) times during his or her stay at the college. A student with a grade of F, WU, FIN, or WF shall not be eligible for that semester. An INC or PEN grade must be completed before the start of the following semester for a student to be considered for Dean's List. A student with a $Z$ grade shall not be considered until the $Z$ grade is resolved.

It is strongly recommended that students conduct a preliminary degree audit (DegreeSolutions) at least two semesters before they expect to graduate.

## Regulations for Part-Time Students

All of the aforementioned criteria for full-time matriculated students shall be applicable to part-time matriculated students. A part-time matriculated student shall be eligible for the Dean's List upon completion of twelve (12) college-level credits during an "accumulation period." An "accumulation period" will consist of two consecutive semesters completing twelve (12) college-level credits.

## Dean's List for Graduation

To be considered for the Dean's List at the time of graduation a student must have a cumulative Grade-Point Average (GPA) of 3.3, with no PEN or INC grades.

## PRESIDENT'S LIST

Students shall be eligible for inclusion on the President's List if they have been assigned academic grades for a minimum of twelve (12) college-level credits in a semester with an average of 3.7 or higher.

A student who qualifies for the President's List in a given semester or at graduation is not eligible to be on the Dean's List at the same time.

A student with a grade of F or WU shall not be eligible for that semester. An INC or PEN grade must be completed before the start of the following semester for a student to be considered for President's List. A student with a Z grade shall not be considered until the grade is resolved.

## Regulations for Part-Time Students

All of the aforementioned criteria for full-time matriculated students shall be applicable to part-time matriculated students. A part-time matriculated student shall be eligible for the President's List upon completion of twelve (12) collegelevel credits during an "accumulation period."

An "accumulation period" will consist of two consecutive semesters completing twelve (12) college-level credits.

President's List for Graduation
To be considered for the President's List at the time of graduation a student must have a cumulative Grade-Point Average (GPA) of 3.7, with no PEN or INC grades.

## HONOR SOCIETIES

Presently four honor societies are active at the BCC.

## Alpha Beta Gamma | Advisor: Mr. Elsworth Brown

Alpha Beta Gamma is the International Business Society recognizing scholarship among community college students. To be eligible for membership with the BCC chapter, students must be enrolled as a Business and Information Systems Department major, have completed 15 credit hours with at least 12 credit hours taken in courses leading to a business degree, and attained a 3.0 GPA. Induction ceremonies are conducted each spring.

## Phi Theta Kappa | Advisor: Ms. Yvonne Erazo

Phi Theta Kappa is the International Honors organization of two-year colleges. Membership is offered to students who have earned at least 24 credit hours at the College and have achieved a cumulative GPA of at least 3.5. Phi Theta Kappa offers a variety of leadership opportunities for student involvement partakes in community service activities and holds an induction ceremony each year during the spring.

## Tau Alpha Pi | Advisor: Dr. Jalil Moghaddasi

Tau Alpha Pi is the National Honor Society recognizing students enrolled in science and technology programs at twoyear colleges. To be eligible for membership, students must have earned at least 24 credit hours with a cumulative GPA of at least 3.5. The organization holds an induction ceremony each year during the spring semester.

## Chi Alpha Epsilon | Advisor: Mrs. Cassandra Bellabe-Rosemberg

Chi Alpha Epsilon is the National Honor Society recognizing the academic achievements of students admitted to colleges and universities through non-traditional criteria. The organization serves Educational Opportunity Program students such as SEEK and College Discovery students at the City University of New York. Membership is offered to students who have earned at least 12 credit hours with a cumulative GPA of at least 3.0 for two consecutive full-time semesters.

## CUNY POLICY ON ACADEMIC INTEGRITY

Academic dishonesty is prohibited at The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion, as provided herein.

## I. Definitions and Examples of Academic Dishonesty

Cheating is the unauthorized use or attempted use of material, information, notes, study aids, and devices of communication during an academic exercise.

The following are some examples of cheating, but by no means is it an exhaustive list:
Copying from another student during an examination or allowing another to copy your work.

Unauthorized collaboration on a take-home assignment or examination.

Using notes during a closed book examination.
Taking an examination for another student or asking or allowing another student to take an examination for you.

Changing a graded exam and returning it for more credit.
Submitting substantial portions of the same paper to more than one course without consulting with each instructor.

Preparing answers or writing notes in a blue book (exam booklet) before an examination. Allowing others to research and write assigned papers or do assigned projects, including use of commercial term paper services.

Giving assistance to acts of academic misconduct/dishonesty.
Fabricating data (all or in part).
Submitting someone else's work as your own.
Unauthorized use during an examination of any electronic devices such as cell phones, palm pilots, computers or other technologies to retrieve or send information.

Plagiarism is the act of presenting another person's ideas, research or writings as your own. The following are some examples of plagiarism, but by no means is it an exhaustive list:

Copying another person's actual words without the use of quotation marks and footnotes attributing the words to their source.

Presenting another person's ideas or theories in your own words without acknowledging the source.

Using information that is not common knowledge without acknowledging the source.

Failing to acknowledge collaborators on homework and laboratory assignments.

Internet Plagiarism includes submitting downloaded term papers or parts of term papers, paraphrasing or copying information from the internet without citing the source, and "cutting \& pasting" from various sources without proper attribution.

Obtaining Unfair Advantage is any activity that intentionally or unintentionally gives a student an unfair advantage in his/her academic work over another student.

The following are some examples of obtaining an unfair advantage, but by no means is it an exhaustive list: Stealing, reproducing, circulating or otherwise gaining advance access to examination materials.

Depriving other students of access to library materials by stealing, destroying, defacing, or concealing them.

Retaining, using or circulating examination materials which clearly indicate that they should be returned at the end of the exam.

Intentionally obstructing or interfering with another student's work.

## Falsification of Records and Official Documents

The following are some examples of falsification, but by no means is it an exhaustive list:
Forging signatures of authorization.
Falsifying information on an official academic record.
Falsifying information on an official document such as a grade report, letter of permission, drop/add form, ID card or other college document.

## COLLEGE SENATE POLICY ON ACADEMIC INTEGRITY

## I. Introduction

Faculty members at Bronx Community College believe that developing students' abilities to think through issues and problems by themselves is central to the educational process. Since academic integrity is vital to BCC as an institution of learning, faculty members will make every effort to uphold this "Policy on Academic Integrity" (hereinafter the "Policy"). Faculty will act in accordance with this Policy and all other University policies and applicable bylaws.

## II. Definitions

The two most common violations of academic integrity are cheating and plagiarism.

## A. Cheating

Cheating is defined as (a) taking or giving help on a test; (b) using unauthorized books, papers, notes or unauthorized pre-prepared materials during an examination; (c) passing off another person's work as one's own in the case of projects, papers, portfolios, lab reports; or (d) falsifying reports that clinical procedures were completed, and fabricating data such as vital signs, lab reports, etc. Examples of cheating include, but are not limited to, the following:

Copying an examination or assignment that will be submitted as an individual's own work;

Procuring and distributing answers to examinations in advance;

Using answers on examinations that have been obtained in advance;

Unauthorized collaboration on work submitted as one's own;
Having another person take an examination or write a paper that will be submitted as one's own;

Submitting work which has been previously or is currently being used in another course without the knowledge or consent of the instructor.

## B. Plagiarism

Plagiarism is a form of academic dishonesty which occurs when individuals attempt to present as their own, ideas or statements that have come from another source. Examples of plagiarism include, but are not limited to, the following:

Failing to acknowledge (give a citation for) the ideas of another person, whether or not such ideas are paraphrased;

Attempting to rewrite borrowed material by simply dropping a word here and there, substituting a few words for others, or moving around words or sentences;

Failing to place quotation marks around borrowed material in the approved style (it is no defense to claim that one has "forgotten" to do so); and/or

Presenting as one's own work a paper or computer program prepared by another person, whether by another student, friend, or family member, or by a business that sells such papers or programs to students.

## III. Faculty Responsibilities

A. Allegations of cheating may be referred to the Vice President for Student Development ("VPSD") to be handled under the Student Disciplinary Procedures in Article 15 of the Bylaws of The City University of New York, as amended by the Board of Trustees on February 24, 1992 ("bylaws").
B. Allegations of plagiarism may be referred to the Vice President of Academic Affairs ("VPAA") to determine whether the matter involves an academic question or a disciplinary matter. If the VPAA determines that the matter is academic, the College's regular procedures in terms of grading and appeals, as contained in the Committee on Academic Standing's Codification dated May 16, 1996 ("CAS Codification"), shall be followed. If the VPAA determines that the matter is disciplinary, then it shall be handled as a disciplinary violation in accordance with Article 15 of the bylaws.

The VPAA and VPSD will keep a record of any reported incident completely separate from the student's other College records. Only the VPAA shall have access to records concerning academic violations, but she/he may supply them to the VPSD or the Student Disciplinary Committee when and if it is appropriate to do so. Records concerning a student's academic integrity shall be destroyed six years after an individual student's graduation or other separation from the College. If the VPAA sees a pattern of reports about a particular student, the VPSD will be consulted and the faculty member informed so that the seriousness of the problem is addressed by further grade penalties, disciplinary action, appropriate counseling or other measures consistent with the CAS Codification in cases of academic violations and by reference to Article 15 of the bylaws in cases of disciplinary violations. (See also Students Rights below.)
C. Allegations of cheating or plagiarism, if proven, may result in disciplinary action pursuant to Article 15 of the bylaws, with penalty ranging from failure in the course to dismissal from the College.

## IV. Student Responsibilities

A. All students' work shall be the result of their own efforts unless teamwork or other collaborative efforts are being clearly encouraged by the instructor.
B. Students are required to appropriately identify direct quotations and paraphrased opinions, ideas, and data when they are incorporated into the writing of papers, examinations, class projects, etc.
C. Students shall follow the directions of the course proctor regarding permissible materials in the classroom at the time of examinations.
D. No student shall give or receive any assistance or communicate in any way with another student while an examination is in progress.
E. No student shall attempt to obtain or disseminate the content of any examination prior to its distribution by the proctor.
F. No student shall submit the same work to more than one instructor without the prior approval of the course instructor.
G. All students are expected to help insure academic integrity. Students should inform the professor if they suspect cheating or plagiarism. Student assistance in this matter is confidential.

## V. Students' Rights and Appeals

In cases in which a matter is treated as an academic violation, the College's regular procedures in terms of grading and appeals, as contained in the CAS Codification, should be followed.

In cases in which the matter is referred to the Vice President for Student Development to be treated as a disciplinary violation, Article 15 of the bylaws fully describes the students' rights and the procedures to be followed.

## RELIGIOUS BELIEFS AND CLASS ATTENDANCE

## Education Law Section 224-a.

No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he or she is unable, because of his or her religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.

Any student in an institution of higher education who is unable, because of his or her religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination, any study or work requirements.

It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his or her religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

If classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on a Saturday, similar or make-up classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.

In effectuating the provisions of this section, it shall be the duty of the faculty and of the administration officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his or her availing himself or herself of the provisions of this section.
Any student who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his or her rights under this section.
A. It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school, because of his or her religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to such student such equivalent opportunity.

As used in this section, the term "institution of higher education" shall mean any institution of higher education, recognized and approved by the regents of the university of the state of New York, which provides a course of study leading to the granting of a post-secondary degree or diploma. Such term shall not include any institution which is operated, supervised or controlled by a church or by a religious or denominational organization whose educational programs are principally designed for the purpose of training ministers or other religious functionaries or for the purpose of propagating religious doctrines. As used in this section, the term "religious belief" shall mean beliefs associated with any corporation organized and operated exclusively for religious purposes, which is not disqualified for tax exemption under section 501 of the United States Code

# Campus Policies and Procedures 

## CAMPUS BEHAVIOR CODE

To ensure the continuance and enhancement of the positive image and reputation of all members of the College community, in the interest for promoting student and faculty welfare at the College, and the safety and security of our entire College community, the following Code of Behavior is in effect:

Gambling and the sale and possession of drugs, including marijuana, are illegal by New York State law. Violators will be subject to disciplinary action and/or to referral to outside authorities.

Any student who does not show his or her ID card upon a legitimate request will be considered a trespasser.

Use of alcoholic beverages is prohibited on campus, except for the consumption of beer and/or wine at special events sponsored by chartered student groups under the supervision of a faculty adviser with prior approval of the Vice President for Student Development.

Any form of cheating is prohibited.
Any student charged with, accused of, or alleged to have violated the Code of Behavior or any law or regulation established by the College, and by the City, State or Federal Government shall be subject to disciplinary procedures as outlined in Articles 15.3 to 15.6 of the Board of Trustees Bylaws and to sanctions as listed in the Board of Trustees Bylaws and Article 129A of the Education Law.

A preliminary investigation will be conducted to determine whether disciplinary charges should be preferred. If there is sufficient basis for the allegation, the matter may be referred to conciliation or formal disciplinary charges may be preferred. The procedures for conciliation conferences and for FacultyStudent Disciplinary Committee hearings are outlined in Articles 15.3 to 15.6 of the Board of Trustees Bylaws. Copies of the pertinent articles can be obtained from the Office of the Vice President for Student Development.

## PUBLIC ORDER (EDUCATION LAW)

Rules and Regulations for the Maintenance of Public Order on Campuses of the City University Pursuant to Article 129A of the Education Law

The tradition of the university as a sanctuary of academic freedom and center of informed discussion is an honored one, to be guarded vigilantly. The basic significance of the sanctuary lies in the protection of intellectual freedoms: the right of professors to teach, of scholars to engage in the advancement of knowledge, of students to learn and to express their views, free from external pressures or interference.

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

## The President

The president, with respect to his or her educational unit, shall:
"(A) Have the affirmative responsibility of conserving and enhancing the educational standards of the college and schools under his or her jurisdiction;
"(B) Be the advisor and executive agent to the Board and of his or her respective College Committee and as such shall have the immediate supervision with full discretionary power in carrying into effect the bylaws, resolutions and policies of the Board, the lawful resolutions of any of its committees and the policies, programs and lawful resolutions of the several facilities;
"'(C) Exercise general superintendence over the concerns, officers, employees and students of the educational unit."

## Rules

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

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

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

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

Each member of the academic community or an invited guest has the right to advocate his or her position without
having to fear abuse, physical, verbal, or otherwise, from others supporting conflicting points of view. Members of the academic community and other persons on the college grounds shall not use language or take actions reasonably likely to provoke or encourage physical violence by demonstrators, those demonstrated against or spectators.

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

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

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

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

The unlawful manufacture, distribution, dispensation, possession, or use of illegal drugs or other controlled substances by University students or employees on University/college premises, or as part of any University/ college activities is prohibited. Employees of the University must also notify the college Personnel Director of any criminal drug statute conviction for a violation occurring in the workplace not later than five days after such conviction.

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

## Penalties

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

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

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

Any organization which authorizes the conduct prohibited under substantive Rules $1-11$ shall have its permission to operate on campus rescinded.

## Appendix-Sanctions Defined:

Admonition-An oral statement to the offender that he or she has violated university rules.
Warning-Notice to the offender, orally or in writing, that continuation or repetition of the wrongful conduct, within a period of time stated in the warning, may be cause for more severe disciplinary action.
Censure-Written reprimand for violation of specified regulation, including the possibility of more severe disciplinary sanction in the event of conviction for the violation of any university regulation within a period stated in the letter of reprimand.

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

Restitution-Reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensate for damages.
Suspension-Exclusion from classes and other privileges or activities as set forth in the note of suspension for a definite period of time.
Expulsion-Termination of student status for an indefinite period. The conditions of readmission, if any is permitted, shall be stated in the order of expulsion.
Complaint to Civil Authorities.
Ejection.
Adopted by the Board of Higher Education June 23, 1969, Calendar No. 3(b). Amended October 27, 1980; May 22, 1989; and June 25, 1990.

## STUDENT DISCIPLINARY PROCEDURES (SECTION 15.3)

## Complaint Procedures:

a. Any charge, accusation, or allegation which is to be presented against a student, and which, if proved, may subject a student to disciplinary action, must be submitted in writing in complete detail to the Office of the Vice President for Student Development promptly by the individual, organization or department making the charge.
b. The chief student affairs officer of the College or his or her designee (the student judicial affairs officer) will conduct a preliminary investigation in order to determine whether disciplinary charges should be preferred. The chief student affairs officer or his or her designee (the student judicial affairs officer) will advise the student of the charge(s) against him or her, consult with other parties who may be involved or who have information regarding the incident, and review
Other relevant evidence. Following this preliminary investigation, which shall be concluded within thirty (30) calendar days of the filing of the complaint, the chief student affairs officer or designee (the student judicial affairs officer) shall take one of the following actions:
(i) dismiss the matter if there is no basis for the allegation(s) or the allegation(s) does not warrant disciplinary actions. The individuals involved shall be notified that the complaint has been dismissed;
(ii) refer the matter to conciliation. If a matter is referred to conciliation, the accused student shall receive a copy of the notice required pursuant to section 15.3 e of this bylaw; or
(iii) prefer formal disciplinary charges.

## Conciliation Conference:

c. The conciliation conference shall be conducted by the counselor in the office of the dean of students or a qualified staff or faculty member designated by a counselor or a qualified staff. The following procedures shall be in effect at this conference:

An effort will be made to resolve the matter by mutual agreement.
If an agreement is reached, the counselor shall report his/ her recommendation to the chief student affairs officer for approval and, if approved, the complainant shall be notified.

If no agreement is reached, or if the student fails to appear, the counselor shall refer the matter back to the chief student affairs officer who will prefer disciplinary charges.

The counselor is precluded from testifying in a college hearing regarding information received during the conciliation conference.

## Notice of Hearing and Charges:

d. Notice of the charge(s) and of the time and place of the hearing shall be personally delivered or sent by the chief student affairs officer of the college to the student at the address appearing on the records of the college, by registered or certified mail and by regular mail. The hearing shall be scheduled within a reasonable time following the filing of the charges or the conciliation conference. Notice of at least five business days shall be given to the student in advance of the hearing unless the student consents to an earlier hearing.
e. The notice shall contain the following: A complete and itemized statement of the charge(s) being brought against the student including the rule, bylaw or regulation he/she is charged with violating, and the possible penalties for such violation.
A statement that the student has the following rights:
(i) to present his/her side of the story;
(ii) to present witnesses and evidence on his/ her behalf;
(iii) to cross examine witnesses presenting evidence against the student;
(iv) to remain silent without assumption of guilt; and
(v) to be represented by legal counsel or an advisor at the student's expense.

A warning that anything the student says may be used against him/her at a non-college hearing.

Faculty-Student Disciplinary Committee Procedure:
The following procedures shall apply at the hearing before the faculty-student disciplinary committee:
The chairperson shall preside at the hearing. The chairperson shall inform the student of the charges, the hearing procedures and his or her rights.

After informing the student of the charges, the hearing procedures, and his or her rights, the chairperson shall ask the student charged to plead quilty or not guilty. If the student pleads guilty, the student shall be given an opportunity to explain his/her actions before the committee. If the student pleads not guilty, the college shall present its case. At the conclusion of the college's case, the student may move to dismiss the charges. If the motion is denied by the committee, the student shall be given an opportunity to present his or her defense.

Prior to accepting testimony at the hearing, the chairperson shall rule on any motions questioning the impartiality of any committee member or the adequacy of the notice of the charge(s). Subsequent thereto, the chairperson may only rule on the sufficiency of the evidence and may exclude irrelevant, immaterial or unduly repetitive evidence. However, if either party wishes to question the impartiality of a committee member on the basis of evidence, which was not previously
available at the inception of the hearing, the chairperson may rule on such a motion. The chairperson shall exclude all persons who are to appear as witnesses, except the accused student.

The college shall make a record of each fact-finding hearing by some means such as a stenographic transcript, a tape recording or the equivalent. A disciplined student is entitled upon request to a copy of such a transcript, tape or equivalent without cost.

The student is entitled to a closed hearing, but has the right to request an open public hearing. However, the chairperson has the right to hold a closed hearing when an open public hearing would adversely affect and be disruptive of the committee's normal operations.

The college bears the burden of proving the charge(s) by a preponderance of the evidence.

The role of the faculty-student disciplinary committee is to listen to the testimony, ask questions of the witnesses, review the testimony and evidence presented at the hearing and the papers filed by the parties, and render a determination as to guilt or innocence. In the event the student is found guilty, the committee shall then determine the penalty to be imposed.

At the end of the fact-finding phase of the hearing, the student may introduce additional records, such as character references. The college may introduce a copy of the student's previous disciplinary record, where applicable, provided the student was shown a copy of the record prior to the commencement of the hearing. The disciplinary record shall be submitted to the committee in a sealed envelope and shall not be opened until after the committee has made findings of fact. In the event the student has been determined to be guilty of the charge or charges, the records and documents introduced by the student and the college shall be opened and used by the committee for dispositional purposes, i.e., to determine an appropriate penalty if the charges are sustained.

The committee shall deliberate in closed session. The committee's decision shall be based solely on the testimony and evidence presented at the hearing and the papers filed by the parties.

The student shall be sent a copy of the faculty-student disciplinary committee's decision within five days of the conclusion of the hearing. The decision shall be final subject to the student's right of appeal.

Where a student is represented by legal counsel, the president of the college may request that a lawyer from the general counsel's office appear at the hearing to present the college's case.

## Appeals (Section 15.4)

An appeal from the decision of the faculty-student disciplinary committee may be made to the president who may confirm or decrease the penalty but not increase it. His/
her decision shall be final except in the case of dismissals or suspension for more than one term. An appeal from a decision of dismissal or suspension for more than one term may be made to the appropriate committee of the board. Any appeal under this section shall be made in writing within fifteen days after the delivery of the decision appealed from. This requirement may be waived in a particular case for good cause by the president or board committee as the case may be. If the president is a party to the dispute, his/her functions with respect to an appeal shall be discharged by an official of the university to be appointed by the chancellor.

## Committee Structure (Section 15.5)

a. Each faculty-student disciplinary committee shall consist of two faculty members and two student members and a chairperson. A quorum shall consist of the chair and any two members. Hearings shall be scheduled at a convenient time and efforts shall be made to insure full student and faculty representation.
b. The president shall select in consultation with the head of the appropriate campus governance body or where the president is the head of the governance body, its executive committee, three (3) members of the instructional staff of that college to receive training and to serve in rotation as chair of the disciplinary committees. If none of the chairpersons appointed from the campus can serve, the president, at his/her discretion, may request that a chairperson be selected by lottery from the entire group of chairpersons appointed by other colleges. The chairperson shall preside at all meetings of the faculty-student disciplinary committee and decide and make all rulings for the committee. He/she shall not be a voting member of the committee but shall vote in the event of a tie.
c. The faculty members shall be selected by lot from a panel of six elected annually by the appropriate faculty body from among the persons having faculty rank or faculty status. The student members shall be selected by lot from a panel of six elected annually in an election in which all students registered at the college shall be eligible to vote. In the event that the student or faculty panel or both are not elected, or if more panel members are needed, the president shall have the duty to select the panel or panels which have not been elected. No individuals on the panel shall serve on the panel for more than two consecutive years.
d. In the event that the chairperson cannot continue, the president shall appoint another chairperson. In the event that a student or faculty seat becomes vacant and it is necessary to fill the seat to continue the hearing, the seat shall be filled from the faculty or student panel by lottery.
e. Persons who are to be participants in the hearings as witnesses or have been involved in preferring the charges or who may participate in the appeals
procedures or any other person having a direct interest in the outcome of the hearing shall be disqualified from serving on the committee.

## Suspension or Dismissal (Section 15.6)

The board reserves full power to dismiss or suspend a student, or suspend a student organization for conduct which impedes, obstructs, or interferes with the orderly and continuous administration and operation of any college, school, or unit of the university in the use of its facilities or in the achievement of its purposes as an educational institution.

The chancellor or chancellor's designee, a president or any dean may, in emergency or extraordinary circumstances, temporarily suspend a student, or temporarily suspend the privileges of a student organization or group for cause, pending an early hearing as provided in bylaw section 15.3 to take place within not more than seven (7) school days. Prior to the commencement of a temporary suspension of a student, the college shall give such student oral or written notice of the charges against him/her and, if he/she denies them, the college shall forthwith give such student an informal oral explanation of the evidence supporting the charges and the student may present informally his/her explanation or theory of the matter. When a student's presence poses a continuing danger to person or property or an ongoing threat of disrupting the academic process, notice and opportunity for denial and explanation may follow suspension, but shall be given as soon as feasible thereafter.

## COMPUTER RESOURCES ACCEPTABLE USE POLICY

This policy incorporates and supplements the CUNY Computer User Responsibilities found at www.cuny.edu/ abtcuny/policies/comp_user.html. As part of the physical and social learning infrastructure, Bronx Community College and The City University of New York acquire, develop and maintain computers, computer systems, and networks. At the College these computer resources are intended for Collegerelated purposes, including direct and indirect support of the College's education, research and public service missions; of College administrative functions; of student and College life activities; and of the free exchange of ideas among members of the College community and between the College community and other communities. This policy applies to all users of College computing resources, whether affiliated with the College or not, and to all uses of those resources, whether on campus or from remote locations.

## Principles of Acceptable Use

Users of College computer resources are required:
To respect the privacy of other users; for example, users shall not intentionally seek information on, obtain copies of, or modify files or data belonging to other users, unless explicit permission to do so has been obtained.

To respect the legal protection provided to programs and data by copyright and license.

To protect data from unauthorized use or disclosure as required by state and federal laws and College and CUNY regulations.

To respect the integrity of computing systems: for example, users shall not use or develop programs that harass other users or infiltrate a computer or computing system and/or damage or alter the software components of a computer or computing system.
To safeguard their accounts and passwords. Any user changes of password must follow published guidelines for good passwords. Accounts and passwords are normally assigned to single users and are not to be shared with any other person without authorization. Users are expected to report any observations of attempted security violations.

## Policy Violations

It is not acceptable to use Bronx Community College computer resources:

For activities inconsistent with the College's mission;
For activities unrelated to official assignments, job responsibilities or role at the College;
For any illegal purpose;
To transmit threatening, obscene, intimidating or harassing materials or correspondence;
For unauthorized distribution of College data and information;
To interfere with or disrupt network users, services or equipment;

For private commercial purposes such as marketing or business transactions;
In violation of copyrights, patent protections or license agreements, including using pirated or unlicensed software;
For unauthorized not-for-profit business activities;
For private advertising of products or services; or For any activity meant to foster personal gain.
Furthermore, users are prohibited from taking College computer hardware or software from College facilities for any purpose without prior approval.

## Security and Privacy:

Users should be aware that their uses of College computer resources are not completely private. While the College does not routinely monitor individual usage of its computer resources, the normal operation and maintenance of the College's computer resources require the backup and caching of data and communications, the logging of activity, the monitoring of general usage patterns, and other such activities that are necessary to render service. The College may also specifically monitor the activity and accounts of individual users of College computer resources, including individual login sessions and communications, without notice, when: the user has voluntarily made them accessible to the public, as by posting to Usenet or a web page;
there is a reasonable basis to believe that this policy or federal, state or local law has been violated;
to diagnose and resolve technical problems involving system hardware, software, or communications; or as otherwise required or permitted by law.

The College, in its discretion, may disclose the results of any such general or individual monitoring to appropriate College or CUNY personnel or law enforcement agencies and the results may be used in College disciplinary proceedings or discovery proceedings in legal actions. In addition, communications made by means of College computer resources in conjunction with College or CUNY business may be releasable to the public under the New York State Freedom of Information Law.

## College Rights:

The College assumes no responsibility or liability for files deleted by College computer resources personnel due to a user's violation of file server space allotments.

The College reserves the right to suspend or terminate a user's access to College computer resources when this policy is violated.
The College is not responsible for damages caused by unauthorized access to College computer resources or for data loss or other damages resulting from delays, nondeliveries, or service interruptions, whether or not resulting from circumstances under the College's control.

Use of any information obtained through College computer resources is at the user's risk. The College makes no warranties (expressed or implied) with respect to Internet services, and it specifically assumes no responsibility for the content of any advice or information received by a user through use of the College computer resources, or for any costs or charges incurred by the user as a result of seeking or accepting such advice.

The College reserves the right to change its policies and rules at any time.

## Enforcement and Violations

This policy is intended to be illustrative of the range of acceptable and unacceptable uses of College computer resources and is not necessarily exhaustive. This policy recognizes and supports the CUNY Libraries Internet Guidelines found at website http://libraries.cuny.edu/l-access.htm.

Questions about specific uses related to security issues not enumerated in this policy and reports of specific unacceptable uses should be directed to the Executive Director of Information Technology. Other questions about appropriate use should be directed to your instructor or supervisor.

The College will review alleged violations of this policy on a case-by-case basis. Clear violations of this policy, which are not promptly remedied, will result in termination of access to the relevant computer resources for the person(s) at fault, and referral for disciplinary actions as appropriate.

## COLLEGE E-MAIL POLICY

## Purpose and Goals

E-mail is one of Bronx Community College's core internal and external communication methods. The purpose of this policy is to ensure that e-mail systems used by College students, faculty and staff support the College's education, research and public service missions to the fullest extent. This policy advises all users of the College e-mail system of their responsibilities and provides guidance in managing information communicated by e-mail. This policy incorporates and supplements the CUNY Computer User Responsibilities found at www.cuny.edulabtcuny/policies/comp_user.html.

## Use of E-Mail

The College provides e-mail services for its students, faculty, staff and other authorized persons for their use when engaging in activities related to their roles at the College. Access to e-mail is a valuable tool in the pursuit of excellence at the College and is a privilege with certain accompanying responsibilities. The same standards of conduct that are expected of College students, faculty, and staff regarding the use of other College facilities, services and resources apply to the use of e-mail.

Users may not use the College e-mail system for illegal or unethical purposes, for personal commercial use or personal financial or other gain, or for any other purpose that would jeopardize the legitimate interests of the College. Use of the College e-mail system by outside organizations not authorized to use College facilities is also prohibited. E-mail users are prohibited from accessing another user's e-mail without permission.

Incidental personal use of College e-mail is permitted when such use does not interfere with College operations, does not compromise functioning of CUNY or College computer resources, does not interfere with the user's employment or other obligations to the College, and is otherwise in compliance with this policy.

## Privacy and Access

College e-mail system administrators will not routinely monitor an individual's e-mail and will take reasonable precautions to protect the privacy of e-mail. However, e-mail is not completely confidential and private. College e-mail system administrators and/or other authorized persons may access e-mail:
when there is a reasonable basis to believe that this policy or federal, state or local law has been violated;
to diagnose and resolve technical problems involving system hardware, software, or communications; and as otherwise required or permitted by law. In addition, e-mail messages sent or received in conjunction with College or CUNY business may be releasable to the public under the New York State Freedom of Information Law. All e-mail messages, including personal communications, may be subject to discovery proceedings in legal actions.

## Security

E-mail security is a joint responsibility of College e-mail system administrators and e-mail users. Users are responsible for taking all reasonable precautions, including safeguarding and changing passwords to protect the e-mail account and prevent use by unauthorized individuals.

## Management and Retention of E-mail Communications

Applicable to all e-mail messages and attachments, since e-mail is a communications system, messages should not be retained for extended periods of time. If a user needs to retain information in an e-mail message for an extended period, he or she should transfer it from the e-mail system to an appropriate electronic or other filing system. College e-mail system administrators are authorized to remove any information retained in the e-mail system that is more than 90 days old. Backup of e-mail messages is not required of the e-mail system technical staff. If a user loses current messages due to a system failure, the College will restore the e-mail with empty folders.

## Enforcement

Violation of this policy may result in suspension and/or termination of an individual's e-mail account, disciplinary action by appropriate College and/or CUNY authorities, referral to law enforcement authorities for criminal prosecution, and/or other legal action, including action to recover civil damages and penalties.

All e-mail users should:
Be courteous and follow accepted standards of etiquette;
Protect others' privacy and confidentiality;
Refrain from using the College e-mail system for personal commercial purposes or other gain;

Protect their passwords;
Remove personal messages, transient records, and reference copies in a timely manner; and
Comply with College and CUNY policies, procedures, rules and regulations.

## POLICY AGAINST SEXUAL HARASSMENT

It is the policy of The City University of New York to promote a cooperative work and academic environment in which there exists mutual respect for all University students, faculty, and staff. Harassment of employees or students based upon sex is inconsistent with this objective and contrary to the University's non-discrimination policy. Sexual harassment is illegal under federal, state, and city laws, and will not be tolerated within the University.

The University, through its colleges, will disseminate this policy and take other steps to educate the University community about sexual harassment. The University will establish procedures to ensure that investigations of
allegations of sexual harassment are conducted in a manner that is prompt, fair, thorough, and as confidential as possible under the circumstances, and that appropriate corrective and/or disciplinary action is taken as warranted by the circumstances when sexual harassment is determined to have occurred. Members of the University community who believe themselves to be aggrieved under this policy are strongly encouraged to report the allegations of sexual harassment as promptly as possible. Delay in making a complaint of sexual harassment may make it more difficult for the college to investigate the allegations.

## A. Prohibited Conduct

It is a violation of University policy for any member of the University community to engage in sexual harassment or to retaliate against any members of the University community for raising an allegation of sexual harassment, for filing a complaint alleging sexual harassment, or for participating in any proceeding to determine if sexual harassment has occurred.
B. Definition of Sexual Harassment

For purposes of this policy, sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other oral or written communications or physical conduct of a sexual nature when:
(1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic standing;
(2) submission to or rejection of such conduct by an individual is used as a basis for employment or academic decisions affecting such individual; or
(3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile or abusive work or academic environment.

Sexual harassment can occur between individuals of different sexes or of the same sex. Although sexual harassment most often exploits a relationship between individuals of unequal power (such as between faculty/staff member and student, supervisor and employee, or tenured and untenured faculty members), it may also occur between individuals of equal power (such as between fellow students or co-workers), or in some circumstances even where it appears that the harasser has less power than the individual harassed (for example, a student sexually harassing a faculty member). A lack of intent to harass may be relevant to, but will not be determinative of, whether sexual harassment has occurred.

## C. Examples of Sexual Harassment

Sexual harassment may take different forms. Using a person's response to a request for sexual favors as a basis for an academic or employment decision is one form of sexual harassment. Examples of this type of sexual harassment (known as quid pro quo harassment) include, but are not limited to, the following:
requesting or demanding sexual favors in exchange for employment or academic opportunities (such as hiring, promotions, grades, or recommendations);
submitting unfair or inaccurate job or academic evaluations or grades; or denying training, promotion, or access to any other employment or academic opportunity because sexual advances have been rejected.

Other types of unwelcome conduct of a sexual nature can also constitute sexual harassment, if sufficiently severe or pervasive that the target does find, and a reasonable person would find, that an intimidating, hostile or abusive work or academic environment has been created. Examples of this kind of sexual harassment (known as hostile environment harassment) include, but are not limited to, the following:
sexual comments, teasing, or jokes;
sexual slurs, demeaning epithets, derogatory statements, or other verbal abuse;
graphic or sexually suggestive comments about an individual's attire or body;
inquiries or discussions about sexual activities;
pressure to accept social invitations, to meet privately, to date, or to have sexual relations;
sexually suggestive letters or other written materials;
sexual touching, brushing up against another in a sexual manner, graphic or sexually suggestive gestures, cornering, pinching, grabbing, kissing, or fondling; and
coerced sexual intercourse or sexual assault.

## D. Consensual Relationships

Amorous, dating, or sexual relationships that might be appropriate in other circumstances have inherent dangers when they occur between a faculty member, supervisor, or other member of the University community and any person for whom he or she has a professional responsibility. These dangers can include: that a student or employee may feel coerced into an unwanted relationship because he or she fears that refusal to enter into the relationship will adversely affect his or her education or employment; that conflicts of interest may arise when a faculty member, supervisor, or other member of the University community is required to evaluate the work or make personnel or academic decisions with respect to an individual with whom he or she is having a romantic relationship; that students or employees may perceive that a fellow student or co-worker who is involved in a romantic relationship will receive an unfair advantage; and that if the relationship ends in a way that is not amicable, either or both of the parties may wish to take action to injure the other party.

Faculty members, supervisors, and other members of the University community who have professional responsibility for other individuals, accordingly, should be aware that any romantic or sexual involvement with a student or employee for whom they have such a responsibility may raise questions as to the mutuality of the relationship and may lead to charges of sexual harassment. For the reasons stated above, such relationships are strongly discouraged.

For purposes of this section, an individual has "professional responsibility" for another individual at the University if he or she performs functions including, but not limited to, teaching, counseling, grading, advising, evaluating, hiring, supervising, or making decisions or recommendations that confer benefits such as promotions, financial aid or awards or other remuneration, or that may impact upon other academic or employment opportunities.

## E. Academic Freedom

This policy shall not be interpreted so as to constitute interference with academic freedom.

## F. False and Malicious Accusations

Members of the University community who make false and malicious complaints of sexual harassment, as opposed to complaints which, even if erroneous, are made in good faith, will be subject to disciplinary action.

## G. Procedures

The University shall develop procedures to implement this policy. The president of each constituent college of the University, the deputy chancellor at the Central Office, and the dean of the Law School shall have ultimate responsibility for overseeing compliance with this policy at his or her respective unit of the University. In addition, each dean, director, department chairperson, executive officer, administrator, or other person with supervisory responsibility shall be required to report any complaint of sexual harassment to any individual or individuals to be designated in the procedures. All members of the University community are required to cooperate in any investigation of a sexual harassment complaint.

## H. Enforcement

There is a range of corrective actions and penalties available to the University for violations of this policy. Students, faculty, or staff who are found, following applicable disciplinary proceedings, to have violated this policy are subject to various penalties, including termination of employment and permanent dismissal from the University. Effective October 1, 1995.
I. Contact Persons

All members of the Sexual Harassment Panel are trained to handle complaints. In case of a complaint, you may contact any one of the following:

## Jesenia Minier-Delgado

Co-Chairperson - Chief Diversity Officer
Location: Language Hall [LH], Room 31
718.289.5151/5154
jesenia.minier-delgado@bcc.cuny.edu

## Professor Ellen Hoist

Co-Chairperson
Location: Carl Polowczyk Hall [CP], Room 403
718.289.5419
ellen.hoist@bcc.cuny.edu
Vacant
Secretary
Professor Franklin Moore
Parliamentarian
Location: Meister Hall [ME], Room 312
718.289.5588
franklin.moore@bcc.cuny.edu
Charles Alston
Committee Member (SC: Policy/Outreach)
Location: Loew Hall [LO], Room 300
718.289.5147
charles.alston@bcc.cuny.edu
Thomas Bracken
Committee Member (SC: Training)
Location: Loew Hall [LO], Room 222
718.289.5871
thomas.bracken@bcc.cuny.edu

## Professor Diane D'Alessio

Committee Member (SC: Recruitment)
Location: Colston Hall [CO], Room 435
718.289.5687
diane.dalessio@bcc.cuny.edu
Clement Drummond
Committee Member (SC: Recruitment)
Location: Bliss Hall [BL], Room 200
718.289.5213
clement.drummond@bcc.cuny.edu

## Wendell Joyner

Committee Member (SC: Training)
Location: Philosophy Hall [PH], Room 14
718.289.5178
wendell.joyner@bcc.cuny.edu

## Professor Raymond Canals

Committee Member (SC: Policy/Outreach)
Location: Meister Hall [ME], Room 317A
718.289.5636
raymond.canals@bcc.cuny.edu

## Professor Neal Phillip

Committee Member (SC: Recruitment)
Location: Language Hall [LH], Room 11
718.289.5939
neal.phillip@bcc.cuny.edu

## Kimberly Roberts

Committee Member (SC: Training)
Location: Roscoe Brown Student Center [BC], Room 102
718.289.3732
kimberly.robertsO2@bcc.cuny.edu
John Rosa
Committee Member (SC: Recruitment)
Location: Loew Hall [LO], Room 125
718.289.5628
john.rosa@bcc.cuny.edu
Thomas Rodriguez
Location: Loew Hall [LO], Room 512
718.289.5100 Ext. 3777
thomas.rodriguez@bcc.cuny.edu
Rolly Wiltshire
Committee Member (SC: Policy/Outreach)
Location: Philosophy Hall [PH], Room 26B
718.289.5186
rolly.wiltshire@bcc.cuny.edu

## THE CUNY WORKPLACE VIOLENCE POLICY AND PROCEDURES

The City University of New York has a policy to address the issue of potential workplace violence in our community, prevent workplace violence from occurring to the fullest extent possible and set for procedures to be followed when such violence has occurred. (See Appendix for provisions.)

## Student Services

## DIVISION OF STUDENT AFFAIRS

Dr. Athos K. Brewer

Vice President for Student Affairs
Loew Hall [LO], Room 201|718.289.5869

## Mr. Bernard J. Gantt

Dean of Enrollment Management
Colston Hall [CO], Room 510|718.289.5515
Vacant
Associate Dean of Student Support Services
Loew Hall [LO], Room | 718.289.5866

## Dr. Fenix N. Arias

Associate Dean of Student Engagement and Student Success Roscoe Brown Student Center [BC], Room 305 | 718.289.5210

The Division of Student Affairs provides direction for all activities related to student services which includes the area of Enrollment Management (Admissions and Recruitment, Financial Aid, Registrar, Welcome Center, and Veterans Affairs); the area of Student Support Services (Career and Transfer Services, College Opportunity to Prepare for Employment (COPE)/Graduate Success Initiative (GSI), General Counseling, Psychological Services, Student Disability Services and Judicial Affairs) the area of Student Engagement and Student Success (Academic Success Center, Athletics, Health Services, Single Stop Program, Student Life and Multicultural Center, and finally the areas of the Early Childhood Center, and Bronx Community College Association Inc..

## EARLY CHILDHOOD CENTER

## Director: Ms. Jitinder Walia

The Children's Center [CC], Room 221 | Phone: 718.289.5461
The Early Childhood Center was founded in 1972 and one of the first childcare centers within the City University of New York. The ECC has been committed to offering excellent early care and education services. The Center offers affordable service to the children of BCC students. Classes are available for toddlers and pre-school children. There is also an after school program for children 6-12.

## BRONX COMMUNITY COLLEGE ASSOCIATION INC.

Chair: Dr. Athos K. Brewer
Loew Hall [LO], Room 201 | Phone: 718.289.5869
The Bronx Community College Association, Inc., is a chartered corporation with a Board of Directors comprised of students, faculty and administrators, and chaired by the College president or a designee. The principle purpose for which the Association has been created is to fund co-curricular programming and activities including, but not limited to,
student publications, honor societies, clubs, college-wide organizations, athletic teams, the early childhood center, and health services.

## DEAN OF ENROLLMENT MANAGEMENT

The Dean of Enrollment Management is responsible for the development, integration, implementation and evaluation of the strategic enrollment plan for the College, including key student services of recruitment, admissions, financial aid, registration, welcome center, and veteran affairs. The Dean of Enrollment Management also provides oversight of the Enrollment Communications Specialist who will serve as the liaison for Hobsons related services including Hobsons Connect and Hobsons Retain for the sister offices of Admissions, Testing, Financial Aid, Academic Advising, Registrar, Bursar, Counseling and the Welcome Center.

## ADMISSION AND RECRUITMENT

Director: Ms. Patricia A. Ramos

Loew Hall [LO], Room 224 | Phone: 718.289.5889
The Office of Admissions and Recruitment is responsible for facilitating the admissions process for all incoming students, assisting with the development and implementation of a comprehensive marketing and recruitment plan, diversifying the recruitment pool, and attracting new student markets. The Recruitment Office is responsible for hosting the College's Open House for future students and facilitating campus tours for future students and interested guests. In addition to promoting the College and providing information, the Admissions Office has the responsibility of obtaining and maintaining accurate student records while safeguarding their privacy and confidentiality.

## OFFICE OF ENROLLMENT MANAGEMENT

Director: Dean Bernard J. Gantt
Colston Hall [CO], Room 509 | Phone: 718.289.5883
The Office of Enrollment Management provides leadership and administration directions in the ongoing development of strategic programs which enhance the College's ability to recruit, retain, and graduate students. This Office supervises the areas of Admissions and Recruitment, Financial Aid, Registrar, the Welcome Center and Veterans Affairs. Students encountering any difficulties related to one of these reporting areas are welcome to visit our office to make an appointment to discuss the matter with the Dean of Enrollment Management.

## OFFICE OF FINANCIAL AID

Director: Mr. Sinu Jacob

Colston Hall [CO], Room 502 | Phone: 718.289.5608
The Office of Financial Aid administers all federal, state, city and college funded aid programs and provides applications, counseling and other information. Financial Aid program descriptions are based on current statuses and regulations, and may be changed periodically. Entering students should contact the Financial Aid Office early in the admissions process to discuss eligibility requirements and to obtain forms and up to date information on the various aid programs. Continuing students should file applications each spring by April 15th.

## OFFICE OF THE REGISTRAR

## Director: Mr. Sanjay Ramdath

Colston Hall [CO], Room 513 | Phone: 718.289.5705
The Office of the Registrar is responsible for providing an efficient maintenance of student records and ensuring the integrity of the student records system through the implementation of operational methods that change as institutional infrastructure changes. Several areas under the supervision of the Registrar include: registration, degree certification, and grade reporting. Services provided include enrollment and degree verifications; re-admission to the College; residency; transcript requests; transfer credit evaluations and grading assistance for faculty.

## VETERANS AND MILITARY RESOURCES

## Coordinator: Ms. Betsy Montañez

Loew Hall [LO], Room 123 | Phone: 718.289.5447
The Office of Veteran and Military Resources provides services for Veteran students and current service members enrolled at Bronx Community College. From application to graduation, the Office of Veteran and Military Resources takes a proactive approach to the educational process and helps students connect with the necessary resources, as well as other Veterans and service members. This office assists veterans and service members with educational benefits, provides information on financial aid, assistance with academic advisement, registration, and withdrawals due to active duty recalls.

## WELCOME CENTER

Director: Mr. Orlando Lopez
Loew Hal [LO], Room 202 | Phone: 718.289.5693
The Welcome Center serves as a liaison to our students, faculty, and staff by providing information regarding all aspects of the campus including college programs and services, office hours and locations, directions to and within the campus, promoting the value of attending our college to visitors, and offering exceptional customer service to our students. The Welcome Center fulfills its mission by
partnering with our Admission's Office, NYC high schools and community organizations, attending recruitment events/college fairs, offering pre-admissions orientations and workshops, hosting informational events and weekly information session tours to educate prospective students about Bronx Community College and its offerings.

## ASSOCIATE DEAN OF STUDENT ENGAGEMENT AND STUDENT SUCCESS

The Associate Dean of Student Engagement and Student Success is responsible for the development, integration, implementation and evaluation of support services provided to freshman students in the area of academic advising, early alert, health services, athletics, student life and the Single Stop Program.

## ACADEMIC SUCCESS CENTER

Interim Director: Mr. Octavio Melendez
Sage Hall [SA], Room 201 | Phone: 718.289.5401
Focused on supporting freshman students' academic progress, the Academic Success Center, is committed to delivering comprehensive academic advising services, and assisting freshmen in the development of individualized educational plans that will inform their academic and professional aspirations.

The Academic Success Center's staff also serves as a valuable resource for freshman students by:

- Providing accurate and timely information regarding testing, placement and graduation requirements.
- Clarifying academic policies and institutional procedures.
- Promoting the use of DegreeWorks, CUNY web-based degree audit tool, that allows students to easily track their progress toward degree completion.
- Providing effective referral to institutional and/or electronic resources.

The Academic Success Center is open Monday through Saturday with evening hours available. For further information call 718.289.5401 or visit our website at: www. bcc.cuny.edu/AcademicAdvising/AcademicSuccessCenter/.

## ATHLETICS

Director: Mr. Michael Belfiore

Alumni Gym Building [AG], Room 403 | Phone: 718.289.5289
The Athletics Program at Bronx Community College provides opportunities for students to compete against neighboring community college and other intercollegiate athletic teams. Men's intercollegiate teams include baseball, basketball, cross country, soccer, and indoor and outdoor track. Women's intercollegiate teams include basketball, cross country, indoor and outdoor track, and volleyball. Participation in the program fosters the values of discipline, cooperation and collaboration as well as the spirit of competition. Through team play, student-athletes learn how to work with others for the achievement of individual and group goals. Individual contributions may include increased confidence, self-esteem, leadership abilities and time management skills. Membership on individual teams is determined by the recruiting efforts of our coaching staff and open tryouts. Full-time students who meet NJCAA eligibility requirements may tryout and become a member of an athletic team. In addition, an acceptable medical report must be on file with the Health Services Office prior to participation. Bronx Community College is a member of the National Junior College Athletic Association (NJCAA Region XV) and the City University of New York Athletic Conference (CUNYAC).

## Recreation and Intramurals

The Recreation and Intramural Sports program offers a wide variety of activities for our students, faculty and staff. Open Recreation opportunities include the use of the cardio room, weight training areas, gymnasium and pool. Available hours vary based on the academic and athletics schedules. In addition, a variety of intramural tournaments are held throughout the semester in sports like basketball, soccer, tennis, handball, dodgeball and volleyball. Students can sign up as a team or as individuals.

## OFFICE OF STUDENT LIFE

Interim Director: Dean Fenix Arias
Roscoe Brown Student Center [BC], Room 305
Phone: 718.289.5194
The Office of Student Life includes a variety of activities, special programs, college-wide organizations and clubs that are an integral part of college life. The purpose of this office is to enhance the overall student experience through exposure to diverse perspectives, leadership development, service learning, co-curricular programming, and volunteer service. Student Life, the Student Government Association (SGA), the Inter-Organizational Council (IOC) and the Multicultural office work collaboratively for the benefit of students and the campus community.

The Student Activities Committee, a Senate sub-committee, is comprised of students, faculty, and administrators. This body serves in an advisory capacity to the Office of Student Life. They review and approve clubs and College-
wide organizations and provide direction for campus-wide programs and activities. Visit http://www.bcc.cuny.edu/ Student-Life/ for more information.

## Student Government Association (SGA)

The Student Government Association is comprised of 15 senators elected by the student body each spring semester. An internal election is conducted for executive positions. As a body, SGA provides direction and guidance on all studentrelated matters, including student activities and campus programming. SGA members participate fully in the College Senate and its many sub-committees.

## Roscoe C. Brown Student Center

The Roscoe C. Brown Student Center is dedicated to serving the social, cultural and recreational needs of Bronx Community College students, and provides for a variety of services and educational experiences. The facility includes a cafeteria, theatre, club programming space, meeting rooms and the Barnes and Noble bookstore. For information regarding use of the facilities for programs, meetings or conferences, contact the Events Management office at 718.289.5993.

## Shuttle Bus

A free shuttle bus service provides evening students with transportation from campus to several subway and bus lines. The hours of operation are 4:30 to 10:30 p.m. in the fall semester and 5:30 to 10:30 p.m. during the spring semester. Service is provided Monday through Thursday, September through May, when classes are in session. Student activity fees cover the cost of this service.

## Clubs and Organizations

The Inter-Organizational Council (IOC) is the representative body that deals with the welfare and governance of all student clubs and College-wide organizations, except the Student Government Association. The IOC is comprised of one student from each chartered club, organization and honor society at Bronx Community College.

There are over 30 student clubs and organizations at BCC with academic, cultural, and social themes. BCC students can join an existing club or start a new club with other BCC students of similar interests. Joining a BCC club is an excellent way to enhance the academic experience at BCC. Students who participate in BCC clubs can explore academic programs and majors, develop leadership skills, practice teamwork, build cross-cultural appreciation, and provide community service.

For more information, visit the IOC Office in Roscoe C. Brown Student Center [BC], Room 309; call 718.289.5201; or visit our website at http://www.bcc.cuny.edu/Student-Life/

## HEALTH SERVICES

Wellness Manager: Ms. Victoria King
Loew Hall [LO], Room 101 | Phone: 718.289.5858
The Office of Health Services provides health education and wellness activities to BCC's diverse student body. Services offered on a walk-in basis include physical assessments, treatment of minor injuries and illnesses along with referrals or emergency triage, as needed. Referrals to community resources are also provided.

Over-the-counter medications are available upon request. HIV screening is offered once a week through a local community health organization. Free immunizations during registration periods may include measles, mumps and rubella, HPV, Hepatitis B. Flu vaccine may also be offered during Flu season. For information regarding CUNY student health options, visit the following CUNY web site: http://web.cuny. edu/administration/sa/services/student-health.html

Under Public Health Law 2165, all matriculated students born after January 1, 1957 must show proof of immunity to measles, mumps and rubella. Free immunizations are available during new student registration. Under Public Health Law 2167 all students must be given information about meningococcal meningitis and the benefits of vaccine. By law, all student information is confidential and released only with the student's signed consent.

## SINGLE STOP PROGRAM

Senior Project Coordinator: Ms. Dedra Polite
Loew Hall [LO], Room 118 | Phone: 718.289.5179
The mission of the Single Stop USA is to partner with community colleges and fully integrate their successful economic empowerment model with student service centers and financial aid departments. Further, they seek to harness two of the country's effective anti-poverty tools: coordinated access to America's safety net and a post-secondary education. Our goal, in collaboration with Single Stop USA, is to be a reliable resource where students at Bronx Community College can be informed of their eligibility for benefits, legal services, low-income housing and financial coaching. Students are then guided through the application process.

## ASSOCIATE DEAN OF STUDENT SUPPORT SERVICES

## Vacant/Interim: Dr. Athos K. Brewer

The Associate Dean of Student Support Services is responsible for the development, integration, implementation and evaluation of the strategic support services provided to students in the areas of general counseling, psychological services, disability services, career and transfer services, judicial affairs and special programs such as College Discovery and College Opportunity to Prepare for Employment (COPE)/Graduate Success Initiative (GSI).

## CAREER AND TRANSFER SERVICES

## Director: Alán Fuentes

Interim Associate: Kennybel Peña
Loew Hall [LO], Room 330 | Phone: 718.289.5759
www.bcc.cuny.edu/CareerTransfer/
www.collegecentral.com/ctsbcc
The Career and Transfer Services Office provides an array of advisement and educational services for students and alumni/alumnae that assist individuals to successfully achieve their academic and career goals and objectives. Career and Transfer Services offer the College Work Experience (CWE 31) course. This course is for students who have at least 30 credits and wish to receive real life work experience. In this class students learn about workplace protocols, how to write a resume and job interview skills. This course is for students in the Associates in Applied Sciences Degree (Marketing, Management, Accounting, Office Administration and Technology, and Computer Information Systems).

Other specific services provided by the unit may include:

## Career Services

- Introduction to College majors and career options
- Career assessments, and assessment of academic strengths and needs
- Internships and career fairs
- Online internship and employment opportunities along with a number of additional career related activities


## Transfer Services

- Academic advisement and registration assistance for transfer students
- Senior college, H/EOP, and SEEK/CD (educational opportunity program) transfer admission information, assistance, application, and acceptance
- Activities and events, including on-campus recruitment, internship, career and transfer fairs, and senior college field trips


## Transfer Planning

www.bcc.cuny.edu/TransferCounseling/
The primary reason for early and continuing transfer planning is to ensure that degree program and curriculum are consistent with future career or educational plans. Waiting until the last semester may limit options. Articulation agreements are excellent tools for transfer planning. They provide a course of action for students, including an outline of the most appropriate courses to schedule. Furthermore, some articulation agreements encourage students to continue in the same course of study they started at BCC, while others gear students toward a particular career or educational pathway.

NOTE: Students applying to CUNY senior colleges must have completed at least one college-level course in mathematics and English with a grade of " C " or better or must demonstrate college-level readiness based on SAT, ACT or New York Regents test scores. Students who do not demonstrate college-level readiness are strongly advised to complete mathematics and English courses before their final semester.

Use this convenient transfer planning timeline to help you determine what to do and when to do it.

## 0-12 Credits

- Read the College Catalog
- Explore career and educational pathways
- Select your degree program
- Read articulation agreements


## 13-24 Credits

- Check for new articulation agreements
- Visit college websites
- Read the CUNY transfer policy
- Write your resume


## 25-30 Credits

- Explore transfer options
- Attend senior college open house events
- Check for new articulation agreements
- Begin scholarship search


## 35-35 Credits

- Complete required mathematics and English courses
- Check for new articulation agreements
- See academic adviser for pre-graduation audit
- Update your resume
- Apply for scholarships


## Final Semester

- Apply for graduation
- Send applications
- Apply for financial aid and scholarships


## Post-Graduation

- Send final transcript to the school you have been accepted to


## TRANSFER APPLICATION ESSENTIALS

## BCC CEEB Code: 2051

Secure other college and high school CEEB codes at http://www.suny.edu/Student/apply_tables_codes.cfm

## CUNY and SUNY Application Priority Deadlines

- Spring Admissions: September 15
- Fall Admissions: February 1

CUNY Transfer Application is available online at the CUNY Portal (www.cuny.edu)
Students should log into the CUNY Portal, click on "apply to CUNY" and look for the transfer application.
CUNY Application Processing Center: 212-997-CUNY (2869)
SUNY Transfer Application is available online at http://www.suny.edu/student/apply_online.cfm
SUNY Recruitment Response Center: 1-800-342-3811

## DISABILITY SERVICES

## Director: Patricia Fleming

Loew Hall [LO], Room 211 | Phone: 718.289.5874
Our mission is to provide access and equal educational opportunity for students with disabilities, enabling them to succeed academically, socially, and professionally. Once students have self-identified, applied for services, and provided documentation of their disability, our staff works to determine eligibility for reasonable accommodations. Accommodations may include Exams administered and proctored in a distraction free environment, Class notes provided, accessible formatted class material, Academic and Career Counseling, use of assistive technology from our Technology lab. Under the Americans with Disabilities Act (ADA), both the student and the College must carry out these responsibilities in a timely manner. The Office of Disability Services also acts as a liaison between the student and faculty and staff.

The Office of Disability Services is an official New York State Voter Registration site. Individuals who visit our office are given the opportunity to register as New York State voters. Assistance is available to complete the registration.

## OFFICE OF STUDENT CONDUCT

Interim Student Conduct Officer: Ms. Jessenia Paoli

Loew Hall [LO], Room 222 | Phone: 718.289.5630
The Office of Student Conduct falls under the jurisdiction of the Division of Student Affairs. This Office serves as the primary recipient of complaints filed by faculty, staff and/or students against a fellow student or students who have violated the Student Code of Conduct or the Rules and Regulations for the Maintenance of Public Order on Campuses of the City University - Pursuant to Article 129A of the Education Law. This law is also known as the "Henderson Rules" (For more information about these rules, please refer to the Campus Policies and Procedures section on this catalog). The Office of Student Conduct provides the Associate Dean of Student Support Services and the Vice President for Student Affairs with recommended courses of action to adjudicate complaints received.

## COLLEGE DISCOVERY PROGRAM (CD)

## Manager: Cynthia Suarez-Espinal

Loew Hall [LO], Room 406 | Phone: 718.289.5882
Email: collegediscovery@bcc.cuny.edu
www.bcc.cuny.edu/CollegeDiscovery/default.cfm
College Discovery is the higher education opportunity program at the two year CUNY colleges. It has been a part of The City University since 1964 when it was established by a resolution of the Board of Higher Education. It provides comprehensive academic support to assist capable students who otherwise might not be able to attend college due to their educational and financial circumstances. Students are admitted without regard to age, sex, sexual orientation, race, disability or creed.

The overall purpose of the CD Program is to provide a range of supportive services to ensure students' ability to succeed. Students apply directly to The City University of New York's Office of Admissions Services, and must also satisfy certain economic eligibility criteria. Students that have previously attended college are not eligible to enter the CD Program, except transfer from Percy Ellis Sutton SEEK Program or other opportunity programs such as EOP and HEOP.

If you are eligible for CD you will receive the following benefits and service:

## Counseling

- Meet with a College Discovery counselor who will help you plan classes, teach you how to succeed academically, explore careers, and guide you throughout your time at BCC.


## Academic Support

- Provides small group or one-on-one tutoring from current BCC students and alumni as well as faculty. Tutors will help you learn the material from class, teach you how to study, and help you prepare for exams and papers.


## Book Stipend

- CD provides you with a book stipend each semester to help pay for your books.


## The Pre-College Summer Experience

- This six-week program will introduce you to college life and to the academic demands of BCC. The summer experience prepares you for academic life at BCC. The dates for the program are end of June to the beginning of August.


## Developmental Education Workshop

- A series of developmental education workshops and seminars provide you with college survival and other life skills. These workshops are provided in addition to the Orientation and Career Development course (OCD-O1) and/or Freshmen Year Seminar course (FYS 11).


## OFFICE OF GENERAL COUNSELING

Interim Coordinator: Dr. Ted Ingram
Loew Hall [LO], Room 432 | Phone: 718.289.5866
The Department of General Counseling is both an academic department as well as a service department housed in Student Affairs. The mission of General Counseling is to provide educational, developmental and preventive counseling services to enable students to meet their academic and career goals while having the opportunity to develop intellectually and emotionally.

The department offers the Orientation and Career Development Course (OCD-01) and Career Exploration Course (OCD-11) for incoming first year students. The OCD courses orient students to the college, foster critical thinking, selfreflection and adjustment to the academic environment. Students registered in the OCD courses are assigned a faculty who is their counselor and advisor for the year, and provides personal and career counseling, as well as course and curriculum advisement. The Office of General Counseling also provides career inventories and other assessment instruments that are administered to help students better understand their interests, abilities, values, and psychological needs.

## PSYCHOLOGICAL SERVICES

Interim Coordinator: Amy Ojerholm
Loew Hall [LO], Room 216 | Phone: 718.289.5223
The Office of Psychological Services offers free and confidential assistance to all registered students to support their academic success, emotional well-being and personal growth. Counselors provide short-term individual and group counseling to help students work through personal, family and relationship issues. Other services include crisis intervention, educational workshops and referrals for long-term counseling and for a wide range of community services.

## COLLEGE OPPORTUNITY TO PREPARE FOR EMPLOYMENT PROGRAM (C.O.P.E)

## Director: Barbara Martin

Loew Hall [LO], Room 106A | Phone: 718.289.5849
The College Opportunity to Prepare for Employment Program is funded by the Human Resources Administration (HRA) and is a collaborative effort with BCC and CUNY. C.O.P.E.'s mission is to provide students with comprehensive services, while helping them to successfully meet the relevant requirements of the Human Resources Administration. Services are available to anyone who is a current or former student or applicant, and who is either receiving public assistance cash benefits (Temporary Assistance to Needy Families, Safety Net Family Assistance, Safety Net Single Assistance), or who meets federal income guidelines for families with income under 200\% of the federal poverty level. Staff assists students with job placement, academic advisement, childcare referrals, personal counseling, educational career workshops and HRA advocacy.

## COPE-GSI (GRADUATE SUCCESS INITIATIVE)

## Director: Barbara Martin <br> Coordinator: Denise Comara

Loew Hall [LO], Room 113 | Phone: 718.289.5047
The is a unique program that has the purpose of improving the retention and graduation rates of motivated CUNY community college students receiving public assistance. Traditionally COPE students have greater demands of their time with academic, work and family responsibilities.

The GSI program will utilize a comprehensive set of services and strategies, including exemption from concurrent work activities to support students vulnerable to challenges that impede degree completion. Collectively GSI program services will help second year COPE students complete college successfully and transition into the workforce with confidence.

## GSI eligible students will have the following:

- 30-45 units towards completion of an AAS or AS degree
- 2.0 GPA or higher and in good academic standing
- Eligibility for at least two semesters of TAP and PELL
- Meet all HRA eligibility requirements

GSI provides the following:

- Free use of laptops
- Free monthly metro cards for the academic year
- Tuition Assistance (if qualified)
- Tutoring and other support services
- Study groups
- Peer mentoring
- Weekly senior seminars
- Guaranteed priority registration
- Advisement and ongoing assessment
- Professional development and career planning support
- Social services support/individual counseling
- Personal academic advisement
- Job placement assistance


# Degree Requirements and Explanation of Credit 

Each student is responsible for completing all requirements as prescribed by the College. With the exception of some accredited programs that require additional credits, a minimum number of 60 credits is required to complete an Associate degree (most Certificate programs require 30 credits).

Degree requirements prior to the implementation of Pathways are indicated according to three categories:

- Core Requirements,
- Required Areas of Study, and
- Specialization Requirements.

Degree requirements since the implementation of Pathways are indicated according to three to four categories:

- Required Core,
- Flexible Core,
- Required Areas of Study, and
- Specialization Requirements.

In addition, to be eligible for an Associate degree, students must maintain a cumulative G.P.A. of 2.0 and complete two Writing Intensive courses.

Each semester a list of Writing Intensive courses is published in the Registration Guide and Schedule of Classes.

Developmental courses (RDL 01 or ENG 02, for example) taken at BCC to remove deficiencies in preparatory work do not have academic credits and do not fulfill degree requirements. Courses required or recommended as a result of placement examinations that are not part of the degree course requirements in a particular curriculum will not count toward fulfilling the requirements of the degree in that curriculum.

At the start of their final semester, students must APPLY FOR GRADUATION (under the "other academic..." menu) in CUNY First to be evaluated for graduation. Students will receive a notice of completion of requirements or a checklist of what remains to be fulfilled. Candidates for the degree must be approved by the faculty for presentation to the president and the Board of Trustees as worthy, meritorious and deserving.

## IMPORTANT NOTICE OF POSSIBLE CHANGES

The City University of New York reserves the right, because of changing conditions, to make modifications of any nature in the academic programs and requirements of the University and its constituent colleges without notice. Tuition and fees set forth in this publication (or on this website) are similarly subject to change by the Board of Trustees of The City University of New York. The University regrets any inconvenience this may cause.

Dated: June 22, 2004

## EXPLANATION OF CREDIT

The allocation of credits to courses is based on New York State Department of Education regulations in higher education. Generally, the formula is that one semester-hour of credit is awarded for each 15 hours of course time (lecture or recitation hours) in classes for which considerable out-ofclass preparation in required. In classes which do not require the same level of out-of-class preparation such as laboratory or studio hours/classes, clinic hours/classes, or physical or health education classes, a unit of two or three hours may equal one semester-hour.

- rec (recitation) - the traditional recitation-discussionseminar form.
- lect (lecture) - several sections have been combined into a single group in which the presentation is sometimes accompanied by a demonstration and audiovisual material.
- lab (laboratory) - the class meets in a specially equipped area where students may do individualized work in experimentation with instruments, tools and similar equipment
- clin (clinic) - supervised, individualized clinical experience in a hospital setting including group and individual instruction.
- studio (studio) - supervised and individualized art studio experience in a group and individual instruction.


## Prerequisites and Corequisites

Prerequisites must be completed with a passing grade before the subsequent course may be taken.

Corequisites may be taken simultaneously or before a given course.

The College reserves the right to limit the number of students registered in any course, or to cancel any course for which there is insufficient enrollment, or to make any changes in prerequisites, corequisites, course descriptions, credit allocations, schedule and section offering in the academic year as it may deem necessary for the proper and efficient functioning of the College.

Students who place in ENG 01 and RDL 01 are allowed to register only for the following credit-bearing courses:

ELC 11 (corequisite MTH 06; recommended for Electronic Engineering Technology students only)

ELC 15 (corequisite MTH 05; recommended for Electronic Engineering Technology students only)

HLT 91 and Physical Education courses
KEY 10
KEY 11
COMM 10 (entry into course dependent upon speech screening)

COMM 12 (not open to students simultaneously registered for any ESL courses)

Art studio courses
Music performance courses
Language courses (Level 12 or above, by placement)

Students who place in ENG 02 or RDL 02 may also register for the following credit-bearing courses:

ART 10
ART 11
ART 12
DAT 30
ECO 11
ECO 12
GEO 10
HIS 11
MUS 10
MUS 11
MUS 12
PEA (activity courses)
PHL 11
POL 11
PSY 11
SOC 11

Students who place out of ENG 01 and RDL 01, and meet the corequisite of ENG 02 or RDL 02 may also register for the following credit-bearing courses:

COMM 11
COMM 20
COMM 22
COMM 61
MEST 10
MEDP 93

## Students are advised to check the BCC Pathways web site for course and degree program updates. http://www.bcc.cuny.edu/Pathways/

Starting in Fall 2013, CUNY implemented the Pathways initiative across its undergraduate colleges. Pathways establishes a new system of general education requirements and new transfer guidelines across CUNY--and by doing so reinforces CUNY's educational excellence while easing student transfer between CUNY colleges.

## General Education Requirements

CUNY's new general education framework is a central feature of Pathways. It lays out requirements that undergraduate students across CUNY must meet. Importantly, it also guarantees that general education requirements fulfilled at one CUNY college will be carry over seamlessly if a student transfers to another CUNY college.

Through the three elements of this framework--the Required Common Core, the Flexible Common Core, and, for students in bachelor's degree programs, the College Option Requirement--CUNY seeks to provide students with well-rounded knowledge, a critical appreciation of diverse cultural and intellectual traditions, an interest in relating the past to the complex world in which students live today, and the ability to help society create a fresh and enlightened future. The framework allows students to explore knowledge from various perspectives and to develop their critical abilities to read, write, and use language and symbol systems effectively. It also develops students' intellectual curiosity and commitment to lifelong learning.

The flexibility of the Common Core framework enables each CUNY college to maintain its distinctive character. So, too, does the College Option, which allows colleges to specify 6-12 additional credits of general education coursework that bachelor's degree students must complete.

## Gateway Courses Into Majors

Faculty committees representing several popular transfer majors at CUNY have designated a minimum of three common and transferable courses that will be required of all students in those majors. Students anticipating majors in these fields can begin their coursework at any CUNY college with the assurance that if they transfer to another CUNY college, their prior coursework will count toward their continued pursuit of that major. http://www.bcc.cuny.edu/ Pathways/?p=pw-Gateway-Courses-into-Majors

## How Credits Transfer

By creating a general education framework that applies to all CUNY undergraduates, and by establishing gateway
courses into several popular majors, the Pathways initiative will significantly improve the ease and efficiency of student transfer between CUNY colleges. Courses taken for general education credit, major credit, and elective credit are guaranteed to transfer.

## Does Pathways Apply to You?

- If you began studying at BCC in or after Fall 2013, then Pathways applies.
- If you returned to BCC after an absence of more than one semester, then Pathways applies.
- If you are a continuing student who began studying at BCC before Fall 2013, then The choice is yours. You may choose to continue your current academic plan or OPT IN to Pathways. Check with your advisor because changing to Pathways may increase your time to graduation!


## Continuing Students

1. Review the courses required in your program and in the Pathways compliant program at the academic advising webpage, http://www.bcc.cuny.edu/AcademicAdvising/ AcademicSuccessCenter/.
2. Use the Student Advisement Degree Audit application in the CUNY portal* http://www.cuny.edu/index.html, to review your program requirements. To determine which version of your academic degree program is better for you, use the What If feature in the application. Make sure to select the appropriate major or plan and year (2013-2014) and if you have an option or sub-plan, select the sub-plan and year as well.
3. Consult with an advisor during the advisement and registration period to opt in to Pathways.
4. If you are Opting in, complete the online Opt-In form in the checklist in your Student Center in CUNY first, https:// cunyportal.cuny.edu/cpr/authenticate/portal_login.jsp.

## Based on your credits...

- If you have 15 credits or less, we strongly recommend that you opt into Pathways.
- If you have between 15 and 30 credits, we recommend that you consult with an advisor to determine if opting into Pathways for the Spring 2014 term is your best choice.
- If you have 30 or more credits, we recommend that you remain in your current program and not opt into Pathways. However, it may be more advantageous to opt in if you have changed your major and have excess credits which could be applied to electives under a Pathways revised program.


## Revised Degree Programs

- Accounting (AAS)
- Automotive Technology (AAS)
- Business Administration (AS)
- Community School Health (AS)
- Computer Information Systems (AAS)
- Computer Science (AS)
- Criminal Justice (AA)
- Dietetics and Nutrition Science (AS)
- Digital Arts (AAS)
- Education Associate (AAS)
- Electronic Engineering Technology (AAS)
- Energy Services Technology (AAS)
- Engineering Science (AS)
- Environmental Technology (AAS)
- Human Services (AAS)
- Liberal Arts and Sciences: Biology (AS)
- Liberal Arts and Sciences: Chemistry (AS)
- Liberal Arts and Sciences: Earth Systems and Environmental Science (AS)
- Liberal Arts and Sciences: Physics (AS)
- Liberal Arts and Sciences (AA)
- Liberal Arts and Sciences: Education (AA)
- Liberal Arts and Sciences: History (AA)
- Liberal Arts and Sciences: Human Services (AA)
- Liberal Arts and Sciences: International Studies (AA)
- Liberal Arts and Sciences: Media Studies (AA)
- Liberal Arts and Sciences: Performing Arts (AA)
- Liberal Arts and Sciences: Political Science (AA)
- Liberal Arts and Sciences: Psychology (AA)
- Liberal Arts and Sciences: Sociology (AA)
- Liberal Arts and Sciences: Spanish (AA)
- Liberal Arts and Sciences: Speech Pathology (AA)
- Marketing Management (AAS)
- Mathematics (AS)
- Medical Office Assistant (AAS)
- Medical Laboratory Technician (AAS)
- Nuclear Medicine Technology (AAS)
- Nursing (AAS)
- Office Administration and Technology (AAS)
- Ornamental Horticulture (AAS)
- Paralegal Studies (AAS)
- Pharmaceutical Manufacturing Technology (AAS)
- Radiological Technology (AAS)
- Science for Forensics (AS)
- Telecommunication Tech (AAS)
- Therapeutic Recreation (AS)

Please note that new degree program (e.g., Biotechnology) is not included on this list.

## Inventory of Degree Programs

## BY DEGREE TYPE

## Associate in Arts Degree (AA)

## Transfer Programs

- Criminal Justice
- Liberal Arts and Sciences
- Liberal Arts and Sciences: Education
- Liberal Arts and Sciences: History
- Liberal Arts and Sciences: Human Services
- Liberal Arts and Sciences: International Studies
- Liberal Arts and Sciences: Media Studies
- Liberal Arts and Sciences: Performing Arts
- Liberal Arts and Sciences: Political Science
- Liberal Arts and Sciences: Psychology
- Liberal Arts and Sciences: Sociology
- Liberal Arts and Sciences: Spanish
- Liberal Arts and Sciences: Speech Pathology


## Associate in Science Degree (AS)

 Transfer Programs- Biotechnology
- Business Administration: Accounting
- Business Administration: Computer Programming
- Business Administration: Management
- Business Administration: Marketing Management
- Community/School Health Education
- Computer Science
- Dietetics and Nutrition Science
- Engineering Science
- Liberal Arts and Sciences: Biology
- Liberal Arts and Sciences: Chemistry
- Liberal Arts and Sciences: Earth Systems and Environmental Science
- Liberal Arts and Sciences: Physics
- Mathematics
- Science For Forensics
- Therapeutic Recreation


## Associate in Applied Sciences Degree (AAS) Career Programs

- Accounting
- Automotive Technology
- Computer Information Systems
- Computer Information Systems: Computer Programming
- Computer Information Systems: Web Page Development
- Digital Arts: Graphic Design
- Digital Arts: Interactive Web Design
- Education Associate
- Electronic Engineering Technology
- Energy Services and Technology
- Environmental Technology
- Human Services
- Marketing Management
- Media Technology
- Medical Laboratory Technician
- Medical Office Assistant
- Nuclear Medicine Technology
- Nursing
- Office Administration and Technology
- Ornamental Horticulture
- Paralegal Studies
- Paralegal Studies: Lay Advocate
- Pharmaceutical Manufacturing Technology
- Radiologic Technology
- Telecommunications Technology
- Telecommunications Technology: Verizon*


## Certificate Programs (CERT)

- Animal Care Management
- Assistant of Children with Special Needs
- Automotive Mechanics
- Bilingual Early Childhood Assistant
- Early Childhood Assistant
- Licensed Practical Nursing (LPN)
- Paralegal Certificate Program
* No longer accepting new students.


## BY DEPARTMENT

## Art and Music

- Digital Arts: Graphic Design (AAS)
- Digital Arts: Interactive Web Design (AAS)


## Biology and Medical Lab Technology

- Animal Care Management (CERT)
- Biotechnology (AS)
- Liberal Arts and Sciences: Biology (AS)
- Medical Laboratory Technician (AAS)
- Ornamental Horticulture (AAS)


## Business and Information Systems

- Accounting (AAS)
- Business Administration: Accounting (AS)
- Business Administration: Computer Programming (AS)
- Business Administration: Management (AS)
- Business Administration: Marketing Management (AS)
- Computer Information Systems (AAS)
- Computer Information Systems: Computer Programming (AAS)
- Computer Information Systems: Web Page Development (AAS)
- Marketing Management (AAS)
- Medical Office Assistant (AAS)
- Office Administration and Technology (AAS)
- Paralegal Certificate Program (CERT)
- Paralegal Studies (AAS)
- Paralegal Studies: Lay Advocate (AAS)


## Chemistry and Chemical Technology

- Environmental Technology (AAS)
- Liberal Arts and Sciences: Chemistry (AS)
- Liberal Arts and Sciences: Earth Systems and Environmental Science (AS)
- Pharmaceutical Manufacturing Technology (AAS)
- Science For Forensics (AS)


## Communication Arts and Sciences

- Liberal Arts and Sciences: Media Studies (AA)
- Liberal Arts and Sciences: Performing Arts (AA)
- Liberal Arts and Sciences: Speech Pathology (AA)
- Media Technology (AAS)*


## Education and Reading

- Assistant of Children with Special Needs (CERT)
- Bilingual Early Childhood Assistant (CERT)
- Early Childhood Assistant (CERT)
- Education Associate (AAS)
- Liberal Arts and Sciences: Education (AA)


## Health, Physical Education and Wellness

- Community/School Health Education (AS)
- Dietetics and Nutrition Science (AS)
- Therapeutic Recreation (AS)


## History

- Liberal Arts and Sciences: History (AA)


## Mathematics and Computer Science

- Computer Science (AS)
- Mathematics (AS)


## Modern Languages

- Liberal Arts and Sciences: Spanish (AA)


## Multidisciplinary

- Liberal Arts and Sciences (AA)
- Liberal Arts and Sciences (AS)


## Nursing and Allied Health

- Licensed Practical Nursing (LPN) (CERT)
- Nursing (AAS)
- Radiologic Technology (AAS)


## Physics and Technology

- Automotive Mechanics (CERT)
- Automotive Technology (AAS)
- Electronic Engineering Technology (AAS)
- Energy Services and Technology (AAS)
- Engineering Science (AS)
- Liberal Arts and Sciences: Physics (AS)
- Nuclear Medicine Technology (AAS)
- Telecommunications Technology (AAS)
- Telecommunications Technology: Verizon (AAS)*


## Social Sciences

- Criminal Justice (AA)
- Human Services (AAS)
- Liberal Arts and Sciences: Human Services (AA)
- Liberal Arts and Sciences: International Studies (AA)
- Liberal Arts and Sciences: Political Science (AA)
- Liberal Arts and Sciences: Psychology (AA)
- Liberal Arts and Sciences: Sociology (AA)

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\begin{array}{r}
\text { Liberal Arts and Sciences } \\
\text { Degree Programs }
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## ABOUT THE PROGRAMS

The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded, individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school.

The general Associate in Arts (A.A.) provides a wellrounded background and the opportunity to explore a variety of subject areas, so that graduates may transfer to the third year of a senior college. Those who wish to pursue a program that allows a greater degree of specialization in the first two years of college may select one of the following options: Education; History; Human Services; International Studies; Media Studies; Performing Arts; Political Science; Psychology; Sociology; Spanish; Speech Pathology. Please note that details on the options are detailed with their respective academic departments (see list at the bottom of this page or the table of contents of this catalog). The Liberal Arts and Sciences A.A. with no option is detailed on the following page.

The Associate of Science (A.S.) degree is designed with a greater emphasis in mathematics and science than the Associate of Arts degree. A student interested in the Associate in Science (A.S.) degree in Liberal Arts and Sciences has to choose one of four options: Biology, Chemistry, Earth Systems and Environmental Science, or Physics. Each option prepares students for transfer to a complementary four-year degree program. Students in the Biology, Chemistry, or Earth Systems and Environmental Science options transfer to four-year science programs (biochemistry, biology, chemistry, earth and environmental science, etc.), teacher education programs, pharmacy schools, engineering programs (biomedical, chemical, environmental), or physician assistant or physical therapy programs. Students in the Physics option usually transfer to colleges offering bachelor's degrees in engineering (civil, electrical, mechanical, etc.) or in the physical sciences. Enrichment programs are offered to encourage students to continue their education beyond the bachelor degree by attending graduate or other professional schools.

Liberal Arts and Sciences A.A.<br>- General / No Option<br>- Education (Education and Reading Department)<br>- History (History Department)<br>- Human Services (Social Sciences Department)<br>- International Studies (Social Sciences Department)<br>- Media Studies<br>(Communication Arts and Sciences Department)<br>- Performing Arts<br>(Communication Arts and Sciences Department)<br>- Political Science (Social Sciences Department)<br>- Psychology (Social Sciences Department)<br>- Sociology (Social Sciences Department)<br>- Spanish (Modern Languages Department)<br>- Speech Pathology<br>(Communication Arts and Sciences Department)

## Liberal Arts and Sciences A.S.

- Biology (Biology and Medical Lab Technology Department)
- Chemistry (Chemistry and Chemical Technology Department)
- Earth Systems and Environmental Science
(Chemistry and Chemical Technology Department)
- Physics (Physics and Technology Department)


## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree Program

Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.A. Degree<br>Curriculum Coordinator: Dr. Debra Gonsher

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences 1 (3-4 Credits)

SUBTOTAL: 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

SUBTOTAL: 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East ( $0-3$ Credits)
- MUS 11 Introduction to Music OR MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication ( $0-3$ Credits)
- COMMUNICATION Select ONE from COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH English Elective ${ }^{2}$ (0-3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (0-3 Credits)
- HISTORY Select ONE from HIS, GEO, PHL (0-3 Credits)
- MODERN LANGUAGE Select TWO from the same language (0-6 Credits)
- SOCIAL SCIENCE Select TWO courses from ANT, CRJ, ECO, HSC, POL, PSY, and SOC (0-6 Credits)


## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- LAB SCIENCE ${ }^{1}$ (0-1 Credit)
- FREE ELECTIVES (0-10 Credits)

SUBTOTAL: 29-30
1 This requirement is satisfied if a student takes a 4-credit STEM variant course in Required Area C.

2 Choose from any ENG course above ENG 16 with the exception of ENG 223.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

Associate in Arts Degree | Transfer Degree Program

## Liberal Arts and Sciences Curriculum <br> 60 Credits required for A.A. Degree

Curriculum Coordinator: Dr. Debra Gonsher

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Choose two laboratory science courses from Astronomy, Biology, Chemistry, Earth Science, Environmental Science OR Physics (8 Credits)

TOTAL 24-25

## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE** (8 Credits)
-ENG*** English (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Philosophy, Political Sciences, Psychology, and Sociology (select from different disciplines) (6 Credits)
- RESTRICTED ELECTIVE-Select from English, History OR Social Science (3 Credits)
TOTAL 32
FREE ELECTIVES
- To complete the 60 credit requirement (3-4 Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may substitute MTH 30 or 31 if they reduce elective credits.
**Choose from a foreign language at the appropriate level. Both courses must be in the same language.
***Excluding English 23, Technical Writing.

## LIBERAL ARTS AND SCIENCES

Associate in Science Degree | Transfer Degree

## Liberal Arts and Sciences Curriculum (pathways)

 60 Credits required for A.S. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning

- MTH $30^{1}$ Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits)
C. Life and Physical Science
- CHM 111 General Chemistry I (4 Credits)

SUBTOTAL 14

## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. US Experience and its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- CHM 12 ${ }^{1}$ General Chemistry II (4 Credits)
*Restricted Elective Select one course from Area A-E. (3 Credits)
SUBTOTAL 19


## Specialization Requirements

-MTH 31 Analytic Geometry and Calculus I** (0-4 Credits)

- MTH 32 Analytical Geometry and Calculus II ( 5 Credits)
- Specialization requirements for option*** (17-18 Credits)
- FREE ELECTIVES (0-5 Credits)

SUBTOTAL 27
1 This program has obtained a waiver to require STEM variant courses in Required Core Area B and Area C and Flexible Core Area E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

* Restricted Elective: must select one course from Flexible Core A-E. No more than two courses in any discipline or interdisciplinary field.
**For students that take MTH 30 to fulfill the Required Core.
***See your department advisor for the appropriate sequence of specialization courses. Students transferring to a college of pharmacy should complete BIO 11 and 12.

BIOLOGY AND MEDICAL LAB TECHNOLOGY DEPARTMENT
Curriculum Coordinator: Dr. Charles Maliti
Biology Option

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)

TOTAL 18

## DEPARTMENT OF CHEMISTRY AND CHEMICAL TECHNOLOGY

Curriculum Coordinator: Dr. Nicolas Anuku

## Chemistry Option

- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- Choose two of the three courses below: CHM 33 Quantitative Analysis AND / OR BIO 11 General Biology I AND / OR PHY 11 Physics I (8 Credits)

TOTAL 18

## DEPARTMENT OF CHEMISTRY AND CHEMICAL TECHNOLOGY

Curriculum Coordinator: Dr. Farnosh Saeedi
Earth Systems and Environmental Science Option

- CHM 27 Principles of Laboratory Safety (2 Credits)
- CHM 33 Quantitative Analysis (4 Credits)
- Choose two of the three courses below: ESE 11 Earth Systems Science: The Earth OR ESE 12 Earth Systems Science: The Atmosphere OR ESE 13 Earth Systems Science: The Ocean (8 Credits)
- ESE 21 Earth Systems Science: The Environment (4 Credits) TOTAL 18


## PHYSICS AND TECHNOLOGY DEPARTMENT

Curriculum Coordinator: Dr. Akhil Lal
Physics Option

- PHY 31 General Physics I (4 Credits)
- PHY 32 General Physics II (4 Credits)
- PHY 33 General Physics III (4 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits)

TOTAL 17
The Biology Option fully articulates with Lehman's B.S. in Anthropology and B.A. in Biology. The Biology Option also articulates with SUNY Empire State College. Copies of these agreements may be found on the BCC Transfer Planning website.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Associate in Science Degree | Transfer Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12* Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)
TOTAL 13-14

## Required Areas of Study

- CHM 11 General Chemistry I (4 Credits)
- CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
- MTH 31 Analytic Geometry and Calculus I (4 Credits)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- ART 11 Introduction to Art OR MUS 11 Introduction to Music OR Humanities OR Social Sciences** (3 Credits)
- MODERN LANGUAGE† (0-8 Credits)

TOTAL 21-29
Specialization Requirements \# (17-18 Credits)
*Students in the Earth Systems and Environmental Science Option may also select from ENG 14, ENG 15, OR ENG 16.
**See your advisor to determine the appropriate course from an approved list of Humanities or Social Science courses.
$\dagger$ Modern Language is a requirement for students planning to transfer to a CUNY four-year college and major in biology, chemistry, earth science or physics. Students planning to transfer should see the language requirements for the four-year degree program at the senior college.
\# See your department advisor for the appropriate sequence of specialization courses. Students transferring to a college of pharmacy should complete BIO 11 and 12.
$\ddagger$ Students may also select BIO 11 or PHY 11.
The Biology Option fully articulates with Lehman's B.S. in Physical Anthropology and B.A. in Biology. The Biology Option also articulates with SUNY Empire State College. Copies of these agreements may be found on the BCC Transfer Planning website.

BIOLOGY AND MEDICAL LAB
TECHNOLOGY DEPARTMENT
Curriculum Coordinator: Dr. Charles Maliti
Biology Option

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)

TOTAL 18

## DEPARTMENT OF CHEMISTRY

 AND CHEMICAL TECHNOLOGYCurriculum Coordinator: Dr. Nicolas Anuku

## Chemistry Option

- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- CHM 33 Quantitative Analysis (4 Credits)
- BIO 11 General Biology I OR PHY 11 Physics I (4 Credits)

TOTAL 18

## DEPARTMENT OF CHEMISTRY AND CHEMICAL TECHNOLOGY

Curriculum Coordinator: Dr. Farnosh Saeedi
Earth Systems and Environmental Science Option

- CHM 27 Principles of Laboratory Safety (2 Credits)
- CHM 33キ Quantitative Analysis (4 Credits)
- ESE 11 Earth Systems Science: The Earth OR

ESE 12 Earth Systems Science: The Atmosphere OR
ESE 13 Earth Systems Science: The Ocean
(Choose two of the above three courses) (8 Credits)

- ESE 21 Earth Systems Science: The Environment (4 Credits) TOTAL 18


## PHYSICS AND TECHNOLOGY DEPARTMENT

Curriculum Coordinator: Dr. Akhil Lal

## Physics Option

- PHY 31 General Physics I (4 Credits)
- PHY 32 General Physics II (4 Credits)
- PHY 33 General Physics III (4 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits) TOTAL 17

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

## ABOUT THE DEPARTMENT

The Department of Art and Music offers a variety of art studio courses in drawing, painting, photography and ceramics; computer courses in digital imaging, typography, 3-D animation and web design; art history courses; and digital and traditional music courses.
Our A.A.S. degree in Digital Arts degree program prepares students to go on to careers in digital, web and graphic design.

The department also runs the Hall of Fame Art Gallery and regularly presents art and music events on campus.

Office: Bliss Hall, Room 303
Phone: 718.289.5341
Website: http://www.bcc.cuny.edu/Art-Music/
Professor and Chairperson: Dr. Ruth Bass
Professor: L. Amowitz, C. Belshe, T. Cipullo, B. Yarmolinsky
Associate Professors: M. Viola
Assistant Professors: R. Ben-Nun, F. Douglas Blanchard, R. Briggs A. Gatto, J. Kelley-Williams,
F. Tanaka-Kuwashima, A. Vuagniaux

Senior CLT: C. Rivera
Approximately 30 adjuncts per semester

## DEGREE PROGRAM

Digital Arts, A.A.S.

## COURSES OFFERED

Art (ART)
Music (MUS)

## DIGITAL ARTS

Associate in Applied Sciences Degree | Career Program Department of Art and Music

Curriculum Coordinator: Professor Lisa Amowitz
This program seeks to prepare students for the dynamic field of digital art by providing a basic career-oriented education. Through intensive training in visual foundations and state-of-the-art technology, students gain aesthetic awareness, problem-solving skills and the technical proficiency necessary to pursue an entry-level position in the visual communication industry in positions such as graphic design, web design, computer animation, 3D graphic visualization, motion graphics design, and interactive multimedia design.

All students begin in the Graphic Design Option, and once completing the basic digital design courses must choose between the Graphic Design Option or the Web Design Option. The Graphic Design Option focuses on typography, page layout and publication design. The Web Design Option focuses on web, animation, sound and multimedia design.

The Digital Arts program articulates with York College (B.S. in Communications Technology); Lehman College (B.A. Specialization in Studio Art: Computer Imaging); Mercy College (B.F.A. in Computer Arts and Design); and New York City College of Technology (BTech in Communication Design). Students are encouraged to read these articulation agreements on the Transfer Planning web site.

## Digital Arts Curriculum

## 60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12, ENG 14, ENG 15 OR ENG 16 (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
C. Life and Physical Science
- SCIENCE Select one course from Required Core C OR Flexible Core E (except BIO 23) ( 3-4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
C. Creative Expression
- ART 11 Introduction to Art History OR ART 12 Intro to Art History: Africa, the Americas, Asia, and the Middle East (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)

A-D - Select one from Flexible Core A, B, C, or D.

- Select one from ANT, COMM, ECO, ENG, GEO, HIS, MOD LAN, MUS 11, PHI, POL, PSY, OR SOC (3 Credits) ${ }^{1}$ SUBTOTAL 24

Required Areas of Study

- PEA Physical Education activity course OR HLT 91 Critical Issues in Health (1-2 Credits)
- FREE ELECTIVE (1-4 Credits)

SUBTOTAL 3-4

## Specialization Requirements

- ART 15 Design Basics (2 Credits)
- ART 21 Drawing (2 Credits)
- ART 22 Painting (2 Credits)
- ART 55 Modern Art (3 Credits)
- ART 56 Graphic and Digital Design History (3 Credits)
- ART 72 Digital Photography (2 Credits)
- ART 79 Typographic Design (2 Credits)
- ART 82 Illustration (2 Credits)
- ART 84 Digital Imaging (2 Credits)
- ART 86 Digital Illustration (2 Credits)
- ART 87 Web Design (2 Credits) SUBTOTAL 24


## Student must choose an option to graduate:

Graphic Design Option Requirements

- ART 81 Typography and Layout (2 Credits)
- ART 89 Publication Design (2 Credits)
- ART 90 Graphic Design Project (2 Credits)
- ART 91 Design Portfolio OR ART 32 Printmaking OR ART 41 Ceramics OR ART 95 Intro to 3D Graphics and Animation (2 Credits)
SUBTOTAL 8


## Web Design Option Requirements

- ART 88 Web Animation (2 Credits)
- ART 93 Web Design Project (2 Credits)
- MUS 13 Sound for the Web (2 Credits)
- ART 97 Web Portfolio OR

ART 32 Printmaking OR ART 41 Ceramics OR ART 95 Intro to 3D Graphics and Animation (2 Credits) SUBTOTAL 8

1 Students planning to transfer to NYC College of Technology are advised to complete PSY 11.

## DIGITAL ARTS (PRE-PATHWAYS)

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Lisa Amowitz

## Digital Arts Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENGLISH Choose any English course (except ENG 23) (3 Credits)
- CMS 11 Fundamentals of Interpersonal

Communication (3 Credits)

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 12* Introduction to Mathematical Thought OR MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
- PEA Physical Education activity course OR

HLT 91 Critical Issues in Health (1-2 Credits)

- SCIENCE** Any laboratory science (4 Credits)

TOTAL 20-21

## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- HUMANITIES ELECTIVE*** (3-4 Credits)
- FREE ELECTIVE (0-2 Credits)

TOTAL 7-8

## Specialization Requirements

(For Both Graphic Design and Web Design Options)

- ART 15\# Design Basics (2 Credits)
- ART 21\# Drawing (2 Credits)
- ART 22 Painting (2 Credits)
- ART 55 Modern Art (3 Credits)
- ART 56 Graphic and Digital Design History (3 Credits)
- ART 72 Digital Photography and Motion Graphics (2 Credits)
- ART 79 Typographic Design (2 Credits)
- ART 82 Illustration (2 Credits)
- ART 84\# Digital Imaging (2 Credits)
-ART 86\# Digital Illustration (2 Credits)
- ART 87 Web Design (2 Credits)

SUBTOTAL 24

## Students select one of two options:

Specialization Requirements for the Graphic Design Option

- ART 81 Typography and Layout (2 Credits)
- ART 89 Publication Design (2 Credits)
- ART 90 Graphic Design Project (2 Credits)
- ART 91 Design Portfolio OR

ART 32 Printmaking OR ART 41 Ceramics OR
ART 95 Introduction to 3D Graphics and Animation (2 Credits)
subtotal 8
TOTAL 32

## Specialization Requirements

 for the Web Design Option- ART 88 Web Animation (2 Credits)
- ART 93 Web Design Project (2 Credits)
- ART 97 Web Portfolio OR ART 32 Printmaking OR

ART 41 Ceramics OR ART 95 Introduction to 3D Graphics and Animation (2 Credits)

- MUS 13 Sound for the Web (2 Credits)


## SUBTOTAL 8

TOTAL 32
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*MTH 21 or MTH 23 is for students intending to transfer to a senior college.
**Select from AST 11 or 12, BIO 11 or 21, CHM 10, 11 or 17, ENV 11, ESE 11 or 12, PHY 10 or 11.
*** Select from Communication, English, Geography, History, Modern Languages, Music, Philosophy, or Social Science (ANT, ECO, POL, PSY, SOC).
\# Should be taken in student's first semester

## COURSES

## Art

## ART $10 \quad 2 \mathrm{rec} 1 \mathrm{cr}$

## Art Survey

Survey of art in selected historical periods of Western civilization.
NOTE: Not open to students taking ART 11 or ART 12. Corequisite: ENG 02 or RDL 02 if required.

## ART 11

3 rec 3 cr

## Introduction to Art History

This course surveys architecture, painting, and sculpture, from prehistory to the present, with emphasis on the development of Western art. Students learn to analyze artworks from different periods and movements including Ancient Egypt, the Italian Renaissance, Impressionism, and Pop Art and how they relate to the society that produced them. A key component of the course is a formal paper based on students己 experience of viewing artworks at museums, galleries, or monuments in New York City
Pre or Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Creative Expression
ART $12 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Art History: Africa, the Americas, Asia, and the Middle East

This course covers the art and architecture of these regions from ancient times to the present. It examines a wide range of media from many different cultures, including African masks, Aztec pyramids, Asian ceramics, and Islamic mosaics. Students learn to analyze artworks and how they relate to the culture that produced them. A key component of the course is a formal paper based on students' experience of viewing artworks at museums, galleries, or monuments in New York City.
Pre or Corequisite: ENG 02 or RDL 02 if required Flexible Core - Creative Expression

## ART $15 \quad 4$ studio 2 cr Design Basics

Studio course introducing the principles of two-dimensional design and color. Experiments in line, value, texture, space, and illusions of volume and their applications to creative and dynamic composition will be applied to conceptual thinking and the development of problem solving skills for graphic design projects of increasing complexity.

## ART $21 \quad 4$ studio 2 cr

## Drawing

Studio course to develop basic skills and concepts in drawing. Emphasis on drawing anatomy and portraits. Use of different mediums and techniques. Students draw from professional models.

## ART 224 studio 2 cr

Painting
Studio course to develop basic skills and concepts in painting in oil and acrylics. Fundamentals of form, color, texture, and composition as applied to still life, landscape, portraits, figure studies, and abstraction. Development of student's personal style.

## ART $32 \quad 4$ studio 2 cr

## Printmaking

Practical studio course in silkscreen printing and intaglio/ relief printing. Basic printmaking techniques are covered with an emphasis on proper use and care of equipment. Primary focus is on the use of photo-sensitive methods. Students will be introduced to graphic arts printing techniques concepts including transparency of ink, separations, registration and editioning. Through museum and gallery visits, as well as library resources, students are made familiar with the developments in printmaking of both the past and present. Portfolio presentation is explained including proper mounting and matting methods and the care of fine arts graphics.

## ART $41 \quad 4$ rec 2 cr <br> Ceramics I

Fundamental techniques of pottery and ceramics. Emphasis on standards of design and development of craftsmanship.
Art museum visits.
ART 424 rec 2 cr

## Ceramics II

Building, decorating, and glazing techniques. Emphasis on three-dimensional design and craftsmanship.

ART $55 \quad 3$ rec 3 cr

## Modern Art

This course covers the important movements in Modern Art, including Impressionism, Post-Impressionism, Expressionism, Cubism, Dada, Surrealism, Abstract Expressionism, Pop Art, Minimal Art, Conceptual Art, and Modern Architecture. Coursework includes lectures, films, and visits to museums,
art galleries, and monuments.
Prerequisite: ART 11 or ART 12 or by departmental permission.
Flexible Core - Creative Expression

ART $56 \quad 3$ lect 3 cr
Graphic and Digital Design History
This course covers the development of graphic design from the Industrial Revolution to the 21st Century. New digital art forms such as web design, computer animation, motion graphics, interactive multimedia and 3-D graphics are also examined. Coursework will include exams, written reports, online research, and museum visits.
Prerequisite: ART 11 or ART 12 or by departmental permission. Flexible Core - Creative Expression

## ART $71 \quad 4$ studio 2 cr <br> Photography

Basic photographic techniques as a creative medium; emphasis on composition and lighting; developing, printing and enlarging. Students provide their own cameras and materials.

## ART $72 \quad 4$ studio 2 cr

## Digital Photography and Motion Graphics

This course will emphasize the basics of composition, lighting, color correction and output. Students will study composition and lighting both in the field and in a commercial studio setting. Students will also examine various methods of digital image presentation including the use of graphic and audio elements in time-based media. This course requires students to have access to a digital camera.

## ART $79 \quad 4$ studio 2 cr <br> Typographic Design

Hands-on typography survey covering history of type, from the stone-age to the electronic age. Coursework will focus on creative exercises that will reinforce the understanding of type; its style, structure, measurement; and its design applications. Students will use current page layout software as applied to typographic studies.
Pre/Corequisite: ART 15 or by departmental permission.
ART $81 \quad 4$ studio 2 cr

## Typography and Layout

Employing typographic and imaging skills, students will strive to create effective page layouts for print design. Conceptual and professional production skills will be emphasized utilizing current layout software.
Pre/Corequisite: ART 79 or by departmental permission.
ART $82 \quad 4$ studio 2 cr

## Illustration

Problems of making illustrations and the direct relationship between technique, concept and execution. Practical aesthetic problems involved in illustrating work done in class
can be used in a portfolio. Students will prepare comps and finished art work ready for reproduction. Assignments teach the student to solve problems of interpretation for children's books, fiction and non-fiction, newspapers and magazines. Students are helped to develop their own styles. Exploration of these concepts on the computer.
Prerequisite: ART 21 or by departmental permission.

## ART $83 \quad 4$ studio 2 cr <br> Graphic Design Principles

The application of 2D design and typography skills applied to problem-solving in visual communications scenarios. From symbol-making, logo design, print ads and posters, and signage systems, students will produce hand and computer generated professional quality work. Emphasis will be placed on the creative process. Studio skills as well as presentation skills will be explored.

ART $84 \quad 4$ studio 2 cr

## Digital Imaging

A course concerned with Digital Imaging for Print, the World Wide Web and Multimedia. Students will experiment with scanned and self-generated images using industry-standard (currently Photoshop) imaging software. Integration with other applications will be a goal. The software programs' prodigious versatility will be applied to the merging and transformation of photographic images in creative and unexpected ways. Professional level skills in this area, vital to a graphic design professional, will be emphasized.

ART 86
4 studio 2 cr

## Digital Illustration

Computer-based instruction exploring advanced topics in illustration using current industry standard drawing programs. Emphasis on conceptualization through finish and technical excellence. Finished class assignments will provide portfolio samples.

## ART $87 \quad 4$ studio 2 cr

Web Design
Building upon skills acquired in previous computer graphics courses, this hands-on computer laboratory workshop focuses upon advanced software and design proficiency. Students will learn professional Web Design and Web Multimedia software. Projects will include various graphics for the web as well as the creation of an interactive website.
Prerequisite: ART 84 or by departmental permission.
ART $88 \quad 4$ studio 2 cr

## Web Animation

This course introduces the principles of digital animation for the web. It focuses on developing a basic understanding
of animation and time-based design, exploring concepts of interactivity, and designing projects for Internet delivery. Projects range from the development of buttons and simple key-frame animations to web ads and splash page animations, incorporating text, sound, and visuals.
Prerequisites: ART 86 or by departmental permission.

## ART $89 \quad 4$ studio 2 cr

## Publication Design

This course explores the application of typographic design to a multiple page format. The challenges presented by designing for an extended publication will foster the development of greater typographic and conceptual skills. Working with narrative, students will create a book that combines personal artistic expression and hands on skills with advanced digital layout techniques, thereby strengthening their ability to analyze and interpret raw information and place it into a meaningful context.
Prerequisites: ART 81 or by departmental permission.

## ART $90 \quad 4$ studio 2 cr

## Graphic Design Project

This course encompasses both the development of a multifaceted graphic design project and the production procedures necessary for projects to be printed professionally. Design projects will explore the creation of identity programs that will include multiple components. The interaction of design and production will be emphasized.
Topics will include project management, understanding font utility programs and file preparation. How to produce reliable digital color proofs, create color separations and understanding color calibration will be covered.
Pre/Corequisite: ART 86 or by departmental permission.

## ART $91 \quad 4$ studio 2 cr

## Design Portfolio

A project based seminar wherein the development of professional portfolios, print and/or multimedia is the goal, along with job-seeking skills.
Prerequisite: ART 81 or by departmental permission. Pre/Corequisites: ART 86, ART 90 or by departmental permission.

## ART $93 \quad 4$ studio 2 cr

## Web Design Project

This course explores the creative and technical process involved in the development of a web design project, including information architecture, interactivity, and menu design. It is conceptual in nature and employs a disciplined and systematic approach to the development of web sites and other Internet related projects. The course takes a comprehensive look at how web sites are developed and deployed and looks into common technologies used for web design. Students will develop fully functional web sites from the ground up.
Prerequisite: ART 87 and ART 88 or by departmental permission.

## ART 954 studio 2 cr

## Introduction to 3D Graphics and Animation

This course provides introductory studio experience in 3D computer graphics and animation. Topics include 3D modeling, texture mapping, virtual lighting, virtual lens, virtual camera, and 3D animation. Through lectures, viewings, tutorials, and projects, students develop a multi-purpose skill set that can be used for innovative content creation, product visualization, space planning, virtual object animation, and multimedia integration.
Prerequisite: ART 86 or by departmental permission.

## ART $97 \quad 4$ studio 2 cr

## Web Portfolio

This is an advanced class in interactive web design, offering supervised career planning, and a chance for students to explore different web design approaches. Aesthetic input and training in appropriate technical skills will be provided to help individual students improve their existing artworks and construct an effective, artistic web portfolio.
Prerequisite: ART 87 and ART 88 or by departmental permission.

## Music

## MUS $10 \quad 2$ rec 1 cr

## Music Survey

Introduction to the vast symphonic and chamber music literature; opera from Baroque to the contemporary period. Audio laboratory listening assignments. Attendance at live concerts required.
Not open to students taking MUS 11 or MUS 12
Corequisite: ENG 02 or RDL 02 if required.

## MUS 11 <br> 3 rec 3 cr

## Introduction to Music

Nature of music expression; elements of music, including tempo, meter, rhythm, melodic and harmonic material and structure, tone color and texture examined in instrumental and vocal forms. History of development of musical styles and forms. Audio laboratory listening assignments. Attendance at live concerts required.

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Corequisite: ENG 02 or RDL 02 if required.
Flexible Core-Creative Expression
MUS 12 3 rec 3 cr
Introduction to Music: A Multi-Cultural Survey of
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In-depth study and analysis of music (style, form, and tradition) and its relation to world cultures. Emphasis on ethnic and artistic characteristics. Audio laboratory listening assignments.
Attendance at live concerts required.
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Creative Expression
MUS $13 \quad 3$ Studio 2 cr
Sound for the Web

This course will introduce students to the techniques and procedures of creating digital sound for the web. The focus will be on various audio techniques, including voice recordings, digital signal processing, video scoring, and the creation of sonic backgrounds. Students will work on individual projects creating original music or audio tracks for web delivery. The class will cover the use of sound in various web-based media, the creation of sound for Flash animation, and the conversion of various sound formats for use with video.

MUS 14

## 2 rec 2 lab 3 cr

## Creative Computer Music

Lecture-demonstrations and lab settings to familiarize students with capabilities of MIDI (Musical Instrument Digital Interface) technologies. Students master MIDI applications of the personal computer with regard to sequencing, sound editing, storage and retrieval. Emphasis on use of MIDI and ability to set up a MIDI workstation.

MUS $18 \quad 2$ rec 2 cr
History of Jazz
Survey of development of jazz music from time of slavery to the present. Audio laboratory listening assignments. Attendance at live concerts required.
Corequisite: RDL 02 if required.
MUS 21, 22, 23, 243 rec 1 cr each

## Choral Performance

The study and presentation of standard and contemporary choral literature for mixed voices. Choral training and performances at concerts, college ceremonies and functions. No audition required; open to all members of the college community.

## MUS $37 \quad 1$ rec 1 cr

## Instrumental Class

Instruction in the Recorder
Basic instruction in playing a musical instrument, the recorder, for both solo and group use. No previous musical training necessary.
MUS $40 \quad 3 \mathrm{rec} 2 \mathrm{cr}$
Fundamentals of Music
Basic reading skills including treble and bass clefs, key signatures, major and minor scales, some elementary sightreading techniques, rhythms, simple harmony.

## MUS $50 \quad 2 \mathrm{rec} 1 \mathrm{cr}$

## Basic Musicianship

Development of basic aural perceptions of pitch, duration, intensity, timbre, melody and rhythm through listening exercises, singing, and the playing of simple musical instruments.

MUS 65 2 rec 1 cr

## Beginning Guitar Class

Introduction to basic guitar techniques, harmonization and transposition of folk songs.

## MUS $66 \quad 2$ rec 1 cr

Guitar Class II
Continuation of MUS 65.
Prerequisite: MUS 65 or departmental permission.

## MUS $70 \quad 2 \mathrm{rec} 1 \mathrm{cr}$

## Piano Class for Beginners

Introduction to basic piano techniques, harmonization and transposition of simple accompanying techniques for folk songs, easy piano literature from all stylistic eras. Practice facilities available.

MUS $71 \quad 2$ rec 1 cr

## Secondary Piano I

MUS $72 \quad 2 \mathrm{rec} 1 \mathrm{cr}$

## Secondary Piano II

Class instruction to attain an elementary facility at the piano. Prerequisite: for MUS 71: MUS 70 or departmental permission; for MUS 72: MUS 71or departmental permission.

## ABOUT THE DEPARTMENT

The Department of Biological Sciences has as its highest goal providing to our students the basis for a lifetime of intellectual appreciation and development. We aim to foster an environment where our students can learn to examine the world scientifically and apply this knowledge in a manner that is beneficial to both the individual and society. In pursuit of this aim, we create an intellectually stimulating atmosphere and provide our students with a quality education in the Biological Sciences, including theoretical and practical analysis of the most current questions in the field.

## The goals of the Department of Biological Sciences are:

To provide high-quality education in the biological sciences
To challenge students to examine the world scientifically and apply their acquired knowledge in their examinations

To foster an environment where students feel intellectually challenged
To respond to educational and employment needs with the community and region
To provide individuals with the opportunity to prepare for careers requiring a background in biology

All curricula have been designed to provide a quality education directed to prepare students for their chosen career area and/or the pursuit of a four-year degree.

Office: Meister Hall [ME], Room 415
Phone: 718.289.5512
Website: http://www.bcc.cuny.edu/Biology/
Professor and Chairperson: Dr. Martin Fein
Professors: M. Gannon, A. Gilman, C. Maliti, C. Mazzatenta, C. Robinson, L. Somenarain

Associate Professors: A. Abdullahai, M. Agovic, S. Akkaraju, S. Atamturktur, L. Broughton, S. Khan, K. Lee, N. McDaniel, R. Tian
Assistant Professors: Y. Edwards, A. Wolf
Lecturers: R, Allen, R. Araya, C. Liachovitzky, L. Rice
Chief CLT: L. Rosario
CLTs: J. Batiz, O. Littlehawk, A. Robert
Approximately 20 adjuncts per semester

## DEGREE AND CERTIFICATE PROGRAMS

Animal Care and Management, Certificate
Biotechnology, A.S.
Liberal Arts, Biology Option, A.S.
Medical Laboratory Technician, A.A.S.
Ornamental Horticulture, A.A.S.

## COURSES

Animal Care and Management (ACM)
Biology (BIO)
Botany (BOT)
Floristry (FLO)
Gardening (GAR)
Horticulture (HRT)
Landscape Design (LND)

## ANIMAL CARE AND MANAGEMENT

Certificate Program
Biological Sciences Department
The purpose of the Certificate Program in Animal Care and Management is to provide access to a career path in the veterinary care of primarily domesticated animals. To accomplish this, partnerships have been established between Bronx Community College and various veterinary clinics and animal hospitals in New York City to enable students to intern at those sites. In preparation for the internship, students in the Animal Care and Management Program will learn techniques for working in a veterinary clinic, including how to properly use and care for the instruments in a laboratory, particularly sterilization techniques, and how to analyze blood and urine samples. As a veterinary assistant, students support veterinarians in their daily tasks, including the restraining and handling of animals, feeding and exercising them, examining them for signs of illness, disease, or injury, cleaning and disinfecting cages and work areas, and sterilizing laboratory and surgical equipment.

This intensive, hands-on program provides BCC students with the technical skills and experience necessary to be competitive in obtaining veterinary assistant jobs in animal hospitals, animal control facilities, veterinary clinics, pet stores and animal rescue facilities. This curriculum also provides a foundation for those who would like to continue their education for an A.S. or B.S. as a veterinary technician or a D.V.M. as a veterinarian. The Certificate Program also fully articulates with Mercy College's B.S. in Veterinary Technology. A copy of the articulation agreement may be found on the BCC Transfer Planning website.
Curriculum Coordinator: Dr. Chris Robinson

## Animal Care and Management Curriculum <br> 30 Credits required for Certificate <br> Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- MTH 12 Introduction to Mathematical Thought OR MTH 21 Survey of Mathematics I (3 Credits)
- PSY 11 Introduction to Psychology OR SOC 11 Sociology (3 Credits)
- BIO 11 General Biology I (4 Credits)

TOTAL 16

## Required Areas of Study

- BIO 15 Zoology (4 Credits)
- DAT 33 Microcomputer Applications (2 Credits) TOTAL 6


## Specialization

- BIO 47 Clinical Techniques for Medical Personnel II (2 Credits)
- ACM 90 Animal Care and Management Internship (6 Credits) TOTAL 8

The following link details information on gainful employment: http://www.bcc.cuny.edu/Gainful-Employment-
Disclosure/?page2=GedtACM

## BIOTECHNOLOGY

Associate in Science Degree | Joint Degree Program Biological Sciences Department
Biotechnology can be broadly defined as the use of living organisms in the design of useful products as well as the exploration of the genetic and biomedical basis of how living organisms function. Some of the fields in which biotechnology plays an important role are:

- Forensic Science;
- Medical research involving genetic diseases, cancer, screening and treatment and embryological development;
- Design of novel drugs aimed at specific biological targets;
- Crop design and genetically modified organisms;
- Production of relevant biologicals such as insulin for treatment of disease; and
- Basic research in areas like, genetics, biochemistry, evolution, etc.
Biotechnological techniques allow genes to be isolated, amplified, expressed in different organisms completely chemically characterized (sequenced). These techniques also allow for insight into, the normal as well as and pathological regulation of the genes. This is a rapidly expanding field and trained individuals are needed.

The Biotechnology Program is a joint degree program with the City College of New York (CCNY) leading to a B.S. degree.
The first 60 credits, resulting in the A.S. Degree, are taken at BCC. To graduate from the A.S. Degree, students must satisfy course requirements as well as college-wide requirements. Students who successfully complete the A.S. Degree in Biotechnology with a cumulative GPA of 2.0 and 2.75 in the sciences, will be accepted into the CCNY B.S. program.

## Curriculum Coordinator: Dr. Martin Fein

## Biotechnology Curriculum

60 Credits required for A.S. Degree
Required Core
A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning

- MTH 30 Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits)
C. Life and Physical Science
- BIO 11 General Biology I (4 Credits) SUBTOTAL 14


## Flexible Core ${ }^{1}$

A. World Cultures and Global Issues (3 Credits)
B. US Experience and its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- BIO 12 General Biology II (4 Credits) Additional course from the Flexible Core A, B, C, D, OR E (3 Credits)
SUBTOTAL 19


## Specialization Requirements

- MTH 31 Analytical Geometry and Calculus (0-4 Credits) ${ }^{1}$
- MTH 37 Elements of Calculus and Statistics (4 Credits)
- FREE ELECTIVE (3-4 Credits)


## SUBTOTAL 7-8

## Biotechnology Specialization Requirements

- BIO 55 Genetics (3 Credits)
- BIO 56 Cell and Molecular Biology with an Introduction to Biotechnology (4 Credits)
- CHM 11 General College Chemistry I (4 Credits)
- CHM 12 College Chemistry II (4 Credits)
- PHY 11 College Physics I ${ }^{2}$ OR

CHM 31 Organic Chemistry I (4-5 Credits)
SUBTOTAL 19-20

[^1]
## LIBERAL ARTS AND SCIENCES

Associate in Science Degree | Transfer Degree
Biological Sciences Department

## Biology Option

A student interested in the Associate in Science (A.S.) degree in Liberal Arts and Sciences has to choose one of four options that includes Biology. The option prepares students for transfer to a complementary four-year degree program. Students in the Biology option transfer to four-year science programs (biochemistry, biology, chemistry, earth and environmental science, etc.), teacher education programs, pharmacy schools, engineering programs (biomedical, chemical, environmental), or physician assistant or physical therapy programs. Enrichment programs are offered to encourage students to continue their education beyond the bachelor degree by attending graduate or other professional schools.
Curriculum Coordinator: Dr. Charles Maliti

## Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.S. Degree <br> Required Core <br> A. English Composition (6 Credits) <br> B. Mathematical and Quantitative Reasoning <br> - MTH $30^{1}$ Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits) <br> C. Life and Physical Science <br> - CHM 111 General Chemistry I (4 Credits)

## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. US Experience and its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- CHM $12^{1}$ General Chemistry II (4 Credits)
*Restricted Elective Select one course from Area A-E (3 Credits)
SUBTOTAL 33


## Specialization Requirements

- MTH 31 Analytic Geometry and Calculus I** (0-4 Credits)
- MTH 32 Analytical Geometry and Calculus II (5 Credits)
-FREE ELECTIVES (0-5 Credits)
SUBTOTAL 9
Biology Option
- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)

SUBTOTAL 18
${ }^{1}$ This program has obtained a waiver to require STEM variant courses in Required Core Area B and Area C and Flexible Core Area E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

* Restricted Elective: must select one course from Flexible Core A-E. No more than two courses in any discipline or interdisciplinary field.
** For students that take MTH 30 to fulfill the Required Core.
*** See your advisor for the appropriate sequence of specialization courses. Students transferring to a college of pharmacy should complete BIO 11 and 12.

The Biology Option fully articulates with Lehman's B.S. in Physical Anthropology and B.A. in Biology. The Biology Option also articulates with SUNY Empire State College. Copies of these agreements may be found on the BCC Transfer Planning website.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Science Degree | Transfer Degree Biological Sciences Department

## Biology Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

Curriculum Coordinator: Dr. Charles Maliti

## Liberal Arts and Sciences Curriculum

60 Credits required for A.S. Degree Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)
TOTAL 13-14

## Required Areas of Study

- CHM 11 General Chemistry I (4 Credits)
- CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
- MTH 31 Analytic Geometry and Calculus I (4 Credits)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- ART 11 Introduction to Art OR MUS 11 Introduction to Music OR Humanities OR Social Sciences* (3 Credits)
- MODERN LANGUAGE† (0-8 Credits)

TOTAL 21-29

## Specialization Requirements

Biology Option

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits) TOTAL 18
* See your advisor to determine the appropriate course from an approved list of Humanities or Social Science courses.
† Modern Language is a requirement for students planning to transfer to a CUNY four-year college and major in biology, chemistry, earth science or physics. Students planning to transfer should see the language requirements for the four-year degree program at the senior college.
The Biology Option fully articulates with Lehman's B.S. in Physical Anthropology and B.A. in Biology. The Biology Option also articulates with SUNY Empire State College. Copies of these agreements may be found on the BCC Transfer Planning website.


## MEDICAL LABORATORY TECHNICIAN

Associate in Applied Sciences Degree | Career Program Biological Sciences Department
Curriculum Coordinator: Dr. Latchman Somenarain

## Medical Laboratory Technician Curriculum

The Medical Laboratory Technician (MLT) curriculum is a career program in which the student earns the A.A.S. degree. In addition to taking general core courses, certain liberal arts and science requirements, and specialized courses in medical laboratory technology, the student has a requirement to train in state-of-the-art hospital laboratories. Upon completion, students will qualify to sit for the NYS Clinical Laboratory Technician license exam (this technician license is required for employment in NYS diagnostic laboratories).

Some students seek employment upon graduation, while others transfer to a four-year college to pursue a baccalaureate degree in Medical Technology (MT). An articulation agreement allows students to transfer credits and continue their studies at York College and earn a B.S. in Medical Technology. A copy of this agreement is available on the Transfer Planning web site. Graduates who transfer and successfully complete a BS degree in Medical Technology will be eligible for the NYS Medical Technologist license exam. The program also articulates with SUNY Empire State College for a baccalaureate degrees in Interdisciplinary Studies as well Science, Mathematics and Technology

NOTE: All students wishing to enter the Medical Laboratory Technology curriculum must complete the following pre-MLT sequence with a minimum index of 2.0: BIO 11, ENG 10/11, CHM 17, MTH 13.

## Medical Laboratory Technician Curriculum (Pathways)

66 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 23 Probability and Statistics (3 Credits)
C. Life and Physical Sciences
- BIO 11 General Biology I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- BIO 12 General Biology II (4 Credits) Additional Flexible Core Requirement - Area E
- CHM 17 Fundamentals of General Chemistry I (4 Credits) SUBTOTAL 24


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credit)
- BIO 22 Medical Terminology (2 Credits)
- CHM 18 Fundamentals of General Chemistry II (4 Credits)
- MTH 13 Trigonometry and College Algebra (3 Credits)
- PSY 11 Introduction to Psychology OR

SOC 11 Introduction to Sociology (3 Credits)
SUBTOTAL 13
Specialization Requirements

- BIO 28 Microbiology and Infection Control (4 Credits)
- BIO 44 Diagnostic Microbiology (4 Credits)
- BIO 81 Introduction to Medical Laboratory Technology (2 Credits)
- BIO 82 Clinical Hematology and Coagulation (4 Credits)
- BIO 83 Clinical Chemistry (4 Credits)
- BIO 85 Immunology / Serology (2 Credits)
- BIO 86 Immunohematology (3 Credits)
- BIO 87 Urinalysis and Body Fluids (2 Credits)
- BIO 90 Clinical Internship (4 Credits)

SUBTOTAL 29

## MEDICAL LABORATORY TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Biological Sciences Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Latchman Somenarain
Medical Laboratory Technology Curriculum
66 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 13 Trigonometry and College Algebra (3 Credits)
- BIO 11 General Biology I (4 Credits)

TOTAL 16
Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credit)
- BIO 12 General Biology II (4 Credits)
- BIO 22 Medical Terminology (2 Credits)
- CHM 17 and 18 Fundamentals of General Chemistry I and II (8 Credits)
- MTH 23 Probability and Statistics (3 Credits)
- PSY 11 Introduction to Psychology OR SOC 11 Sociology (3 Credits) TOTAL 21


## Specialization Requirements

- BIO 28 Microbiology and Infection Control(4 Credits)
- BIO 44 Diagnostic Microbiology (4 Credits)
- BIO 81 Introduction to Medical Laboratory Technology (2 Credits)
- BIO 82 Clinical Hematology and Coagulation (4 Credits)
- BIO 83 Clinical Chemistry (4 Credits)
- BIO 85 Immunology / Serology (2 Credits)
- BIO 86 Immunohematology (3 Credits)
- BIO 87 Urinalysis and Body Fluids (2 Credits)
- BIO 90 Clinical Internship (4 Credits) TOTAL 29

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

## ORNAMENTAL HORTICULTURE

Associate in Applied Sciences Degree | Career Program Biological Sciences Department
Horticulturists are skilled in the cultivation of plants and the care of gardens. They may work in public parks and gardens; they may design, install and maintain the interior landscapes in public buildings and corporate headquarters; or they may work as florists, arranging plants and flowers for special occasions.

Recognizing the need for trained horticulturists, Bronx Community College and The New York Botanical Garden (NYBG) have established a joint program in Ornamental Horticulture. Students study liberal arts and sciences at the BCC campus for the first year. They spend the second year at the NYBG for both academic courses and field experience in aspects of ornamental horticulture.

The program offers two areas of specialization: general horticulture and commercial floristry. Graduates earn an A.A.S. degree in Ornamental Horticulture from BCC.

NYBG courses are open only to Ornamental Horticulture (A.A.S.) students and must be approved by both the Program Director at BCC and the Director of Education at NYBG. Additionally, substitution of Ornamental Horticulture courses must have the written approval of the BCC Program Director.

The Ornamental Horticulture program fully articulates with SUNY Empire State College. A copy of the articulation agreement is available on line at the BCC Transfer Planning website.
Program Director: Ms. Rebecca Araya

## Ornamental Horticulture Curriculum (Pathways) 60 Credits required for A.A.S. Degree <br> Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
C. Life and Physical Sciences
- BIO 11 General Biology I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
E. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- BIO 12 General Biology II (4 Credits) Additional Flexible Core Requirement - Area E
- CHM 17 Fundamentals of General Chemistry I (4 Credits) SUBTOTAL 21


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credit)
- BUS 11 Business Mathematics (3 Credits)
- BUS 51 Business Organization and Management (3 Credits)
- PSY 11 Introduction to Psychology OR

SOC 11 Introduction to Sociology (3 Credits)

- PEA Physical Education-one activity course (1 Credit) SUBTOTAL 11


## NYBG Core Requirements 1

- BOT 11 Basic Botany (1 Credit)
- BOT 12 Plant Form and Function (1 Credit)
- BOT 13 Plant Physiology (1 Credit)
- BOT 41 Entomology (1 Credit)
- GAR 11 Horticultural Techniques I (1 Credit)
- GAR 12 Horticultural Techniques II (1 Credit)
- GAR 13 Pruning (1 Credit)
- GAR 21 Soil Science I (1 Credit)
- GAR 24 Soil Science II (1 Credit)
- GAR 31 Preparation for Pesticide Applicator Certification (2 Credits)
- GAR 32 Diseases of Ornamental Plants (1 Credit) TOTAL 12


## Specialization 1 (Select One)

## General Horticulture Specialization

- BOT 61 Woody Plant Identification: Fall Trees and Shrubs (1 Credit)
- BOT 64 Woody Plant Identification: Spring Trees and Shrubs (1 Credit)
- GAR 41 Plant Propagation I (1 Credit)
- GAR 51 Turf and Grounds Maintenance (1 Credit)
- GAR 81 Plants for Landscaping (1 Credit)
- HRT 13 Turf and Grounds Management I (2 Credits)
- HRT 14 Arboriculture I (2 Credits)
- HRT 15 Perennials and Flower Borders I (2 Credits)
- HRT 16 Greenhouse Operations I (2 Credits)
- HRT 172 Horticulture Field Exp. Electives (1 Credit)
- LND 11 Landscape Design Theory (1 Credit)
- LND 12 Graphics (1 Credit)

TOTAL 16

## Commercial Floristry Specialization

- FLO 11 Basic Centerpieces (1 Credit)
- FLO 12 Holiday Arrangements (1 Credit)
- FLO 13 Funeral Arrangements (1 Credit)
- FLO 15 Wedding Flowers (1 Credit)
- FLO 23 House Plants and Their Care (0.5 Credit)
- FLO 24 Essential Floral Techniques and Arrangements (0.5 Credit)
- FLO 25 Basic Floral Business Techniques (0.5 Credit)
- FLO 26 Intermediate Floral Arrangements (0.5 Credit)
- FLO 61 Commercial Floristry Field Exp. I (3 Credits)
- FLO 62 Commercial Floristry Field Exp. II (3 Credits)
- FLO 63 Commercial Floristry Field Exp. III (3 Credits)
- GAR 44 Commercial Greenhouse Management (1 Credit)

TOTAL 16
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
${ }^{1}$ These core and specialization requirements are given at the New York Botanical Garden.
${ }^{2}$ To be chosen from Horticulture with approval of department.
${ }^{3}$ This specialization may not be offered every semester.
NOTE: Course numbers are different in the BCC catalog and the NYBG Catalog. The 9 credits of Field Experience $\mathrm{I}-\mathrm{III}$ in the Commercial Floristry specialization represent 540 hours of practical field work

## ORNAMENTAL HORTICULTURE (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Biological Sciences Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Program Director: Ms. Rebecca Araya

## Ornamental Horticulture Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- PEA Physical Education (one activity course) (1 Credit)
- BIO 11 General Biology I (4 Credits) TOTAL 14


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credit)
- BIO 12 General Biology II (4 Credits)
- CHM 17 Fundamentals of General Chemistry I (4 Credits)
- BUS 11 Business Mathematics (3 Credits)
- BUS 51 Business Organization and Management (3 Credits)
- PSY 11 Introduction to Psychology OR

SOC 11 Sociology (3 Credits)
TOTAL 18

## NYBG Core Requirements*

- BOT 11 Basic Botany (1 Credit)
- BOT 12 Plant Form and Function (1 Credit)
- BOT 13 Plant Physiology (1 Credit)
- BOT 41 Entomology (1 Credit)
- GAR 11 Horticultural Techniques I (1 Credit)
- GAR 12 Horticultural Techniques II (1 Credit)
- GAR 13 Pruning ( 1 Credit)
- GAR 21 Soil Science I (1 Credit)
- GAR 24 Soil Science II (1 Credit)
- GAR 31 Preparation for Pesticide Applicator Certification (2 Credits)
- GAR 32 Diseases of Ornamental Plants (1 Credit)

TOTAL 12

## Specialization Requirements (Select One)

## General Horticulture Specialization

- BOT 61 Woody Plant Identification: Fall Trees and Shrubs (1 Credit)
- BOT 64 Woody Plant Identification: Spring Trees and Shrubs (1 Credit)
- GAR 41 Plant Propagation I (1 Credit)
- GAR 51 Turf and Grounds Maintenance (1 Credit)
- GAR 81 Plants for Landscaping (1 Credit)
- HRT 13* Turf and Grounds Management I (2 Credits)
- HRT 14* Arboriculture I (2 Credits)
- HRT 15* Perennials and Flower Borders I (2 Credits)
- HRT 16* Greenhouse Operations I (2 Credits)
- HRT 17** Horticulture Field Exp. Electives (1 Credit)
- LND 11 Landscape Design Theory (1 Credit)
- LND 12 Graphics (1 Credit) TOTAL 16


## Commercial Floristry Specialization

- FLO 11 Basic Centerpieces (1 Credit)
- FLO 12 Holiday Arrangements (1 Credit)
- FLO 13 Funeral Arrangements (1 Credit)
- FLO 15 Wedding Flowers (1 Credit)
- FLO 23 House Plants and Their Care ( 0.5 Credit)
- FLO 24 Essential Floral Techniques and Arrangements ( 0.5 Credit)
- FLO 25 Basic Floral Business Techniques ( 0.5 Credit)
- FLO 26 Intermediate Floral Arrangements ( 0.5 Credit)
- FLO 61 Commercial Floristry Field Exp. I (3 Credits)
- FLO 62 Commercial Floristry Field Exp. II (3 Credits)
- FLO 63 Commercial Floristry Field Exp. III (3 Credits)
- GAR 44 Commercial Greenhouse Management (1 Credit) TOTAL 16

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* These core and specialization requirements are given at the New York Botanical Garden.
**To be chosen from Horticulture with approval of department. Note: Course numbers are different in the BCC catalog and the NYBG Catalog.
The 9 credits of Field Experience I-III in the Commercial Floristry specialization represent 540 hours of practical field work.


## COURSES

# Animal Care and Management 

## ACM 90

## 6 cr

## Animal Care and Management Internship

This will be a 500-hour hands-on experience for students who successfully complete the prerequisite courses. The internship will provide valuable opportunities through which students will be able to put into action the practices that they learned in the classroom. Students will focus on procedures and specific applications relating to basic veterinary care, feeding and nutrition, animal handling, animal housing, and sanitation procedures.
Prerequisites: BIO 15 with a grade of $\mathrm{C}+$ or better and BIO 47. Students will be permitted two attempts in BIO 15 to achieve the C+ grade. A "W" will not count as an attempt. If a student takes the course two times, the two grades will be averaged into the student's GPA unless the first grade is an " $F$ " and can be removed under the repeat-failure policy.

## Biology

## BIO $11 \quad 2$ lect 4 lab 4 cr

## General Biology I

Chemical basis of life; cellular structure, function and reproduction; photosynthesis and cell respiration; human anatomy and physiology; plant structure and function.
Prerequisites: MTH 05 and RDL 02 and ENG 02 if required.
Required Core - Life and Physical Sciences
Flexible Core-Scientific World

## BIO 12

2 lect 4 lab 4 cr
General Biology II
Continuation of BIO 11 with emphasis on plant and animal development; Mendelian and molecular genetics; evolution; animal and plant diversity; and ecology.
Prerequisite: BIO 11.
Flexible Core-Scientific World
BIO $15 \quad 2$ lect 4 lab 4 cr
Zoology
The diversity of the animal kingdom with emphasis on ecology, behavior, and phylogeny with medical and economic implications for humanity
Prerequisite: BIO 11.

## BIO $16 \quad 3$ lab 1 cr

## Laboratory Concepts in Biology

This course covers basic biology laboratory skills and concepts. Skills covered will include measurement, record keeping, graphical analysis, microscope use, and dissecting techniques. Topics covered will include the scientific method; the biochemical basis of life; cellular
structure, function and reproduction; and biodiversity. This course is intended to be taken with one of the 3-credit biology classes to fulfill the 1-credit laboratory requirement for the Liberal Arts A.A. major, although it may be taken in a subsequent semester.
Prerequisites: ENG 02 and RDL 02 and MTH 05, if required Corequisites: BIO 19 or BIO 150 or BIO 27/PSY 27 or HLT 20/BIO 20 or with departmental approval

## BIO $18 \quad 4$ lect 4 cr

## Human Biology

A physiological study of the skeletal, muscular, integumentary, digestive, nervous, circulatory, excretory, respiratory, endocrine and reproductive systems of the human body; spe-cial senses.
Prerequisites: ENG 02 and RDL 02, if required
BIO $19 \quad 3$ lect 3 cr

## Food, Sex and Death

This course is designed for non-biology majors and fulfills the Life and Physical Sciences Pathways common core requirement. Topics covered will include the chemical basis of life; cellular structure, function and reproduction; photosynthesis and cellular respiration; nutrition and human health; reproduction; evolution; biodiversity; and ecology.
Prerequisites: MTH 05 and ENG 02 and RDL 02, if required
Required Core-Life and Physical Sciences

## BIO 20 / HLT 203 lect 3 cr

## Aspects of Human Sexuality

This course teaches students about physical, sociological, and psychological aspects of human sexuality. Scientific research on gender, sexual arousal, sexual orientation, sexually transmitted infections, and contraception will be explored. Students will examine cross cultural factors and ethical issues surrounding human sexuality.
Prerequisites: ENG 02 and RDL 02
Flexible Core-Scientific World
BIO 21
3 lect 3 lab 4 cr

## The Human Body

Anatomy and physiology of the integumentary, digestive, nervous, circulatory, excretory, respiratory, endocrine and reproductive systems of the human body; special senses.
Prerequisites: RDL 02 and ENG 02 if required.
Required Core-Life and Physical Sciences
BIO 22
2 lect 2 cr

## Medical Terminology

Acquaintance with medical concepts, medical terms and scientific principles; various ailments and diseases; tests used in their analyses; treatments and therapeutic techniques for alleviation and cure.
Prerequisites: RDL 02 and ENG 02 if required.
BIO $23 \quad 3$ lect 3 lab 4 cr
Human Anatomy and Physiology I
An integrated lab-lecture method for the study of the structure
and function of the human organism. Includes basic chemistry, cellular anatomy and physiology, tissues, integumentary, skeletal, muscular, nervous and endocrine systems.
Prerequisites: MTH 05 and RDL 02 and ENG 02 if required.
Required Core - Life and Physical Sciences
Flexible Core - Scientific World
BIO 24
3 lect 3 lab 4 cr

## Human Anatomy and Physiology II

An integrated lab-lecture method for the study of the structure and function of the human organism. Includes cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems.
Prerequisite: BIO 23
Flexible Core - Scientific World

## BIO 27/PSY 273 lect 3 cr

## Introduction to Behavioral Neuroscience

This course is a survey of the field of Neuroscience including an introduction to the structures and functions of the nervous systems; understanding sensation, perception and movement; sleep and dreaming; learning and memory; and neurological disorders.
Prerequisite: PSY 11 or BIO 11
Flexible Core - Scientific World

## BIO 28 <br> 3 lect 3 lab 4 cr

## Microbiology and Infection Control

Introduction to microbial structure, function and reproduction. Introduces the medical aspects of bacteriology, mycology, parasitology, virology, serology, immunology, epidemiology, and infection control.
Prerequisites: BIO 11 and BIO 12 or BIO 23 and BIO 24

## BIO 44 <br> 2 lect 4 lab 4 cr

## Diagnostic Microbiology

Advanced study of microorganisms with emphasis on diagnostic techniques for identifying pathogens. Included are morphological, cultural, biochemical, serological methods, and antibiotic testing.
Prerequisite: BIO 28 or BIO 43 and departmental approval.
BIO $46 \quad 1$ lect 3 lab 2 cr

## Clinical Techniques for Medical Personnel I

Introduction to the physician's office, medical records, measurement of vital signs, electrocardiograph, preparation of the exam room and medical instruments, $x$-ray and radiograph methods
Prerequisites: BIO 18 or BIO 21, and BIO 22.
BIO $47 \quad 1$ lect 3 lab 2 cr
Clinical Techniques for Medical Personnel II
Clinical laboratory techniques for a medical office laboratory including sterilization and disinfection techniques, analysis of blood, urine and microbiology specimens. Use and care of the microscope and other laboratory instruments.
Prerequisites: BIO 18 and BIO 22; or BIO 21 and BIO 22; or BIO 11.

## BIO $55 \quad 3$ lect 3 cr

## Genetics

A survey of the major principles and concepts of the science of heredity. The course reviews classical Mendelian and nonMendelian genetics. It covers modern genetics including the molecular basis of heredity, gene regulation, developmental genetics, population genetics and biotechnology.
Prerequisites: BIO 12.
BIO $56 \quad 2$ lect 4 lab 4 cr

## Cell and Molecular Biology with an Introduction to Biotechnology

The study of living organisms at the cellular and molecular level concerning the structure and functions of organelles, metabolism, cell signaling, gene structures and function, DNA replication, transcription, translation and control of gene expression. The laboratory portion will focus on basic skills and concepts necessary for the techniques of Biotechnology. These include methods for isolation and characterization of macromolecules (DNA, RNA, Proteins), agarose and polyacrylamide electrophoresis, restriction digests and restriction mapping, PCR, cloning, cell transformations and hybridization reactions.
Prerequisite: BIO 55
BIO $81 \quad 1$ lect 2 lab 2 cr

## Introduction to Medical Laboratory Technology

This course is designed to preview the MLT curriculum coursework and for students to obtain a variety of laboratory skills needed in other MLT courses. It introduces the students to the professional and technical responsibilities of the Medical Laboratory Technician (MLT). Professional topics include hospital and laboratory organization, legal and ethical issues, quality assessment and lab math. Preliminary topics in the major technical areas of laboratory science (Microbiology, Immunology/ Serology, Hematology, Immunohematology, and Clinical Chemistry) are explored. The course also includes instruction and practice in phlebotomy techniques.
Prerequisites: BIO 11, MTH 13, CHM 17 and departmental approval. Corequisites: BIO 12, CHM 18.

## BIO $82 \quad 2$ lect 4 lab 4 cr

Clinical Hematology and Coagulation
Principles and practice of clinical laboratory techniques in hematology and coagulation: complete blood count, normal and abnormal smears, sedimentation rate and coagulation studies. Emphasis on both manual and automated techniques, principles and diagnostic implications.
Prerequisites: BIO 12, BIO 81 and CHM 18 and departmental approval.

BIO $83 \quad 2$ lect 4 lab 4 cr

## Clinical Chemistry

Basic principles of clinical chemistry and quality assurance. Clinical chemistry tests: glucose, renal function tests, serum proteins, hepatic profile, electrolytes, enzymes, and therapeutic drug monitoring. Emphasis on manual techniques, chemical principles and diagnostic implications.

Prerequisites: BIO 81, CHM 18 and MTH 13 and departmental approval.
BIO $85 \quad 1$ lect 2 lab 2 cr
Immunology/Serology
This course is an introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures. The class includes other areas of study concerning the fundamentals of immunity and the immune response such as antibody structure and interactions, the complement system, hypersensitivity reactions and disorders of the immune response.
A student laboratory is used for experiences in fundamental immunology/serology laboratory techniques.
Prerequsites: BIO 12, BIO 81, CHM 18 and departmental approval

## BIO $86 \quad 1$ lect 3 lab 3 cr

## Immunohematology

Immunohematology is the study of blood antigens and antibodies. The course covers principles, procedures and the clinical significance of tests results. Topics in blood banking also include blood group systems, pre-transfusion testing, and adverse effects of transfusions, donor selection, blood components and hemolytic disease of the newborn. The course also explores methods for blood processing, handling, and storage of blood components, and examines cross matching and antibody identification procedures. The class utilizes a student laboratory for experiences in fundamental immunohematology laboratory techniques, including quality control and safety.
Prerequsites: BIO 12, BIO 81, CHM 18 and departmental approval BIO $87 \quad 1$ lec 2 lab 2 cr

## Urinalysis and Body Fluids

This course introduces urinalysis and body fluid analysis, including the anatomy and physiology of the kidney, and physical, chemical and microscopic examination of urine, cerebrospinal fluid and other body fluids. The course utilizes a student laboratory for experiences in basic urinalysis and body fluids analysis
Prerequisites: BIO 11, MTH 13, CHM 17 and department approval Corequisites: BIO 12, CHM 18

## BIO $90 \quad 4 \mathrm{cr}$

## Clinical Internship

This 500 hour course is designed to provide the didactic and clinical experience necessary to acquire knowledge in Clinical Laboratory Science. Students practice clinical skills at
local cooperating hospitals or private laboratories under the guidance of bench technologists and supervisors. They are evaluated by the person in charge of the laboratory and the faculty member assigned to the course to meet established clinical objectives. Students rotate through the following clinical areas: Hematology, Coagulation, Urinalysis, Serology / Immunology, Blood Bank, Microbiology, and Clinical Chemistry.
Prerequisite: Completion of all Medical Laboratory Technology courses and approval by the MLT Program Director.

## BIO $150 \quad 3$ lect 3 cr

## Biology, Bioethics and Law

Basic concepts on structure and function of the human body in conjunction with legal definitions and decisions, and ethical interpretations concerning biological/medical technology. Course includes material on contraception and sterilization, abortion, genetics, DNA manipulations, artificial insemination, in vitro fertilization, surrogate motherhood, death and dying, human experimentation, organ transplantation.
Prerequisites: RDL 02 and ENG 02 if required.
Flexible Core-Scientific World

## Botany

Enrollment in Botany is limited to students in the Ornamental Horticulture curriculum or with special permission of the department. Offered at the New York Botanical Garden. Students should contact the program director.

## Floristry

Enrollment in Floristry is limited to students in the Ornamental Horticulture curriculum with special permission of the department. Offered at the New York Botanical Garden. See curriculum advisor: Ms. Rebeca Araya.

## Gardening

Enrollment in Gardening is limited to students in the Ornamental Horticulture curriculum or with special permission of the department. Offered at the New York Botanical Garden. Students should contact the program director.

## Horticulture

Enrollment in Horticulture is limited to students in the Ornamental Horticulture curriculum or with special permission of the department. Offered at the New York Botanical Garden. Students should contact the program director.

## Landscape Design

Enrollment in Landscape Design is limited to students in the Ornamental Horticulture curriculum or with special permission of the department. Offered at the New York Botanical Garden. Students should contact the program director.

# Business and Information Systems 

## MISSION STATEMENT

The mission of the Business and Information Systems Department Programs is to provide a meaningful, contentspecific education for students majoring in business administration, accounting, management, marketing management, computer programming, office administration and technology and medical office assistant as well as to provide core courses which will assist them to continue their education at four-year institutions and to be successful in their chosen careers.

The goals of the Business and Information Systems Department are:

- To provide students with a high-quality foundation in basic areas such as accounting, information technology, management, marketing, office administration and quantitative skills.
- To provide students with the necessary knowledge base in their chosen area of concentration to be qualified to enter the workforce or pursue a four-year degree.
- To provide practical work experiences through cooperative work programs.
- To develop well-rounded graduates in each business curriculum through exposure to the liberal arts and science courses.
- To enhance the students' problem solving and critical thinking skills.
- To create an educational environment where students grow intellectually and attain their career goals.
- To sponsor activities that enhance students' professional and social development.

All curricula have been designed to provide a quality education directed to prepare students for their chosen career area and/or the pursuit of a four-year degree.

All of the Business and Information Systems Department programs have been nationally accredited by the Accreditation Council for Business Schools and Programs.

The Paralegal Program gives the student a broad range of employment opportunities. There is an increasingly wide range of paralegal job opportunities in both the private and public sectors. Law firms, banks, accounting firms, the court system, and national, state and city government agencies all employ Paralegals.

The Paralegal Programs are accredited by the American Bar Association (ABA).

Office: Meister Hall [ME], Room G-20
Phone: 718.289.5594
Website: http://www.bcc.cuny.edu/Business-Information-Systems/
Professor and Chairperson: Dr. Rosemary Quinn
Professors: H. Andima, R. Canals, H. Clampman, I. Ghafoor
Associate Professors: N. Knight, P. Jaijairam, K. Park-Kim, C. Perkins

Assistant Professors: F. Moore, M. Walwyn
Lecturers: E. Brown, T. D'Arrigo, M. Gagion, H. Irby, Jr. Approximately 30 adjuncts per semester

## Business and Information Systems Advisory Committee

Mr. Guillermo Fisher, Director of Operations Distribution Center, Krasdale Foods Inc.
Ms. Leonie McCaulsky, Management Analyst New York State Unified Court System
Ms. Jessica Perez, Assistant Director of Career and Transfer Services, Bronx Community College
Ms. June Reitmeier, Controller, Vanguard Temporaries Inc.; Adjunct Professor, Pace University
Mr. Domingo Rivera, Auditor, US Defense Contract Agency

## Paralegal Advisory Committee

Henry F. Camuso, Attorney at Law
Hon. Robert Johnson, Esq., Bronx District Attorney
Connie Jones, Chief, Civil Clerk's Office, U.S. Attorney's Office
Professor Franklin Moore, Bronx Community College
Robert Nesmith, Paralegal, NYC Comptrollers Office
Joanne Page, Executive Director of Fortune Society
Kevin Quaranta, Esq., Quaranta and Associates
Dr. Rosemary Quinn, Chairperson, Business and Information
Systems Department Bronx Community College
Hon. Lucindo Suarez, Associate Justice
New York State Appellate Term
Rita Thompson, Paralegal Manager
Kavanagh Maloney and Osnato LLP

## DEGREE AND CERTIFICATE PROGRAMS

Accounting, A.A.S.
Business Administration, A.S.
with Options in

- Accounting
- Computer Programming
- Management
- Marketing Management

Computer Information Systems, A.A.S. with Options in

- Computer Programming
- Web Page Development

Marketing Management, A.A.S.
Medical Office Assistant, A.A.S.
Office Administration and Technology, A.A.S.
Paralegal Studies, A.A.S.
Paralegal Studies, Certificate

## COURSES

Accounting (ACC)
Web Page Development (BIS)
Business (BUS)
Business Communications (COM)
Computer Literacy (CPL)
Computer Applications and Programming (DAT)
Finance (FIN)
Keyboarding (KEY)
Law (LAW)
Marketing (MKT)
Office Procedures (SEC)
Taxation (TAX)
Word Processing and Desktop Publishing (WPR)

## ACCOUNTING

Associate in Applied Science Degree | Career Program Business and Information Systems Department
Accountants are indispensable in modern business organizations. Their basic responsibilities include the recording and summarizing of financial transactions. Accountants are called upon to analyze, interpret, and prepare business records. They are often asked to make recommendations for more efficient operations. Accounting graduates may enter the field in such positions as bookkeepers, cost accounting clerks, junior accountants, and tax examiners for government agencies. After further study, graduates may continue their education to acquire the baccalaureate degree and become business managers, budget directors, private accountants or controllers. With further appropriate education and experience, graduates may qualify for certification as Certified Public Accountants or as teachers of accounting and related subjects. A Cooperative Work Experience course during their senior year allows students to gain valuable business experience in
a supervised setting. Students are advised that there is an A.S. degree offered in the same discipline. The accounting program articulates with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs (see the Transfer Planning web site for more details).
Curriculum Coordinator: Professor Howard A. Clampman

## Accounting Curriculum (Pathways)

60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH $21^{1}$ Survey of Mathematics I OR MTH 23 Probability and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences
- SCIENCE 2 AST 111, BIO 11, CHM 11, CHM 17, ENV 11, ESE 11, ESE 12, ESE 13, PHY 110 OR PHY 11 (3-4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
B. US Experience in its Diversity $O R$
C. Creative Expression OR
E. Scientific World ${ }^{3}$
- Flexible Core B: COMM 20, ECO 12, HIS 20, HIS 23, HIS 24, HIS 51, POL 11, and POL 41
Flexible Core C: ART 11, ART 12, ART 55, ART 56, COMM 26, FRN 22, ITL 22, MUS 11, MUS 12, SPN 25, SPN 30, and SPN 31
Flexible Core E: BIO 20/ HLT 20 (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
SUBTOTAL 21-22


## Specialization Requirements

- ACC 111 Principles of Accounting I (4 Credits)
- ACC 112 Principles of Accounting II (4 Credits)
- ACC 113 Principles of Intermediate Accounting (4 Credits)
- ACC 15 Accounting Information Systems (3 Credits)
- BUS 10 Introduction to Business (3 Credits)
- BUS $111^{4}$ Applications of Mathematics for Business (3 Credits)
- COMM 12 Voice and Diction: Business and Professional Speech (2 Credits)
- DAT 10 Computer Fundamental and Applications (3 Credits)
- DAT 36 Microcomputer Spreadsheet Applications OR DAT 38 Microcomputer Database Applications (3 Credits)
- KEY 10 Keyboarding for Computers (1 Credit)
- LAW 41 Business Law (3 Credits)
- MKT 11 Principles of Marketing (3 Credits)
- CWE $31^{5}$ Cooperative Work Experience (2 Credits)
- LAB SCIENCE CREDIT ${ }^{2}$ (0-1 Credit) SUBTOTAL 38-39

1 Students planning to transfer to a four-year college should take MTH 30 OR 31. The prerequisite for MTH 30/31 is MTH 6.
2 Students may select either a 4 -credit $O R$ a 3 -credit science course. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
3 Flexible Core B: COMM 20, ECO 12, HIS 20, HIS 23, HIS 24, HIS 51, POL 11, and POL 41
Flexible Core C: ART 11, ART 12, ART 55, ART 56, COMM 26, FRN 22, ITL 22, MUS 11, MUS 12, SPN 25, SPN 30, and SPN 31 Flexible Core E: BIO 20/ HLT 20
4Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year college may take BUS 41 instead of BUS 111.
5CWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed fulltime are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

## ACCOUNTING (PRE-PATHWAYS)

Associate in Applied Science Degree | Career Program Business and Information Systems Department

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Howard A. Clampman

## Accounting Curriculum

60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 12* Introduction to Mathematical Thought (3 Credits)
- SCIENCE* BIO 18, AST OR CHM (4 Credits) TOTAL 16


## Required Areas of Study

- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR
ENG 16 Written Composition and Poetry (3 Credits)
-RESTRICTED ELECTIVES** (5 Credits)
TOTAL 8


## Specialization Requirements

- ACC 11 Fundamental Accounting I (4 Credits)
- ACC 12 Fundamental Accounting II (4 Credits)
- ACC 13 Intermediate Accounting (4 Credits)
- ACC 15 Accounting Information Systems (3 Credits)
- BUS 11 Business Mathematics (3 Credits)
- BUS 10 Introduction to Business (3 Credits)
- DAT 10 Computer Fundamentals and Applications (3 Credits)
- DAT 36 Microcomputer Spreadsheet Applications OR

DAT 38 Microcomputer Database Applications (3 Credits)

- KEY 10 Keyboarding for Computers (1 Credit)
- LAW 41 Business Law (3 Credits)
- MKT 11 Principles of Marketing (3 Credits)
- CWE 31† Cooperative Work Experience (2 Credits) TOTAL 36

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students who may later transfer to a four-year college should take a lab science from among BIO 11, CHM 10 or 11, PHY 11 or AST 11 or 12, and MTH 29, 30 or 31 instead of MTH 12.
**Select from Anthropology, Art, Communication, Economics, Geography, History, only 1 course in Health Education or 2 courses in Physical Education, Modern Languages, Music, Philosophy, Psychology, Political Science, or Sociology (no more than two courses from the same department or discipline).
tCWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed full-time are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

## BUSINESS ADMINISTRATION

Associate in Science Degree | Transfer Degree Business and Information Systems Department The Business Administration curriculum provides a broad academic foundation so that graduates may transfer to the third year of a senior college or pursue immediate employment. Students must select one option from among the Accounting, Computer Programming, Management, and Marketing Management options.
Curriculum Coordinator: Dr. Rosemary Quinn

## Business Administration Curriculum (Pathways)

 60 Credits required for A.S. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{1}$ (4 Credits)
C. Life and Physical Sciences ( $3-4$ Credits)

SUBTOTAL 13-14

## Flexible Core

A. World Cultures and Global Issues ${ }^{3}$ (3 Credits)
B. U.S. Experience in Diversity ${ }^{3}$ (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society ${ }^{3}$ (3 Credits)
E. Scientific World (3 Credits)

Restricted Elective Select one course from Areas A-E. (3 Credits) SUBTOTAL 18

## Specialization Requirements

- ACC 111 Principles of Accounting I (4 Credits)
- BUS 41 Business Statistics (3 Credits)
- BUS 51 Business Organization and Management (3 Credits)
- DAT $10^{4}$ Computer Fundamental and Applications OR DAT $30^{5}$ Introduction to Computer Applications and Programming (3 Credits)
- LAW 41 Business Law (3 Credits)
- LAB SCIENCE Credit ${ }^{2}$ (0-1 Credit) SUBTOTAL 16-17


## Degree Options

Student must choose an option to graduate: Accounting, Computer Programming, Management or Marketing Management (12 Credits)

Accounting Option:
This option prepares students with fundamental courses in business and accounting. The option also provides the background for transfer to a senior college and completion of the baccalaureate degree. Students who wish to pursue a career in finance should select this option. Upon completion of further appropriate education and training, and with experience, the student may qualify by state examination as a Certified Public Accountant or as a teacher.

- ACC 112 Principles of Accounting II (4 Credits)
- ACC 113 Principles of Intermediate Accounting (4 Credits)
- ACC 15 Accounting Information Systems (3 Credits)
- KEY 10 Keyboarding for Computers (1 Credit)

SUBTOTAL 12
Students are advised that there is an A.A.S. degree offered in the same discipline.

## Computer Programming Option:

This option provides a range of computer programming courses designed to provide the necessary foundation for employment and/or transfer to a senior college.

- DAT 38 Database Management Applications (3 Credits)
- DAT 47 JAVA Programming (3 Credits)
- DAT 48 Advanced JAVA Programming (3 Credits)
- DAT 49 UNIX Fundamentals (3 Credits)

SUBTOTAL 12

## Management Option:

This option provides the student with skills needed to be a successful manager. Students are prepared to enter management training programs leading to middlemanagement positions. The option is also broad enough to allow students to pursue any business major at a senior college.

- MKT 11 Principles of Marketing (3 Credits)
- FIN 31 Principles of Finance (3 Credits)
- BUS 52 Organizational Behavior (3 Credits)
- BUS 53 International Management (3 Credits)


## SUBTOTAL 12

Students are advised that there is an A.A.S. degree offered in the same discipline.

## Marketing Management Option:

This option provides basic courses for those students interested in a career in Marketing Management and for those who intend to transfer to a senior college.

- MKT 11 Principles of Marketing (3 Credits)
- MKT 18 Consumer Behavior OR MKT 47 E-Marketing (3 Credits)
- MKT 41 Management of Retail Operations OR MKT 43 Principles of Advertising (3 Credits)
- MKT 48 Marketing Management (3 Credits) SUBTOTAL 12

1 In order to comply with transfer requirement at Senior Colleges, students are required to complete MTH 30 or MTH 31 to fulfill Required Core B. The program has been given a waiver to require its students to take MTH 30 or MTH 31 to fulfill Required Area B. If students transferring into this program complete a different course in this area, they will be certified as having completed the Common Core, but it may not be possible for them to finish their degree within the regular number (60) of credits.
2 Students may select either a 4-credit STEM Variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
3 In an effort to select courses which can be accepted as transfer credits at Senior Colleges and give students the breadth of knowledge required nationally of Business Majors, students are strongly recommended to complete HIS 10 or HIS 11 to fulfill Flexible Core A; ECO 12 to fulfill Flexible Core B; and COMM 11 and/or ECO 11 to fulfill Flexible Core D
4 DAT 10 is for students enrolled in the Accounting; Management; and Marketing Management options.
5 DAT 30 is for students enrolled in the Computer Programming Option only.
Students interested in transferring to Baruch College, SUNY Empire State, Lehman College, SUNY Maritime, SUNY Potsdam, and Sagrado Corazon should visit the articulation agreement section of the Transfer Planning web site for recommended courses.

## BUSINESS ADMINISTRATION (PRE-PATHWAYS)

Associate in Science Degree | Transfer Degree Business and Information Systems Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Curriculum Coordinator: Dr. Rosemary Quinn

## Business Administration Curriculum <br> 60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 29 Pre-Calculus Mathematics for Business Students OR MTH 30 Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits)
- SCIENCE AST 11 OR 12, BIO 11, CHM 10, CHM 11, ENV 11, ESE 11 OR PHY 11 (4 Credits)
TOTAL 17
Required Areas of Study
- ECO 11 Microeconomics OR ECO 12 Macroeconomics (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- RESTRICTED ELECTIVES* (7 Credits) TOTAL 13


## Specialization Requirements

- ACC 11 Fundamental Accounting I (4 Credits)
- BUS 41 Business Statistics (3 Credits)
- BUS 51 Business Organization and Management (3 Credits)
- CMS 12 Voice and Diction: Business and Prof. Speech (2 Credits)
- DAT 10** Computer Fundamentals and Applications OR DAT 30*** Introduction to Computer Fundamentals and Programming (3 Credits)
- LAW 41 Business Law (3 Credits)
- Option Select one (12 Credits)

TOTAL 30

## Accounting Option

This option prepares students with fundamental courses in business and accounting. The option also provides the background for transfer to a senior college and completion of the baccalaureate degree. Students who wish to pursue a career in finance should select this option. Upon completion of further appropriate education and training, and with experience, the student may qualify by state examination as a Certified Public Accountant or as a teacher.

- ACC 12 Fundamental Accounting II (4 Credits)
- ACC 13 Intermediate Accounting (4 Credits)
- ACC 15 Accounting Information Systems (3 Credits)
- KEY 10 Keyboarding for Computers (1 Credit) TOTAL 12
Students are advised that there is an A.A.S. degree offered in the same discipline.


## Computer Programming Option

This option provides a range of computer programming courses designed to provide the necessary foundation for employment and/or transfer to a senior college.

- DAT 38 Microcomputer Database Applications (3 Credits)
- DAT 47 JAVA Programming (3 Credits)
- DAT 48 Advanced JAVA Programming (3 Credits)
- DAT 49 UNIX Fundamentals (3 Credits) TOTAL 12


## Management Option

This option provides the student with skills needed to be a successful manager. Students are prepared to enter management training programs leading to middlemanagement positions. The option is also broad enough to allow students to pursue any business major at a senior college.

- BUS 52 Organizational Behavior (3 Credits)
- BUS 53 International Management (3 Credits)
- FIN 31 Principles of Finance (3 Credits)
- MKT 11 Principles of Marketing (3 Credits) TOTAL 12
Students are advised that there is an A.A.S. degree offered in the same discipline.


## Marketing Management Option

This option provides basic courses for those students interested in a career in Marketing Management and for those who intend to transfer to a senior college.

- MKT 11 Principles of Marketing (3 Credits)
- MKT 18 Consumer Behavior OR MKT 47 E-Marketing (3 Credits)
- MKT 41 Management of Retail Operations OR

MKT 43 Principles of Advertising (3 Credits)

- MKT 48 Marketing Management (3 Credits)

TOTAL 12

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

NOTE: Students interested in transferring to Baruch College's Zicklin School of Business should review the Memorandum of Understanding, available on the Transfer Planning web site.
The Accounting option fully articulates with John Jay's B.S. in Economics-Forensic Financial Analysis Specialization.
The Accounting, Management, and Marketing Management options fully articulate with Lehman College's Business Administration B.B.A. degree.
The Management option fully articulates with SUNY Maritime's B.S. in International Transportation and Trade, and SUNY Potsdam's B.S. in Business Administration and Lehman College's B.S. in Health Services Administration and with Colorado State University's Global Campus B.S. degrees in Business Management and Healthcare Administration and Management.
All options articulation with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.
Students should refer to the agreements on the Transfer Planning web site for recommended courses.
*Restricted Electives: Select a total of seven credits from Art (non-studio courses), Communications, Economics, Geography, History, Health, Physical Education (only one course in Health Education or two courses in Physical Education), Modern Languages, Music (non-studio courses), Philosophy, Psychology, Political Science or Sociology. No more than two courses from the same department or discipline.
**DAT 10 is for students enrolled in the Accounting; Management; and Marketing Management options.
***DAT 30 is for students enrolled in the Computer Programming Option only.

## COMPUTER INFORMATION SYSTEMS

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department

The field of computer information systems is rich in career opportunities with excellent starting salaries for qualified personnel. Corporations, government agencies, financial institutions, marketing and retail organizations, and small firms require the services of computer applications specialists, computer programmers, and information technology technicians. The Computer Information Systems Curriculum, based upon your interests, prepares you for various entry-level positions including junior computer programmer, computer operator, computer support specialist, application user specialist, data-entry operator, web page designer and desktop publishing specialist.

Students must select either the Computer Programming Option or the Web Page Development Option once they have earned 12 degree credits.
Graduates may transfer to related programs offered by four-year colleges. A Cooperative Work Experience course allows students to gain valuable business experience in a supervised setting.
Students interested in the Business Administration Computer Programming Option (A.S. Degree) in the Business and Information Systems Department should see the Business Administration curriculum information in the college catalog. Students interested in Computer Science (A.S. Degree) in the Mathematics and Computer Science Department should see the Computer Science curriculum information in the college catalog.
Curriculum Coordinator: Professor Imran Ghafoor

## Computer Information Systems Curriculum (Pathways)

60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH $21{ }^{1}$ Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
C. Life and Physical Science

SCIENCE ${ }^{2}$ AST 111, BIO 11, CHM 11, CHM 17, ENV 11, ESE 11, ESE 12, ESE 13, PHY 110 OR PHY 11 (3-4 Credits)

## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
B. US Experience in its Diversity OR C. Creative Expression OR E. Scientific World ${ }^{3}$
- Select from ANT, ART, COMM, ECO, GEO, HIS, BIO 20/ HLT 20, Modern Language, MUS, PHL, PSY, POL OR SOC (3 Credits)


## D. Individual and Society

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
SUBTOTAL 21-22


## Specialization Requirements

- ACC 111 Principles of Accounting I (4 Credits)
- BIS 13 Introduction to Internet and Web Development (3 Credits)
- BUS 10 Introduction to Business (3 Credits)
- BUS $111^{4}$ Applications of Mathematics for Business (3 Credits)
- COMM 12 Voice and Diction: Business and Professional Speech (2 Credits)
- DAT 30 Introduction to Computer Fundamental and Programming (3 Credits)
- DAT 33 Microcomputer Applications (2 Credits)
- DAT 35 BASIC Language Programming (3 Credits)
- KEY 10 Keyboarding for Computers (1 Credit)
- CWE $31^{5}$ Cooperative Work Experience (2 Credits)
- LAB SCIENCE Credit ${ }^{2}$ (0-1 Credit)

SUBTOTAL 26-27
Degree Options---see next page for information
Student must choose an option to graduate:

- Computer Programming
- Web Page Development

SUBTOTAL 12
Computer Programming Option:

- DAT 38 Database Management Applications (3 Credits)
- DAT 47 JAVA Programming (3 Credits)
- DAT 48 Advanced JAVA Programming (3 Credits)
- DAT 49 UNIX Fundamentals (3 Credits)

SUBTOTAL 12
Web Page Development Option:

- BIS 12 Multimedia Theory and Applications for Business (3 Credits)
- BIS 23 Advanced Web Page Design and Development (3 Credits)
- BIS 31 E-Commerce (3 Credits)
- DAT 38 Database Management Applications (3 Credits) SUBTOTAL 12

1 Students planning to transfer to a four-year college should take MTH 30 or 31.
2 Students may select either a 4-credit or a 3-credit science course. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
3 Flexible Core B: COMM 20, ECO 12, HIS 20, HIS 23, HIS 24, HIS 51, POL 11, and POL 41
Flexible Core C: ART 11, ART 12, ART 55, ART 56, COMM 26, FRN 22, ITL 22, MUS 11, MUS 12, SPN 25, SPN 30, and SPN 31 Flexible Core E: BIO 20/ HLT 20
4 Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year
college may take BUS 41 instead of BUS 111.
5 CWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed fulltime are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department.
College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

All options articulate with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.

## COMPUTER INFORMATION SYSTEMS (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department
If you began studying at BCC in OR after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements OR change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Imran Ghafoor

## Computer Information Systems Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 12* Introduction to Mathematical Thought (3 Credits)
- SCIENCE** BIO 18 OR CHM 10 (4 Credits)

TOTAL 16

## Required Areas of Study

- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry(3 Credits)
- RESTRICTED ELECTIVES \# (5 Credits) TOTAL 8


## Specialization Requirements

- ACC 11 Fundamental Accounting I (4 Credits)
- BIS 13 Introduction to the Internet and Web Development (3 Credits)
- BUS 10 Introduction to Business (3 Credits)
- BUS 11§ Business Mathematics(3 Credits)
- DAT 30 Introduction to Computer Fundamentals and Programming (3 Credits)
- DAT 33 Microcomputer Applications (2 Credits)
- DAT 35 VISUAL BASIC Programming (3 Credits)
- KEY 10 Keyboarding for Computers (1 Credits)
- CWE 31+ Cooperative Work Experience (2 Credits)

TOTAL 24

- OPTIONS: select one after completion of 12 credits (12 Credits)

Computer Programming Option

- DAT 38 Microcomputer Database Applications (3 Credits)
- DAT 47 JAVA Programming (3 Credits)
- DAT 48 Advanced JAVA Programming (3 Credits)
- DAT 49 UNIX Fundamentals (3 Credits)

TOTAL 12
Web Page Development Option

- BIS 12 Multimedia Theory and Applications for Business (3 Credits)
- BIS 23 Advanced Web Page Design and Development (3 Credits)
- BIS 31 E-Commerce (3 Credits)
- DAT 38 Microcomputer Database Applications (3 Credits)

TOTAL 12

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* Students who intend to transfer to a four-year college should take MTH 30 or 31 instead of MTH 12. Check for required Prerequsites for these math courses.
** Students who intend to transfer to a four-year college should take a science course with a laboratory component from among AST 11 or AST 12, BIO 11, BIO 21, CHM 10, CHM 11, ENV 11, ESE 11 or PHY 11. Non-transfer students may also take a science course with a laboratory component.
\#Restricted Electives: Select a total of five credits from Art (non-studio courses), Communications, Economics, Geography, History, Health, Physical Education (only one course in Health Education or two courses in Physical Education), Modern Languages, Music (non-studio courses), Philosophy, Psychology, Political Science, or Sociology. No more than two courses from the same department or discipline.
§ Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year college may take BUS 41 instead of BUS 11.
†CWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed full-time are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

All options articulate with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.

## MARKETING MANAGEMENT

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department

Marketing facilitates the flow of goods and services from producers to consumers. In today's marketing driven society, organizations need college graduates with knowledge of marketing functions, including advertising, personal selling, wholesaling, retailing, and marketing research. A Cooperative Work Experience course allows students to gain valuable experience in a supervised setting. Graduates are equipped to assume entry-level positions and to pursue selfemployment opportunities. Students are advised that there is an A.S. degree offered in the same discipline. The program articulates with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.
Curriculum Coordinator: Professor Howard A. Clampman
Marketing Management Curriculum (Pathways) 60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR

ENG 14 Written Composition and Prose Fiction OR
ENG 15 Written Composition and Drama OR
ENG 16 Written Composition and Poetry (3 Credits)
B. Mathematical and Quantitative Reasoning

- MTH $21^{1}$ Survey of Mathematics I OR MTH $23^{1}$ Probability and Quantitative Reasoning (3 Credits)
C. Life and Physical Science
- SCIENCE ${ }^{2}$ AST 111, BIO 11, CHM 11, CHM 17, ENV 11, ESE 11, ESE 12, ESE 13, PHY 110 OR PHY 11 (3-4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
B. US Experience in its Diversity $O R$
C. Creative Expression OR E. Scientific World ${ }^{3}$
- Select from ANT, ART, COMM, ECO, GEO, HIS, BIO 20 / HLT 20, MODERN LANGUAGE, MUS, PHL, PSY, POL OR SOC (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits) SUBTOTAL 21-22

Required Areas of Study<br>- PHYSICAL EDUCATION OR HEALTH EDUCATION ${ }^{4}$ (2 Credits) SUBTOTAL 2<br>Specialization Requirements

- ACC 111 Principles of Accounting I (4 Credits)
- BUS 10 Introduction to Business (3 Credits)
- BUS $111^{5}$ Applications of Mathematics for Business (3 Credits)
- COMM 12 Voice and Diction: Business and Professional Speech (2 Credits)
- DAT 10 Computer Fundamental and Applications (3 Credits)
- LAW 41 Business Law (3 Credits)
- MKT 11 Principles of Marketing (3 Credits)
- MKT 18 Consumer Behavior OR MKT 47 E-Marketing (3 Credits)
- MKT 48 Marketing Management (3 Credits)
- MKT 41 Management of Retail Operations OR FIN 31 Principles of Finance (3 Credits)
- MKT 43 Principles of Advertising (3 Credits)
- CWE $31^{6}$ Cooperative Work Experience (2 Credits)
- KEY 10 Keyboarding for Computers (1 Credit)
- LAB SCIENCE credit (0-1 Credit)

SUBTOTAL 36-37
1 Students planning to transfer to a four-year college should take MTH 30 or 31.
2 Students may select either a 4-credit or a 3-credit science course. Students selecting a 3 -credit course must also complete an additional 1 -credit lab course to fulfill graduation requirements.
3 Flexible Core B: COMM 20, ECO 12, HIS 20, HIS 23, HIS 24, HIS 51, POL 11, and POL 41
Flexible Core C: ART 11,ART 12, ART 55, ART 56, COMM 26, FRN 22, ITL 22, MUS 11, MUS 12, SPN 25, SPN 30, and SPN 31 Flexible Core E: BIO20/HLT 20
4 Select one course in Health Education or two courses in Physical Education.
5 Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year college may take BUS 41 instead of BUS 111.
6 CWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed fulltime are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

## MARKETING MANAGEMENT (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to

Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Howard A. Clampman

## Marketing Management Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 12* Introduction to Mathematical Thought (3 Credits)
- SCIENCE** BIO 18 OR CHM (4 Credits)

TOTAL 16

## Required Areas of Study

- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- RESTRICTED ELECTIVES\# (5 Credits) TOTAL 8


## Specialization Requirements

- ACC 11 Fundamental Accounting I (4 Credits)
- BUS 10 Introduction to Business (3 Credits)
- BUS 11§ Business Mathematics (3 Credits)
- CMS 12 Voice and Diction: Business and Prof. Speech (2 Credits)
- DAT 10 Computer Fundamentals and Applications (3 Credits)
- KEY 10 Keyboarding for Computers (1 Credit)
- LAW 41 Business Law (3 Credits)
- MKT 11 Principles of Marketing (3 Credits)
- MKT 18 Consumer Behavior OR MKT 47 E-Marketing (3 Credits)
- MKT 48 Marketing Management (3 Credits)
- MKT 41 Management of Retail Operations OR FIN 31 Principles of Finance (3 Credits)
- MKT 43 Principles of Advertising (3 Credits)
- CWE 31† Cooperative Work Experience (2 Credits) TOTAL 36

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students who intend to transfer to a four-year college should take MTH 30 or 31 instead of MTH 12. Check for required Prerequsites for these math courses.
** Students who intend to transfer to a four-year college should take a science course with a laboratory component from among AST 11 or AST 12,BIO 11, BIO 21, CHM 10, CHM 11, ENV 11, ESE 11, PHY 11. Non-transfer students may also take a science course with a laboratory component.
\# Restricted Electives: Select a total of five credits from Art (non-studio courses), Communications, Economics, Geography, History, Health, Physical Education (only one course in Health Education or two courses in Physical Education), Modern Languages, Music (non-studio courses), Philosophy, Psychology, Political Science, or Sociology. No more than two courses from the same department or discipline.
§ Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year college, may take BUS 41 instead of BUS 11.
tCWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester.
Students who are employed full-time are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department.
College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students planning on transferring to a four-year college are advised to take MTH 21 or MTH 23.

## MEDICAL OFFICE ASSISTANT

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department
This curriculum is designed for students who would like to become Medical Office Assistants. They may work in physicians' offices, hospitals, laboratories, and other healthrelated facilities. Students in the program are trained to transcribe recorded dictation of medical correspondence and case histories; complete computerized medical forms; maintain physicians' financial, medical, and office records; prepare patients for medical examinations; perform basic clinical laboratory tests; and manage a medical office.
Curriculum Coordinator: Dr. Rosemary Quinn

## Medical Office Assistant Curriculum (Pathways)

 60 Credits required for A.A.S. Degree
## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 21 Survey of Mathematics I OR MTH 23 Probability and Quantitative Reasoning (3 Credits)
C. Life and Physical Science - BIO 21 The Human Body (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR

HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society

- COMM 11 Fundamentals of Interpersonal

Communication (3 Credits)
B. US Experience in its Diversity ${ }^{1} O R$
C. Creative Expression $O R$
E. Scientific World

Select from ART 11, ART 12, ART 55, ART 56,
BIO 20/HLT 20 COMM 20, COMM 26, ECO 12, FRN 122, HIS 20, HIS 23, HIS 24, HIS 51, MUS 11, MUS 12, POL 11,
POI 41, ITL 122, SPN 125, SPN 130, OR SPN 131(6 Credits)
SUBTOTAL 22

## Required Areas of Study

- BUS $111^{2}$ Applications of Mathematics for Business (3 Credits)
- DAT 36 Microcomputer Spreadsheet Applications (3 Credits)
- HLT 91 Critical Issues In Health (2 Credits)
- LAW 45 Medical Law (3 Credits)
- PEA Physical Education (1 Credit)

SUBTOTAL 12

## Specialization Requirements

- KEY 10 Keyboarding for Computers (1 Credit)
- KEY 11 Document Formatting and Speed Development (2 Credits)
- KEY 12 Advanced Document Production (2 Credits)
- WPR 11 Transcription for Business (3 Credits)
- WPR 21 Word Processing Applications (3 Credits)
- BIO 22 Medical Terminology (2 Credits)
- BIO 46 Clinical Techniques I (2 Credits)
- BIO 47 Clinical Techniques II (2 Credits)
- SEC 35 Medical Office Procedures and Management (2 Credits)
- COM 31 Business Communications (3 Credits)
- NMT $78^{3}$ EKG - Interpretations and Techniques (2 Credits)
- NMT $79^{3}$ Phlebotomy (2 Credits)

SUBTOTAL 26
1 Students must select two 3-credit courses that fulfill Pathways Flexible Core B, C or E (no more than one course in each Core area).
2 Students who have completed MTH 06 (or three years high school mathematics) and intend to transfer to a four-year college may take BUS 41 instead of BUS 111.
3 Completion of BIO 22 and BIO 22 is required prior to registering for these courses as well as permission of the Medical Office Assistant Program Curriculum Coordinator.

NOTE: The program articulates with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.

## MEDICAL OFFICE ASSISTANT (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements $O R$ change to Pathways. You should consult with an academic advisor.

Curriculum Coordinator: Dr. Rosemary Quinn

## Medical Office Assistant Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- BIO 21 The Human Body (4 Credits)
- MTH 12@ Introduction to Mathematical Thought (3 Credits) TOTAL 16


## Required Areas of Study

- BUS 11 Business Mathematics (3 Credits)
- DAT 36 Microcomputer Spreadsheet Applications (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- LAW 45 Medical Law (3 Credits)
- RESTRICTED ELECTIVES* (7 Credits)

TOTAL 18

## Specialization Requirements

- KEY 10 Keyboarding for Computers (1 Credit)
- KEY 11 Document Formatting and Speed Development (2 Credits)
- KEY 12 Advanced Document Production (2 Credits)
- WPR 11 Transcription for Business (3 Credits)
-WPR 21 Word Processing Applications (3 Credits)
- COM 31 Business Communications (3 Credits)
- SEC 35 Medical Office Procedures and Management (2 Credits)
- BIO 22 Medical Terminology (2 Credits)
- BIO 46 Clinical Techniques I (2 Credits)
- BIO 47 Clinical Techniques II (2 Credits)
- NMT 78** EKG -Interpretation and Techniques (2 Credits)
- NMT 79** Phlebotomy (2 Credits)

TOTAL 26
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the

Registration Guide and Schedule of Classes.
@ Students who intend to transfer to a four-year college should take MTH 29, 30, or 31. Check for required prerequisites for these math courses.

* Restricted Electives: Select a total of seven credits from Art (non-studio courses), Communications, Economics, English, Geography, History, Health Education, Physical Education (only one course in Health Education or two courses in Physical Education), Modern Languages, Music (non-studio courses), Philosophy, Psychology, Political Science or Sociology (no more than two courses from the same department or discipline).
** Completion of BIO 21 and BIO 22 is required prior to registering for these courses as well as permission of the Medical Office Assistant Program Curriculum Coordinator.

NOTE: The program articulates with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.

## OFFICE ADMINISTRATION AND TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department
Numerous employment opportunities for college trained administrative assistants with office information systems skills exist in a wide variety of offices-business, professional and governmental organizations. The Department is equipped with the latest technology, and computer facilities are available for students to enhance their skills. Students learn machine transcription, office procedures, computer systems and applications including a variety of software programs, Internet, e-mail, multimedia, web page development, and composition of business correspondence. The program articulates with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.

Curriculum Coordinator: Dr. Rosemary Quinn

## Office Administration and Technology Curriculum (Pathways)

60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{1}$
- MTH 21 Survey of Mathematics I OR MTH 23 Probability and Quantitative Reasoning (3 Credits)
C. Life and Physical Science ${ }^{2}$

SCIENCE 2 AST 11, BIO 11, CHM 11, CHM 17, ENV 11, ESE 11, ESE 12, ESE 13, PHY 10 OR PHY 11 (3-4 Credits)

## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
B. US Experience in its Diversity ${ }^{3} O R$
C. Creative Expression OR E. Scientific World Select from ANT, ART, COMM, ECO, GEO, HIS, BIO 20/ HLT 20, MODERN LANGUAGE, MUS, PHL, PSY, POL OR SOC (6 Credits)
SUBTOTAL 21-22


## Required Areas of Study

- BUS 10 Introduction to Business (3 Credits)
- BIS 13 Introduction to Internet and Web Development (3 Credits)
- WPR 23 Office Administration and Supervision (2 Credits)
- DAT 10 Computer Fundamental and Applications (3 Credits) SUBTOTAL 11


## Specialization Requirements

- KEY 10 Keyboarding for Computers (1 Credit)
- KEY 11 Document Formatting and Speed Development (2 Credits)
- KEY 12 Advanced Document Production (2 Credits)
- WPR 11 Transcription for Business (3 Credits)
-WPR 21 Word Processing Applications (3 Credits)
- WPR 24 Presentation for Business (3 Credits)
- COM 31 Business Communications (3 Credits)
- DAT 36 Microcomputer Spreadsheet Applications (3 Credits)
- DAT 38 Microcomputer Database Applications (3 Credits)
- SEC 41 Office Procedures (2 Credits)
- CWE $31^{4}$ Cooperative Work Experience (2 Credits)
- LAB SCIENCE Credit 2 ( $0-1$ Credit)

SUBTOTAL 27-28
1 Students planning to transfer to a four-year college should take MTH 30 or 31. Please check prerequisites for these math courses.
2 Students may select either a 4-credit or a 3-credit science course. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
3 Students must select two 3-credit courses that fulfill Pathways Flexible Core B, C or E (no more than one course in each Core area).

4 CWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed full-time are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College WorkStudy assignments within CUNY may not be used as substitutes for the CWE internship.

## OFFICE ADMINISTRATION AND TECHNOLOGY (PRE-PATHWAYS)

If you began studying at BCC in OR after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements OR change to Pathways. You should consult with an academic advisor.

## Office Administration and Technology Curriculum

 60 Credits required for A.A.S. Degree
## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- SCIENCE* Science Course (4 Credits)
- MTH 12@ Introduction to Mathematical Thought (3 Credits)
- CMS 12 Voice and Diction: Business and Professional Speech (2 Credits)
TOTAL 18


## Required Areas of Study

- BUS 10 Introduction to Business (3 Credits)
- BIS 13 Introduction to the Internet and Web Development (3 Credits)
-WPR 23 Office Administration and Supervision (2 Credits)
- DAT 10 Computer Fundamentals and Applications (3 Credits)
- RESTRICTED ELECTIVES** (4 Credits)

TOTAL 15

## Specialization Requirements

- KEY 10 Keyboarding for Computers (1 Credit)
- KEY 11 Document Formatting and Speed Development (2 Credits)
- KEY 12 Advanced Document Production (2 Credits)
- WPR 11 Transcription for Business (3 Credits)
-WPR 21 Word Processing Applications (3 Credits)
-WPR 24 Presentations for Business (3 Credits)
- COM 31 Business Communications (3 Credits)
- DAT 36 Microcomputer Spreadsheet Applications (3 Credits)
- DAT 38 Microcomputer Database Applications (3 Credits)
- SEC 41 Office Procedures (2 Credits)
- CWE 31 Cooperative Work Experience*** (2 Credits) TOTAL 27
* Students who intend to transfer to a four-year college should take a science course with a laboratory component such as: BIO 11, BIO 21, CHM 10, CHM 11, CHM 17, ENV 11, PHY 11, AST 11 or 12; ESE 11 or ESE 12. Non-transfer students may also take a science course with a laboratory component.
@ Students who intend to transfer to a four-year college should take MTH 30 or 31 . Check for required prerequisites for these math courses.
** Restricted Electives: Select a total of four credits from Art (non-studio courses), Communications, Economics, English, Geography, History, Health Education, Physical Education (only one course in Health Education or two courses in Physical Education), Modern Languages, Music (non-studio courses), Philosophy, Psychology, Political Science or Sociology (no more than two courses from the same department or discipline).
*** Students who are employed full-time are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.


## PARALEGAL STUDIES

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department
The Paralegal Studies Curriculum was developed according to guidelines provided by the American Bar Association's Standing Committee on Paralegals. It offers students a background in the legal fundamentals, appropriate skills and practical experience necessary for professional employment. The paralegal can perform tasks delegated by a lawyer as long as the lawyer is responsible to the client and assumes full professional responsibility for the work. A paralegal cannot give legal advice, appear in court (except as permitted by law) or set fees.

There is an increasingly wide range of paralegal job opportunities in both the private and public sectors. Law firms, banks, accounting firms, insurance companies, brokerage houses, the court system, schools, hospitals, welfare centers, public program law offices, neighborhood legal centers, legal aid offices, and national, state and city government agencies all employ paralegals. Federal, New York State, and New York City civil service systems have paralegal job classifications. The paralegal program gives the student a broad range of employment opportunities.

A paralegal education can prove to be a good background for an executive career in professions other than law and for the law profession itself. One can apply earned credits towards a lawrelated bachelor's degree. The program has a large liberal arts component, which enables students to continue their education after completion of the A.A.S. Paralegal Degree.

The Paralegal Studies curriculum emphasizes business and law courses that prepare students for employment that includes research, writing, and other tasks commonly assigned by law firms to paralegals. The curriculum features a 210 -hour internship (LAW 98) component in which students work in a legal setting. This exposes students to the legal profession and makes them further aware of their ethical and professional responsibilities.

## The goals and objectives of the program are :

- To acquire an Associate in Applied Science Paralegal Studies degree or a Paralegal Certificate.
- To provide the students with a background in the legal fundamentals, appropriate skills and practical experience necessary for professional employment.
- To give students a broader range of employment opportunities, the curriculum offers a wide variety of business, law, and liberal arts courses.
- To give students the opportunity to continue their education after completion of the A.A.S. Paralegal degree. This is met by the curriculum's large liberal arts core. Students have the automatic right to transfer to any of the City University of New York's (CUNY)senior colleges upon receipt of their Paralegal A.A.S. degree. We presently have an articulation agreement with New York City Technical College as well as with SUNY Canton and SUNY Empire State.
- To expose our students to the legal profession in which they will be employed. This is met by a 210 hour working internship in a law related facility.
- To provide students with knowledge of the ethical responsibilities and the legal restrictions placed on legal assistants.


## Upon completion of the program, the student should be able to perform the following tasks:

(i) Draft legal documents
(ii) Conduct legal research
(iii) Assist attorneys preparing for trial
(iv) Interview clients

The Lay Advocate Option prepares students for service to people and institutions that are concerned with the criminal system, family law, the poor, the mentally and physically handicapped and the elderly.

The Paralegal Certificate is designed for advanced students who already have a minimum of 60 college credits $O R$ a twoyear degree. A credit $O R$ noncredit internship is optional.
Approved by the American Bar Association
Curriculum Coordinator: Professor Raymond Canals

## Paralegal Studies Curriculum (Pathways)

60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 21 Survey of Mathematics I OR

MTH 23 Probability and Statistics (3 Credits)
Required Core C. Life and Physical Sciences - OR Flexible Core E. Scientific World ${ }^{1}$

- SCI Choose from AST 111, AST 112, BIO 11, BIO 19, BIO 20/ HLT 20, BIO 21, CHM 11, CHM 17, CHM 110, ENV 11, ESE 11, ESE 12, ESE 13, PHY 11 OR PHY 110 (3-4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
Additional Flexible Core Requirement (Area A)
- SOC 11 Introduction to Sociology (3 Credits)

SUBTOTAL 21-22

## Specialization Requirements

- POL 11 American National Government OR

SOC 35 Introduction to Social Work (3 Credits)

- DAT 10 Computer Fundamental and Applications (3 Credits)
- LAW 17 Introduction to Paralegal Studies (3 Credits)
- LAW 19 Introduction to Law Office Management and Computers (3 Credits)
- LAW 41 Business Law (3 Credits)
- LAW 47 Civil Procedures (3 Credits)
- LAW 95 Legal Research and Writing (3 Credits)
- LAW 96 Advanced Legal Research and Writing (3 Credits)
- LAW 98 Paralegal Seminar and Internship (2 Credits)

SUBTOTAL 26

## Restricted Electives

Choose one of the following three courses:

- ACC 111 Principles of Accounting I (4 Credits)
- BUS 111 Applications of Mathematics for Business (3 Credits)
- TAX 11 Introduction to Taxation (3 Credits)

SUBTOTAL 3-4
Choose three of the following nine courses:

- LAW 52 Business Organizations (3 Credits)
- LAW 62 Family Law (3 Credits)
- LAW 64 Constitutional Law (3 Credits)
- LAW 65 Criminal Law and Procedures (3 Credits)
- LAW 72 Real Property (3 Credits)
- LAW 77 Immigration Law (3 Credits)
- LAW 82 Insurance and Torts (3 Credits)
- LAW 92 Estates, Trusts and Wills (3 Credits)
- LAW 912 Landlord Tenant Advocacy (3 Credits)

SUBTOTAL 9

## FREE ELECTIVES

- To complete the 60 credit requirement 0-1


## Lay Advocate Option

Students selecting the Lay Advocate option should replace 9 credits of the Paralegal Studies curriculum restricted electives and LAW 98 in the specialization requirements with the following:

- HLT $97^{3}$ Field Work in Community Health Resources (3 Credits)
- LAW 62 Family Law (3 Credits)
- LAW 65 Criminal Law and Procedures (3 Credits)
- LAW 89 Legal Advocacy (3 Credits)

SUBTOTAL 12
1 Students must choose one science course. This course may be selected from courses included in Required Core C or Flexible Core E.
2 Department permission required
3 HLT 97 is in lieu of LAW 98

## PARALEGAL STUDIES (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Business and Information Systems Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Approved by the American Bar Association | Curriculum Coordinator: Professor Raymond Canals

## Paralegal Studies Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- SCIENCE* Choose from AST 11, AST 12, BIO 11, BIO 50, CHM 10, CHM 11, CHM 13, ESE 11, ESE 12, OR PHY 11 (4 Credits)
- MTH 12* Introduction to Mathematical Thought (3 Credits) TOTAL 18-19


## Required Areas of Study

- POL 11 American National Government OR

SOC 35 Introduction to Social Work (3 Credits)

- SOC 11 Sociology (3 Credits)

TOTAL 6
Specialization Requirements

- DAT 10 Computer Fundamentals and Applications (3 Credits)
- LAW 17 Introduction to Paralegal Studies (3 Credits)
- LAW 19 Introduction to Law Office Management and Computers (3 Credits)
- LAW 41 Business Law (3 Credits)
- LAW 47 Civil Procedure (3 Credits)
- LAW 95 Legal Research and Writing (3 Credits)
- LAW 96 Advanced Legal Research and Writing (3 Credits)
- LAW 98 Paralegal Seminar and Internship (2 Credits)

TOTAL 23
Restricted Electives

- ACC 11** Fundamental Accounting II OR

BUS 11** Business Mathematics OR
TAX 11** Introduction to Taxation (3-4 Credits)

- LAW 52*** Business Organizations (3 Credits)
- LAW 62*** Family Law (3 Credits)
- LAW 64 *** Constitutional Law (3 Credits)
- LAW 65*** Criminal Law and Procedures (3 Credits)
-LAW 72*** Real Property (3 Credits)
- LAW 77*** Immigration Law (3 Credits)
- LAW 82*** Insurance and Torts (3 Credits)
- LAW 92*** Estates, Trusts and Wills (3 Credits)
- LAW 91*** Landlord Tenant Advocacy (3 Credits)

TOTAL 12-13
FREE ELECTIVES

- To complete the 60 credit requirement 0-1

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students who may later transfer to a four-year college should take a lab science from among BIO 11, CHM 10 or 11, PHY 11, AST 11 or 12, ENV 11, ESE 11 or 12 and MTH 29, 30 or 31 instead of MTH 12.
** Choose one out of three courses.
***Choose three out of nine courses.
*** $\dagger$ Departmental permission.

## Students selecting the Lay Advocate Option should replace the Paralegal Studies curriculum restricted electives with the following: <br> Lay Advocate Option <br> - HLT 97\# Field Work in Community Health Resources (3 Credits)

- LAW 62 Family Law (3 Credits)
- LAW 65 Criminal Law and Procedures (3 Credits)
- LAW 89 Legal Advocacy (3 Credits)

TOTAL 12
\#HLT 97 is in lieu of LAW 98.
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

## PARALEGAL

Certificate Program
Business and Information Systems Department
The certificate course of study is designed for advanced students who do not wish to enroll in the Paralegal A.A.S. Degree program. Minimum entrance requirements are 60 college credits $O R$ a two-year degree. Students entering with 60 credits should have completed courses in the following areas: English, Communication, Social Science, History, Music or Art, Science and Mathematics.

Curriculum Coordinator: Professor Raymond Canals

## Paralegal Certificate Curriculum

30-31 Credits required for Certificate

- DAT 10 Computer Fundamentals and Applications (3 Credits)
- LAW 17 Introduction to Paralegal Studies (3 Credits)
- LAW 19 Introduction to Law Office Management and Computers (3 Credits)
- LAW 41 Business Law (3 Credits)
- LAW 47 Civil Procedure (3 Credits)
- LAW 95 Legal Research and Writing (3 Credits)
- LAW 96 Advanced Legal Research and Writing (3 Credits)
- LAW 52* Business Organizations (3 Credits)
- LAW 62* Family Law (3 Credits)
- LAW 65* Criminal Law and Procedures (3 Credits)
- LAW 72* Real Property (3 Credits)
- LAW 77* Immigration Law (3 Credits)
- LAW 82* Insurance and Torts (3 Credits)
- LAW 91* Landlord/Tenant Advocacy (3 Credits)
- LAW 92* Estates, Trusts and Wills (3 Credits)
- ACC 111** Principles of Accounting I (4 Credits)
- BUS 111** Applications of Mathematics for Business (3 Credits)
- TAX 11** Introduction to Taxation (3 Credits)
*Choose 2 of these 8 law courses.
${ }^{* *}$ Choose 1 of these 3 law courses.
NOTE: Students who may later transfer to a four-year college should consult an advisor for possible replacement courses.

For information on Gainful Employment, please visit http://www.bcc.cuny.edu/Gainful-EmploymentDisclosure/?page2=GedtPCP

## COURSES

## Accounting

Please note that ACC 111, ACC 112 and ACC 113 replace ACC 11, ACC 12 and ACC 13 respectively.

## ACC $111 \quad 4$ rec 4 cr

## Principles of Accounting I

This course examines the fundamental principles of accounting theory and practice, including the analysis of assets, liabilities, and owners' equity accounts; allocation, estimation, and accrual procedures for financial statement preparation.
Prerequisites: MTH 01, if required
Corequisite: ENG 02 or RDL 02 if required.

## ACC $112 \quad 4$ rec 4 cr

## Principles of Accounting II

The overall purpose of this course is to apply fundamental accounting principles to the corporate and partnership forms of business organizations. These will include an introduction to the fundamental accounting concepts relating to accounting for property, plant and equipment (plant assets), accounting for long term liabilities, partnerships, equity transactions for corporations, statement of cash flows, and financial statement analysis.
Prerequisite: ACC 11 or ACC 111.

## ACC $113 \quad 4$ rec 4 cr

## Principles of Intermediate Accounting

Theory and problems of accounting applied to preparation of financial statements; problems of valuation; and income determination.
Prerequisite: ACC 12.
ACC $15 \quad 3$ rec 1 lab 3 cr

## Accounting Information Systems

Information systems and their relationship to the accounting function. Emphasis on interaction of accounting and information systems, application of information systems to financial/accounting management decisions, and control of these systems. A computerized accounting information package will be explored.
Prerequisite: ACC 12.

## Business

## BIS $12 \quad 4$ rec 3 cr

## Multimedia Theory and Applications for Business

Provides a theoretical understanding of multimedia technologies and fundamentals of multimedia software design and development. Students produce multimedia packages in business applications and their areas of specialization.
Corequisites: ENG 02 or RDL 02 if required; KEY 10 or equivalent skill level with permission of the department.

## BIS 13

4 rec 3 cr

## Introduction to the Internet and Web Development

Introduction to using the Internet and World Wide Web (WWW) for business and general use. Emphasis on Internet tools, which include e-mail, chat rooms, listservs, newsgroups, and Gopher as applied to business. Students optimize use of the Internet by learning how to identify and access information resources on the WWW through browsing, navigating, searching, and retrieving business-related information. Design and development of business-related Web pages.
Prerequisites: ENG 01 or RDL 02 if required; KEY 10 or equivalent skill level with permission of the department.

## BIS 23 <br> 2 rec 2 lab 3 cr

## Advanced Web Page Design and Development

This course introduces advanced concepts of the World Wide Web to increase interactivity and enhance the appearance and impact of a Web page. Topics to be covered include graphics, creative layouts, image maps, framed Web pages, and JavaScript.
Prerequisites: ENG 11, KEY 10 or equivalent skill level with departmental permission, and BIS 13.

## BIS 31 <br> 2 lec 2 lab 3 cr

## E-Commerce

This course is structured to provide an understanding of the complexities of the marketplace for E-Commerce and the design, maintenance, and administration of a Web-based E-Commerce site. It will also include identification of some E -Commerce sites that are currently utilized in business.
Prerequisites: BIS 13 and BUS 10.

## BUS 10

3 rec 3 cr

## Introduction to Business

Introductory survey course to acquaint students with business as a field of study. Analysis of the role of business in society with emphasis on how the business system operates. Functional areas of accounting, marketing, finance, business law, management and information systems.
Corequisite: RDL 02 or ENG 02 if required.

## BUS $41 \quad 3$ rec 1 lab 3 cr

## Business Statistics

Introduction to statistical methods as a basis for decisionmaking and operations control in business, utilizing principles of probability, sampling error, estimation and the descriptive methods of frequency distribution correlation, index number and time series analysis. Application to data pertinent to business and economic problems in such areas as accounting controls, production and marketing.
Prerequisite: Three years of high school mathematics or MTH 06. Corequisite: ENG 02 or RDL 02 if required.
BUS $51 \quad 3$ rec 3 cr

## Business Organization and Management

An introduction to basic managerial concepts and practices. The nature of organizations and their relationships with external forces (social, economic, legal/political, competitive,
technological and global) are explored. Key management functions, including decision-making, planning, organizing, directing and controlling are examined. Analytical and handson skills are further developed by introducing students to the application of mathematical models in the solution of managerial problems.
Corequisite: ENG 02 or RDL 02 if required and MTH 05 if required.

## BUS $52 \quad 3$ rec 3 cr

## Organizational Behavior

This course explores the impact of individuals, groups, organizational structure, and the external environment on human behavior within organizations. A managerial perspective is established by examining how organizational behavior concepts are applied to improve performance in the workplace. Topics discussed include organizational design, corporate culture, motivation and reward systems, leadership, group dynamics, and decision-making.
Prerequisite: BUS 51

## BUS $53 \quad 3$ rec 3 cr

## International Management

This course introduces the student to concepts and techniques employed in managing multinational organizations. It provides a basic understanding of the challenges confronted by management and the knowledge needed to operate successfully in global markets. The impact of rapidly changing cultural, political, legal, technological, and competitive forces on key managerial functions is also examined.
Prerequisite: BUS 51.
BUS 111
3 rec 3 cr

## Applications of Mathematics for Business

This course examines the application of mathematics to business. Topics include problems of interest, bank discounts, purchase discounts, installment sales, payrolls, depreciation, profit distribution, taxes, and insurance.

## Prerequisite: MTH 01.

Corequisite: RDL 02 or ENG 02 if required.
NOTE: This course replaces BUS 11.

## Computer Literacy

## CPL 11 <br> 2 lab 1 cr <br> Computer Literacy

Introduction to computer fundamentals for academic and professional use. Students will be introduced to the operational components of computers such as hardware, software, and use of the Windows Operating System. Students will receive hands-on experience using popular software and E-mail as well as acquire basic Internet skills
necessary for research and term paper preparation. Ethical issues in computing will also be addressed. This course is open only to non-business majors.
Prerequisite: ENG 01 or RDL 01 if required.

## Computer Applications and Programming

## DAT $10 \quad 2$ rec 2 lab 3 cr

## Computer Fundamentals and Applications

Introduction to computers and their use in information processing. Topics include hardware and software concepts, elements of system analysis, system design, and management information systems. Emphasis on computer usage, programming skills, and use of application programs involving word processing, spreadsheets, and data base management. Corequisites: RDL 02 or ENG 02 if required; MTH 03 or MTH 05.

## DAT 30 <br> 2 lect 2 lab 3 cr

## Introduction to Computer Fundamentals and Programming

Introduction to data processing equipment and operation; basic elements of electronic data processing, input, processing, storage, and output; flow-charting, numbering systems and business programming applications. Introduction to BASIC language programming in both a lecture and laboratory setting.
Corequisites: RDL 02 or ENG 02 if required; MTH 03 or MTH 05.

## DAT 33 <br> 1 lect 2 lab 2 cr

## Microcomputer Applications

Provides "hands-on" experience with microcomputers through use of an integrated software system with word processing, spreadsheet analysis, database management and graphics components.
Corequisite: RDL 01 or ENG 01 if required.
DAT 35
2 lect 2 lab 3 cr

## Visual Basic Programming

This course will provide a foundation for writing Windows based application programs that are event-driven with Graphical User Interface (GUI). Topics will include dialogs, menus, controls, scope of variables, data types, selection and iteration structures, objects and instances, MIDI, fonts and graphics, plus file I/O. Students will write and debug several programs using different business applications.
Prerequisites: DAT 10, DAT 30 or department approval.

DAT 36
2 lect 2 lab 3 cr

## Microcomputer Spreadsheet Applications

The lab portion involves "hands-on" training to design and implement financial and other applications. Includes development of personalized menus, use of MACRO capabilities, functions, and graphics. The lecture portion involves the business use of spreadsheets. Illustrations of business uses as well as case work will be addressed. Prerequisites: DAT 10, DAT 30 or DAT 33 or departmental approval.

## DAT 38 <br> 2 lect 2 lab 3 cr

## Microcomputer Database Applications

The lab portion involves converting file design, simple and complex data entry, like sorting and indexing, editing and modifying databases, and report generation. The lecture portion involves the business of databases. Illustrations of business uses as well as case work will be addressed.
Prerequisites: DAT 10, DAT 30 or DAT 33 or departmental approval.
DAT $47 \quad 2$ lec 2 lab 3 cr

## JAVA Programming

An introduction to Web-based application programming, using JAVA language, which is based in $\mathrm{C} / \mathrm{C}++$, but completely object-oriented and platform-independent, to create interactive/dynamic Web pages. Students familiar with the format and syntax of a programming language will develop applets designed to be executed over the internet within Web browsers, as well as stand-alone applications.
Prerequisite: DAT 10 or DAT 30 or departmental approval.

## DAT 48

2 rec 2 lab 3 cr

## Advanced JAVA Programming

This course is a continuation of JAVA Programming (DAT 47). The Fundamentals of JAVA such as Syntax, Primitive Data Types and Operations, Control Structures, Methods and Arrays will be reviewed. Classes and Objected Strings, Class Inheritance and Interfaces, GUI Programming Applets, Exception Handling, Input/Output Multithreading are studied in detail and Data Structures are introduced.
Prerequisite: DAT 47 or departmental approval.

## DAT 49 <br> 2 rec 2 lab 3 cr

## UNIX Fundamentals

This course is an introduction to operating systems with particular emphasis on the use, management and operation of the UNIX operating system. Students will learn how to effectively integrate UNIX utilities and user commands within a networked multi-user environment.
Prerequisite: DAT 10 or DAT 30 or departmental approval.

## Finance

## FIN 31 <br> 3 rec 3 cr

## Principles of Finance

American financial system; public and private financial institutions; financial problems of industrial and commercial firms. Procedures of business, foreign trade, and consumer financing; governmental policies and their effects on economic activities.
Corequisite: ENG 02 or RDL 02 if required.

## Keyboarding

## KEY 10

2 rec 1 cr

## Keyboarding for Computers

Introduction to keyboarding through classroom instruction and laboratory practice. Emphasis is placed on speed and accuracy in keying alpha/numeric text. Students are expected to achieve a minimum speed of 20 words per minute.

## KEY $11 \quad 5$ rec 2 cr

## Document Formatting and Speed Development

This course is designed to increase speed and accuracy and develop proofreading skills. Emphasis is placed on the proper formatting and production of business correspondence (memos, letters, tables, and reports) from straight and rough draft copy. Students are expected to achieve a minimum speed of 30 words per minute.
Prerequisite: KEY 10 or department permission.
Corequisite: ENG 01 or RDL 01 if required.

## KEY 12

4 rec 2 cr

## Advanced Document Production

This course is designed to enable students to produce more complex business documents using decision-making skills to determine content and formatting. Students are expected to achieve a minimum speed of 40 words per minute. Students will be able to demonstrate proficiency in producing high quality business documents.
Prerequisite: KEY 11 or department permission.
Corequisite: ENG 02 or RDL 02 if required.
Law

## LAW 17

3 rec 3 cr

## Introduction to Paralegal Studies

Introduces students to the legal system as it operates in the State of New York, the legal process, and certain basic areas of the law (torts, contracts, property). Roles of the lawyer and paralegal within the legal system especially as they relate to the unauthorized practice of law, fiduciary relationships, and ethical considerations. Students become familiar with specific paralegal skills. They practice and perfect such skills as interviewing techniques, factual investigation and formal and informal advocacy.
Corequisite: ENG 02 or RDL 02 if required.
LAW 19
3 rec 3 cr

## Introduction to Law Office Management and Computers

Survey of principle areas of law office management, docket control, calendar monitoring, bookkeeping/accounting systems, functions of the law library and computers in the law office.

Students gain understanding of computers, operating systems and programming in the modern law office; overview of other computer applicators for lawyers and paralegals; computer law, hardware and software tailored for law office applications.
Prerequisites: DAT 10, RDL 02, and ENG 02 if required.
LAW $41 \quad 3$ rec 3 cr

## Business Law

Survey of the legal and economic environment of business, and interrelationship and impact of ethical, social and political influences on individuals and organizations in the study of agency, antitrust, bankruptcy, constitutional, consumer, contract, criminal, and labor laws, and the federal and state court systems. Corequisite: ENG 02 or RDL 02 if required.

## LAW $45 \quad 3$ rec 3 cr

## Medical Law

Law as it affects work of medical secretarial assistants and paralegals including medical practice acts, legal relationship of physician and patient, professional liability, types of medical practice, preparation of reports for workers' compensation, and court litigation.
Corequisite: ENG 02 or RDL 02 if required.
LAW $47 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Civil Procedure

Common, statutory and constitutional law; the judicial system; and civil and criminal proceedings from initiation to enforcement and judgment.
Corequisites: ENG 02 or RDL 02 if required; LAW 17.

## LAW $52 \quad 3$ rec 3 cr

## Business Organizations

Introduction to law relating to business organizations: agency; sole proprietorships and partnerships; corporations; government regulation; drafting and research practice; functions of the lawyers and paralegal assistant.
Corequisite: ENG 02 or RDL 02 if required.

## LAW $62 \quad 3$ rec 3 cr <br> Family Law

Focus on legal aspects of marriage; custody and visitation; economic and social aspects of divorce, separation, annulment, and anti-nuptial agreements; contractual relations among members of the family; family court procedures; criminal jurisdiction over minors; drafting and research practice; functions of the lawyer and paralegal assistant. Aspects of criminal, statutory and constitutional law as it affects the juvenile offender.
Corequisite: ENG 02 or RDL 02 if required.
LAW 63
3 lec 3 cr

## Law for Security Personnel

A study of the legal problems in the private security sector. Included is a review of the powers and restrictions on "private police," (e.g., arrest, search and seizure, eavesdropping, and
a comparison with the powers of law enforcement agencies). Civil liabilities of private security personnel are studied as well as aspects of civil law. Licensing statutes are also analyzed.
Prerequisite: ENG 02 or RDL 02 if required.
LAW $64 \quad 3$ lec 3 cr

## Constitutional Law

This course provides an analysis of the historical development of constitutional criminal procedure. The effect of the due process clause of the Fourteenth Amendment is examined through a study of the leading Supreme Court decisions relating to criminal justice. Special attention is placed upon the Fourteenth Amendment's use to apply the Bill of Rights to the States.
Prerequisite: ENG 02 or RDL 02 if required.
Pre/corequisite: POL 11.

## LAW $65 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Criminal Law and Procedures

Provides understanding of basic distinctions between criminal and civil law; familiarization with criminal justice system; major stages of a criminal case.
Corequisite: ENG 02 or RDL 02 if required.

## LAW 72 <br> 3 rec 3 cr

## Real Property

Law of real property and real estate transactions. Analysis of sales, obligations of the real estate broker, surveys, recordings, closings and title searches, mortgages, assignments, consolidation agreements, and mortgage foreclosures. Law of landlord and tenant are extensively reviewed.
Corequisite. ENG 02 or RDL 02 if required.
LAW $77 \quad 3$ rec 3 cr

## Immigration Law

Hands-on course dealing with concepts and techniques of immigration law. Procedures for preparation of immigrant and non-immigrant visa applications; and the skills necessary to assist immigrants who seek asylum, citizenship, naturalization or employment, or who face exclusion or deportation proceedings. Emphasis on the practice of immigration law from the perspective of a paralegal.
Corequisite: ENG 02 or RDL 02 if required.
LAW $82 \quad 3 \mathrm{rec} 3 \mathrm{cr}$
Insurance and Torts
Survey of the law of insurance and the law of torts, especially as they relate to each other: nature and types of insurance, indemnity and subrogation; the insurance contract; defenses against payment to the insured; government regulations; tort liability; intentional torts; negligent torts, litigation; drafting and research practice; functions of the lawyer and paralegal assistant. Corequisite: ENG 02 or RDL 02 if required.

LAW $89 \quad 3 \mathrm{rec} 3 \mathrm{cr}$
Legal Advocacy
Administrative law and advocacy, agency advocacy, preparation and conduct of administrative hearings, due process rights,
and basics of evidence. Procedural rights in public benefit entitlement programs and the rights of the physically and mentally handicapped and the elderly. Also, procedural rights in housing programs and overview of landlord and tenant law, administrative advocacy, and trial advocacy.
Corequisite: ENG 02 or RDL 02 if required.
LAW 91
3 rec 3 cr
Landlord/Tenant Advocacy
This hands-on course deals with concepts and techniques used in Housing Court. Students learn strategies for representing tenants against the New York City Housing Authority, rent stabilization and rent control laws, and the Jiggetts Preliminary Relief System. Conduct research in housing and welfare law; and develop direct and crossexamination skills.
Prerequisites: LAW 17 and LAW 47; completion of 30 credits, a " $\mathrm{C}+$ " average and permission from director of the program.

## LAW 923 rec 3 cr

## Estates, Trusts and Wills

Requirements, formalities, drafting and execution of wills and trusts, probating wills, intestacy law, administration of wills and estates, preparation of federal estate and inheritance tax returns; transfer tax proceedings under the law of New York State; estate planning.
Corequisite: RDL 02 or ENG 02 if required.
LAW $95 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Legal Research and Writing

How to research legal questions and to present results to the supervising attorney. Role of legal research in the process of legal advocacy; historical development and present organization of the Anglo-American legal system; organization and procedures of the New York courts; various tools of legal research and how to use them; skill in researching and answering legal questions in an active law office; skill in organizing and writing legal memoranda.
Prerequisites: ENG 10 or ENG 11, LAW 17, LAW 47.
LAW $96 \quad 3$ rec 3 cr

## Advanced Legal Research and Writing

Drafting pleadings and business agreements, law office memoranda, memoranda of law in support of motions, pretrial and memoranda of law, and appellate briefs. Use of computer research tools, such as WESTLAW or LEXIS. Substantive aspects, with emphasis on the conduct of practical exercises in research and writing. The art of oral advocacy.
Prerequisites: ENG 10 or ENG 11, LAW 17, LAW 47, LAW 95.

## LAW $98 \quad 2$ rec 2 cr

## Paralegal Seminar and Internship

Provides students with an optimal practical experience in the legal field by placing them in various legal environments-law offices OR corporate, judicial, OR administrative agencywhich have shown an interest in sponsoring an intern. The seminar and internship program provides direct contact and utilization of skills and knowledge obtained in the classroom and permits students to practice and perfect those skills in an operating office situation. In addition to satisfying the
individual needs of students, this program helps the student crystallize and clarify career goals.
Prerequisites: LAW 17, LAW 47, and completion of at least 40 credits toward a degree.

## Marketing Management

## MKT 11

3 rec 3 cr

## Principles of Marketing

Introduction to the role and scope of marketing in a rapidly changing and challenging environment. Designed to set an overall framework for further studies in the marketing "field," this course surveys broad marketing issues and focuses on the planning and implementation of product, promotion, pricing, and distribution strategies.
Corequisite: ENG 02 or RDL 02 if required.

## MKT 18 <br> 3 rec 3 cr

## Consumer Behavior

Explores the impact of cultural, social, economic, and psychological influences on consumer decision-making. Highlights the importance of understanding consumer behavior in formulating and implementing the marketing strategy and traces key stages of the consumer decision-making process.

## Prerequisite: MKT 11.

## MKT 41

3 rec 3 cr

## Management of Retail Operations

Examines the role of retailing within the larger marketing system and focuses on strategic aspects of retailing. The management decision-making process with respect to key areas, such as growth and diversification strategies, financial planning, store location, merchandising management, human resources management, advertising and sales promotion are explored. Prerequisite: MKT 11.

## MKT 43

3 rec 3 cr

## Principles of Advertising

Introduces advertising as a fundamental business function and as a creative outcome of the marketing strategy. This course addresses a wide variety of conceptual and technical issues, including consumer behavior, market segmentation, advertising planning and research, media and budget considerations, copywriting, art direction and production, and sales promotion.
Prerequisite: MKT 11.

MKT $47 \quad 2$ rec 2 lab 3 cr

## E-Marketing

Based upon established marketing thought and practice, this course focuses on the impact of the World Wide Web on the formulation and implementation of the marketing strategy. The role of the Web in market analysis as well as in product, promotion, pricing, and distribution strategies is explored. New E-business models designed to increase the efficiency of traditional marketing functions are also examined.
Prerequisites: ENG 01 and RDL 01 if required; MKT 11.

Corequisites: ENG 02 or RDL 02 if required; DAT 10 or permission of department.

## MKT $48 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

Marketing Management
Designed to provide a basic understanding of key issues facing today's marketing managers, this course introduces the student to fundamental concepts and techniques needed to manage the marketing function. Topics include the analysis of marketing opportunities and constraints, an examination of the decision-making process with respect to product, promotion, pricing, and distribution strategies as well as the planning and delivery of marketing programs. A managerial orientation is developed through the case study method.
Prerequisites: ENG 01 and RDL 01 if required; MKT 11. Corequisites: ENG 02 and RDL 02 if required.

## Office Administration and Technology and Medical Assistant Programs

## COM 31 <br> 2 rec 2 lab 3 cr

## Business Communications

An introduction to the principles of writing business correspondence and reports. Emphasis will be placed on the outlining of ideas and the development of the composition of written communications such as routine letters, memos, email messages, and reports. The assimilation of content and interpretation of incoming correspondence for appropriate action and response will also be addressed. Language Arts skills will be reviewed and reinforced. A term report will be required.
Prerequisite: ENG 10 or ENG 11, KEY 12.
SEC $35 \quad 4$ rec 2 cr

## Medical Office Procedures and Management

Perform secretarial and medical assistant responsibilities in private physicians' offices, hospitals, and medical laboratories. Cultivation of desirable personal traits and attitudes of the medical office assistant. Office projects include case histories, medical reports, filing systems, and record-keeping. Development of skill in transcribing medical reports.
Prerequisites: KEY 13, WPR 11, or department permission. Corequisites: BIO 47.

SEC $41 \quad 4$ rec 2 cr

## Office Procedures

This course is designed to equip students with the ability to perform efficiently in their role as administrative assistants and as members of an office team by learning the role of support staff. Topics include prioritizing work assignments; managing time and stress; planning meetings and conferences; making travel arrangements; and integrating technologies that have increased office productivity. Projects requiring the analysis of data and development of critical thinking and problem-solving
skills will be incorporated into the course.
Prerequisites: COM 31, KEY 12.

## Taxation

## TAX $11 \quad 3$ rec 3 cr

## Introduction to Taxation

Study of the current federal, New York State and New York City income tax laws and regulations: concepts of taxable gross and net income, deductions and exemptions as applied to various classes of individual taxpayers. Preparation of individual income tax returns on government forms.
Prerequisites: BUS 11 and ACC 11 or permission of the department.

## Word Processing

## WPR $11 \quad 5 \mathrm{rec} 3 \mathrm{cr}$

## Transcription for Business

Students will develop transcription skills necessary to transcribe simple documents. A review of grammar and punctuation along with an emphasis on spelling and word study skills will enable students to produce documents. Prerequisite: KEY 10.
Corequisites: ENG 10 / 11, KEY 11, or permission of department.

## WPR 21

3 rec 3 cr

## Word Processing Applications

Students will learn the essential features and commands of current word processing software to improve productivity and efficiency in the creation of business documents.

## Prerequisite: KEY 10.

Corequisite: KEY 11.

## WPR 23 <br> 3 rec 2 cr

## Office Supervision and Administration

This course is designed to introduce students to the role and functioning of the office supervisor $O R$ administrator. Students will become familiar with the nature of supervisory issues as they relate to employees, other supervisors, and upper management. Prerequisite: WPR 21.

## WPR $24 \quad 3$ rec 3 cr

## Presentations for Business

Students will learn the concepts and practical applications of current presentation software. Topics will include producing text with graphic elements such as charts, graphs, and tables to general professional-looking fliers, reports, forms, letterheads, and slide presentations.
Prerequisites: RDL 02, if required; MTH 05 or CUNY math proficiency; ENG 10 or ENG 11; WPR 21 or permission of Department.

## Chemistry and Chemical Technology

## MISSION, PHILOSOPHY AND GOALS

The Department of Chemistry and Chemical Technology supports and endorses the mission, philosophy and goals of the founding institution:
"To Educate the People, the Whole People."
The Department of Chemistry and Chemical Technology is an integral part of Bronx Community College and the City University of New York. Therefore, the Department has the responsibility to provide courses in chemistry for students in the various programs and curricula. These courses meet the requirements for the first two years of a four-year college program. They include first and second year courses for chemistry and other science majors, for health science majors, and courses for non-science majors.

Students in Science, Technology and Health care fields who need to take a course in Chemistry, must take either General College Chemistry I (CHM 11) or Fundamentals of General Chemistry I (CHM 17). A prerequisite for these courses is a Chemistry Placement Test, consisting of 40 multiple choice questions, based on a broad range of topics from High School or other basic Chemistry courses. The test helps the BCC Chemistry Department faculty place students into the right Chemistry classes.

The specific goals of the Department of Chemistry and Chemical Technology are:

- Develop transfer and career programs to respond to education and employment needs of the community that we serve.
- Develop and maintain modern and competitive chemistry courses to serve the science and non-science students of the college.
- Maintain a high level of instructional excellence through an experienced and dedicated technical staff.

In addition to the traditional basic and advanced college chemistry courses, the Department of Chemistry offers careeroriented programs in Environmental Technology, Earth Systems and Environmental Science, Pharmaceutical Manufacturing Technology and, most recently, Forensic Science.

Professor and Chairperson: Dr. Neal Phillip
Professors: T. Brennan, V. Flaris, K. Ismail, E. Passer, M. Pulver, H. Stein

Associate Professor: S. Bhaskaran
Assistant Professors: A. Durante, J. Molina, M. Ponnala (sub), F. Saeedi, D. St. Hilaire, A. Socha, S. Therese

Lecturers: R. Lupo, S. Segni (sub)
College Laboratory Technicians: M. Fields, D. Kim, C. Rodriguez

Approximately 20 adjuncts per semester

## COURSES

Chemistry (CHM)
Earth Systems and Environmental Science (ESE)
Environmental Technology (ENV)
Pharmaceutical Manufacturing Technology (PMT)
Science (SCl)

## DEGREE PROGRAMS

Environmental Technology, A.A.S.
Liberal Arts and Sciences - Chemistry, A.S.
Liberal Arts and Science - Earth Systems and
Environment Science, A.S.
Pharmaceutical Manufacturing Technology, A.A.S.
Science for Forensics, A.S.

## ENVIRONMENTAL TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Department of Chemistry and Chemical Technology
This competency-based curriculum provides state of-the-art training for careers in environmental technology. Environmental Technology utilizes the principles of science, engineering, communications and economics to protect and enhance safety, health and natural resources.

All credits from this program may be transferred to Medgar Evers College for a bachelor's degree in Environmental Health. Students interested in transferring to the Environmental Engineering program at The City College should see Dr. Neal Phillip. The program articulates with SUNY Empire State. See the Transfer Planning web site for more details.
Curriculum Coordinator: Dr. Vicki Flaris

## Environmental Technology Curriculum (Pathways) 60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 23 Probability and Statistics ${ }^{1}$ (3 Credits)
C. Life and Physical Sciences
- CHM 17 Fundamentals of General Chemistry² (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- CHM 18 Fundamentals of General Chemistry II ${ }^{2}$ (4 Credits)
Additional Flexible Core Requirement - Area E. - BIO 11 General Biology I (4 Credits) SUBTOTAL 24


## Required Areas of Study

- BIO 12 General Biology II (4 Credits)
- DAT 33 Microcomputer Applications ${ }^{3}$ (2 Credits)
- ENG 223 Scientific and Technical Writing ${ }^{4}$ (3 Credits)
- MTH 13 Trigonometry and College Algebra ${ }^{1}$ (3 Credits)
- PHY 11 College Physics I (4 Credits)
- RESTRICTED ELECTIVE ${ }^{5}$ (1 Credit) SUBTOTAL 17


## Specialization Requirements

- ENV 11 Introduction to Environmental Health (4 Credits)
- ENV 12 Environmental and Occupational Regulations (4 Credits)
- ENV 23 Environmental Toxicology (3 Credits)
- ENV 31 Water Chemistry and Pollution (4 Credits)
- ENV 32 Atmospheric Chemistry and Pollution (4 Credits) SUBTOTAL 19

1 Students intending to transfer to four-year programs in Environmental Science and Environmental Engineering should take MTH 30 and MTH 31 in lieu of MTH 13 and MTH 23.
2 Students intending to transfer to four-year programs in Environmental Science and Environmental Engineering should take CHM 11 and CHM 12 in lieu of CHM 17 and CHM 18.
3 Students can substitute CHM 38 for DAT 33.
4 Students can substitute ENG 12 for ENG 223.
5 Students can take ART 10 or MUS 10, or WFA 10 or any PEA one credit course. Students who intend to transfer should choose

## ENVIRONMENTAL TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Department of Chemistry and Chemical Technology

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

Curriculum Coordinator: Dr. Vicki Flaris

## Environmental Technology Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- Restricted Elective* (1 Credit)
- CHM 17 Fundamentals of General Chemistry I ** (4 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 23 Scientific and Technical Writing*** (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- OCD 01 Orientation and Career Development (0 Credit) TOTAL 17


## Required Areas of Study

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CHM 18 Fundamentals of General Chemistry II ** (4 Credits)
- DAT 33 Microcomputer Applications + (2 Credits)
- MTH 13 Trigonometry and College Algebra** (3 Credits)
- MTH 23 Probability and Statistics**(3 Credits)
- PHY 11 College Physics I (4 Credits)

TOTAL 24

## Specialization Requirements

- ENV 11 Introduction to Environmental Health (4 Credits)
- ENV 12 Environmental and Occupational Regulations (4 Credits)
- ENV 23 Environmental Toxicology (3 Credits)
- ENV 31 Water Chemistry and Pollution (4 Credits)
- ENV 32 Atmospheric Chemistry and Pollution (4 Credits) TOTAL 19

NOTE: Students must achieve a grade point average of 2.5 or better in the first four courses before they are considered for admission to the program. Students intending to transfer to a fouryear program in environmental science must maintain a minimum index of 2.0; take CHM 11 and CHM 22 in lieu of CHM 17 and CHM 18; and MTH 30 and MTH 31 in lieu of MTH 13 and MTH 23.

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* Students can take ART 10 or MUS 10, or WFA 10 or any PEA one credit course. Students who intend to transfer should choose ART 10, or MUS 10, or any PEA one credit course.
** Students intending to transfer to four-year programs in Environmental Science or Environmental Engineering should take CHM 11 and CHM 22 in lieu of CHM 17 and CHM 18; and take MTH 30 and MTH 31 in lieu of MTH 13 and MTH 23.
*** Students can substitute ENG 12 for ENG 23.
+ Students can substitute CHM 38 for DAT 33.


## LIBERAL ARTS AND SCIENCES

## Associate in Science Degree | Transfer Degree

A student interested in the Associate in Science (A.S.) degree in Liberal Arts and Sciences has to choose one of four options: Biology, Chemistry, Earth Systems and Environmental Science, or Physics. Each option prepares students for transfer to a complementary four-year degree program. Students in the Chemistry, and the Earth Systems and Environmental Science options transfer to four-year science programs (biochemistry, biology, chemistry, earth and environmental science, etc.), teacher education programs, pharmacy schools, engineering programs (biomedical, chemical, environmental), or physician assistant or physical therapy programs. Enrichment programs are offered to encourage students to continue their education beyond the bachelor degree by attending graduate or other professional schools.

## Liberal Arts and Sciences Curriculum (Pathways)

60 Credits required for A.S. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning

- MTH 30' ${ }^{1}$ Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits)
C. Life and Physical Science
- CHM $11{ }^{1}$ General Chemistry I (4 Credits) SUBTOTAL 14


## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. US Experience and its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- CHM $12^{1}$ General Chemistry II (4 Credits) *Restricted Elective Select one course from Area A-E. (3 Credits)
SUBTOTAL 19


## Specialization Requirements

- MTH 31 Analytic Geometry and Calculus I** (0-4 Credits)
- MTH 32 Analytical Geometry and Calculus II (5 Credits)
- Specialization requirements for option*** (18 Credits)
-FREE ELECTIVES (0-4 Credits) SUBTOTAL 27

Chemistry Option
Curriculum Coordinator: Dr. Nicolas Anuku

- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- Choose two of the three courses below:

CHM 33 Quantitative Analysis AND / OR
BIO 11 General Biology I AND / OR
PHY 11 Physics I (8 Credits)
TOTAL 18

Earth Systems and Environmental Science Option Curriculum Coordinator: Dr. Farnosh Saeedi

- CHM 27 Principles of Laboratory Safety (2 Credits)
- CHM 33 Quantitative Analysis (4 Credits)
- Choose two of the three courses below: ESE 11 Earth Systems Science: The Earth OR ESE 12 Earth Systems Science: The Atmosphere OR ESE 13 Earth Systems Science: The Ocean (8 Credits)
- ESE 21 Earth Systems Science: The Environment (4 Credits) TOTAL 18

1 This program has obtained a waiver to require STEM variant courses in Required Core Area B and Area C and Flexible Core Area E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

* Restricted Elective: must select one course from Flexible Core A-E. No more than two courses in any discipline or interdisciplinary field.
**For students that take MTH 30 to fulfill the Required Core.
***See your department advisor for the appropriate sequence of specialization courses. Students transferring to a college of pharmacy should complete BIO 11 and 12.
Both options also articulate with SUNY Empire State College. Copies of these agreements may be found on the BCC Transfer Planning website.


## LIBERAL ARTS AND SCIENCES (Pre-Pathways)

Associate in Science Degree \| Transfer Degree
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Liberal Arts and Sciences Curriculum <br> 60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12* Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)

TOTAL 13-14

## Required Areas of Study

- CHM 11 General Chemistry I (4 Credits)
- CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
- MTH 31 Analytic Geometry and Calculus I (4 Credits)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- ART 11 Introduction to Art OR MUS 11 Introduction to Music OR Humanities OR Social Sciences** (3 Credits)
- MODERN LANGUAGE $\dagger$ ( $0-8$ Credits) TOTAL 21-29

Specialization Requirements \# (18 Credits)
Chemistry Option
Curriculum Coordinator: Dr. Nicolas Anuku

- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- CHM 33 Quantitative Analysis (4 Credits)
- BIO 11 General Biology I OR PHY 11 Physics I (4 Credits) TOTAL 18

Earth Systems and Environmental Science Option
Curriculum Coordinator: Dr. Farnosh Saeedi

- CHM 27 Principles of Laboratory Safety (2 Credits)
- CHM 33キ Quantitative Analysis (4 Credits)
- ESE 11 Earth Systems Science: The Earth OR ESE 12 Earth Systems Science: The Atmosphere OR ESE 13 Earth Systems Science: The Ocean (Choose two of the above three courses) (8 Credits)
- ESE 21 Earth Systems Science: The Environment (4 Credits) TOTAL 18
*Students in the Earth Systems and Environmental Science Option may also select from ENG 14, ENG 15, or ENG 16.
**See your advisor to determine the appropriate course from an approved list of Humanities or Social Science courses. $\dagger$ Modern Language is a requirement for students planning to transfer to a CUNY four-year college and major in biology, chemistry, earth science or physics. Students planning to transfer should see the language requirements for the four-year degree program at the senior college.
\# See your department advisor for the appropriate sequence of specialization courses. Students transferring to a college of pharmacy should complete BIO 11 and 12.
$\ddagger$ Students may also select BIO 11 or PHY 11.
The Chemistry Option fully articulates with Lehman's B.S. in Physical Anthropology and B.A. in Biology. Both options also articulate with SUNY Empire State College. Copies of these agreements may be found on the BCC Transfer Planning website.


## PHARMACEUTICAL MANUFACTURING TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Department of Chemistry and Chemical Technology
The Pharmaceutical Manufacturing Technology (PMT) program is a specialized chemical technology program designed to meet the needs of the pharmaceutical and related industries (cosmetics, food, plastics, custom chemicals, research centers, pilot plants etc.). The PMT curriculum prepares students to work in manufacturing, research and development, and quality control and quality assurance departments of pharmaceutical, cosmetics, and related chemical industries. Today's industrial environment requires technicians well trained in state-of-the-art instruments, computer methods, safety protocols and federal and state government regulations.
The PMT program provides a solid foundation in liberal arts and sciences combined with specialized training in the field. Students also have the option of transferring to science and engineering bachelor's programs or to pharmacy schools to continue their education. The program articulates with SUNY Empire State College. Visit the Transfer Planning web site for details.
Curriculum Coordinator: Dr. Thomas Brennan

## Pharmaceutical Manufacturing Technology Curriculum (Pathways) <br> 60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR

ENG 11 Composition and Rhetoric I (3 Credits)
C. Life and Physical Sciences

- CHM 11 General Chemistry I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- CHM 12 General Chemistry II (4 Credits)
- Additional Flexible Core Requirement - Scientific World
- BIO $11^{11}$ General Biology I (4 Credits) SUBTOTAL 21

Required Areas of Study

- ART $10^{2}$ Art Survey (1 Credit)
- BIO $12^{1}$ General Biology II (4 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- ENG 23 Scientific and Technical Writing (3 Credits)
- MTH $13^{3}$ Trigonometry and College Algebra (3 Credits)
- MTH $14^{3}$ Algebra and Introduction to Calculus (3 Credits) SUBTOTAL 24


## Specialization Requirements

- CHM 27 Principles of Laboratory Safety (2 Credits)
- CHM 37 Quantitative Instrumental Analysis (4 Credits)
- CHM 38 Computer Applications in Chemistry (2 Credits)
- RESTRICTED ELECTIVES ${ }^{4}$ (5-6 Credits)
- CHM 39 Foundations of Pharmaceutical Process Technology (3 Credits)
- CHM 40 Pharmaceutical and Chemical Technology (3 Credits)
- PMT 41 Pharmaceutical Chemistry (3 Credits)
- PMT 42 Pharmaceutical Product Preparation (3 Credits)
- PMT 43 Pharmaceutical Laws and Regulations (2 Credits)
- FREE ELECTIVES to complete 60 credit requirement (1-2 Credits)
SUBTOTAL 15
1 Students can substitute PHY 11 for BIO 12. Students who wish to substitute both PHY 11 and PHY 12 for BIO 11 and BIO 12 need department approval.
2 Students can substitute MUS 10, or any PEA one-credit course, or CPR 10, or WFA 10 for ART 10.

3 Students intending to transfer to four-year programs should substitute MTH 30 and MTH 31 and 32 for MTH 13 and MTH 14.
4 Students may choose any combination of restricted electives CHM 39, CHM 40, PMT 41, PMT 42 and PMT 43 to meet the program credits requirement.

## PHARMACEUTICAL MANUFACTURING TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Department of Chemistry and Chemical Technology
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Thomas Brennan

## Pharmaceutical Manufacturing Technology Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ART 10* Art Survey (1 Credit)
- BIO 11\# General Biology I (4 Credits)
- CHM 11 General Chemistry I (4 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3Credits)
- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 13** Trigonometry and College Algebra (3 Credits)
- OCD 10 Orientation and Career Development (O Credit) TOTAL 21


## Required Areas of Study

- BIO 12\# General Biology II (4 Credits)
- CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- ENG 23 Scientific and Technical Writing (3 Credits)
- MTH 14** Algebra and Introduction to Calculus (3 Credits) TOTAL 25


## Specialization Requirements

- CHM 27 Principles of Laboratory Safety (2 Credits)
- CHM 37 Quantitative Instrumental Analysis (4 Credits)
- CHM 38 Computer Applications in Chemistry (2 Credits)
- Restricted Electives\#\# (5-6 Credits)
- CHM 39 Foundations of Pharmaceutical Process Technology (3 Credits)
- CHM 40 Pharmaceutical and Chemical Technology (3 Credits)
- PMT 41 Pharmaceutical Chemistry (3 Credits)
- PMT 42 Pharmaceutical Product Preparations (3 Credits)
- PMT 43 Pharmaceutical Laws and Regulations (2 Credits)
-FREE ELECTIVE*** (to complete 60 credit requirement) (0-1 Credit)
TOTAL 14
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students can substitute MUS 10, or any PEA one-credit course, or CPR 10, or WFA 10 for ART 10.
\#Students can substitute PHY 11 for BIO 12. Students who wish to substitute both PHY 11 and PHY 12 for BIO 11 and BIO 12 need department approval.
**Students intending to transfer to four-year programs should substitute MTH 30 and MTH 31 and 32 for MTH 13 and MTH 14.
\#\# Students may choose any combination of the restricted electives CHM 39, CHM 40, PMT 41, PMT 42 and PMT 43 to meet the program credits requirement.
*** Students may take a one credit free elective course to fulfill the program credit requirement.


## SCIENCE FOR FORENSICS

Associate in Science Degree | Joint Degree Program Department of Chemistry and Chemical Technology

The Science for Forensics (SFF) Associate in Science (A.S.) degree program is part of a joint program between Bronx Community College and John Jay College of Criminal Justice for students with a strong interest in science, law, and public service. BCC graduates of the Science for Forensics A.S. program will continue their studies at John Jay College where they will earn a Bachelor of Science in Forensic Science. To enter the Forensic Science program at John Jay, BCC graduates must have a 2.5 or better GPA in foundation coursework. Creation of this $2+2$ partnership in forensic science will open up a new opportunity for New York City area students to receive an excellent education leading to exciting career paths. The SFF program will provide future forensic scientists with the necessary scientific foundation and technical training in general chemistry, organic chemistry, physics, biology, mathematics, data collection and analysis, oral and written communication skills, teamwork, and hands-on experience for successful, productive and rewarding careers in local, regional and national forensic science and chemistry based laboratories, major research centers, university facilities, government testing labs, and public utilities.
Curriculum Coordinator: Dr. John Molina

## Science for Forensics Curriculum (Pathways)

60 Credits required for A.S. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{1}$

- MTH 31 Calculus and Analytical Geometry (4 Credits)
C. Life and Physical Sciences ${ }^{1}$
- CHM 11 General College Chemistry I (4 Credits)

SUBTOTAL 14

## Flexible Core

Select two courses from any of the following areas (Flexible Core A-D) ${ }^{2}$, with no more than one course in any area, and no more than one course in any discipline or interdisciplinary field (6 Credits)
A. World Cultures and Global Issues
B. U.S. Experience in Diversity
C. Creative Expression
D. Individual and Society

The following courses are required:

## E. Scientific World ${ }^{1}$

- CHM 12 General Chemistry II (4 Credits)
- PHY 31 Physics I (4 Credits)

SUBTOTAL 14

## Required Areas of Study

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- PHY 32 Physics II (4 Credits)
- RESTRICTED ELECTIVE ${ }^{3}$ (1 Credit)

SUBTOTAL 18

## Specialization Requirements

- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- CHM 33 Quantitative Analysis (4 Credits) SUBTOTAL 14

1 This program has received a waiver to require students to complete MTH 31 to fulfill Required Core B, CHM 11 to fulfill Required Core C, CHM 12 to fulfill Flexible Core E, and PHY 31 (selected from Flexible Core E) to fulfill the sixth Flexible Core course.

2 To fulfill the two-year degree requirements of this Joint Degree with John Jay College, this program has received an additional waiver to allow students to complete a portion of the Common Core requirements prior to transfer and complete the remaining requirements upon transfer.

3 Any PEA one credit course, or CPR 10, or WFA 10, or ART 10, or MUS 10.

## SCIENCE FOR FORENSICS (Pre-Pathways)

Associate in Science Degree | Joint Degree Program Department of Chemistry and Chemical Technology

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. John Molina

## Science for Forensics Curriculum

60 Credits required for A.S. Degree

## Core Requirements

- BIO 11 General Biology I (4 Credits)
- BIO 12 General Biology II (4 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 31 Analytic Geometry and Calculus I (4 Credits)
- OCD 01 Orientation and Career Development (O Credit) TOTAL 24


## Required Areas of Study

- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- PHY 31 Physics I (4 Credits)
- PHY 32 Physics II (4 Credits)
- Restricted Elective ${ }^{1}$ (0-1 Credit) TOTAL 13-14


## Specialization Requirements

- CHM 11 General College Chemistry I (4 Credits)
- CHM 12 General Chemistry II OR CHM 222 General Chemistry II with Qualitative Analysis (4 or 5 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- CHM 32 Organic Chemistry II (5 Credits)
- CHM 33 Quantitative Analysis (4 Credits)

TOTAL 22-23
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
1 Any PEA one credit course, or CPR 10, or WFA 10, or ART 10, or MUS 10.
2 Students take CHM 22 if CHM 12 is not offered.

## COURSES

## Chemistry

CHM $2 \quad 1$ rec 2 lect 2 lab 0 cr

## Introduction to Chemistry*

Introduction to types of matter, elements, compound, formulas, equations, use of arithmetic for chemical problemsolving, nomenclature, atomic structure and chemical bonding. Basic laboratory skills.
Corequisites: MTH 05 and RDL 02 or by departmental approval.
CHM $10 \quad 3$ rec 3 lab 4 cr
Chemistry in Everyday Life
An elementary course for Liberal Arts and other nonscience students which shows the significant role that chemistry plays in our everyday lives. Topics include, in addition to applications of basic principles, pollution and the environment, proteins, chemicals of food, poisons, toxins, drugs, chemicals and the mind. Laboratory: provides laboratory experience and illustrates relevant ideas in the lecture. It fulfills the laboratory science requirement for business, education associate and liberal arts students.
Corequisites: ENG 02 or RDL 02 if required.
*CHM $11 \quad 1$ rec 2 lect 3 lab 4 cr
General College Chemistry I
Fundamental principles and theories of chemistry, aspects of atomic structure and bonding, chemical calculations, states of matter, solutions. Laboratory: chemical techniques and principles.
Prerequisites: Placement Exam or CHM 02; and MTH 05.
Required Core-Life and Physical Sciences
Flexible Core-Scientific World
CHM $12 \quad 1$ rec 2 lect 3 lab 4 cr

## General College Chemistry II

Solutions, kinetics, equilibria, electrochemistry, properties of non-metallic and metallic elements, nuclear chemistry, organic chemistry. Laboratory: chemical techniques and principles, and qualitative analysis. (Chemistry and other science majors should take CHM 22 in the second semester. Engineering Science majors may choose either CHM 12 or CHM 22 in the second semester.)
Prerequisite: CHM 11.
Flexible Core - Scientific World
CHM $13 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Chemistry and the Environment

An elementary chemistry course for students in a curriculum, which requires only a 3 -hour science course. The course shows the significant role that chemistry plays in our everyday lives. In addition to applications of basic principles, topics include pollution and the environment, proteins, chemicals of food, poisons, toxin drugs, chemicals and the mind.
Co-requisite: ENG 02 or RDL 02 if required.
Required Core - Life and Physical Sciences

## CHM $17 \quad 1$ rec 2 lect 3 lab 4 cr

## *Fundamentals of General Chemistry I

Introductory course in general chemistry, atomic theory, formulas and equations, electron configurations, periodic table, chemical bonding, molecular structure, calculations, gas, liquid and solid states, solutions. Laboratory: illustrates the principles of course and laboratory techniques.
Prerequisites: Placement exam or CHM 02; and MTH 05 and RDL 02.
Required Core - Life and Physical Sciences
Flexible Core - Scientific World

## CHM 18 <br> 1 rec 2 lect 3 lab 4 cr <br> Fundamentals of General Chemistry II

Continuation of CHM 17. Ionic reactions; acid-base theories, pH , chemical equilibria, structure, nomenclature and properties of hydrocarbons, alcohols, ethers, carbonyl compounds, amine and amides, acids, esters, fats, lipids, amino acids, proteins, and carbohydrates.
Prerequisite: * Students in science, technology and health care fields, who need to take a course in chemistry, must take either CHM 11 or CHM 17. A prerequisite for these courses is CHM 02 or achieving a score of 25 out or 40 on a chemistry placement exam. For more information, see the Department of Chemistry and Chemical Technology. CHM 17.
Flexible Core - Scientific World
CHM $20 \quad 1$ rec, 2 lec, 3 lab, 4 cr

## Introduction to Nanoscience

The course will give students an introduction to nanoscience, synthesis of nanomaterials, the tools to determine the mechanical properties and characterize these materials (for example, Electron Microscopy (SEM/TEM), Atomic Force Microscopy (AFM)), nanoscale modeling and societal impacts of nanomaterials/technology (such as, ethical, legal, environmental implications). Students will chose a nanomaterial of interest and also do a term paper and presentation. Laboratory demonstrations will illustrate principles of the course and laboratory techniques.
Prerequisites: Placement Exam or CHM 02; and MTH 05 Flexible Core-Scientific World

CHM 22
1 rec 2 lect 6 lab 5 cr

## General Chemistry II with Qualitative Analysis

Emphasis on solutions, equilibria, acids and bases, ionization equilibria, solubility product, complexions, oxidation-reduction and survey of metallic and non-metallic elements, organic and nuclear chemistry. Laboratory: qualitative analysis of solutions, salts and alloys.
Prerequisite: CHM 11.

## CHM 27 <br> 2 lect 2 cr <br> *Principles of Laboratory Safety

Presents the basic concepts of laboratory safety. Topics include legal issues, chemical and biological hazards, storage, laboratory design, and emergency responses.
Prerequisite: CHM 11 or CHM 17.

## CHM $31 \quad 1$ rec 3 lect 4 lab 5 cr

## Organic Chemistry I

Structure, nomenclature, properties and reactions of organic compounds including electronic theory and mechanisms. Laboratory: preparation, purification and identification of representative organic compounds.
Prerequisites: CHM 12, 18 or CHM 22.

## CHM $32 \quad 1$ rec 3 lect 4 lab 5 cr

## Organic Chemistry II

Organic spectroscopy (IR, NMR, UV) and mass spectrometry; molecular orbital theory applied to conjugated and aromatic systems; physical, chemical properties and major reactions of the main classes of organic molecules; aromatics, alcohols, aldehydes and ketones, carboxylic acids, carboxylic acid derivatives, amines, amides, peptides, carbohydrates as well as carbonyl a-substitution reactions and carbonyl condensation reactions.
Prerequisite: CHM 31.

## CHM $33 \quad 2$ lect 6 lab 4 cr

## Quantitative Analysis

Theory and laboratory methods of quantitative chemical analysis with laboratory determinations employing gravimetric and titrimetric (volumetric) methods, including acid-base, precipitation and oxidation-reduction reactions; use of chelating agents and analytical instruments.
Prerequisite: CHM 22.
CHM $37 \quad 1$ rec 2 lect 3 lab 4 cr
Quantitative Instrumental Analysis
Covers basic discussions of the theory, operation and analytical applications of spectroscopy and chromatography. This course begins to develop expertise in techniques involving the operation of many common laboratory instruments and how they are used in quantitative analysis with specific applications in the pharmaceutical field. Prerequisite: CHM 22.

## CHM $38 \quad 1$ lect 2 lab 2 cr

## Computer Applications in Chemistry

Introduction to computer applications in chemistry including: ChemOffice, Excel, PowerPoint, Internet searches and research, and molecular modeling programs.
Prerequisite: CHM 11 or CHM 17.

## CHM $39 \quad 3$ lect 3 cr

Foundations of Pharmaceutical Process Technology
Discusses the wide variety of products generated by the US pharmaceutical and chemical process industry; focuses on changing government regulations, environmental health and safety issues, and changing technologies. Provides knowledge of the chemical technician's role in the pharmaceutical and chemical process industry.
Prerequisite: CHM 22.

## CHM $40 \quad 3$ lect 3 cr

## Pharmaceutical and Chemical Technology

Introduction to chemical processes and methods currently used in industry, including fluid flow, heat transfer, plant utilities, distillation, extractions, crystallization, filtration, drying, etc. Students will also investigate current topics and technology applications. Students choose a current method and write a comprehensive review for its use and applications. Fieldwork investigations, library, or computer investigations may be required.

## CHM $101 \quad 1 \mathrm{cr}$

## Contemporary Chemistry Laboratory

CHM 101, Contemporary Chemistry Laboratory, is a 1-credit, 3hour laboratory course designed to teach non-science majors the fundamentals of working with laboratory equipment, data gathering, analysis, and reporting. Laboratory exercises are included to illustrate the principles of general chemistry and to provide practical examples of chemistry in our everyday lives, as in foods, cosmetics and personal care and household products. The laboratory exercises incorporates the use of modern chemical instrumentation available in the Department of Chemistry and Chemical Technology.
Prerequisites / Corequisite: CHM 10 or CHM 110

## CHM $110 \quad 3$ lect 3 cr <br> Contemporary Chemistry

CHM 110 is an elementary course for Liberal Arts and other non-science students which provide students with a basic knowledge of General and Organic Chemistry and their application in understanding drugs, energy, and the environment. In addition to this, laboratory activities to enhance student interests and skills are included: measurements, testing the pH of the household products and beverages, measuring sugars in beverages, monitoring ambient levels of carbon dioxide, etc.
Prerequisites / Corequisite: MTH 05 AND RDL 02
Required Core - Life and Physical Sciences

## Earth Systems And Environmental Science

ESE $11 \quad 2$ lec 1 rec 3 lab 4 cr

## Earth Systems Science: The Earth

This course presents the scientific method and basic concepts in geology. Topics include materials, structures and surface features of the earth, oceans, and the processes that have produced them.
Prerequisites: ENG 02, RDL 02 if required.
Corequisite: MTH 05.
Flexible Core - Scientific World
Required Core-Life and Physical Sciences

## ESE 12 <br> 2 lec 1 rec 3 lab 4 cr

## Earth Systems Science: The Atmosphere

An introduction to the processes and phenomena of our atmosphere. Topics include clouds, sky color, storms, climates, the Ice Ages, and the greenhouse effect. Students will also be introduced to the science of weather forecasting using the BCC weather station.
Prerequisites: ENG 02, RDL 02 if required.
Corequisite: MTH 05.
Flexible Core-Scientific World
Required Core-Life and Physical Sciences

## ESE $13 \quad 2$ lec 1 rec 3 lab 4 cr

## Earth Systems Science: The Ocean

This course presents the scientific method in oceanography and basic concepts of ocean studies. Topics include the ocean in the earth system, properties of ocean water, ocean currents, the dynamic coast and the ocean, and climate change. In the laboratory, students are introduced to the dynamic ocean by working with current (Internet) and archived oceanographic data coordinated with learning investigations keyed to current ocean activities and products. The course examines the world ocean with an Earth system perspective.
Prerequisites: ENG 02, RDL 02 if required.
Corequisite: MTH 05.
Flexible Core - Scientific World
ESE $21 \quad 2$ lec 1 rec 3 lab 4 cr

## Earth Systems Science: The Environment

This course provides a look at the earth system as a whole. Emphasis will be on the interrelation among biological, geological, climatological and human systems on continental and global scales. The links among these systems will be illustrated by present day processes and by the geologic record of scaled events in Earth system history. The course will include computer-based exercises and will also rely on Internet resources. Projects, papers, and presentations will be required. Prerequisites: Choice of two out of three courses from ESE 11, ESE 12, and ESE 13.

## Environmental Technology

## ENV $11 \quad 2$ lect 1 rec 3 lab 4 cr

## Introduction to Environmental Health

This course provides a basic understanding of widespread health problems that are linked to environmental and occupational health hazards. Students become familiar with the identity and sources of air and water pollutants, the routes of entry of these pollutants into the body and the harmful effects of these pollutants. Laboratory exercises familiarize students with methods of air, soil and water analysis. Field trips provide first-hand knowledge of public health, occupational health and safety issues.
Prerequisites: RDL 02, ENG 02, ESL 03 if required.
Flexible Core-Scientific World
Required Core - Life and Physical Sciences

ENV 12
2 lect 1 rec 3 lab 4 cr

## Environmental and Occupational Regulations

Overview of judicial system, regulatory agencies and the federal register system. Definition of key terms and concepts in environmental law. Delineation of major environmental laws relating to water, wastewater, air, hazardous/solid waste, environmental impacts and the workplace. The laboratory section of the course will focus on hazardous materials training according to 29 CFR 1910.120. Students qualify to receive a 40 -hour HAZMAT Certificate at the completion of the laboratory portion of the course.
Prerequisite: ENV 11.
ENV $21 \quad 1$ lect 8 field study 3 cr

## Field Study in the Environment

The course teaches students how to become field technicians which enables them to conduct site evaluations, on-site sampling and site remediation in compliance with EPA regulations. Students are also trained in health and safety procedures for hazardous waste operations.
Prerequisites: ENV 11, ENV 12.

## ENV 22 <br> 2 lect 4 lab 4 cr

## Environmental Methods of Analysis

This course includes lecture demonstrations and hands-on laboratory experiments with the equipment and instruments commonly used for air, soil and water analysis to determine levels of pollution.
Prerequisites: CHM 18, ENV 11.

## ENV $23 \quad 3$ lect 3 cr

Environmental and Occupational Toxicology
Introduction to principles of toxicology with emphasis on environmental and occupational health. Provides necessary background to understand the health effects of toxic waste and environmental pollutants.
Prerequisites: BIO 12, CHM 18 or CHM 22, ENV 11.

## ENV 24

3 lect 12 internship 3 cr

## Environmental Internship

Weekly seminars that integrate the fieldwork experience of students doing a supervised internship at various public and private environmental agencies, industrial companies and water treatment/waste management plants.
Prerequisites: ENV 11, ENV 12 and permission of Environmental Technology Program Administration.

## ENV $31 \quad 2$ lect 1 rec 3 lab 4 cr

## Water Chemistry and Pollution

This course introduces students to the application of the principles of inorganic, physical and dilute solution equilibrium chemistry to aquatic systems, both in the aquatic environment and in water and wastewater treatment.
Prerequisite: CHM 18 or CHM 22.
ENV 32
2 lect 1 rec 3 lab 4 cr

## Atmospheric Chemistry and Pollution

This course presents a concise, clear review of the fundamental aspects of atmospheric chemistry. It reviews our basic understanding of the chemistry of the earth's atmosphere and discusses current environmental issues, including air pollution, acid rain, the ozone hole, and global climate change.
Prerequisite: CHM 18 or CHM 22.

## Pharmaceutical Manufacturing Technology

## PMT $41 \quad 2$ lect 2 lab 3cr

## Pharmaceutical Chemistry

This course emphasizes the chemical principles and reactions vital to drug design and drug action. The course is aimed at undergraduates who have a basic grounding in chemistry and are interested in learning about drug design and the molecular mechanisms by which drugs act in the body. It examines the general principles and strategies involved in discovering and designing new drugs and developing them for the marketplace, and it looks at particular 'tools of the trade' which are used in rational drug design. Clinically important drugs will be used as examples.
Prerequisite: CHM 31 or CHM 18.

## PMT 42

3 lect 3cr

## Pharmaceutical Product Manufacturing

This course discusses the science and technology that applies to pharmaceutical manufacturing. Students will study different pharmaceutical formulations, and their methods of preparation for solid, liquid and other pharmaceutical products. Specific classes of pharmaceuticals will be discussed. Special topics will include packaging, and marketing regulations.
Prerequisite: CHM 31.

PMT $43 \quad 2$ lect 2cr

## Pharmaceutical Laws and Regulations

This course discusses the pharmaceutical laws and regulations that govern manufacturing, packaging and marketing of pharmaceutical products. Students will discuss specific examples that impacted the development of the laws and regulations.
Prerequisite: ENG 10 or ENG 11.

## Science

## SCI $12 \quad 3 \mathrm{hr} 3 \mathrm{cr}$

## Science Exploration - From the Stars to the Cells

SCI12 is an inquiry-based science content course. Topics include astronomy, earth science and advances in technology and material sciences: the stars, cosmology, the earth and other planets, plate tectonics, cycles of the earth and ecosystems and the environment; and the fundamental concepts of the living cell and the molecules of life; and superconducting materials and nanotechnology. The course includes hands-on activities and computer simulations.
Prerequisites: MTH 05, ENG 02, RDL 2 (if required)

# Communication Arts and Sciences 

## ABOUT THE DEPARTMENT

The Department of Communication Arts and Sciences offers a wide range of programs, courses, and extracurricular activities that foster a community of students, artists, and future professionals. The mission of the Department of Communication Arts and Sciences is to prepare students for future education and employment through comprehensive study of the nature of communication and the acquisition of skills required for careers in communication fields.

Classes range from the foundational course in interpersonal communication to specialized courses in communication, speech pathology and theatre. Students can also participate in co-curricular activities including Theatre Workshop, Speech and Drama and Debate Team.
Office: Colston Hall [CO], Room 701
Phone: 718.289.5768
Website: http://www.bcc.cuny.edu/communication/
Professor and Chairperson: Dr. Debra A. Gonsher
Professors: B. Carney, J. Halberstam, I. Mirsky, J. Wisotsky
Associate Professors: R. Butt, J. Magloire
Assistant Professors: S. Brady, T. Fisher, S. Hanssen,
E. Mareneck, T. Smalec, J. Socas

Lecturers: L. Brenner
Instructor: C. Meyers
Approximately 13 adjuncts per semester

## DEGREE PROGRAMS

Liberal Arts and Sciences, A.A.
Media Studies Option
Performing Arts Option
Speech Pathology Option
Media Technology, A.A.S.

## COURSES

Prior to Fall 2013, all communication courses were listed as CMS courses. These courses encompass four disciplines and are now being listed by discipline: Communications (COMM), Film Studies (FILM), Media Studies (MEST), and Theater (THEA).

In Fall 2013, CMT courses were replaced by Media and Digital Film Production courses, which have the appellation MEDP.
Communications (COMM)
Film Studies (FILM)
Media Studies (MEST)
Media and Digital Film Production (MEDP) \& Theater (THEA)

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree
Department of Communication Arts and Sciences
Media Studies Option
The Liberal Arts and Sciences curriculum offers a well-rounded education that prepares students for a wide range of career options. Students take courses in a diverse set of disciplines that provides a foundation for later specialization. The Media Studies option allows students interested in communication, mass media, and film and video studies or production to transfer to a senior college. Students who graduate with an A.A. Liberal Arts and Sciences: Media Studies option can pursue a variety of careers including television and/or film producer or director, screenwriter, corporate communications specialist, media analyst, and others.
Curriculum Coordinator: Dr. Debra A. Gonsher

## Liberal Arts and Sciences Curriculum (Pathways)

 60 Credits required for A.A. Degree
## Required Core

A. English Composition ${ }^{1}$ (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{2}$ (3 Credits)
C. Life and Physical Sciences ${ }^{3}$ (3-4 Credits) SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues ( 6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society ( 3 Credits)
E. Scientific World (3-4 Credits) SUBTOTAL 18-19

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art OR

ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR
MUS 11 Introduction to Music OR
MUS 12 Introduction to World Music (0-3 Credits)

- COMM 11 Introduction to Communication OR Select ONE from COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH English Elective (0-3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (0-3 Credits)
- MODERN LANGUAGES Select one course from FRN, ITL, POR, or SPN (0-3 Credits)
- SOCIAL SCIENCE Select one course from ANT, ECO, POL, PSY, SOC (0-3 Credits)

Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- LAB ${ }^{3}$ Lab Science ( $0-1$ Credit)


## Specialization Requirements

- FILM 61 Introduction to Film (0-3 Credits)
- FILM 91 World Cinema (0-3 Credits)
- MEST 60 Introduction to Mass Communication ( $0-3$ Credits)
- MEST 96 Television, Society, and the Individual ( $0-3$ Credits)


## FREE ELECTIVES

- Free Elective to complete 60 credits 4 (3-16 Credits) SUBTOTAL 29-30

1 ENG $10 / 11$ plus one course from ENG $12,14,15$, and 16 . It is recommended that students choose ENG 15.
2 MTH 23 is recommended in Required Core B
3 Select appropriate lab course to match lecture course. The 1 credit lab requirement is satisfied if a student takes a 4-credit STEM variant course in Required Area C.
4 It is recommended that students use free elective credits to take MEDP 18. Select additional free electives in consultation with Media Studies advisor.
The Media Studies option is fully articulated with SUNY Empire State College. See the Transfer Planning web site for more details.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree |

## Department of Communication Arts and Sciences

## Media Studies Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Debra A. Gonsher
Liberal Arts and Sciences Curriculum
60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR

MTH 22* Survey of Mathematics II OR
MTH 23* Probability and Statistics OR
MTH 26* Mathematics in the Modern World (3 Credits)

- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)

- SCIENCE Two Lab sciences chosen from Astronomy, Biology, Chemistry, Earth Science, Environmental Science OR Physics (8 Credits)
TOTAL 24-25
Required Areas of Study
- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- Modern Language** (8 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Philosophy, Political Science, Psychology and Sociology (select from two different disciplines) (6 Credits)
TOTAL 23


## Specialization Requirements

- ENG 15 Written Composition and Drama (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits)
- CMS 60 Introduction to Mass Communication (3 Credits)
- CMS 61*** History and Theory of Film (3 Credits)

TOTAL 12
FREE ELECTIVES

- To complete the 60 credit requirement ( $0-1$ Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

The Media Studies option is fully articulated with Lehman's B.A. in Mass Communication and with SUNY Empire State College. Both agreements are available for viewing on the Transfer Planning web site.

* Students may substitute MTH 30 or 31 if they reduce elective credits.
** Choose from a Modern Language at the appropriate level. Both courses must be in the same language. Students who have passed two years of a Modern Language in high school are exempt from this requirement.
${ }^{* * *}$ CMT 51 or CMT 53 may be substituted for CMS 61 depending on the requirements of the receiving four-year college.


## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree | Department of Communication Arts and Sciences

## Performing Arts Option

The Liberal Arts and Sciences curriculum offers a well-rounded education that prepares students for a wide range of career options. Students take courses in a diverse set of disciplines that provides a foundation for later specialization. The Performing Arts option allows students interested in theatre, dance, or music to transfer to a senior college. Students who graduate with an A.A. Liberal Arts and Sciences: Performing Arts option can pursue a career in the arts, including actor, musician, dancer, producer, director, teacher, arts administrator, arts journalist, promoter, grant writer, and others.
Curriculum Coordinator: Dr. Sara Brady

## Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.A. Degree

## Required Core

A. English Composition ${ }^{1}$ (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{2}$ (3 Credits)
C. Life and Physical Sciences (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3-4 Credits)

SUBTOTAL 18-19

## Required Areas of Study

- ART 11 Introduction to Art OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR
MUS 11 Introduction to Music OR
MUS 12 Introduction to World Music (0-3 Credits)
- COMM 11 Introduction to Communication OR COMM 20 Public Speaking and Critical Listening ( $0-3$ Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (0-3 Credits)
- MODERN LANGUAGES 3 Select one course from FRN, ITL, POR, OR SPN (0-3 Credits)
- SOCIAL SCIENCE Select one course from ANT, ECO, POL, PSY, OR SOC (0-3 Credits)
- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)

- LAB ${ }^{4}$ Lab Science ( $0-1$ Credit)

SUBTOTAL 1-18

## Specialization Requirements

- THEA 70 Introduction to Theatre ( $0-3$ Credits)
- THEA 75 Introduction to Acting (0-3 Credits)
- ENG 40 Folklore (3 Credits) OR

ENG 61 Shakespeare (0-3 Credits)

- PERFORMING ARTS

Choose 3 Credits From:
COMM 26 Oral Interpretation of Literature ( $0-3$ Credits) $O R$
FILM 61 Introduction to Film ( $0-3$ Credits) $O R$
FILM 91 World Cinema ( $0-3$ Credits) OR
MUS 14 Creative Computer Music (3 Credits) OR
MUS 21 Choral Performance 1 ( 1 Credit) OR
MUS 22 Choral Performance 2 ( 1 Credit) OR
MUS 23 Choral Performance 3 ( 1 Credit) $O R$
MUS 24 Choral Performance 4 ( 1 Credit) $O R$
MEST 60 Introduction to Mass Communication (0-3 Credits)
PEA 41 Techniques of Jazz Dance ( 1 Credit) OR
PEA 46 African, Caribbean and Black Dance Forms
(1 Credit) OR PEA 47 Beginning Salsa (1 Credit)
SUBTOTAL 0-12
FREE ELECTIVES

- To complete 60 credits ${ }^{5,6}$ (0-16 Credits)

1 ENG $10 / 11$ plus one course from ENG 12, 14, 15, and 16. ENG 15 is recommended for this option.
2 MTH 21 or 23 is recommended in Required Core B.
3 Students who have completed two years of a modern language in high school are exempt from this requirement.
4 Select appropriate lab course, if needed, to match lecture course.
5 Students should see the language requirements at the senior college to which they are planning to transfer and consult with an advisor about using free elective credits to complete a twosemester modern language sequence, if needed.
6 Select additional free electives in consultation with Performing Arts advisor.
The Performing Arts option articulates with SUNY Empire State College. See the Transfer Planning web site for more details.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree | Department of Communication Arts and Sciences

## Performing Arts Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Sara Brady

## Liberal Arts and Sciences Curriculum

60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Two lab sciences chosen from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)
TOTAL 24-25


## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE** (8 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Philosophy, Political Science, Psychology and Sociology (select from two different disciplines) (6 Credits)
TOTAL 23


## Specialization Requirements

- ENG 15 Written Composition and Drama (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits)
- CMS 60 Introduction to Mass Communication (3 Credits)
- PERFORMING ARTS**** Choose from selected CMS, MUS and PEA courses with Departmental Advisement (6 Credits) TOTAL 12
FREE ELECTIVES
- To complete the 60 credit requirement ( $0-1$ Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* Students may substitute MTH 30 or 31 if they reduce elective credits.

> ** Choose two courses in the same Modern Language at the appropriate level. Students who have passed two years of a Modern Language in high school are exempt from this requirement.
> *** The two required courses in the Social Sciences must be taken from different disciplines.
> **** Performing Arts courses: Three credits must be taken in each of two different disciplines. Select from CMS 75, PEA 41, PEA 46, PEA 47, MUS 21, MUS 22, MUS 23, MUS 24 .

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree | Department of Communication Arts and Sciences

## Speech Pathology Option

The Liberal Arts and Sciences curriculum offers a wellrounded education that prepares students for a wide range of career options. Students take courses in a diverse set of disciplines that provides a foundation for later specialization. The Speech Pathology option is for students who want to help children and adults overcome speech problems such as fluency (stuttering), language problems such as aphasia, and related medical problems such as dysphagia (swallowing difficulties) in a wide variety of settings including hospitals, schools, and private practice. Students who have the sensitivity, personal warmth, and empathy to interact with a person who has a communication problem, along with scientific aptitude, patience, and persistence are ideal candidates for this program. Students who graduate with an A.A. Liberal Arts and Sciences: Speech Pathology option can transfer to a four-year program in preparation for a career as a certified Speech-Language Pathologist.

Curriculum Coordinator: Dr. Joel Magloire

## Liberal Arts and Sciences Curriculum (Pathways)

 60 Credits required for A.A. Degree
## Required Core

A. English Composition ${ }^{1}$ (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{2}$ (3 Credits)
C. Life and Physical Sciences ${ }^{3}$ (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues ( 6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3-4 Credits)

SUBTOTAL 18-19

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR
MUS 11 Introduction to Music OR
MUS 12 Introduction to World Music (0-3 Credits)
- COMMUNICATIONS 11 Fundamentals of Interpersonal Communication OR Select ONE from MEST, FILM OR THEA (0-3 Credits)
- ENGLISH ${ }^{4}$ English Elective ( $0-3$ Credits)
- HISTORY HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World OR Select ONE from GEO, PHL (0-3 Credits)
- MODERN LANGUAGES ${ }^{5}$ Select one course from FRN, ITL, POR, or SPN (0-3 Credits)
- SOCIAL SCIENCES ${ }^{6}$ Select one course from ANT, ECO, POL, PSY, SOC (0-3 Credits) SUBTOTAL 3-12


## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- LAB ${ }^{7}$ Lab Science ( $0-1$ Credit)
- FREE ELECTIVES (3-16 Credits) SUBTOTAL 3-19


## Specialization Requirements

- BIO 21 The Human Body (0-4 Credits)
- COMM 20 Public Speaking and Critical Listening (0-3 Credits)
- COMM 41 The Theory of Language Development (3 Credits)
- COMM 42 Anatomy and Physiology of the Speech Mechanism (3 Credits) SUBTOTAL 6-13

1 ENG 10/11 plus one course from ENG 12, 14, 15, and 16.
2 MTH 23 is recommended in Required Core B.
3 BIO 21 is recommended in Required Core C.
4 Select from any ENG course above ENG 16 with the exception of ENG 223.
5 Select from any Modern Language listed above at appropriate level with the exception of ITL 23 . Students who have passed two years of a Modern Language in high school are exempt from this requirement and may take additional free elective credits.
6 It is recommended that students take PSY 11 in this area.
7 This requirement is satisfied if a student takes a 4-credit STEM variant course in Required Area C. BIO 21 is recommended.
8 Select additional free electives in consultation with Speech Pathology advisor. PSY 11 is recommended for students who have not taken it to fulfill their Social Science requirement.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree |

## Department of Communication Arts and Sciences

Speech Pathology Option
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

Curriculum Coordinator: Dr. Joel Magloire
Liberal Arts and Sciences Curriculum
60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR

MTH 22* Survey of Mathematics II OR
MTH 23* Probability and Statistics OR
MTH 26* Mathematics in the Modern World (3 Credits)

- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)

- BIO 21 The Human Body and one additional LAB SCIENCE (8 Credits) TOTAL 24-25


## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE*** (8 Credits)
-ENGLISH**** (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits) TOTAL 23


## Specialization Requirements

- CMS 41 Theory of Language Development (3 Credits)
- CMS 42 Anatomy and Physiology of the Speech Mechanism (3 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Political Sciences, Psychology, and Sociology (select from two different disciplines) (6 Credits)
TOTAL 12
FREE ELECTIVES
- To complete the 60 credit requirement ( $0-1$ Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*The Liberal Arts and Sciences A.A. Speech Pathology Option articulates with the B.A. Speech Pathology and Audiology Program at Lehman College. Students are encouraged to read a copy at the Transfer Planning web site.
**Students may substitute MTH 30 or 31 if they reduce elective credits.
***Choose from a Modern Language at the appropriate level. Both courses must be in the same language. Students who have passed two years of a Modern Language in high school are exempt from this requirement.
****Excluding English 23, Technical Writing.

## MEDIA TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Department of Communication Arts and Sciences

The A.A.S. in Media Technology is designed for students who wish to go directly into the field of media production. Students who graduate with an A.A.S. in Media Technology can pursue a career in a variety of settings including television, film or audio studio, news outlet, editing facility, government agency, advertising firm, educational institution, among others. In the last semester of study, students have the opportunity to do further work in the industry through a supervised internship program.
Curriculum Coordinator: Professor Jeffrey Wisotsky

## Media Technology Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 12* Introduction to Mathematical Thought (3 Credits)
- PEA Physical Education activity course OR HLT 91 Critical Issues in Health (1-2 Credits)

TOTAL 16-17

## Required Areas of Study

- ART 10 Art Survey (1 Credit)
- MUS 10 Music Survey (1 Credit)
- ENG 15 Written Composition and Drama (3 Credits)
- CMS 12 Voice and Diction: Business and Prof. Speech (2 Credits)
- CMS 60 Introduction to Mass Communication (3 Credits)
- PHY 14 Physics through Film (3 Credits)

TOTAL 13

## Specialization Requirements

- ART 71 Photography (2 Credits)
- CMT 10 Introduction to Television Technology (3 Credits)
- CMT 12 Small Studio Color Television (3 Credits)
- CMT 14 Digital Video Effects and Presentational Graphics (3 Credits)
- CMT 23 Field Television Production (3 Credits)
- CMT 31 Sound Recording and Editing (3 Credits)
- CMT 33 Video Editing I (3 Credits)
- CMT 35 Video Editing II(3 Credits)
- CMT 51 Media Internship OR

CMT 53 Media Projects Laboratory (3 Credits)
TOTAL 26
FREE ELECTIVES

- To complete the required 60 credit requirement (4-5 Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*MTH 21, Survey of Mathematics I, or MTH 23, Probability and Statistics, are recommended for students transferring to a four-year college. These courses require completion of MTH 05 or equivalent. Also see the Media Studies Option under Liberal Arts and Sciences in "The Curricula and Programs" section of the college catalog.

## COURSES

Prior to Fall 2013, all Communication courses were listed as CMS courses. These courses encompass four disciplines and are now being listed by discipline: Communications (COMM), Film Studies (FILM), Media Studies (MEST), and Theater (THEA).

In Fall 2013, CMT courses were replaced by Media and Digital Film Production courses, which have the appellation MEDP.

## Communication

## COMM $09 \quad 1$ rec 0 cr

## Speech Clinic

Clinical program of speech therapy for organic and functional disorders such as lisp, stuttering and related articulatory difficulties. Students are assigned on the basis of Speech Placement Screening, diagnostic interview, or referral by department faculty. Required course for students where evaluation indicates need.

COMM $10 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Phonetics

Study of contemporary American English through phonetic analysis; practice in broad and narrow transcription, using the International Phonetic Alphabet; and exercises designed to develop auditory and kinesthetic sensitivity to phonetic distinctions.

## COMM $11 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Fundamentals of Interpersonal Communication

Dynamics of communication through examination of theory and discussion. Designed to provide understanding of communicative processes; opportunities for each student to experiment with personal communicative activity.
Prerequisites: ENG 01 and RDL 01 if required.
Corequisite: ENG 02 or ENG 10 or RDL 02 if required.
Flexible Core - Individual and Society

COMM $12 \quad 2$ rec 2 cr

## Voice and Diction: Business and Professional Speech

Study of voice and articulatory factors in effective speech communication, with special attention to individual needs through speech diagnosis, development of auditory, discrimination, and exercises geared to individual and group needs. Designed for the student who needs more effective speech communication for business and professional environments.
Corequisite: ENG 01.

COMM $20 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Public Speaking and Critical Listening

Principles and practice of contemporary forms of public speech communication; informative, persuasive, inspirational, and entertaining; principles and practice of critical listening; analysis and evaluation of public communication.
Prerequisites: ENG 01 and RDL 01 if required.
Corequisite: ENG 02 or ENG10 or RDL 02 if required.
Flexible Core - US Experience in its Diversity
COMM 223 rec 3 cr

## Small Group Communication: Theory and Practice

This course explores the core principles and techniques of small group theory in relationship to both the individual who communicates in social groups, and the diverse social contexts in which small group communication occurs. Students will use assigned readings and outside research (e.g., scholarly articles, social media, and observation) to assess the impact of factors such as diversity, leadership, conflict, problem-solving methodologies, and spatial ecology on small group dynamics.
Prerequisites: ENG 01 and RDL 01 if required. Corequisite: ENG 02 or ENG 10 or RDL 02 if required. Flexible Core - Individual and Society

COMM $26 \quad 3$ rec 3 cr

## Oral Interpretation of Literature

This course emphasizes oral performance of prose, poetry, drama, essays, and historical speeches. Emphasis is on expression, interpretation, and delivery skills involved in interpretive oral presentation to an audience. Selection and analysis of appropriate literary forms used in performance will also be included.
Flexible Core - Creative Expression
COMM $28 \quad 3$ rec 3 cr

## African-American and Puerto Rican Rhetoric

Analysis and evaluation of the messages and rhetorical methods of selected African American and Puerto Rican Spokes-people.
Prerequisites: ENG 01 and RDL 01 if required
Corequisite: ENG 02 or RDL 02 or ENG 10
Flexible Core - World Cultures and Global Issues

## COMM $34 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Intercultural Communication

This course explores issues of culture and communication within the context of the global environment. Students will examine the impact of factors such as perception, attitudes, values, etiquette, customs, and oral and written patterns on communication in national and international settings.
Prerequisites: ENG 1 or ENG 9 and RDL 1 if required Corequisites: ENG 2 or ENG 10 or RDL 2 if required
Flexible Core - World Cultures and Global Issues

## COMM 41

3 rec 3 cr

## The Theory of Language Development

This course in the theory of language development includes study of phonological, morphological, semantic, syntactic, and pragmatic sequences and processes in speech and language acquisition as well as multicultural and multilinguistic language acquisition.
Prerequisite: COMM 11.

## COMM $42 \quad 3$ rec 3 cr

## The Anatomy and Physiology of the Speech Mechanism

This course in the anatomy and physiology of the speech mechanism includes study of the anatomy and physiology of respiration, phonation, articulation, hearing, a discussion of speech acoustics and an introduction to the nervous system. Prerequisite: COMM 11.

## Media and Digital Film Production

## MEDP $10 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Media and Digital Film Production

This course introduces students to the fundamentals of digital video production while providing the context for a career including industry trends, technology tools, and production requirements.
Prerequisites: ENG 01 AND RDL 01
Corequisite: ENG 02 OR RDL 0

## MEDP 12 <br> 3 rec 3 cr

## Digital Studio Production

Students will be introduced to the theory and practice of an HD digital television studio, including camera operation, switching and other control systems, lighting, and in-camera editing. Students will manage, operate and work in the customary roles in a digital television production studio.
Prerequisites: MEDP 10
MEDP $14 \quad 3 \mathrm{rec} 3 \mathrm{cr}$
Digital Animation and VFX
This course introduces students to the fundamentals of 2D \& 3D animation for film, television, and the web. Students learn to model and texture objects; compose and light scenes; and logo, title, and character animation.
Prerequisites: MEDP 10

## MEDP $18 \quad 3 \mathrm{rec} 3 \mathrm{cr}$ <br> Introduction to Visual Storytelling

Students will learn how to create effective scripts and storyboards for film, television, internet, and mobile applications. Corequisite: ENG 02

## MEDP 23 <br> 3 rec 3 cr

## Digital Video Field Production

Students will be introduced to the basic principles of digital field production such as single-camera set up, audio techniques, lighting for interviews and in-camera editing.
Prerequisite: MEDP 12
MEDP $31 \quad 3$ rec 3 cr

## Digital Audio Production and Post Production

This course introduces students to basic theories and techniques of digital audio production (microphones, on location recording) and audio post-production (nonlinear digital editing and mixing with ProTools.)
Prerequisites: MEDP 10

## MEDP $33 \quad 3$ rec 3 cr <br> Digital Video Editing I

This course introduces students to the basics of postproduction digital video editing for multimedia, video and web capabilities using the non-linear editing system Final Cut Pro. Corequisite: MEDP 12

## MEDP $35 \quad 3$ rec 3 cr

## Digital Video Editing II

This course provides students with advanced theoretical and practical post-production digital video editing experience working with the nonlinear editing system AVID.
Prerequisites: MEDP 33
MEDP $36 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Media and Digital Film Projects

Production of a short, synchronized-sound media project from development and preproduction through principal photography and editing.
Corequisite: MEPD 18 AND MEDP 23
MEDP $51 \quad 3$ rec 3 cr

## Media and Digital Film Internship

The Media and Digital Film Internship is designed to give students on the job experience and a chance to network with professionals involved in Digital Media:
television, film, web, gaming, public access, governmental agency or corporate. The Media and Digital Film Internship introduces students to the application of skills obtained in the program and prepares students for the professional expectations of the field. Note: The internship requires a commitment of 90 hours. Students are required to submit a resume one semester prior to the internship.
Prerequisites: Minimum of 45 curriculum credits, including ART 71 and MEDP 33, a completed resumé, and departmental permission

## MEDP 53 <br> 3 rec 3 cr

## Media Projects Lab

Students utilize knowledge and skills accumulated in the prerequisites to produce a meaningful, complete media project in one or a combination of principle media formats studied in the curriculum, including scripting, storyboarding and standard production processes. Completed project should be suitable for display in a job portfolio. All production materials are to be paid by the students.
Explanation: Some students go on to a four-year college that requires a production reel. MEDP cv 53, Media Projects Lab, will enable students, under the guidance of professionals, to create either a reel or film/video suitable for use as a portfolio.

## Film Studies

## FILM $61 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Film

This course provides the student with an appreciation of the film experience. Particular attention is given to important techniques, theories, and genres that influenced the development of the medium. Concepts are illustrated through the weekly viewing of classic American and International films.
Prerequisite: ENG 1 and RDL 1 if required.
Corequisite: ENG 2 or ENG 10 or RDL 2 if required.
Flexible Core - Creative Expression

## FILM 91 <br> 3 rec 3 cr

## World Cinema

Study of documentary and narrative motion pictures and their role in the world. Development of the film as an art form and as a major source of influence upon and reflection of society.
Prerequisite: ENG 2 or RDL 2 or ENG 10 if required Corequisites: ENG 2 or RDL 2 or ENG 10 if required Flexible Core - World Cultures and Global Issues

## Media Studies

## MEST 60

3 rec 3 cr

## Introduction to Mass Communication

Survey of mass communication media, including radio, television, film, and print (press); the development, characteristics and uses of the media and their effects on the individual and the environment.

Prerequisites: ENG 01 and RDL 01
Corequisite: ENG 02 or ENG 10 or RDL 02
Flexible Core - US Experience in its Diversity

MEST 96
3 rec 3 cr

## Television, Society and the Individual

Survey of mass communication media, including radio, television, film, and print (press); the development, characteristics and uses of the media and their effects on the individual and the environment.
Prerequisites: ENG 01 and RDL 01
Corequisite: ENG 02 or ENG 10 or RDL 02
Flexible Core - Individual and Society

## Theatre

## THEA 70

3 rec 3 cr

## Introduction to Theatre

Study of the movements and theories and world of theatre, including an examination of relevant theatrical structures and equipment. European and American theatre; Oriental theatre, including Japanese, Chinese, Indian, Balinese; African theatre.
Prerequisites: ENG 01 and RDL 01
Corequisite: ENG 02 or ENG 10 or RDL 02
Flexible Core - Creative Expression
THEA $75 \quad 3$ rec 3 cr

## Introduction to Acting

Introduction to the theoretical background, history of and practical experience in acting. Students will apply dramatic theories to various public performance situations as well as prepare dramatic works from diverse cultures.
Pre or Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Creative Expression

## Education and Reading

## ABOUT THE DEPARTMENT

The Department of Education and Reading endorses access and excellence. We are committed to supporting students in every way possible. Our students require support and exposure to the most up-to-date tools and pedagogy. Our goal is to insure that our graduates meet all the standards necessary to reach their goals in the work force or when transferring to four-year institutions.

Office: Colston Hall [CO], Room 401
Phone: 718.289.5679
Website: http://www.bcc.cuny.edu/Education-Reading/
Professor and Chairperson: Dr. Joan Wilson
Professors: S. Powers
Associate Professors: J. Todaro
Assistant Professors: T. Elmore, T. Johnson, D.E. Matsoukas, J. Shaddai

Instructor: Minkyung Choi
Lecturers: D.D'Alessio, G. Osborne
Substitute Lecturers:T. Hernen; Ella Roman, Ricardo Sosa, J.A.Tellaun-Williams

CLT/Tutor Coordinator: B. Bah
Sub. CLT: Garland Jean-Charles
Approximately 30 adjuncts per semester

## DEGREE PROGRAMS

Education Associate, A.A.S.
Liberal Arts and Sciences, Education Option, A.A.

## CERTIFICATE PROGRAMS

Assistant of Children with Special Needs
Bilingual Early Childhood Assistant
Early Childhood Assistant

## COURSES

Education (EDU)
Learning to Learn (LTL)
Reading (RDL)

## EDUCATION ASSOCIATE

Associate in Applied Sciences Degree | Career Program Education and Reading Department

The Department of Education offers two degree programs for students choosing a career in the field of education: the A.A.S. Degree and the A.A. Degree. The A.A.S. Degree is designed for students seeking employment upon the completion of the two-year degree. This program offers a wide range of education courses and internship experiences in New York City Public Schools. If the student decides to transfer to a four-year institution, additional liberal arts credits may be required. Upon employment as a paraprofessional, the New York City Board of Education will pay for six credits per semester for college courses. The A.A. Degree program is designed for students who seek automatic transfer to a senior college in CUNY, upon graduation, to pursue a baccalaureate degree and teacher certification. Students interested in preparing to be teachers should pursue the Liberal Arts and Sciences Associate in Arts (A.A.) Education Option; see the Liberal Arts and Sciences curriculum description in the college catalog.
Please note that the program articulates with SUNY Empire State College. Visit the Transfer Planning web site for more details.
Curriculum Coordinator: Professor Diane D'Alessio

## Education Associate Curriculum (Pathways)

60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
C. Life and Physical Science
- SCIENCE ${ }^{1}$ AST 111, BIO 11, CHM 11, CHM 17, ENV 11, ESE 11, PHY 110 OR PHY 11 (3-4 Credits) SUBTOTAL 12-13


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
C. Creative Expression
- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
SUBTOTAL 9


## Required Areas of Study

- HLT 91 Critical Issues in Health (2 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- PSY 41 Psychology of Infancy and Childhood OR GEO 10 Introduction to Geography (3 Credits)
- Any MOD. LANG., COMM, THEA, FILM (3 Credits)
- FYS 11 First Year Seminar ${ }^{2}$
- LAB Lab Sciences (0-1 Credits)
- Free Elective (2 Credits) SUBTOTAL 14-15


## Specialization Requirements

- EDU 10 Child Study- Birth to Grade 6 (3 Credits)
- EDU 12 Contemporary Urban Education - Birth to Grade 6 OR EDU 26 Human Relations in Urban Schools (3 Credits)
- EDU 30 Introduction to Special Needs, Schools and Society (3 Credits)
- EDU 40 Field Work Seminar (3 Credits)

SUBTOTAL 12

- RESTRICTED ELECTIVES (Selection of four courses from the list below will depend on career preference) (12 Credits) EDU 15 Reading and Other Language Arts for the Early Childhood and Elementary Years EDU 16 Literacy in Early Childhood Education (Birth-to Grade 2) EDU 17 Literacy in Childhood Education-Grades -1-6 EDU 18 Literacy in a Spanish Bilingual Program EDU 24 Pre-school Seminar I EDU 25 Pre-school Seminar II EDU 31 Introduction to Learning Disabilities and Inclusive Education EDU 50 Creativity and the Arts for the Early Childhood and Childhood Years
SUBTOTAL 24
1 Students may select either a 4-credit or a 3-credit science course. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
2 Students who have not completed this course in their first year at the college and are in good academic standing can be exempted from this requirement and can take a free elective to complete the 60 credit requirement for the program.


## EDUCATION ASSOCIATE (PRE-PATHWAYS)

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Associate in Applied Sciences Degree | Career Program Education and Reading Department <br> Curriculum Coordinator: Professor Diane D'Alessio

## Education Associate Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21 Survey of Mathematics OR

MTH 23* Probability and Statistics (3 Credits)

- HLT 91 Critical Issues in Health (2 Credits)
- SCIENCE AST11 OR BIO11OR CHM11 OR ESE11 OR PHY11, OR ENV 11 (laboratory science course) (4 Credits) TOTAL 18


## Required Areas of Study

- ART 11 Introduction to Art OR

MUS 11 Introduction to Music (3 Credits)

- HIS Any History course OR

GEO 10 Introduction to Human Geography (3 Credits)

- PSY 11 Introduction to Psychology (3 Credits)
- PSY 41 Psychology of Infancy and Childhood (3 Credits)
- ENGLISH Elective English 14, 15 or 16 (3 Credits)
- ELECTIVES Communication OR MODERN LANGUAGE (3-4 Credits) TOTAL 18-19


## Specialization Requirements

- EDU 10 Child Study -- Birth to Grade 6 (3 Credits)
- EDU 12 Contemporary Urban Education--Birth to Grade 6 OR EDU 26 Human Relations in Urban Schools (3 Credits)
- EDU 40 Field Work Seminar--Birth to Grade 6 (3 Credits)
- Electives Education courses (select two from below) (6 Credits) EDU 16 Literacy in Early Childhood Education-Birth to Grade 2 (3 Credits)
EDU 17 Literacy in Childhood Education--Grades 1-6 (3 Credits)
EDU 18 Literacy in a Spanish Bilingual Program (3 Credits)
EDU 24 Pre-school Seminar I (3 Credits)
EDU 25 Pre-school Seminar II (3 Credits)
EDU 30 Introduction to Special Needs, Schools and Society (3 Credits)
EDU 31 Introduction to Learning Disabilities and Inclusive Education (3 Credits)
EDU 50 Creativity and the Arts for the Early Childhood and Childhood Years (3 Credits)
TOTAL 15
FREE ELECTIVES
- To complete 60 credit requirement (8-9 Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students planning on transferring to Lehman or The City College are encouraged to take MTH 23.
Please note that the program articulates with SUNY Empire State College. Visit the Transfer Planning web site for more details.

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree | Education and Reading Department

## Education Option

The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded, individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The Education Option offers a greater degree of specialization.
Curriculum Coordinator: Professor Diane D'Alessio

## Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.A. Degree

## Required Common Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$ (3-4 Credits) SUBTOTAL 12-13

## Flexible Common Core

No more than two courses in any discipline or interdisciplinary field.
A. World Cultures and Global Issues (3 Credits)
B. U.S. Experience in Diversity ( 3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

RESTRICTED ELECTIVE: Select ONE course from Area A. World Cultures and Global Issues (3 Credits) SUBTOTAL 18

## Required Areas Of Study I

- ART 11 Introduction to Art History OR ART 12 Introduction to Art History: Africa, the Americas, Asia, and the Middle East OR
MUS 11 Introduction to Music OR MUS 12 Introduction to Music: A Multicultural Survey of World Music (0-3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication OR COMM 20 Public Speaking and Critical Listening ${ }^{2}$ (0-3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (0-3 Credits)
- PSY 11 Introduction to Psychology (0-3 Credits)
- MODERN LANGUAGES Choose from FRN, ITL, POR, OR SPN (0-3 Credits)

SUBTOTAL 0-15

## Required Areas Of Study li

- LAB SCIENCES ${ }^{3}$ (0-1 Credit)
- PEA Select any Physical Education course OR

HLT 91 Critical Issues in Health (1-2 Credits)

- FREE ELECTIVE ${ }^{3}$

SUBTOTAL 2-17

## Specialization Requirements

- EDU 10 Child Study- Birth to Grade 6 (3 Credits)
- EDU 12 Contemporary Urban Education Birth to Grade 6 (3 Credits)
- EDU 40 Field Work Seminar (3 Credits)
- EDU $26{ }^{4}$ Human Relations in Urban Schools OR EDU $30{ }^{5}$ Introduction to Special Needs (3 Credits) SUBTOTAL 12

1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
2 It is recommended that students planning to transfer to City College take COMM 20.
3 It is recommended that students take a second course in the same language if they have elective credits. It is also recommended that students who fulfill the Flexible Core with courses from the Required Area of Study select courses from the Liberal Arts and Sciences disciplines.
4 It is recommended that students planning to transfer to Lehman College's Early Childhood/Childhood Education Program take EDU 26.

5 NYS Education Department requires teacher education candidates to complete a three credit course designed to meet the needs of all students in an inclusive classroom (EDU 30). After May 2014, teacher candidates will be required to take an examination-Educating All Students.

NOTE: Bronx Community College and Lehman College have established an articulation agreement for those students entering Lehman College's Early Childhood/Childhood Education Program. There is also an articulation agreement with SUNY Empire State College.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Associate in Arts Degree | Transfer Degree Education and Reading Department

## Education Option

## Liberal Arts and Sciences Curriculum

60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21 or Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Choose two different laboratory science courses from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)

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TOTAL 24-25
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## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- Modern Language (Both courses must be in the same language) (8 Credits)
- ENG 14, 15, OR 16 (3 Credits)
- CMS 20 Public Speaking and Critical Listening OR EDU 26** Human Relations in Urban Schools (3 Credits) TOTAL 23


## Specialization Requirements

- PSY 11 Introduction to Psychology (3 Credits)
- EDU 10 Child Study--Birth to Grade 6 (3 Credits)
- EDU 12 Contemporary Urban Education-Birth to Grade 6 (3 Credits)
- SOCIAL SCIENCE ${ }^{* * *}$ Choose from Anthropology, Economics, Geography, Political Science, Psychology, and Sociology OR EDU 40*** Field Work Seminar-Birth to Grade 6 (3 Credits)

TOTAL 12
FREE ELECTIVES

- To complete the 60 credit requirement ( $0-1$ Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

Bronx Community College and Lehman College have established an articulation agreement for those students entering Lehman College's early childhood/childhood education program.
NOTE: Students planning to transfer to Lehman College must achieve a 3.0 index in their Education coursework at BCC, a grade point average of 2.75 or better for admission into Lehman College's early childhood/childhood teacher preparation program and earn a C or better in math, natural science, English, and foreign language.

* Students planning to transfer to Lehman College's early childhood/childhood education program are required to take two laboratory sciences from different disciplines.
**Students planning to transfer to Lehman College's early childhood/childhood education program substitute EDU 26 for CMS 20. Otherwise, students take CMS 20.
***Students planning to transfer to Lehman College's early childhood/childhood education program substitute EDU 40 for SOC SCI.


## Prior Learning Assessment

Prior Learning Assessment (PLA) offers students the opportunity to earn college credit for knowledge and skills that have been acquired outside the traditional classroom learning environment.

The Department of Education and Reading offers students who have earned an average of B or higher in EDU 10 Child Study, EDU 12 Contemporary Urban Education and/or EDU 26 Human Relations, and have work experience in an educational setting, the opportunity to apply for PLA credit in the following courses: EDU 16 Literacy in Early Childhood Education, EDU 18 Literacy in a Spanish Bilingual Program, EDU 30 Introduction to Special Needs, Schools and Society, EDU 31 Introduction to Learning Disabilities, EDU 40 Fieldwork Experience and EDU 50 Creativity and the Arts for the Early Childhood and Childhood Years. A maximum number of six exemption credits can be awarded to an Education major. For further information, please contact the Department of Education and Reading at (718) 289-5679 or Professor Diane D'Alessio, PLA Coordinator at (718) 289-5687.

## ASSISTANT OF CHILDREN WITH SPECIAL NEEDS

## Certificate Program <br> Department of Education and Reading

This program prepares students to meet the requirements leading to a Child Development Associate (CDA) credential in a "Special Education" childcare development setting. This certificate program responds to the current demand for trained practitioners at learning centers and public schools that serve children who have special needs. The population served includes children with behavior management needs, limited mobility, physical impairments, diagnosed learning disabilities, and/or children waiting for a very restrictive service. BCC students will learn the characteristics and needs of children with special needs in order to provide ageappropriate strategies in all aspects of their work with these children. Students will acquire skills in designing and planning activities that are developmentally appropriate experiences for children with special needs. Upon successful completion of the program, students will be able to continue their studies in Bronx Community College's Education Associate A.A.S. Degree Program, and all of the certificate course credits will be accepted for this A.A.S. degree.
Curriculum Coordinator: Dr. Tyhesha Elmore

## Assistant of Children with Special Needs <br> 30 Credits required for Certificate

## Semester I

- PSY 11 Introduction to Psychology (3 Credits)
- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- EDU 10 Child Study - Birth to Grade 6 (3 Credits)
- EDU 30 Introduction to Special Needs, Schools and Society (3 Credits)
- FREE ELECTIVE (1 Credit) TOTAL 15


## Semester II

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- PSY 41 Psychology of Infancy and Childhood (3 Credits)
- EDU 26 Human Relations in Urban Schools (3 Credits)
- EDU 31 Introduction to Learning Disabilities and Inclusive Education (3 Credits)
- EDU 40 Field Work Seminar (3 Credits) TOTAL 15

BILINGUAL EARLY CHILDHOOD ASSISTANT
Certificate Program
Department of Education and Reading
The Bilingual Early Childhood Assistant Certificate Program prepares students to meet the requirements leading to a Bilingual Specialization of the Child Development Associate (CDA) credential (issued by the national credentialing agency, the Council for Early Childhood Professional Recognition). This certificate program responds to the current demand for trained practitioners at bilingual early childhood learning centers that is due to the increasing number of non-English speaking families using these centers. Students enrolled in this program will acquire skills in planning and designing activities that are developmentally appropriate learning experiences for young children learning a second language. Upon successful completion of the program students will be able to continue their studies in Bronx Community College's Education Associate A.A.S. Degree Program, and all of the certificate course credits will be accepted for this A.A.S. degree.

## Curriculum Coordinator: Dr. Tyhesha Elmore

## Bilingual Early Childhood Assistant <br> 30 Credits required for Certificate

## Semester I

- PSY 11 Introduction to Psychology (3 Credits)
- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- EDU 10 Child Study - Birth to Grade 6 (3 Credits)
- EDU 15 Reading and Other Language Arts, EDU 16 Literacy in Early Childhood Education OR EDU 17 Literacy in Childhood Education (3 Credits)
- FREE ELECTIVE (1 Credit)

TOTAL 15

## Semester II

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- PSY 41 Psychology of Infancy and Childhood (3 Credits)
- EDU 18 Literacy in a Spanish Bilingual Program (3 Credits)
- EDU 30 Introduction to Special Needs, Schools and Society (3 Credits)
- EDU 40 Field Work Seminar (3 Credits)

TOTAL 15

## EARLY CHILDHOOD ASSISTANT

## Certificate Program

Department of Education and Reading
The Early Childhood Assistant Certificate Program prepares students to meet the requirements established by the national credentialing agency, the Council for Early Childhood Professional Recognition, which leads to the Child Development Associate (CDA) credential in a center based infant/toddler setting or a family care setting. This certificate program responds to the current need for trained practitioners in infant through early childhood learning centers due to the increased demand for childcare among a growing number of families. It provides the educational foundation for a person who seeks to become a home childcare provider. Upon successful completion of the Early Childhood Care Assistant Certificate Program, students will be able to continue their studies in Bronx Community College's Education Associate A.A.S. Degree Program, and all of the certificate course credits will be accepted for this A.A.S. degree
Curriculum Coordinator: Dr. Tyhesha Elmore

## Early Childhood Assistant

30 Credits required for Certificate

## Semester I

- PSY 11 Introduction to Psychology (3 Credits)
- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- EDU 10 Child Study - Birth to Grade 6 (3 Credits)
- EDU 24 Pre-school Seminar I (3 Credits)
- FREE ELECTIVE (1 Credit)

TOTAL 15
Semester II

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- PSY 41 Psychology of Infancy and Childhood (3 Credits)
- EDU 25 Pre-school Seminar II (3 Credits)
- EDU 30 Introduction to Special Needs, Schools and Society (3 Credits)
- EDU 40 Field Work Seminar (3 Credits)

TOTAL 15

## COURSES

## Education

All EDU courses are knowledge and competency based, providing future educators the opportunity to integrate theory and practice.

EDU 10
3 rec 3 cr

## Child Study-Birth to Grade 6

Designed to provide opportunities to analyze and apply theories and research findings to all educational aspects of development from birth through childhood; to examine multicultural, multilingual, inclusive settings and classroom management techniques; to plan educational activities for diverse populations and contrasting social and economic environments based on child study and learning theories; and to write and present a child case study. The use of technology is introduced as appropriate. Requires visits to early childhood and childhood learning settings with diverse socioeconomic populations in order to apply systematic observation techniques. The case study will be part of each student's academic portfolio.
Prerequisites: ENG 02 and RDL 02.
Prerequisite or Corequisite: PSY 11.

## EDU 12 <br> 3 rec 3 cr

## Contemporary Urban Education-Birth to Grade 6

Designed to study the structure of the American public education system with special emphasis on the bilingual, multicultural and special educational aspects of contemporary urban education at early childhood and childhood levels. Course includes historical overview of public education; topics focusing on reducing the widening achievement gap among diverse urban school populations; promoting equitable educational opportunities for minorities and school populations-at-risk with an emphasis on the structure of schools; and factors that promote more effective teaching and effective schools. The use of technology is introduced as appropriate. Requires visits to early childhood and childhood classrooms with diverse socioeconomic populations, and contributions to each student's academic portfolio.
Prerequisites: ENG 02 and RDL 02.
EDU 15
3 rec 3 cr

## Reading and Other Language Arts for the Early Childhood and Elementary Years

Understanding how children acquire and develop reading and language skills; knowledge of language arts literature; understanding of psychological principles underlying language arts instruction; knowledge of instructional technologies for application to the elementary reading and language arts classroom.
Prerequisite: EDU 10.

## EDU 16 <br> 3 rec 3 cr

## Literacy in Early Childhood EducationBirth to Grade 2

Designed to provide an understanding of the multiple ways young children develop language and literacy; to review the psychological principles underlying current models in literacy instruction; to plan literacy activities to engage the learner in the use of word study, comprehension and problem solving strategies; to understand the interconnection of the family and the learning environment; and to develop an awareness of the various genres and the reading interests of children. Projects related to assessment of language and literacy development are assigned. The use of technology is introduced as appropriate. Requires visits to early childhood and childhood learning environments with diverse socioeconomic populations, and contributions to each student's academic portfolio.
Prerequisite or Corequisite: EDU 10.

## EDU 17 <br> 3 rec 3 cr

## Literacy in Childhood Education-Grades 1-6

Designed to provide an understanding of the multiple ways children develop language and literacy; to review the psychological principles underlying current models in literacy instruction; to plan literacy activities to engage the learner in the use of word study, comprehension and problem solving strategies; to understand the interconnection of the family and the learning environment; and to develop an awareness of the various genres and the reading interests of children. Projects related to assessment of language and literacy development are assigned. The use of technology is introduced as appropriate. Requires visits to early childhood and childhood learning environments with diverse socioeconomic populations, and contributions to each student's academic portfolio.
Prerequisite or Corequisite: EDU 10.

## EDU 18

## 3 rec 3 cr

## Literacy In a Spanish Bilingual Program

Designed to enable students to acquire strategies and knowledge of implementing the New York State and New York City learning and performance standards in the native and English language arts and in the acquisition of a second language. Competencies: Understanding how young children acquire and develop language through literature; knowledge of psychological principles underlying current standard-based instruction in language arts and English as a second language (ESL); knowledge of ESL instructional methods and materials; ability to apply literacy skills in a literature-based program; and the ability to apply observation and analysis skills to the development of critical thinking and language development in literature. The use of technology is introduced as appropriate. Requires visits to bilingual early childhood and childhood learning environments with diverse socioeconomic populations, and contributions to each student's academic portfolio. Prerequisite or Corequisite: EDU 10 and SPN 13.

EDU $24 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Pre-school Seminar I*

Interaction among parents, staff, and children; historical and philosophical background; planning an educational program; physical environment of the classroom; instructional materials and activities; child and parent adjustment to a new school situation; handling negative child behavior.
Required for students interested in Child Care.
Prerequisite or Corequisite: EDU 10.

## *Offered Fall Semester only.

## EDU $25 \quad 3$ rec 3 cr

## Pre-school Seminar II**

Continuation of EDU 24. Play activities; devising activities to meet children's growth needs; involving parents in the school program; planning and conducting parent conferences and meetings; working as part of a group; evaluation of own performance and of class performance; child care services and resources; and knowledge of useful references. Recommended for students interested in early childhood learning environments.
Prerequisite: EDU 24.
**Offered Spring Semester only.

## EDU 26 <br> 3 rec 3 cr

## Human Relations in Urban Schools

Norms, values, and roles; observation of human behavior; principles that govern human change; activities that aid social and emotional growth; effective principles and practices of communication through written messages, teacher-parent conferences, telephone calls, and group presentations; handling conflict and criticism; codes of ethics; and knowledge of useful references.
Prerequisite or Corequisite: EDU 10.
EDU $30 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Special Needs, Schools and Society*

Designed to provide an understanding of the topics of critical importance to the intersection of persons with special needs, schools and society. This course will address a wide range of topics that include, without limitation: special needs legislation; special needs categories; special needs policy; adaptive technology; local and national inclusion policies; medical, psychological and sociological factors for persons with special needs; available services and resources for persons with special needs. Requires visits to childhood learning environments, with diverse socioeconomic needs, in a special needs setting. The use of technology is introduced as appropriate.
Prerequisite or Corequisite: EDU 10.
*Offered Fall Semester only.

EDU $31 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Learning Disabilities and Inclusive Education**

Designed to provide an understanding of topics of critical importance to the local and national meanings of learning disabilities and inclusion. This course will address a wide range of topics that include, without limitation: definitions of learning disabilities; diagnostic-prescriptive support; an overview of inclusive education; student characteristics; organization and management of the inclusionary learning environment; diverse approaches to pedagogical practice; models of collaboration, including collaborative team teaching (CTT); classroom management; and assessment and utilization of assistive instructional technologies. Requires visits to childhood learning environments, with diverse socioeconomic needs in an inclusionary educational setting. The use of technology is introduced as appropriate. Prerequisite: EDU 30.
**Offered Spring Semester only.

## EDU $40 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Field Work Seminar-Birth to Grade 6

Individual and small-group teaching experiences under professional supervision in an accredited school or agency. Periodic meetings with BCC faculty supervisor. Students must demonstrate competencies pertaining to general knowledge expected of those who completed the Education sequence; and be able to plan educational activities for culturally diverse populations and children with special needs. Students' dispositions and instructional strategies will be assessed. The use of technology is introduced as appropriate. Students will make contributions to their academic portfolio.
Prerequisites: EDU 10; EDU 12 or EDU 26.
Corequisite: All other education courses and permission of department.

## EDU $46 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Student Mentoring

A field-based high school drop-out prevention course. Students enrolled are mentors paired with high school students, the protégés. The role of mentors, interpersonal skills, basic teaching-learning principles, techniques and strategies for helping protégés develop positive attitudes towards education. Minimum of two-hour weekly meeting with protégé outside of class.
Prerequisites: GPA of 2.5 or higher;
ENG 01, ENG 02, RDL 01, RDL 02, if required; permission of department.

EDU $50 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Creativity and the Arts for the Early Childhood and Childhood Years

Designed to provide an understanding of the relationship between the growth of creativity in young children and the major theories of child development. Emphasis on the role of imagination, play, sensorial learning, and aesthetic experiences in classroom activities. Projects related to the implementation of instructional and assessment strategies are assigned. The use of technology is introduced as appropriate. Requires visits to early childhood and childhood classrooms with diverse socioeconomic populations, and contributions to each student's academic portfolio. Other field experiences may include visits to children's museums and/or other cultural arts venues in the New York Metropolitan area. Prerequisite or Corequisite: EDU 10.

## Learning to Learn

## LTL 10 <br> 3 rec 3 cr

## Learning to Learn

Presents learning strategies for students enrolled in college level courses who have completed a required developmental reading course. Examines organization of information from the various content courses taken concurrently. Teaches interpretation and construction of charts, graphs, tables, maps; task management; incorporation of life skills into the learning environment. Uses analytical approach to development of test questions relevant to the various content areas.
Prerequisite: RDL 02 if required.
Corequisite: Content area course recommended for probationary students or as an elective.

## Reading

## RDL $01 \quad 5$ rec 0 cr

## Basic Reading Skills

Individualized program in fundamental reading skills with emphasis on phonics and syllabication, word structure, and sentence and paragraph analysis on student's instructional level. Required as indicated by placement scores.

## RDL 025 rec 0 cr <br> Reading and Study Skills

Individualized program designed to develop reading and study skills necessary for success in college-level work. Vocabulary development, comprehension skills, textbook techniques, and library and research techniques.
Prerequisite: RDL 01 or as required by placement scores.

## RDL 5

## 3 rec 0 cr

## Basic Reading for ESL Students

An introductory program designed to help beginning ESL students expand their reading knowledge of English through extensive and intensive reading practice. Development of techniques to facilitate comprehension of words, sentences, and paragraphs for increased reading speed and improved comprehension.
Prerequisite: Registration only by Department placement.

RDL 11 2 rec 2 cr

## College Reading and Study Skills

Advanced course to increase proficiency in reading and study strategies. Student and instructor jointly develop an individual program based on the student's expressed interests and diagnosed needs. The program might focus on any combination of the following: rate of reading; test-taking techniques; reading in the content areas; textbook reading and study techniques; critical and interpretive reading.

RDL 21
3 rec 3 cr

## Reading in the Sciences and Technologies

Advanced reading and study skills to obtain, utilize, and retain information from texts in the sciences and technologies. Application of scientific and technical vocabulary, critical and interpretive comprehension, and study and test taking skills will be related to students' curriculum needs and interest. Prerequisite: RDL 02 if required.

## MISSION STATEMENT

The English Department supports the College's mission of providing "a strong academic foundation for students of diverse backgrounds, preparations, and aspirations." Our course offerings in Composition, Literature, and English as a Second Language share the common goal of developing students' facility with language, as well as their critical and analytical skills.

Office: Colston Hall [CO], Room 601
Phone: 718.289.5731/54
Website: http://www.bcc.cuny.edu/English/
Professor and Chairperson: Dr. Robert Beuka
Professors: F. De Naples, T. Sedore, T. Wodajo, S. Amper, M.Pita, S. Utakis

Associate Professors: J. Athanasourelis, D. Blot, M. Denbo, C. Sassi-Lehner, Donna Kessler-Eng, M. Treglia, E. Smith, C. Dacey-Groth, S. Tarlin, J. Bolt

Assistant Professors: K. Di Tommaso, L. Hurley, C. Liston, J. Rodas, K. Urda, A. Parmegiani S. Duvivier

Lecturers: M. Barnhill, F. DiSalvo, N. Gear, A. Rowan, W. Washington, J. Katz, M. Coss

Higher Education Assistant: J. Robertson
Assistant to Higher Education Assistant: K. Thomas

## COURSES:

English (ENG)
English as a Second Language (ESL)

## English

All courses offered by the English Department include composition. In courses providing a fourth conf/rec hour, the teacher will use the fourth hour for instructional purposes. The CUNY ASSESSMENT TEST IN WRITING and CUNY ASSESSMENT TEST IN READING are required before registering for an English course. A student may not register for ENG 11 unless he or she has passed both the CUNY Writing and the CUNY Reading Assessment Tests. A student who has completed the semester's work but has failed the same noncredit course (e.g. ENG 01 or 02) twice, may choose not to take the same course a third time. The student may choose to report to the Department of English Office so that he or she may be placed in a rigorous tutorial program.

## ENG $1 \quad 4$ rec 0 cr

## Developmental Writing I

Extensive writing practice in response to readings. Review and practice of basic principles of grammar and usage, with emphasis on sentence structure and various mechanical aspects of writing. Focus on writing problems such as sentence fragments, sentence misconstruction, lack of subject verb agreement, faulty use of pronouns, misspellings, and inaccuracy in punctuation. Helps students write effective paragraphs and essays.
For students with a combined score of 47 or less on CUNY ASSESSMENT test in WRITING.

## ENG 2 <br> 4 rec 0 cr

## Developmental Writing II

Extensive writing practice in response to readings, with emphasis on paragraph development and unity. Students learn to develop paragraphs through styles such as narration, illustration, comparison-contrast, process, cause and effect, and argumentation. Helps the student to write effective paragraphs/ essays in preparation for ENG 11. Includes review of grammar and usage.
Prerequisite: ENG 01, if required, and for students with a combined score of 48-55 on the CUNY Assessment Test in Writing.

## ENG $9 \quad 4$ rec 0 cr

## Writers' Workshop for ESL Students

Intensive review and practice of English. Development of increased proficiency in academic writing; paragraph and essay structure and grammar. In-depth reading program to enhance vocabulary and comprehension skills.
Prerequisite: ESL 03, or placement on the ENG 09 level. Successful completion of this course is equivalent to successful completion of ENG 01.

## ENG 10 <br> 5 rec 1 conf/rec 3 cr

## Fundamentals of Composition and Rhetoric

Fundamental principles of expository organization and grammar that emphasize essay development, unity and clarity, utilizing various rhetorical styles; selected readings. Approximately nine compositions required, including practice ACTs, and one research paper with MLA documentation using library resources. Students must pass the ACT and complete the ENG 11 final exam. Students who pass ENG 10 are permitted to enroll in ENG 12 or above. Students who do not pass the CUNY/ACT Writing Skills Assessment Test cannot pass the course.
Prerequisites: Passing score on CUNY Assessment Test in Reading AND combined score of $48-55$ on CUNY Assessment Test in Writing, or with Chairperson's permission.
Required Core - English Composition

## ENG 11

3 rec 1 conf/rec 3 cr

## Composition and Rhetoric I

Fundamental principles of organization and rhetoric; practice in expository writing; selected readings, mainly non-fiction; approximately eight papers required, including one research paper with MLA documentation using library resources. Prerequisites: Passing scores on both the CUNY Writing Skills Assessment Test and CUNY Reading Skills Assessment Test.
Required Core-English Composition

## ENG 12 <br> 3 rec 1 conf/rec 3 cr

## Composition and Rhetoric II

Study and application of the principles of organization, rhetoric, and literary analysis; expository writing and research based on thematically linked readings; development of critical thinking. Research paper with MLA documentation required.
Prerequisite: ENG 10 or ENG 11.
Required Core - English Composition
ENG $14 \quad 3$ rec 1 conf $/$ rec 3 cr

## Written Composition and Prose Fiction

Continued emphasis on the writing of clear, effective expository prose based on readings in short stories and novels. Research paper required.
Prerequisite: ENG 10 or ENG 11.
Required Core-English Composition

## ENG $15 \quad 3$ rec 1 conf/rec 3 cr

## Written Composition and Drama

Continued emphasis on the writing of clear, effective expository prose based on readings in world drama. Research paper required.
Prerequisite: ENG 10 or ENG 11.
Required Core - English Composition
ENG 163 rec 1 conf $/$ rec 3 cr
Written Composition and Poetry
Continued emphasis on the writing of clear, effective expository prose based on readings in poetry. Research paper required.
Prerequisite: ENG 10 or ENG 11.
Required Core-English Composition

## ENG 21 <br> 3 rec 3 cr

## Introduction to Creative Writing

Introduction to the forms, techniques, and approaches to writing in the creative genres, including fiction, poetry, drama, and creative nonfiction. Readings, daily writing assignments, and revision of written work are required. Students will produce a portfolio containing a series of creative writings in various genres, as well as one piece of critical writing with research.

## Prerequisite: ENG 10 or ENG 11.

Flexible Core - Creative Expression

## ENG $23 \quad 3$ rec $1 \mathrm{lab} / \mathrm{rec} 3 \mathrm{cr}$

## Scientific and Technical Writing

Study and practice of various types of writing in scientific, business and technological disciplines, including abstracts, progress reports, description of a process, technical proposals, technical reports and business documents such as memoranda, letters, and resumes. Course includes one laboratory hour of instruction in business and technical software applications.
(Liberal Arts students must have written permission of Department Chairperson.)
Prerequisite: ENG 10 or ENG 11.

## ENG 40 <br> 3 rec 3 cr <br> Folklore

Study of American folk literature including an examination of oral traditions such as folk speech, proverbs, folktales, folk songs and ballads. Elements of folk superstitions, dreams, games, and folk life.
Prerequisite: ENG 10 or ENG 11.
ENG 41
3 rec 3 cr
History of the English Language
Focus is on description and history of the English language from Old English to World Englishes as evidenced in literary texts; language elements, writing systems, language families, grammars, dictionaries, and geographical and social dialects. Prerequisite: ENG 10 or ENG 11.

## ENG 47

3 rec 3 cr

## Latino Literature

Introduction to prominent writers from a range of Latino literary traditions. Representative literary works from Mexican-American, Dominican-American, Cuban-American, Puerto Rican and other Latino writers are read and analyzed. Critical writings, including a research paper, are required.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - US Experience in its Diversity
ENG 48
3 rec 3 cr

## Afro-Caribbean Literature

Introduction to prominent writers from Africa and the Caribbean. Representative literary works are read and analyzed. Critical writings, including a research paper are required.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - World Cultures and Global Issues

## ENG 50

## 3 rec 3 cr

## U.S. Literature and Thought I

Major themes in U.S. literature, thought and history from the colonial period to the end of the Civil War. Selected authors may include Paine, Cooper, Irving, Poe, Thoreau, Emerson, and Whitman.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - US Experience in its Diversity

ENG 51
3 rec 3 cr

## U.S. Literature and Thought II

Major themes in U.S. literature and thought from the end of the Civil War to the present. Selected authors may include Melville, James, Twain, Eliot, Hughes, Hemingway, and Ellison.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - US Experience in its Diversity
ENG 53
3 rec 3 cr

## The Black Writer in American Literature

Literature by Black American authors; consideration of the nature of this literature-its characteristic forms, imagery, archetypes and styles. Readings include works of Dunbar, Hughes, Cullen, DuBois, Wright, Ellison, Jones, and Baldwin, with emphasis on prose. Critical or research paper required.
Prerequisite: ENG 10 or ENG 11.
ENG 56
3 rec 3 cr

## Children's Literature

Discussions and lectures on history, development, and critical evaluation of children's literature (including works from other cultures in translation). Children's literature will be considered through multiple critical approaches, including gender, cultural and psychological criticism. One research project as well as other written work will be required, including the opportunity to write a work for children.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - Individual and Society
ENG 57
3 rec 3 cr

## Introduction to Women's Literature

Introduction to prominent women writers from various backgrounds, genres, and periods. Both primary literary works by women and theory about women's literature are read and analyzed. Critical writings, including a research paper, are required.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - Individual and Society

## ENG 61 <br> 3 rec 3 cr

## Shakespeare

Introduction to plays and poetry of Shakespeare. Representative tragedies, comedies, histories, and poems are read and analyzed. Poetic and dramatic techniques and the Elizabethan theatre are studied. Critical or research paper required.
Prerequisites: ENG 11
Flexible Core - Creative Expression

## ENG 65

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3 \mathrm{cr}
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## Honors Elective: Independent Research

To involve the intellectually aware, creative student in the indepth analysis of some phase of English through independent research. Each student will work closely with the instructor, receiving guidance in research techniques, organizing bibliography in the specific area, and preparing drafts of the honors paper.
Prerequisite: B or higher average in several previous English courses taken at BCC and the written approval of a full-time instructor in the English Department and the chairperson.

## ENG 72 <br> 3 rec 3 cr

## The Bible as Literature

Study of the prime Biblical narratives as well as chief poetic and wisdom sections of both Old and New Testaments, including the Apocrypha. Biblical texts to be read in English. Students write short themes on both texts and their scholarly critiques on these texts.
Prerequisite: ENG 10 or ENG 11.
ENG $154 \quad 3$ rec 3 cr

## Black Poetry

Poetry of all modes by Black American poets. Consideration of social environments producing this literature; study of techniques and subjects of various Black poets.
Prerequisite: ENG 10 or ENG 11.
Flexible Core - US Experience in its Diversity
ENG $223 \quad 3$ rec 3 cr

## Technical Writing

Study and practice of various types of writing in technical disciplines, including progress reports, technical proposals and documents such as memoranda and letters.
Prerequisite: ENG 10 or ENG 11.

## English as a Second Language

ESL $01 \quad 8$ rec 0 cr<br>English as a Second Language - Basic

For students whose native language is not English. Intensive program for beginning level students for development of English language skills. Builds oral and written control of basic grammatical structures, and listening and reading comprehension.

ESL $02 \quad 6$ rec 0 cr
English as a Second Language - Intermediate
For students whose native language is not English. Builds oral control of grammatical structures, listening comprehension, and the ability to write grammatically acceptable, wellconstructed paragraphs and short essays.
Prerequisite: ESL 01 if required, or placement on the ESL 02 level.

## ESL 03

6 rec 0 cr
English as a Second Language-Advanced
For students whose native language is not English. Builds control of advanced grammatical structures and develops ability to write various forms of expository compositions.
Prerequisite: ESL 02 if required, or placement on the ESL 03 level.

## First Year Courses

## OFFICE OF ACADEMIC AFFAIRS

Vice President for Academic Affairs and Provost Dr. Claudia V. Schrader

The Office of Academic Affairs provides leadership for all of the College's academic programs, with particular emphasis on curriculum and faculty development, student success and evening and weekend classes. Working in close partnership with the BCC faculty, this office helps students reach their post-BCC goals, whether they plan to transfer to a four-year college or pursue a career in their chosen field. Among Academic Affairs' educational initiatives: study abroad, in places as diverse as China and South Africa; the ASAP program, which enables students to graduate at an accelerated pace; and the Freshman Year Seminar, a bold new approach to preparing first year students for academic success. Such innovative tools inspire our scholars to think critically, communicate persuasively and act ethically and creatively in a competitive world.

## FYS $11 \quad 2$ rec 1 cr

## First-Year Seminar

This course combines a practical introduction to college for first-semester students with an introduction to academic study. Students complete an integrated curriculum combining college readiness activities and assignments, frequent computer lab activities, and introductory-level study of selected topics drawn from across the disciplines. College readiness subjects include time management, communication strategies, utilizing online resources, study skills, stress management and goal setting, both academic and professional. Academic activities include assignments targeted to remedial skill levels and linked to General Education proficiencies such as Communication, Reasoning and Analysis, Information Literacy, and Personal Growth and Professional Development.

## OFFICE OF STUDENT AFFAIRS

Vice President for Student Affairs Dr. Athos K. Brewer

The Office of General Counseling is committed to addressing multi-cultural issues encountered by students. Career inventories and other assessment instruments are administered to help students better understand their interests, abilities, values and psychological needs.

The counseling faculty teaches the Orientation and Career Development course (OCD 01). In the OCD course, the counselor assists freshmen students to develop effective study skills, time management and career decision-making skills.

OCD $011 \quad 1$ rec 0 cr

## Orientation and Career Development

In this course students develop basic college survival skills in areas of academic life, such as career goals, time management, classroom behavior, assessment of instructor demands and utilization of library and other college resources. Emphasis is placed on students' understanding the academic environment, demands required to develop successful coping and achievement behaviors.

## Health, Physical Education and Wellness

## DEPARTMENT MISSION

The Department of Health, Physical Education and Wellness supports the mission of the College, which is to provide a liberal arts education and/or career education or continuing education.

This education aims to prepare students for a life of independence and creative thinking and community participation.

The College seeks to meet the needs of its culturally and linguistically diverse student body so that all students can develop to his or her full potential.
The philosophy of the Department of Health, Physical Education and Wellness reflects the belief that an individual develops in a multi-faceted context. We believe in preparing students in all aspects of growth with a holistic concept of health.

Office: Alumni Gymnasium [AG], Room 300
Phone: 718.289.5268
Website: www.bcc.cuny.edu/Physical-Education/

Chairperson and Professor: Dr. J. Heller
Deputy Chairperson and Professor: Dr. S. Moss
Professors: D. Genova, S. Schwartz
Associate Professor: C. Aleong
Assistant Professors: J. Acevedo, K. Cooper, U. Lysniak, S. Reader, H. Skinner

Lecturers: M. McNichol, E. Gruttadauria
Senior College Laboratory Technician: A. DeJesus
Office Manager: M. Torres
College Assistant: D. Gomez

## DEGREE PROGRAMS

Community/School Health Education, A.S. Dietetics and Nutrition Science, A.S.
Therapeutic Recreation, A.S.

## COURSES

Cardiopulmonary Resuscitation (CPR)
Health (HLT)
Health Care Management (HCM)
Physical Education (PEA)
Recreation (REC)
Workplace First Aid Training (WFA)

## CLUBS

Dance Workshop: Prof. Kelvin Cooper
Food and Garden Club: Prof. Charmaine Aleong

## COMMUNITY/SCHOOL HEALTH EDUCATION

Associate in Science Degree | Transfer Degree Department of Health, Physical Education and Wellness

Health education is a rapidly growing field that aims to promote health and prevent diseases in individuals, families and communities. Community health educators work in hospitals, health centers, community agencies, schools, business settings and governmental agencies. Health educators impart information about such health issues as heart disease, diabetes, obesity, stress, reproductive health, dependencies and safety. The School Health Educator is a specialist who teaches and promotes health in any educational facility from pre-kindergarten through college. Public, private and parochial schools, as well as colleges and universities, all require trained health educators. The A.S. degree in Community/School Health Education offers a solid foundation for continuing on towards a baccalaureate degree either at The City University of New York or at other colleges and universities. Upon completion of the 60 credit A.S. degree, students may enter a bachelor's degree program as a third year student or they may seek employment in a community health agency.

Curriculum Coordinator: Mary Lou McNichol

## Community/School Health Education Curriculum (Pathways) <br> 60 Credits required for A.S. Degree <br> Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$

- BIO 11 General Biology I OR

BIO 23* Anatomy and Physiology I (4 Credits)
SUBTOTAL 13

## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. U.S. Experience in its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World ${ }^{1}$

- CHM 17 Fundamentals of General Chemistry OR BIO 24* Anatomy and Physiology II (4 Credits)
RESTRICTED ELECTIVE Select one course from Area A-E.** (3 Credits)

SUBTOTAL 19

## Specialization Requirements

- CPR 10 Cardiopulmonary Resuscitation OR WFA 10 Workplace First Aid Training (1 Credit)
- PEA 12 Elementary Hatha Yoga OR PEA 82 Introduction to Tai Chi Chuan (1 Credit)
- PEA ${ }^{2}$ Physical Education (1 Credit)
- HLT 91 Critical Issues in Health (2 Credits)
- HLT 94 Human Nutrition (3 Credits)
- Select 2 Courses from the following: HLT 90 Health and Aging HLT 92 Drugs, Society and Human Behavior HLT 93 Human Sexuality HLT 96 Health Education for Parenting HLT 97 Field Work in Community Health Resources 3 HLT 89 HIV/AIDS (6 Credits)
- PSY 11 Introduction to Psychology (0-3 Credits)
- SOC 11 Introduction to Sociology ( $0-3$ Credits)
- Restricted Elective (0-6 Credits) COMM 20 Public Speaking AND PSY 41 Psychology of Infancy and Childhood OR MODERN LANGUAGE ${ }^{4}$ (Select two from the same language)
- FREE ELECTIVES (2-11 Credits) SUBTOTAL 28
* The curriculum has obtained a waiver to require its students to take CHM 17 and BIO 11 or the sequence BIO 23-BIO 24 in the Common Core.
** No more than two courses in any discipline or interdisciplinary field.

1 Students planning to transfer to Lehman College, or other four-year programs, are strongly advised to take BIO 23 and BIO 24 instead of BIO 11 and CHM 17. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number ( 60 ) of credits.

2 Select any physical education course except PEA 12 and PEA 82.
3 Students who are not planning on transferring to a 4 year program in Community Health are encouraged to take this course.
4 Choose from a foreign language at the appropriate level. Both courses must be from the same foreign language.
The program articulates with Lehman College's B.S. in Health Education as well as with SUNY Empire State.

## COMMUNITY/SCHOOL HEALTH EDUCATION (PRE-PATHWAYS)

Associate in Science Degree | Transfer Degree
Department of Health, Physical Education and Wellness
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Curriculum Coordinator: Mary Lou McNichol

## Community/School Health Education Curriculum 60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR

ENG 11 Composition and Rhetoric I (3 Credits)

- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics OR MTH 26 Mathematics in the Modern World (3 Credits)
- BIO 11¹ General Biology I (4 Credits)
- PEA² Physical Education (1 Credit)

TOTAL 17

## Required Areas of Study

- ART 11 Introduction to Art OR

MUS 11 Introduction to Music (3 Credits)

- HLT 91 Critical Issues in Health (2 Credits)
- CHM $17^{1}$ Fundamentals of General Chemistry I (4 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- PSY 41 Psychology of Infancy and Childhood (3 Credits)
- SOC 11 Sociology (3 Credits)
- CMS Any 3 credit CMS course excluding CMS 10 (3 Credits)
- MODERN LANGUAGE ${ }^{3}$ (8 Credits)
- ENGLISH Any three credit English course (3 Credits)

TOTAL 32

## Specialization Requirements

- CPR 10 Cardiopulmonary Resuscitation OR

WFA 10 Workplace First Aid Training (1 Credit)

- PEA 12 Elementary Hatha Yoga OR

PEA 82 Introduction to Tai Chi Chuan (1 Credit)

- HLT 94 Human Nutrition (3 Credits)


## Select 2 courses from the following:

- HLT 89 HIV / AIDS
- HLT 90 Health and Aging
- HLT 92 Drugs, Society and Human Behavior
- HLT 93 Human Sexuality
- HLT 96 Health Education for Parenting
- HLT $97^{4}$ Field Work in Community Health Resources (6 Credits)
TOTAL 11
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

1. Students planning to transfer to Lehman College are advised to take BIO 23 and 24 instead of BIO 11 and CHM 17.
2. Select any physical education course except PEA 12 or 82.
3. The 8 credits must be in the same language. See language requirements in "The Curricula and Programs" section of this catalog.
4.Students who are not planning on transferring to a 4 -year program in Community Health are encouraged to take this course.

## DIETETICS AND NUTRITION SCIENCE

Associate in Science Degree | Joint Degree Program Department of Health, Physical Education and Wellness
Dietetics and Nutrition Science specialists are employed in health and human services settings such as hospitals, nursing homes, adult care facilities, youth agencies, schools and food service establishments. Dietitians and nutritionists assist in preventing disease and treating illness by promoting healthy eating habits. Dietitians may also practice in clinical, community, management and consultant settings.

The program in Dietetics and Nutrition Science consists of four semesters of Liberal Arts and Science education and courses directly related to dietetics and nutrition.

The Dietetics and Nutrition Science Associate in Science (A.S.) degree program is a dual/joint degree program with Lehman College's B.S. degree program in Dietetics, Foods and Nutrition.

Upon successful completion of the curriculum at Bronx Community College, students will automatically be accepted into Lehman College's Dietetics, Foods and Nutrition Program. At Lehman, students can continue in the specialization of Dietetics, Foods and Nutrition or Food Service and Nutrition. Both programs are designed to prepare students for entrylevel positions as dietitians or nutritionists in health-care facilities, community agencies, food service operations and corporations. Students will also be prepared for graduate study in the American Dietetic Association (ADA), which complies with the requirement for the Didactic Programs in Dietetics (DPDs). Students who complete this program can apply for an ADA-accredited dietetic internship. Completion of the internship and option I enables the student to become eligible to take the registration examination in dietetics to
become a Registered Dietitian (RD). Option II, Food Service and Nutrition, is a concentration in foods, food service and nutrition for students interested in serving the needs of the food service industry. These professionals may be involved in restaurant catering, community food service and corporate food service.
Curriculum Coordinator: Professor Charmaine Aleong

## Dietetics and Nutrition Science Curriculum (Pathways)

60 Credits required for A.S. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{1}$ (3 Credits)
C. Life and Physical Sciences ${ }^{2}$

- BIO 23 Human Anatomy and Physiology I (4 Credits)

SUBTOTAL 13

## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. U.S. Experience in its Diversity ( 3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- BIO 24 Human Anatomy and Physiology II (4 Credits)

Select one course from Area A-E (3 Credits)
SUBTOTAL 19

## Specialization Requirements

- CPR 10 Cardiopulmonary Resuscitation OR WFA 10 Workplace First Aid Training (1 Credit)
- HLT 91 Critical Issues in Health (2 Credits)
- HLT 94 Human Nutrition (3 Credits)
- HLT 99 Health of the Nation (2 Credits)
- HCM 11 The U.S. Health Care Delivery System (3 Credits)
- PEA 51 Stress Management (2 Credits)
- CHM 17 Fundamentals of General Chemistry I (0-4 Credits)
- DAT 10 Computer Fundamentals and Applications (3 Credits)
- PSY $11^{3}$ Introduction to Psychology (0-3 Credits)
- SOC $11^{3}$ Sociology ( $0-3$ Credits)
- FREE ELECTIVES (2-11 Credits)

SUBTOTAL 28
1 Students in this curriculum are strongly advised to take MTH 23 to fulfill required Core Area B.
2 NOTE: The program has been given a waiver to require its students to take BIO 23 to fulfill Required Area C and BIO 24 to fulfill Flexible Are E in the Flexible Core.
3 If this course satisfies a Flexible Core Area, free elective credits may be taken.

## DIETETICS AND NUTRITION SCIENCE (PRE-PATHWAYS)

Associate in Science Degree || Joint Degree Program Department of Health, Physical Education and Wellness
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Charmaine Aleong

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 23 Probability and Statistics (3 Credits)
- BIO 23 Human Anatomy and Physiology I (4 Credits)
- BIO 24 Human Anatomy and Physiology II (4 Credits) TOTAL 20


## Required Areas of Study

- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- CHM 17 Fundamentals of General Chemistry I (4 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- MODERN LANGUAGE (8 Credits) (Choose from a foreign language at the appropriate level. Both courses must be in the same language.)
- PSY 11 Introduction to Psychology (3 Credits)
- SOC 11 Sociology (3 Credits)

TOTAL 26
Specialization Requirements

- CPR 10 Cardiopulmonary Resuscitation OR WFA 10 Workplace First Aid Training (1 Credit)
- HLT 94 Human Nutrition (3 Credits)
- HLT 99 Health of the Nation (2 Credits)
- HCM 11 The U.S. Health Care Delivery System (3 Credits)
- DAT 10 Computer Fundamentals and Applications (3 Credits)
- PEA 51 Stress Management (2 Credits) TOTAL 14

NOTE: At least two courses must be taken from a list designated as "Writing Intensive."

## THERAPEUTIC RECREATION

Associate in Science Degree | Joint Degree Program Department of Health, Physical Education and Wellness
Curriculum Coordinator: Professor Jose Acevedo
Therapeutic Recreation Specialists are employed in health and human services settings such as hospitals, nursing homes, adult day care facilities, youth agencies, drug treatment centers and homeless shelters. They work with people who have a variety of disabilities and health conditions to improve their leisure time skills and their quality of life.

The program in Therapeutic Recreation consists of four semesters of Liberal Arts education and courses directly related to recreation. The Therapeutic Recreation Associate of Science (A.S.) degree program is a joint degree program with Lehman College's B.S. program in Recreation Education.

Upon completion of the curriculum at Bronx Community College students will automatically be accepted into Lehman College's Recreation Education Program. At Lehman, students can continue in the specialization of Therapeutic Recreation or Administration. Upon graduation from Lehman College students in Therapeutic Recreation are eligible to take the National Certification Examination for Certified Therapeutic Recreation Specialist (CTRS) administered by the National Council for Therapeutic Recreation Certification. Students in the administration specialization are employed in public parks and recreation agencies, not-for-profit organizations such as P.A.L. and the YMCA, health and fitness centers, camps and sports associations. Upon graduation from Lehman College, students can sit for the national certifying examination for Certified Leisure Professional (CLP) administered by the National Recreation and Park Association.

## Therapeutic Recreation Curriculum (Pathways) 60 Credits required for A.S. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning* (3 Credits) *Students in this curriculum are strongly advised to take MTH 23
C. Life and Physical Sciences**

- BIO 23 Human Anatomy and Physiology I (4 Credits) ** This program has received a waiver to require STEM variant courses to fulfill. Required Core B and Flexible Core E requirements.
SUBTOTAL 13


## Flexible Core

No more than two courses in any discipline or interdisciplinary field.
A. World Cultures and Global Issues (3 Credits)
B. U.S. Experience in its Diversity ( 3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World**

- BIO 24 Human Anatomy and Physiology II (4 Credits)
** This program has received a waiver to require STEM variant courses to fulfill. Required Core $B$ and Flexible Core E requirements.
RESTRICTED ELECTIVE Select one course from Flexible Core A-E (3 Credits)


## SUBTOTAL 19

## Specialization Requirements

- CPR 10 Cardiopulmonary Resuscitation OR WFA 10 Workplace First Aid Training (1 Credit)
- REC 93 Introduction to Therapeutic Recreation (3 Credits)
- REC 94 Recreation: Historical and Philosophical Perspective (3 Credits)
- REC 95 Program Planning and Leadership in Recreation (3 Credits)
- PEA 51 Stress Management (2 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- HLT 99 Health of the Nation (2 Credits)
- HCM 11 The U.S. Health Care Delivery System (3 Credits)
- PEA Select any Course (1 Credit)
- PSY 11 Introduction to Psychology ${ }^{1}$ (0-3 Credits)
- RESTRICTED ELECTIVES ${ }^{1}$ (3 Credits)
- FREE ELECTIVES (2-5 Credits) SUBTOTAL 28

1 If this course satisfies a flexible core area, free electives may be taken.
2 Select from REC 96, any 3 credit HLT, or PEA courses totaling 3 credits

## THERAPEUTIC RECREATION (PRE-PATHWAYS)

Associate in Science Degree | Joint Degree Program Department of Health, Physical Education and Wellness
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Jose Acevedo

## Therapeutic Recreation Curriculum

60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric I OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- MTH 23 Probability and Statistics (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- BIO 23 and BIO 24 Human Anatomy and Physiology I and II (8 Credits)
TOTAL 20


## Required Areas of Study

- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- HCM 11 The US Health Care Delivery System (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits)
- HLT 99 Health of the Nation (2 Credits)
- PEA Select any Course (1 Credits)
- RESTRICTED ELECTIVE* (3 Credits)
- MODERN LANGUAGE** (0-8 Credits) TOTAL 20-28


## Specialization Requirements

- REC 93 Introduction to Therapeutic Recreation (3 Credits)
- REC 94 Recreation: Historical and Philosophical Perspective (3 Credits)
- REC 95 Program Planning and Leadership in Recreation (3 Credits)
- PEA 51 Stress Management (2 Credits)
- CPR 10 Cardiopulmonary Resuscitation OR WFA 10 Workplace First Aid Training (1 Credit) TOTAL 12
FREE ELECTIVES
- To complete the 60 credit requirement ( $0-8$ Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Select REC 96, any 3 Credit HLT course, or PEA courses totaling 3 credits
** Students who have completed the Modern Language requirement may select courses from Liberal Arts and Science to complete the 60 credit requirement.

## COURSES

Cardiopulmonary Resuscitation

## CPR 10 <br> 1 lab 1 cr

## Cardiopulmonary Resuscitation

(Does not fulfill PEA requirement)
Designed to develop basic life support, knowledge and skill in cardiopulmonary resuscitation (clearing obstructed airways and mouth to mouth resuscitation). Students meeting the American Heart Association standards will receive AHA certification.

## Health

## HLT 20 <br> 3 lect 3 cr

## Aspects of Human Sexuality

This course teaches students about physical, sociological, and psychological aspects of human sexuality. Scientific research on gender, sexual arousal, sexual orientation, sexually transmitted infections, and contraception will be explored. Students will examine cross cultural factors and ethical issues surrounding human sexuality.
Pre or Corequisite: ENG 02 and RDL 02 if required.
Flexible Core - Scientific World

## HLT $89 \quad 3$ lec 3 cr

HIV / AIDS
This course is designed to teach the most current body of knowledge in the field of HIV disease. Learners will explore the history, epidemiology, primary, secondary and tertiary prevention strategies as well as controversial issues from the perspective of different stake holders, locally, nationally and globally.
Prerequisite: HLT 91.

## HLT $90 \quad 3$ lec 3 cr

## Health and Aging

This course provides an examination of health promotion, health management and health care in the elder years. It explores the inter-relationship between the physiological, psychological, social, economic, and cultural dimensions of aging.
Prerequisite: HLT 91.

## HLT $91 \quad 2 \mathrm{rec} 2 \mathrm{cr}$

Critical Issues in Health
Intended to develop and encourage critical judgment in vital areas of health: mental health, dependencies, human sexuality and nutrition.
Corequisite: ENG 01 or RDL 01 if required.

HLT $92 \quad 3$ rec 3 cr

## Drugs, Society and Human Behavior

Various aspects of drug use and abuse are explored pharmacological, historical, legal and psychosocial. Emphasis on the roles of the individual and society in dealing with current issues.
Prerequisite: HLT 91.

## HLT $93 \quad 3$ rec 3 cr

## Human Sexuality

Consideration of physical, sociological, and psychological aspects of human sexuality with emphasis on development of critical judgment in addressing ethical issues.
Prerequisite: HLT 91.

## HLT $94 \quad 3$ rec 3 cr

## Human Nutrition

Introduction to essentials of nutrition education and the relationship of food to the student's personal goals and life experiences. Students-as-consumers find their choices and responsibilities emphasized by classroom experiments, self-examination and experiential learning. Weight control, changing food requirements in the life cycle, special diets, food labeling, additives, food economics in relationship to health are included.

Prerequisite: HLT 91 and/or permission of instructor.

## HLT $96 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Health Education for Parenting

Provides health care information as it relates to child development. Provides parents and others who work with children with resources and coping skills needed to raise a healthy child and to nurture the family unit.
Prerequisite: HLT 91.
HLT $97 \quad 1$ sem 5 hrs field work 3 cr
Field Work in Community Health Resources
Provides students with firsthand knowledge of the community, its health problems and the forces impacting on them. Offers an opportunity to become involved in identifying and addressing problems.
Prerequisite: HLT 91 and/or permission of instructor.

## HLT $98 \quad 1$ rec 2 hrs field work 3 cr

## Community Health Resources for Child Care Workers

Seminar in community health resources for child care workers. Students use their job placement as field work experience and keep weekly logs.

## HLT 99 <br> 2 rec 2 cr

## Health of the Nation

Provides an examination of the health status of different populations in the United States. Concepts of epidemiology, health promotion and disease prevention are discussed. The characteristics of special populations are addressed as are some of the major threats to the health, safety and welfare of individuals in society.
Corequisite: ENG 01 or RDL 01.

## Health Care Management

## HCM $11 \quad 3$ rec 3 cr

## The U.S. Health Care Delivery System

Examines key issues about the organization and delivery of health and nutrition services. Explores the role of health care professions and occupations, the structure and function of the U.S. health services delivery system, and applications of technology and financial resources.

## HCM $12 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Hospital Organization and Management

Overview of management and organization theory with applications to health care settings. Examines conceptual, technical, and human skills as they relate to the management of complex health care institutions.
Prerequisites or Corequisites: BUS 51, HCM 11 and satisfactory completion of 30 credits.

HCM 313 rec 3 cr

## Community Health Care Management

This course helps students develop the necessary skills to work as a Community Health Worker (CHW). Topics include public health, social determinants of health, health policy, working with culturally diverse clients, health outreach and group facilitation. Students will gain practical information on health advising, conducting client interviews, and presenting health information to groups.
Prerequisite: HLT 91 and HSC 10

## Physical Education and Wellness

All students who enroll in PEA classes are strongly advised to get a medical exam and to file the results with Health Services (Loew Hall, 101). All instructors will make the fitness demands of their classes clear. The Department of Health, Physical Education and Wellness assumes no responsibility for students who are not physically fit enough to participate in our classes.

## PEA $11 \quad 2$ rec 1 cr

## Fitness for Life

Designed to assist students in evaluating their present level of fitness and to provide opportunities for self-improvement. Selection from the following weight training and aerobic activities: weight training machines, free weights, jogging, fitness games, interval training, treadmills, exercise bikes, and other cardio fitness equipment.

PEA 12
2 rec 1 cr

## Elementary Hatha Yoga

Progressive exercises designed to improve flexibility, develop efficient breathing, and apply relaxation techniques. The history of yoga, physiological benefits, stress management techniques, nutritional concepts and body awareness are interwoven to emphasize the integral nature of body and mind.

## PEA $14 \quad 2$ lab 1 cr

## Aerobic Dance

Students participate in aerobic dance to improve cardiovascular fitness. There is additional mat work to develop toned muscles and flexibility. Course includes information on nutrition, weight management, injury management, and other fitness related concepts.

## PEA 15 <br> 2 lab 1 cr

## Walking, Jogging and Weight Training

Walking, jogging and weight training to develop cardiovascular endurance and muscle toning. Students are placed in individualized programs in jogging and weight training. Course includes information on the benefits of exercise, efficient training principles, posture, and other fitness related concepts.
PEA 16
2 lab 1 cr

## Strength and Flexibility Training Through Pilates

Students will learn a challenging series of mat exercises that have proven to be effective for creating long, strong, well-toned, and flexible muscles. Students will study skeletal structures and major muscle groups, so that they may support their exercise routines with efficient alignment and coordinated breathing. The course will include lectures on other fitness related topics.

## PEA $21 \quad 2$ rec 1 cr

## Beginning Swimming Level

Basic water safety skills and knowledge to make an individual reasonably safe while in, on, or about the water. Registration limited to non-swimmers.

## PEA 22 <br> 2 rec 1 cr

## Intermediate Swimming Level

Basic elements of good swimming; includes swimming techniques with emphasis upon mastering form and endurance in the front crawl, back crawl, elementary backstroke and deep water survival skills.
Prerequisite: PEA 21 or the ability to swim at least 25 yards using a crawl and/or backstroke.

## PEA 23 <br> 2 rec 1 cr

## Swimming

Intended for students beyond the intermediate swimming level. Emphasis on mastering form and endurance in crawl, back crawl, breaststroke, butterfly and sidestroke. Also covers competitive techniques of swimming, survival skills, and basic skin diving.
Prerequisite: PEA 22 or ability to swim at least 50 yards using a crawl stroke and/or backstroke in deep water.

## PEA 24 <br> 2 rec 1 cr

## Lifeguard Training

Development of skills and knowledge essential for a person to qualify as a non-surf lifeguard. Successful completion of this course qualifies student for American Red Cross Lifeguard Training Certificate. Students should expect to spend approximately $\$ 30$ to cover the cost of certification.
Prerequisite: Ability to swim 500 yards, employing front crawl, breaststroke, elementary backstroke and sidestroke.

## PEA $25 \quad 1$ lect 2 rec 2 cr

## Water Safety Instructor*

Course prepares the student to teach American Red Cross Water Safety courses. Successful completion of this course qualifies student for an American Red Cross Water Safety Instructor certificate. Students should expect to spend \$30 to cover the cost of certification.
Prerequisite: Student must be at least 17 years of age and have the ability to perform the American Red Cross swimmer level skills and the elementary backstroke, breaststroke, sidestroke, crawl stroke and back crawl.

## PEA 282 rec 1 cr

## Water Aerobics

Water exercise geared to improvement of posture, muscle tone and general coordination including strength, flexibility and endurance. Students enjoy the benefits of invigorating exercise without stress in a relaxing pool environment. Open to swimmers and non-swimmers.

## PEA $30 \quad 2$ lab 1 cr

## Introduction to Volleyball

Basic skills related to volleyball: setting, underhand passing, blocking and spiking. Ten strategy and various offensive combinations as well as terminology and rules.

## PEA 33

4 rec $71 / 2$ wks 1 cr

## Beginning Tennis

Fall semester first 7-/2 weeks; spring semester last 7-1/2 weeks. Students will be notified of starting date. For beginning players. Skills include the forehand, backhand and serve plus elementary singles and doubles strategy. All equipment furnished by College. Meets two times a week, 2 rec. per session for $7-1 / 2$ weeks.

## PEA $41 \quad 2$ rec 1 cr

## Techniques of Jazz Dance

Basic techniques of jazz dance; development of new dance skills including kicks, turns, pivots, isolations, stretches, and traveling movements that will increase the ability to perform to contemporary music and to express oneself through dancing. Students will also have the opportunity to create original movement, to analyze dance on video, and to write dance critiques.

## PEA 46 <br> 1 lect 2 rec 2 cr

## African, Caribbean and Black Dance Forms $\dagger$

Students will learn several African and Caribbean based dances, and develop improved coordination, rhythmic sensitivity, endurance, strength, flexibility, and stamina. They will explore the influence of African dance on the Caribbean, and on the contemporary American dance scene. Students will write papers on the role of African dance, African aesthetics, and related topics.

## PEA 47 <br> $2 \operatorname{lab} 1 \mathrm{cr}$

## Beginning Salsa

Students will master beginning Salsa dance steps so that they may feel comfortable in social dance situations. Dance technique will include the basic step and variations, handholding positions, leading and following techniques, rhythmic accuracy, turn patterns and shines. Students will also learn about the history of Salsa dancing and music, and its current worldwide influence.

## PEA $51 \quad 1$ lect 2 lab 2 cr

## Stress Management

Lectures focus on discussions of psychological and behavioral approaches to stress management. These include utilizing time management techniques, learning to recognize distorted stress- inducing thought patterns, and incorporating effective communication skills. Lab work combines a variety of relaxation and exercise techniques which teach the student to combat the negative physical effects of stress. The final project for the course is student development of a personal stress management plan to best address individual needs. Corequisite: ENG 01 or RDL 01 if required.

## PEA 71, 72, 731 cr hour arranged

## Varsity Athletics

Students may enroll in one or more of the following intercollegiate athletic courses and receive up to three credits for work in such courses. Admission to each course, which is based on tryouts and permission of the instructor, may be used to fulfill PEA requirements. Students opting to receive credit are required to participate in games, scrimmages, conditioning programs, practices, ongoing individual and team analysis, post-season tournament play, written assignments, team and individual statistics and a final examination. Students who wish to participate without course credit may do so.

Baseball (Men)
Basketball (Men and Women)
Indoor Track and Field (Co-ed)
Outdoor Track and Field (Co-ed)
Soccer (Men)
Soccer (Women)
Softball (Women)
Tennis (Men and Women)
Volleyball (Women)
Wrestling (Men)

## PEA 81

2 rec 1 cr

## Techniques of Self-Defense

Introduction to the skills and techniques of martial arts (judo, karate, jiu-jitsu and aikido) for the purpose of understanding their value for self-defense.

## PEA 82 <br> 2 rec 1 cr

## Introduction to Tai Chi Chuan

Basic movements and beginner level forms of the Yang School of Tai Chi Chuan, ancient Chinese exercise system consisting of slow, rhythmical movements engaged in for health, meditation and self-defense by men and women of all ages. The movements are non-strenuous, easy to do and are intended to bring greater harmony to mind and body.

## Therapeutic Recreation

## REC 93

3 rec 3 cr

## Introduction to Therapeutic Recreation

Provides an overview of therapeutic recreation programs provided in clinical or community settings for the physically, mentally, socially or emotionally disabled. This course examines basic concepts and models of service with field observations.
Prerequisite: ENG 01 and RDL 01 if required.
Corequisite: ENG 02 or RDL 02 if required.
REC 94
3 rec 3 cr

## Recreation: Historical and Philosophical Perspective

Reviews the historical development of recreation and leisure, and examines theories of play, recreation and leisure. It includes an exploration of the functions of organized recreation in the US today and enables individuals to develop a personal philosophy of leisure.
Prerequisite: REC 93.
REC 95
3 rec 3 cr

## Program Planning and Leadership in Recreation

This course is designed to explore concepts, techniques, and strategies in recreational program planning, scheduling and operation in public, voluntary, therapeutic, and commercial settings. Basic principles and practices in group leadership. Prerequisite: REC 94

## REC $96 \quad 3$ rec 3 cr

## Introduction to Alternative Therapies in Therapeutic Recreation

An exploration of alternative therapies for special needs individuals. Program planning and use of various modalities (art, recreation activities) will be emphasized. Alternative modalities using DVD's, virtual field visits, and role-playing activities to describe rehabilitation, hospital, recreation, and community-based service will be used.
Prerequisite: REC 93.

## Workplace First Aid

## WFA $10 \quad 2$ lab 1 cr <br> Workplace First Aid Training

Designed to provide individuals in the workplace with First Aid, CPR for Professional Rescuer, and Automated External Defibrillator (AED) knowledge and skills necessary to recognize and determine basic emergency care for injuries and sudden illnesses until advanced medical personnel arrive and take over. This course will contain first aid skills and knowledge in blood borne pathogen exposure, treatment for wounds, broken bones, and head and spinal injury and burns. This course will also include CPR training in rescue breathing obstructed airway, and performance of cardiopulmonary resuscitation, Bag-Valve Mask, and two-rescuer skills. Corequisite: ENG 01 and RDL 01 if required.

## MISSION STATEMENT

The goals and philosophy of the Department of History are designed to support the primary mission of Bronx Community College. As stated in the College Catalog, that mission is "to give our students the foundation and tools for success, whether they choose to continue their education and/or enter a profession immediately upon graduation and to instill in them the value of informed and engaged citizenship and service to their communities."

Course offerings in the History Department contribute both to Liberal Arts Transfer curricula and to Career Programs. In all classes and curricula, we understand our goal to be to teach with a commitment to the values of a broad liberal arts education, and to the goal of preparing students for life in an---open and often contentious---democratic society. Through all of our course offerings and programs, the department seeks to educate its students to enter the 21st century equipped to deal with its many complexities, both imagined and unforeseen.

Office: Colston Hall [CO], Room 301
Phone: 718.289.5653
Website: http://www.bcc.cuny.edu/History/
Associate Professor and Chairperson: Dr. Tamar Rothenberg
Professors: N. S. Davis, D. Gordon
Associate Professors: K. Culkin, J. Getman-Eraso, C. Grenda, W. deJong-Lambert, R. Maryks, W. Roczniak

Assistant Professors: E. Hardman, M. Lazda, A. Reid, S. Offenbach

Lecturer: S. Mhlaba
Approximately 16 adjuncts per semester

## COURSES

Geography (GEO)
History (HIS)
Philosophy (PHL)

## DEGREE PROGRAMS

Liberal Arts and Sciences, A.A., History Option

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree Department of History

## History Option

The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded, individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The History Option offers a greater degree of specialization. The option articulates with several SUNY Empire State College baccalaureate programs. Students are encouraged to visit the Transfer Planning web site for more information.
Curriculum Coordinator: Dr. Tamar Rothenberg
Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.A. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$ (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues ( 6 Credits)
B. U.S. Experience in Diversity ( 3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR
MUS 11 Introduction to Music OR
MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication OR Select ONE from COMM, THEA, FILM, MEST (0-3 Credits)
- ENG English Elective ${ }^{2}$ (0-3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (0-3 Credits)
- SOCIAL SCIENCE Select one course from ANT, ECO, POL, PSY, SOC (0-3 Credits)
- MODERN LANGUAGES ${ }^{3}$ Select a sequence of two courses from the same Modern Language (0-6 Credits) SUBTOTAL 6-15


## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- LAB Lab Science ${ }^{1}$ (0-1 Credit)
- FREE ELECTIVES (0-10 Credits) SUBTOTAL 1-13


## Specialization Requirements

- HIS 20 The American Nation (0-3 Credits)
- HIS Select TWO additional HIS courses (6 Credits)
- RESTRICTED ELECTIVE Select one of the following: GEO; PHL; ANT; ECO; POL; SOC; MUS 11 OR 12; ART 11 OR 12; ART 55; FILM 61 or 91; THEA 70; ENG 41, 48, 50, 51, 53, 56, 57 OR 61; FRN 22; ITL 23; SPN 21, 22, 24, 25, 30 OR 31 (3 Credits)
SUBTOTAL 12
1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements
2 Choose from any ENG course above ENG 16 with the exception of ENG 223.

3 Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college language requirement. These students will take additional language coursework or choose other free elective credits.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree
Department of History

## History Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013,
you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Tamar Rothenberg

## Liberal Arts and Sciences Curriculum

60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR

MTH 22* Survey of Mathematics II OR
MTH 23* Probability and Statistics OR
MTH 26* Mathematics in the Modern World (3 Credits)

- PEA or Physical Education or HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Choose two laboratory science courses from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)
TOTAL 24-25


## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- Modern Language** (8 Credits)
- ENG*** English (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits) TOTAL 23

Specialization Requirements

- HIS History (6 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Philosophy, Political Sciences, Psychology, and Sociology
(select from two different disciplines) (6 Credits)
TOTAL 12
FREE ELECTIVES
- To complete the 60 credit requirement (0-1 Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may substitute MTH 30 or 31 if they reduce elective credits.
${ }^{* *}$ Choose from a modern language at the appropriate level. Both courses must be in the same language.
***Excluding ENG 23, Technical Writing.

## COURSES

## Geography

## GEO $10 \quad 3$ rec 3 cr

## World Regional Geography

This course introduces geographical concepts and perspectives and builds basic map skills and locational knowledge of countries, cities, physical features and regions. Issues addressed include climate change, the global economy, natural resource use, culture, and geopolitics.
Corequisite: RDL 02 or ENG 02 if required.
Flexible Core - World Cultures and Global Issues

## History

HIS $10 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## History of the Modern World

Exploration of outstanding political, intellectual, philosophical, social and economic trends, movements and events from mid18th century to present. Analysis of forces that have shaped the modern world.
Prerequisite: A passing score on the CUNY/ACT Writing Skills Assessment Test and a passing score on the CUNY/ACT Reading Skills Assessment Test
Flexible Core - World Cultures and Global Issues

## HIS $11 \quad 4$ rec 3 cr

## Introduction to the Modern World

Exploration of outstanding political, intellectual, philosophical, social and economic trends, movements and events from mid-18th century to present. Analysis of forces that have shaped the modern world. This course is identical in academic content and in assessment to HIS 10, but adds a fourth developmental hour and limits class size to 28 to allow the instructor to work closely with students in English/ Reading remediation to assist them in building a conceptual framework as well as developing academic comprehension, expressive and interpretive skills.
Prerequisite: RDL 01 and ENG 01 if required
Corequisite: RDL 02 or ENG 02 or ENG 10.
Flexible Core - World Cultures and Global Issues

## HIS 13 <br> 3 rec 3 cr

## History of the Ancient World

Four major River Valley civilizations-Egypt, Mesopotamia, India, China-will be covered. Examination of the florescence and decline of Greek and Roman civilizations. Focus on significant achievements of each people, assessing their impact on contemporary cultures as well as their legacy to ours. Readings from religious texts, poetry, drama and philosophy.
Flexible Core - World Cultures and Global Issues
HIS $14 \quad 3$ rec 3 cr
The Individual and Society in Medieval History
Effects of major ideas, social and economic changes, political concepts and their impacts upon the society of the West during the Middle Ages. Emphasis on interaction of these aspects within the cultural context of medieval Europe.
Prerequisite: Passing scores on both the CUNY/ACT Writing Skills Assessment Test and CUNY/ACT Reading Skills Assessment Test. Flexible Core - Individual and Society

## HIS 15

3 rec 3 cr

## Intellectual and Social History of Modern Europe

Effects of major ideas in Western society from the 18th century in their political and cultural context. The revolutionary dynamic in democracy, romanticism and conservatism, changing situation of religion, role of women in modern society, socialism in 19th and communism in 20th centuries, interaction between philosophy and politics extending from idealism to existentialism, class conflict and social stability, racism and egalitarianism, scientism and irrationalism.
Prerequisite: HIS 10 or 11.
HIS $20 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## The American Nation: The Political and Social Development of a People

The American Nation (HIS 20) is a one-semester survey of American history covering significant political, social, and cultural currents of the last 400 years. This class will introduce students to the major developments of the American past, with a focus on how they influenced Americans' lives and how they were influenced by Americans' actions. Students will analyze how these developments helped shape American society and the United States' role in the global community.
Prerequisite: ENG 02 and RDL 02 if required.
Flexible Core - US Experience in its Diversity
HIS 23
3 rec 3 cr

## Social and Intellectual History of Modern America

Fundamental concepts of the American experience that permeate our lives today, including puritanism, class consciousness, prejudice, violence, feminism, and pragmatism.
Prerequisite: HIS 10 or 11.
Flexible Core - US Experience in its Diversity

## HIS 24

## The History of American Foreign Relations

Major developments in the foreign relations of the U.S., from the American Revolution to Vietnam, and their domestic and international effects. Emphasis on the policies of this century; evolution of the republic into a world power and the consequent tensions and crises. Origins and progress of efforts at international cooperation and peace.
Prerequisite: ENG 02 and RDL 02 if required.
Flexible Core - US Experience in its Diversity
HIS 27
3 rec 3 cr

## Modern History of the Far East

China, Japan and Korea in the modern period; political and cultural institutions; structure of oriental societies; advances of the West and the effect of imperialism; industrialism, agrarian reforms; Communism; problems of the post-World War II period.
Prerequisite: HIS 10 or 11.

## HIS $28 \quad 3$ rec 3 cr

## Women: The Historical Perspective

This course examines the ways in which women in different times and different eras have shaped and been shaped by the societies in which they lived. The influence of cultural ideas about gender on women's lives and women's part in shaping and challenging those ideas receive particular attention.
Prerequisite: ENG 02 and RDL 02 if required.
Flexible Core - Individual and Society

## HIS $31 \quad 3$ rec 3 cr

## Modern Latin American History

Historical development of the Latin American area through the 19th and 21st centuries.
Prerequisite: HIS 10 or 11.

## HIS $34 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

History of Science and Technology
Major developments in science and technology in the Western world and their impact on man and society. Growth and interaction of science and technology from the dawn of civilization to the present day.
Prerequisite: HIS 10 or 11.

## HIS $35 \quad 3$ rec 3 cr

## History of Africa

This is an introductory survey of the history of Africa from the pre-colonial period to the post-independence era. Through a multidisciplinary approach, the course will cover some of the major themes in African history including pre-colonial social and political hierarchies, state formation, internal and external trade, the slave trade and slavery, Imperialism, nationalism and liberation struggles, and post-independence, contemporary issues. Throughout the course attention will be drawn to the diversity of the African experience as well as the political, social and economic interactions between Africa and the global community

Prerequisite: ENG 02 and RDL 02 if required.
Flexible Core - World Cultures and Global Issues

## HIS $36 \quad 3$ rec 3 cr <br> History of Modern Russia

The history, culture, and economic and social development of Russia in modern times, with some emphasis on Russia's relations with her neighbors in Eastern Europe.

## Prerequisite: HIS 10 or 11.

## HIS $37 \quad 3$ rec 3 cr

## African-American History

The African experience; development and abolition of slavery in America; reconstruction after the Civil War; migration out of the South; manifold consequences of urban relocation; Black education, church and arts; writing of Black Americans including Frederick Douglass and Franklin Frazier.
Prerequisite: HIS 10 or 11.

## HIS $45 \quad 3$ rec 3 cr

## The History of Genocide and Ethnic Cleansing in the Modern World

An introduction to the political, economic and social explanations for genocide, mass murder and ethnic cleansing in twentieth century Europe, Africa and Asia. Case studies will include the murder of Greeks and Americans at the beginning of the century, the Holocaust, and genocide in Rwanda and Darfur. Prerequisite: HIS 10 or 11.

## HIS $51 \quad 3$ rec 3 cr

## History of New York City

This course examines the social, economic and political history of New York City from its Dutch origins in Lenape territory to the present, with emphasis on immigration, innovation, conflict and consideration of the city's role in the U.S. and global economy.

Prerequisite: ENG 02 and RDL 02 if required.
Flexible Core - US Experience in its Diversity

## Philosophy

## PHL $11 \quad 3$ rec 3 cr

## Introduction to Philosophy

Fundamental questions of human experience, and basic problems of philosophy; survey of major philosophers (classical and modern).
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Individual and Society
PHL $90 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Religion

Humanistic and academic orientation to study of religion, treating each of the major world religions systematically. Course includes both historical and contemporary material. Corequisite: ENG 02 or RDL 02 if required.

# Mathematics and Computer Science 

## ABOUT THE DEPARTMENT

Mathematics and computer science are disciplines vital to both the liberal arts curriculum and to research in the natural and social sciences. The mission of the Mathematics and Computer Science Department at Bronx Community College is to prepare our diverse student population to be productive members of the global community with problem solving and critical thinking skills.

The department offers A.S. Degrees in both Mathematics and Computer Science.

Associate Professor and Chairperson: Dr. Nikolaos Apostolakis
Professors: L. Alpert, M. Bates, L. Fernandez, B. Kabak, A. Kheyfits, R. Kossak, A. McInerney, M. Messaoudene, C. O'Sullivan, M. Psarelli, P. Rothmaler, A. Weaver, P. Yom, U. Iyer

Associate Professors: G. Leibman, S. Persinger, I. Petrovic, J. Pineiro, A. Togha, K. Taylor, Q. Fang

Assistant Professors: A. Belilgne, R. Gouraige, N. Novak, Z. Wang, E. Antonakos, P. Laul, K. Ojakian, K. Dias

Lecturer: J. Kim, S. Donovan, S. Zybert
Approximately 60 adjuncts per semester

## DEGREE PROGRAMS

Computer Science, A.S.
Mathematics, A.S.

## COURSES

Computer Science (CSI)
Mathematics (MTH)

## COMPUTER SCIENCE

Associate in Science Degree | Transfer Degree Department of Mathematics and Computer Science
The Computer Science Curriculum provides an introduction to the field of computer science to ensure successful transfer to a senior college Computer Science program. Students learn to construct, verify and implement algorithms by writing and running programs in standard programming languages. The curriculum provides a broad background in science and the humanities as well as a thorough grounding in discrete and continuous mathematics. The Computer Science A.S. program articulates with the Computer Science B.S. program at Lehman College and the B.A. and B.S. programs at Iona College. BCC Computer Science graduates have successfully transferred to City College, Polytechnic University, Rensselaer Polytechnic University, Clarkson University, and others.

Students interested in curricula emphasizing computer applications such as the A.S. degree in Business Administration (Computer Programming Option) or the A.A.S. degree in Computer Information should consult the Business and Information Systems Department.
Curriculum Coordinator: Dr. Sharon Persinger

## Computer Science Curriculum (Pathways)

60 Credits required for A.S. Degree

## Common Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (4 Credits)

- MTH $31^{1}$ Calculus and Analytic Geometry I (4 Credits)


## C. Life and Physical Sciences

- SCIENCE I ${ }^{2}$ BIO 11 General Biology I OR

CHM 11 General College Chemistry I OR
PHY 11 College Physics I OR PHY 31 Physics I (4 Credits)
SUBTOTAL 14

## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. U.S. Experience in Diversity ( 3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- CSI 30 Discrete Mathematics I (3 Credits)

Additional course from the Flexible Core E

- SCIENCE II ${ }^{2}$ BIO 12 General Biology II OR CHM 12 General College Chemistry II OR PHY 12 College Physics II OR PHY 32 Physics II (4 Credits) SUBTOTAL 19


## Specialization Requirements

- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits)
- CSI 31 Introduction to Computer Programming I (3 Credits)
- CSI 32 Introduction to Computer Programming II (3 Credits)
- CSI 35 Discrete Mathematics II (3 Credits)
- CSI 33 Data Structures (3 Credits)

SUBTOTAL 22

## Free Electives

MTH $30^{1}$ and / or Free Elective ( $1-5$ Credits)
1 Students requiring MTH 30 must use free elective credits for this purpose.
2 SCI I and II must form a sequence, e.g., BIO 11and12.
NOTE: The program has been given a waiver to require its students to take MTH 31 to fulfill Required Area B, BIO 11 or CHM 11 or PHY 11 or PHY 31 to fulfill Required Area C, CSI 30 to fulfill Flexible Are E, BIO 12 or CHM 12 or PHY 12 or PHY 32 to fulfill the 6th course in the Flexible Core. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

## COMPUTER SCIENCE (PRE-PATHWAYS)

## Associate in Science Degree | Transfer Degree

 Department of Mathematics and Computer ScienceIf you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Sharon Persinger

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 31 Calculus and Analytic Geometry I (4 Credits)
- SCIENCE* A two-semester sequence in a Laboratory science (8 Credits) TOTAL 21


## Required Areas of Study

- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- HISTORY OR SOCIAL SCIENCE Select from

Anthropology, Economics,Geography, History, Philosophy, Political Science, Psychology, OR Sociology (3 Credits)
TOTAL 9

## Specialization Requirements

- MTH 32 Calculus and Analytic Geometry II (5 Credits)
- MTH 33 Calculus and Analytic Geometry III (5 Credits)
- CSI 30 Discrete Mathematics I (3 Credits)
- CSI 31 Introduction to Programming I (3 Credits)
- CSI 32 Introduction to Programming II (3 Credits)
- CSI 35 Discrete Mathematics II (3 Credits)
- CSI 33 Data Structures OR

DAT 41 Assembly Language Programming (3 Credits)
TOTAL 25
FREE ELECTIVES $\dagger$

- To complete the 60 credit requirement (5 Credits)

NOTE: Students who are required to take MTH 30, a prerequisite for MTH 31, must use elective credits.
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*The laboratory science sequence may be chosen from BIO 11-12, CHM 11-22, PHY 11-12 or PHY 31-32. Students should consult the college to which they intend to transfer as to choosing an appropriate sequence. Students who plan to transfer to City College should take PHY 31-32 and are encouraged to take PHY 33, MTH 34, and MTH 35.
**Students should consult the requirements of the senior college of their choice.
$\dagger$ Students who plan to transfer to a senior college should consult the language requirements in "The Curricula and Programs" section of the college catalog. This program articulates with Lehman College's B.S. in Computer Science program and Iona's B.A. and B.S. in Computer Science.

## MATHEMATICS

Associate in Science Degree | Transfer Degree Department of Mathematics and Computer Science
The Mathematics curriculum provides a broad background in science and the humanities as well as a thorough grounding in higher mathematics, particularly calculus and its applications. In addition to computational techniques, students learn the rudiments of rigorous mathematical argument and proof. Problem-solving and reasoning skills learned in the course of studying mathematics not only provide a solid base for transfer to a senior college, but also assist in a wide variety of career options and disciplines such as physical and biological sciences, computer science, education, economics, business, finance, health, human services, and social science.

[^2]
## Mathematics Curriculum (pathways)

60 Credits required for A.S. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning

- MTH $31^{11}$ Calculus and Analytic Geometry I (4 Credits)
C. Life and Physical Sciences
- SCIENCE I ${ }^{2}$ BIO 11 OR CHM 11 OR PHY 11 OR PHY 31
(4 Credits)
SUBTOTAL 14


## Flexible Core

A. World Cultures (3 Credits)
B. U.S. Experience (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- SCIENCE II ${ }^{2}$ BIO 12 OR CHM 12 OR PHY 12 OR PHY 32 (4 Credits)
RESTRICTED ELECTIVE Select one course from Area
A-E. (3 Credits)
SUBTOTAL 19


## Specialization Requirements

- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- MTH 33 Analytic Geometry and Calculus III ( 5 Credits)
- MTH 42 Linear Algebra (4 Credits)
- MTH OR CSI (Two chosen from MTH 34, 44, 46, 48, CSI 35) (7-8 Credits)
SUBTOTAL 21-22
FREE ELECTIVES
- MTH $30^{1}$ and/or FREE ELECTIVE ${ }^{3}$ (5-6 Credits)

1 Students requiring MTH 30 must use free elective credits for this purpose.
2 SCII and II must form a sequence, e.g., BIO 11 and 12.
NOTE: The program has been given a waiver to require its students to take MTH 31 to fulfill Required Area B, BIO 11 or CHM 11 or PHY 11 or PHY 31 to fulfill Required Area C, and BIO 12 or CHM 12 or PHY 12 or PHY 32 to fulfill Flexible Area E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

## MATHEMATICS (PRE-PATHWAYS)

## Associate in Science Degree | Transfer Degree Department of Mathematics and Computer Science

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

Curriculum Coordinator: Dr. Cormac O'Sullivan

## Mathematics Curriculum

60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 31 Calculus and Analytic Geometry I (4 Credits)
- SCIENCE* A two-semester sequence in a laboratory science (8 Credits)
TOTAL 21


## Required Areas of Study

- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- ENGLISH Select one course from ENG 12, 14, 15, OR 16 (3 Credits)
- MODERN LANGUAGE*** (0-8 Credits)
- HISTORY or SOCIAL SCIENCE Select from Anthropology, Economics,Geography, History, Philosophy, Political Science, Psychology, or Sociology (3 Credits) TOTAL 9-17


## Specialization Requirements

- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits)
- MTH 42 Linear Algebra (4 Credits)
- Restricted electives $\dagger$ (7-8 Credits)

TOTAL 21-22
FREE ELECTIVES

- To complete the required 60 credits, students may take up to 9 credits in any department or discipline (0-9 Credits)

NOTE: Students who are required to take MTH 30, a prerequisite for MTH 31, must use elective credits.
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
NOTE: The Mathematics Degree program articulates with the B.A. in Actuarial Science at Baruch College as well as the B.S. in Applied Mathematics and the B.S. in Mathematics Education at New York City College of Technology.
*The laboratory science sequence may be chosen from BIO 11-12, CHM 11-22, PHY 11-12 or PHY 31-32. Students should consult the college to which they intend to transfer as to choosing an appropriate sequence. Students who intend to transfer to City College in Computer Science or Engineering should take PHY 31-32.
** Students should consult the requirements of the senior college of their choice.
***Students who plan to transfer to a senior college should consult the language requirements in "The Curricula and Programs" section of this catalog.
$\dagger$ Choose from MTH 34, MTH 35, MTH 44, MTH 46, MTH 48, or CSI 35. Students who plan to transfer to City College and Hunter College should choose CSI 35 or MTH 34 .

## MATHEMATICS COURSE PLACEMENT

The zero-level courses are taken for no credit and are remedial or compensatory in nature. They are designed for students who lack the preparation necessary to enter the college-level mathematics courses.

- COLLEGE CURRICULA MATHEMATICS REQUIREMENTS (Effective Jan. 1, 2010)


## A. Mathematics Sequence by Curriculum.

After identifying your curriculum (major) below from the list on the left, see the COMPASS Cut-Off Scores for Mathematics Placement Chart to determine the first mathematics course you need to take in the mathematics sequence for your choice of curriculum.

NOTE: The old sequence MTH $03 \longrightarrow$ MTH 04 (not offered after Sp 2010 ) can replace MTH 05 anywhere below

## Curricula

Accounting Curriculum A.A.S. Degree
Animal Care and Management Certificate Program
Automotive Mechanics Certificate Program
Automotive Technology A.A.S. Degree
Biotechnology A.S. Degree
Business Administration A.S. Degree
Accounting Option
Management Option
Marketing Management Option
Computer Programming Option
Community/School Health Education A.S. Degree
Computer Information Systems Curriculum
Web Page Development Option
Computer Programming Option A.A.S. Degree
Computer Science A.S. Degree
Criminal Justice A.A. Degree
Digital Arts, Graphic Design Option A.A.S. Degree Web Design Option

Dietetics and Nutrition A.S. Degree
Education Associate A.A.S. Degree
Electronic Engineering Technology A.A.S. Degree
Energy Services Technology A.A.S. Degree
Engineering Science A.S. Degree
Environmental Technology A.A.S. Degree
Human Services A.A.S. Degree
Liberal Arts and Sciences A.A. Degree
Education Option
History Option
Human Services Option
International Studies Option
Media Studies Option
Performing Arts Option
Liberal Arts and Sciences A.S. Degree
Biology Option 139
Chemistry Option 239
Earth Systems and Environmental Science 639
Physics Option 339

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Required Mathematics Courses Sequence
\(12^{* *}\) or \(1 \rightarrow 5 \rightarrow 6 \rightarrow 30(\rightarrow 31)^{*} \#\)
\(12^{* *}\) or \(1 \rightarrow 5 \rightarrow 21\)
None
\(\rightarrow 5 \rightarrow 6 \rightarrow 13\)
\(1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31 \rightarrow 37\)
\(1 \rightarrow 5 \rightarrow 6 \rightarrow 30(\rightarrow 31 \#)\)
\(1 \rightarrow 5 \rightarrow 21\) or 23 or 26
\(12^{* *}\) or \((1 \rightarrow 5 \rightarrow 6 \rightarrow 30(\rightarrow 31))^{*}\)
\(\rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31 \rightarrow 32 \rightarrow 33 \rightarrow\) (MTH 34, 42)*
\(1 \rightarrow 5 \rightarrow 21\) or 22 or 23 or \(26 / O R(1 \rightarrow 5 \rightarrow 6 \rightarrow 30)+\)
\(12^{* *}\) or \((1 \rightarrow 5 \rightarrow 21\) or 23 )
\(\rightarrow 5 \rightarrow 23\)
\(1 \rightarrow 5 \rightarrow 21\) or 23
\(\rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31\)
\(1 \rightarrow 5 \rightarrow 6 \rightarrow 13\) or \((1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31)\)
\(\rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31 \rightarrow 32 \rightarrow 33 \rightarrow 34 \rightarrow\) (MTH 42)*
\(1 \rightarrow 5 \rightarrow 6 \rightarrow 13\) and 23
\(12^{* *}\) or \((1 \rightarrow 5 \rightarrow 21 \text { or } 23)^{*}\)
\(1 \rightarrow 5 \rightarrow 21\) or 22 or 23 or \(26 / O R(1 \rightarrow 5 \rightarrow 6 \rightarrow 30)+\)
```

```
1->5->6 -> 30->31->32
```

1->5->6 -> 30->31->32
1->5->6->30->31->32
1->5->6->30->31->32
1->5->6->30->31->32
1->5->6->30->31->32
1->5->6->30->31->32->33

```
1->5->6->30->31->32->33
```

Licensed Practical Nursing
Paralegal Certificate Program
Marketing Management Curriculum A.A.S. Degree
Mathematics A.S. Degree

Media Technology A.A.S. Degree
Medical Office Assistant Curriculum A.A.S. Degree
Medical Laboratory Technology A.A.S. Degree
Nuclear Medicine Technology A.A.S. Degree
Nursing A.A.S. Degree
Ornamental Horticulture A.A.S. Degree
General Horticulture Option 234
Interior Landscaping Option 334
Office Administration and Technology A.A.S. Degree
Paralegal Studies A.A.S. Degree
Pharmaceutical Manufacturing Technology A.A.S. Degree
Pre-Clinical Nursing Program
Radiologic Technology A.A.S. Degree
Science for Forensics A.S. Degree
Therapeutic Recreation A.S. Degree
Telecommunications Technology A.A.S. Degree

See Nursing Department
None
$12^{* *}$ or $\left(1 \rightarrow 5 \rightarrow 6 \rightarrow 30(\rightarrow 31)^{*}\right.$
$1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31 \rightarrow 32 \rightarrow 33$ and MTH 42, two courses from \{CSI 35, MTH 34, 35, 44, 46, 48\}
$12^{* *}$ or $(1 \rightarrow 5 \rightarrow 21)^{*}$
$12^{* *}$ or $(1 \rightarrow 5 \rightarrow 6 \rightarrow 30$ )*
$1 \rightarrow 5 \rightarrow 6 \rightarrow 13 \rightarrow 14$
$\rightarrow 5 \rightarrow 6 \rightarrow 30$
See Nursing Department
None $(\rightarrow 5 \rightarrow 6$ )

```
\(12^{* *}\) or \((1 \rightarrow 5 \rightarrow 6 \rightarrow 30)^{*}\)
\(12^{* *}\) or \((1 \rightarrow 5 \rightarrow 21\) or 23 )
\(1 \rightarrow 5 \rightarrow 6 \rightarrow 13 \rightarrow 14\) or \((1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31)^{*}\)
```

See Nursing Department
$1 \rightarrow 5 \rightarrow 6 \rightarrow 13 / O R(1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31)^{*}$
$1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31 \rightarrow 32$
$1 \rightarrow 5 \rightarrow 21$ or 22 or 23 or 26
$1 \rightarrow 5 \rightarrow 6 \rightarrow 30 \rightarrow 31$

* Students who may later transfer to a four-year college should consider taking these courses.
\# Recommended course but not a required course by curriculum.
$\dagger$ Student who may transfer to a four-year college other than CUNY colleges should consider taking these courses.
**For students entering with COMPASS proficiency ( 35 or more on M1 and 40 or more on M2). Students entering without COMPASS proficiency must take MTH 01 and/or MTH 05 before taking MTH 12 (see COMPASS cut-off scores for Mathematics Placement).


## (TO PLACE OUT OF A COURSE)

| Place out of: | $\begin{array}{c}\text { Arithmetic (MI) } \\ \text { (pre-algebra) }\end{array}$ |  | Algebra (M2) | College Algebra (M3) | Ceometry (S4) |
| :--- | :--- | :--- | :--- | :--- | :--- | \(\left.\begin{array}{c}Trigonometry <br>

(S5)\end{array}\right]\)
*For nursing curriculum codes 003 and 046 and 047 : If $M 1 \geq 35$ and $M 2 \geq 40$, or if the student is CUNY Math Exempt (Q/R/S/T/B), student is eligible to apply for PHM 10 at Nursing Department. Otherwise, students should take the appropriate remedial course.

## CMAT CUT-OFF SCORES FOR MATHEMATICS PLACEMENT

| Place out of: | Part I <br> Arithmetic <br> (20) | Part II <br> Elementary <br> Algebra (20) | The Sum of <br> Parts I and II <br> (40) | Part III <br> Intermediate <br> Algebra (20) | Part IV <br> Trigonometry <br> (8) | Part V <br> Precalculus (12) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| MTH 1 | $\geq 12$ |  |  |  |  |  |
| MTH 5 | - | - | $\geq 25$ | $\geq 13$ |  |  |
| MTH 6 | - | - | $\geq 25$ | $\geq 13$ | $\geq 4$ |  |
| MTH 13 or MTH 30 | - | - | $\geq 25$ | $\geq 13$ | $\geq 4$ | $\geq 8$ |

## HIGH SCHOOL EQUIVALENCY (REGENTS SCORE OF 75 OR BETTER)

| MTH 5 | Seq Math II (SMQII): MQ3 and MQ4 [10th grade math] or Math A |
| :--- | :--- |
| MTH 6 | Seq Math III (SMQ III): MQ5 and MQ6, or Math B |

**NOTE: If students have taken advanced algebra in high school and wish to take MTH 31, then they may be exempt from MTH 30 by taking an exemption examination administered by the Department of Mathematics and Computer Science.
The new New York State Regents exams (2010 and after) focus on Integrated Algebra, Geometry, and Algebra 2 and Trigonometry. For students entering in Fall 2011 or Spring 2012, CUNY Math Proficiency is measured by passing one of the three Regents exams with a score of 75, and completion of the three-year Regents course sequence Integrated Algebra/Geometry/Algebra 2 and Trigonometry. For students entering in Fall 2012 or after, CUNY Math Proficiency can be demonstrated by achieving a score of 80 or higher on any of the three Regents math courses, and successfully completing Algebra 2 and Trigonometry or higher.
A student may place out of MTH 06 by passing all three Regents exams with a score of 75 or above.
Note that in order to transfer to a CUNY senior college, students must have achieved CUNY Math Proficiency either by achieving a $35 / 40$ on their entering COMPASS placement test, or having demonstrated proficiency by means of Regents or other exemptions, or by having passed a credit-bearing math course (three or more credits) with a grade of C or higher

## MATHEMATICS COURSE SEQUENCES:

## Liberal Arts (non-science)

Mathematics, Science, Technology and Business (transfer programs) Curricula Requiring MTH 12 (non-science, non-transfer)

Entering with COMPASS proficiency (M1 $\geq 35$ and M2 $\geq 40$ ): MTH 21 or MTH 23 Entering without COMPASS proficiency: MTH 1 $\rightarrow$ MTH 5 $\rightarrow$ MTH 21 or MTH 23

Entering with COMPASS proficiency (M1 $\geq 35$ and M2 $\geq 40$ ): MTH 06 $\rightarrow$ MTH 30 (or MTH 13 Entering without COMPASS proficiency: MTH $1 \rightarrow$ MTH $5 \rightarrow$ MTH 6 $\rightarrow$ MTH 30 (or MTH 13) Entering with COMPASS proficiency ( $\mathrm{M} 1 \geq 35$ and $\mathrm{M} 2 \geq 40$ ): MTH 12 Entering without COMPASS proficiency: MTH $1 \rightarrow$ MTH $5 \rightarrow$ MTH 12 (Note: MTH 12 is not recommended for transfer to a four year college.)

## Exemption Examinations

Qualified students may take exemption examinations for all courses offered by the Mathematics Department upon application to the department. In general, a grade of $\mathrm{B}+$ or better is required for exemption with credit. A passing grade less than $\mathrm{B}+$, but C or better, will qualify for exemption without credit.

## COURSES

## Computer Science

CSI $30 \quad 3$ rec 3 cr

## Discrete Mathematics I

Introduction to mathematical methods in computer science. Topics include basic concepts of mathematical logic, set theory, elementary number theory, counting methods and probability, and informal proof.
Prerequisite: MTH 06.
Corequisites: ENG 02 and RDL 02 if required.
Flexible Core - Scientific World

## CSI $31 \quad 2$ lect 2 lab 3 cr

## Introduction to Computer Programming I

Introduction to computer systems and computer logic; techniques of structured programming; data representation; basic algorithm design and implementation in a modern structured language; computer solutions to problems taken from engineering, science, physics, mathematics, business and other applications.
Prerequisites: CSI 30, and MTH 30 if required; and ENG 02 and RDL 02 if required.
Corequisite: MTH 31

## CSI 32

2 rec $2 \operatorname{lab} 3 \mathrm{cr}$

## Introduction to Computer Programming II

Continuation of CSI 31. Introduction to object-oriented programming including encapsulation, polymorphism, and inheritance; class templates; recursion and recursive analysis; analysis of algorithms; program style; documentation of programs; debugging; development of major projects. Prerequisites: CSI 31 and ENG 02 and RDL 02 if required.

## CSI $33 \quad 2$ rec 2 lab 3 cr

## Data Structures

Introduction to data structures and algorithms for developing solutions to various computational problems for sorting and searching large collections of data. Topics include container classes, pointers and dynamic arrays, linked lists, stacks, queues, and trees.
Prerequisites: CSI 32, and ENG 02 and RDL 02 if required.

## CSI 35 <br> 2 rec 2 lab 3 cr

## Discrete Mathematics II

Introduction to the theory and application of abstract mathematical structures, the design and analysis of algorithms modeling mathematics and other disciplines. Topics selected from relations, partial orderings, graphs and trees, mathematical reasoning, and methods of proof. Prerequisites: CSI 30, and MTH 31; ENG 02 and RDL 02 if required.

## Mathematics

## MTH $1 \quad 4$ rec 0 cr

## Fundamental Concepts and Skills in Arithmetic and Algebra

Topics selected from basic operations in arithmetic, geometry, verbal problems whose solutions involve arithmetic processes, generalizations of the principles of arithmetic leading to the fundamental concepts of algebra. Elementary treatment of signed numbers and linear equations. Liberal Arts (non-science) and Science, Technology and Business (transfer programs) should refer to the Mathematics Placement charts above for appropriate course.
Corequisite: RDL 01 if required.
MTH $5 \quad 6$ rec 0 cr

## Elementary Algebra

Signed numbers, evaluation of algebraic expressions, linear equations and their graphs, polynomials, factoring, radical expressions, quadratic equations.
Prerequisite: Math 01 or equivalent and RDL 01 if required. Refer to COLLEGE CURRICULA MATHEMATICS REQUIREMENTS and COMPASS CUT-OFF SCORES FOR MATHEMATICS PLACEMENT. Corequisite: RDL 02 if required.

MTH 6
6 rec 0 cr

## Intermediate Algebra and Trigonometry

Topics selected from real and complex numbers, function concept, coordinate geometry, linear and quadratic equations, systems of equations, geometry, elements of trigonometry.
Prerequisite: MTH 05 or two years of high school mathematics consisting of algebra and geometry or equivalent, and RDL 02 if required.

## MTH $10 \quad 4$ rec 4 cr

## Technical Mathematics I

(For Telecommunications Technology Verizon students only.) First course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include trigonometry functions, vectors, units of measurement and approximate numbers, fundamental concepts of algebra, functions and graphs, systems of linear equations, determinants, factoring and fractions, quadratics, variation and geometry. A scientific calculator is used throughout the course.
Prerequisite: MTH 06 or equivalent and ENG 02 and RDL 02 if required.

## MTH 11

## 4 rec 4 cr

## Technical Mathematics II

(For Telecommunications Technology Verizon students only.) Second course in a two-semester sequence of intermediate algebra and trigonometry with technical applications. Topics include trigonometric functions of any angle, oblique triangles, exponents and radicals, graphs of exponential and logarithmic functions, basic operations with complex numbers, inequalities, introduction to statistics. A scientific calculator is used throughout the course. Prerequisites: MTH 10 or equivalent and ENG 02 and RDL 02 if required.

Any course numbered 12 through 15 is, with some modification, recommended only for those students enrolled in career (A.A.S.) programs.

## MTH 12 <br> 3 rec 3 cr

## Introduction to Mathematical Thought

Topics selected from probability, statistics, logic, set theory, geometry, matrices, number system structures. (Not recommended for transfer curricula, and not accepted for credit in the Liberal Arts curriculum.)
Prerequisites: CUNY Math Proficiency as measured by the COMPASS exam and ENG 01 and RDL 02 if required. Students who have not attained CUNY Math Proficiency should refer to COLLEGE CURRICULA MATHEMATICS REQUIREMENTS and COMPASS CUTOFF SCORES FOR MATHEMATICS PLACEMENT.

ENG 02 and RDL 02, if required, are prerequisites for all MTH courses numbered 13 and higher. MTH 13, 14, and 15 are recommended for students in career technology curricula such as Automotive Technology, Electronic Engineering Technology, Medical Laboratory Technology and Telecommunications Technology curricula.

## MTH $13 \quad 4 \mathrm{rec} 3 \mathrm{cr}$

## Trigonometry and College Algebra

Vectors, complex numbers, functions and graphs, exponential, logarithmic and trigonometric functions, analytic trigonometry, systems of linear equations.
Prerequisites: MTH 06 or equivalent and ENG 02 and RDL 02 if required.
MTH 14
3 rec 3 cr
College Algebra and Introduction to Calculus
Analytic geometry, the derivative and its applications, differentiation of transcendental functions.
Prerequisites: MTH 13 or equivalent and ENG 02 and RDL 02 if required.

## MTH $15 \quad 3$ rec 3 cr Calculus

The integral and its applications, methods of integration, elementary differential equations, expansion of functions in series. Prerequisites: MTH 14 or equivalent and ENG 02 and RDL 02 if required. MTH 21, 22, 23 and 26 are non-sequential courses primarily for Liberal Arts students enrolled in non-science transfer programs. MTH 21, 22 and 26 are recommended for Liberal Arts students and as electives for students in other curricula. MTH 23 is recommended for students in such social sciences as economics, political science, psychology, human services and sociology.

## MTH 21

3 rec 3 cr

## Survey of Mathematics I

Designed for non-science liberal arts students. Emphasis on key concepts and structure of mathematics. Topics selected from decimal notation, computation in other bases, groups, sets, logic, elementary number theory, development of real number system, analytic geometry, linear programming, networks, complex numbers.
Prerequisites: MTH 05 or equivalent and ENG 02 and RDL 02 if required. Required Core - Mathematical and Quantitative Reasoning

MTH $22 \quad 3$ rec 3 cr

## Survey of Mathematics II

Topics selected from geometry, algebra, graphs, functions, game theory, mathematical induction, permutations, combinations, probability, logic; Euclidean, non-Euclidean, projective, finite, and coordinate geometries; groups, matrices. Prerequisites: MTH 05 or equivalent and ENG 02 and RDL 02 if required.

MTH $23 \quad 3$ rec 3 cr

## Probability and Statistics

Organization and presentation of data, measures of central tendency and variation, correlation and regression, elementary probability, the binomial distribution.
Prerequisites: MTH 05 or equivalent and ENG 02 and RDL 02 if required. Required Core - Mathematical and Quantitative Reasoning

MTH $26 \quad 2$ rec 2 lab 3 cr

## Mathematics in the Modern World

Topics selected from BASIC computer language; mathematical simulation of problems from diverse fields including water pollution, population studies, political polls, and artificial intelligence; mathematical algorithms and interpretation of graphs.
Prerequisites: MTH 05 or equivalent and ENG 02 and RDL 02 if required.
MTH 30 through 35 are designed for students majoring in mathematics, physics, biology, chemistry, engineering science, computer science, and are recommended for those in other curricula with advanced preparation.

## MTH 30

4 rec 4 cr

## Pre-Calculus Mathematics

The relation between a function and its graph, composition and inversion of functions, polynomial, rational, exponential and logarithmic functions, trigonometry.
Prerequisites: MTH 06 or equivalent and ENG 02 and RDL 02 if required. Required Core - Mathematical and Quantitative Reasoning

## MTH 31

6 rec 4 cr

## Analytic Geometry and Calculus I

Limits, rates of change, differentiation and anti-differentiation of algebraic functions, applications, integrals, curve sketching. For Mathematics, Computer Science, and Engineering Science majors, or for Liberal Arts and Sciences students planning to major in one of the physical sciences.
Prerequisites: MTH 30 or equivalent and ENG 02 and RDL 02 if required. Required Core - Mathematical and Quantitative Reasoning

## MTH $32 \quad 6$ rec 5 cr

## Analytic Geometry and Calculus II

Differentiation and integration of transcendental functions, hyperbolic functions, applications of the definite integral; parametric equations, mean value theorems, polar coordinates, plane analytic geometry.
Prerequisites: MTH 31 or equivalent and ENG 02 and RDL 02 if required.

## MTH $33 \quad 5$ rec 5 cr

## Analytic Geometry and Calculus III

Vectors, applications of vectors to analytic geometry and calculus, partial differentiation, multiple integrals, volumes and surface area, infinite series, applications.
Prerequisites: MTH 32 or equivalent and ENG 02 and RDL 02 if required.

## MTH 34 <br> 4 rec 4 cr

## Differential Equations and Selected Topics in Advanced Calculus

Methods of solving ordinary differential equations; selected topics from among the following: hyperbolic functions, power series, Fourier series, gamma functions, Bessel functions, problems of motion, electric circuits, damped and forced vibrations, Laplace transform.
Prerequisites: MTH 33 or equivalent and ENG 02 and RDL 02 if required.
MTH $35 \quad 4$ rec 4 cr

## Selected Topics in Advanced Calculus and Linear Algebra

Matrices, introduction to linear algebra and vector analysis, integral theorems of Gauss, Green and Stokes; applications. Prerequisites: MTH 33 or equivalent and ENG 02 and RDL 02 if required.

MTH 42
4 rec 4 cr

## Linear Algebra

Vector spaces, basis and dimension, matrices, linear transformations, determinants, solution of systems of linear equations, eigenvalues and eigenvectors.
Prerequisites: MTH 32 or equivalent and ENG 02 and RDL 02 if required.

MTH $44 \quad 4$ rec 4 cr

## Vector Analysis

Differential geometry of curves, line integrals, surface integrals, change of variables, Green's theorem, Stokes' theorem, Gauss's Theorem.
Prerequisites: MTH 33 or equivalent and ENG 02 and RDL 02 if required.
MTH $46 \quad 4$ rec 4 cr

## Abstract Algebra

Properties of integers, permutations, groups, alternating groups, groups of symmetries, quotient groups, sets, mappings, isomorphisms, homomorphisms, rings, fields, polynomials.
Prerequisites: MTH 42 or equivalent and ENG 02 and RDL 02 if required.
MTH $48 \quad 4$ rec 4 cr

## Advanced Calculus

Advanced treatment of the real number system, properties of continuous functions, derivatives and differentials, rigorous work with limits, the definite integral, uniform continuity, uniform convergence, infinite sequences, functions defined by series. Prerequisites: MTH 33 or equivalent and ENG 02 and RDL 02 if required.

## MISSION STATEMENT

The Department of Modern Languages (MLD) has existed since February 1959 when classes began at the former site of the Bronx High School of Science. In the fall of 1973 all operations of the College were relocated to its present location in University Heights on the second floor of Colston Hall.

## The goals of the Department of Modern Languages are:

- To instill humanistic values and enhance career options.
- To introduce, develop, and reinforce language skills through classroom work, the language laboratory, and the tutoring resources of the department.
- To focus students' learning experience on the cultural aspects of the courses offered in the department, and thus foster not only self-awareness but also appreciation of one's own culture and of other cultures.
- To encourage students to be active in the college community, the larger community, and as global citizens, through participation in clubs, volunteer activities, and study abroad.

Office: Colston Hall [CO], Room 201
Phone: 718.289.5633
Website: http://www.bcc.cuny.edu/Modern-Languages/
Associate Professor and Chairperson: Dr. Laurel Cummins
Professors: G. Guarnieri
Associate Professors: A. Lamazares, J. López-Marrón, C. Rivera, A. Bralove-Ramirez

Assistant Professors: E. Borelli
Lecturers: D. Flores, H. Harrison, A. Resto
Approximately 25 adjuncts per semester

## DEGREE PROGRAM

Liberal Arts and Sciences, A.A., Spanish Option

## COURSES

Arabic (ARB)
French (FRN)
Italian (ITL)
Language (LAN)
Portuguese (POR)
Spanish (SPN)
Dr. Laurel Cummins, French Language Coordinator
Dr. Giulia Guarnieri, Italian Language Coordinator
Dr. Alexander Lamazares, Portuguese Language Coordinator
Diana Flores, Spanish Language Coordinator

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree
Department of Modern Languages
Spanish Option
The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded, individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The Spanish Option offers a greater degree of specialization.
Curriculum Coordinator: Professor Diana Flores
Liberal Arts and Sciences Curriculum (pathways)
60 Credits required for A.A. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences (3-4 Credits) SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues ( 6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits) SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR MUS 11 Introduction to Music OR MUS 12 Introduction to World Music (0-3 Credits)
- COMM 11 Introduction to Communication OR Select ONE from COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH ${ }^{2}$ English Elective (0-3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World OR Select ONE from GEO, PHL (0-3 Credits)
- MODERN LANGUAGES Select from FRN, ITL or POR at the appropriate level ( $0-3$ Credits)
- SOCIAL SCIENCES Select one course from ANT, CRJ, ECO, HSC, POL, PSY, SOC (0-3 Credits)
SUBTOTAL 12


## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- LAB ${ }^{1}$ Lab Science (0-1 Credit)

SUBTOTAL 1-3

## Specialization Requirements ${ }^{3}$

(Choose four based on initial placement in Spanish)

- SPN 111 Beginning Spanish I (3 Credits)
- SPN 112 Beginning Spanish II (3 Credits)
- SPN 113 Intermediate Spanish Language and Culture (3 Credits)
- Select one from the following ( 3 Credits): SPN 20 Advanced Spanish Composition and Creative Writing SPN 121 Spanish Language and Culture SPN 122 Latin American Language and Culture SPN 130 Literature and Culture of Puerto Rico OR SPN 131 Literature and Culture of the Spanish Caribbean SUBTOTAL: 12
FREE ELECTIVES (3-10 Credits)
1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.

2 Choose from any ENG course above ENG 16 with the exception of ENG 223.
3 A student who places into SPN 111 will begin the Spanish Specialization sequence with 111 and complete four courses. A student who places out of SPN 111 will begin the Spanish Specialization sequence with SPN 112 and complete four courses. A student who places out of SPN 111 and SPN 112 will begin the Spanish Specialization sequence with SPN 113 and complete four courses. A student who places out of SPN 111, 112, and 113 will begin the Spanish Specialization sequence with SPN 20 and complete four courses. In some cases, SPN 24 or SPN 125 may substitute for SPN 130/131. No credit will be granted toward the Spanish Option for a course taken below a student's proficiency level.
The program articulates with Lehman College and SUNY Empire State College. See the Transfer Planning web site for more information.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree Department of Modern Languages
Spanish Option
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able
to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Curriculum Coordinator: Professor Diana Flores

## Liberal Arts and Sciences Curriculum

60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Two lab sciences chosen from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)
TOTAL 24-25


## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- ENGLISH*** (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Philosophy, Political Sciences, Psychology, and Sociology (select from different disciplines) (6 Credits) TOTAL 21


## Specialization Requirements

- SPN 20 Advanced Spanish Composition and Creative Writing (3 Credits)
- SPN 21 Spanish Language and Culture (4 Credits)
- SPN 22 Latin-American Language and Culture (4 Credits)
- SPN 30 Literature and Culture of Puerto Rico OR SPN 31 Literature and Culture of the Spanish Caribbean (4 Credits) TOTAL 15

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* Students may substitute MTH 30 or 31 if they reduce elective credits.
** Excluding ENG 23, Technical Writing.
An articulation agreement with Lehman College allows BCC graduates to earn a B.A. in Spanish. A copy of this agreement is available on line at the Transfer Planning web site.


## COURSES

## Placement Information

Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college language requirement.
The Department of Modern Languages does not grant exemption or college credit for the Regents examination, regardless of score.
CLEP (College Level Examination Program): The BCC Department of Modern Languages will follow the CUNY wide Council on Foreign Language Study policy of not granting college credit or exempting the students from the instituted language requirement.
AP (Advanced Placement): The BCC Department of Modern Languages will grant 3 credits-equivalent to the SPN 20 course to those students who receive a score of 4 or 5 on the AP Language Exam, and it will exempt from the foreign language requirements those students who receive a score of 3. The Department of Modern Languages will grant 6 creditsequivalent to the SPN 23 and 24 courses to those students who receive a score of 4 or 5 on the AP Literature Exam.

## Arabic

## ARB $111 \quad 3$ rec, 1 conf $/$ rec 3 cr

## Beginning Arabic I

This introductory language course is designed for beginners of Arabic. This course is not for native or heritage speakers of Arabic. Students will develop their Arabic listening, speaking, reading, and writing skills. Introducing Arabic letters and basic vocabulary of daily communication will be the major focus at this stage. The course also focuses on the cultural aspects of the Arab world in context with language learning. Students will be given opportunities to explore the cultural side of the Arab world through different activities, presentations, and contacts with native Arabic speakers and Arabic organizations in the United States.

## Flexible Core - World Cultures and Global Issues

ARB 1123 rec, 1 conf/rec 3 cr

## Beginning Arabic II

This course is continuation of Arabic 111. At this level, students will continue building the skills they acquired as beginners and will move to a higher level where they can listen, read, comprehend, and speak about various topics of personal interest, such as culture, religion, work, studies, travel, daily activities, and economics. In addition to the textbook this course also relies on the use of authentic materials, such as newspapers, Arabic media products, guests from Arabic speaking countries, Arabic menus, trips, and extra-curricular activities in Arabic settings (North African and Middle Eastern restaurants, Arabic cultural centers, etc.).
Prerequisites: ARB 11 or 111 or Placement
Flexible Core - World Cultures and Global Issues

## French

## FRN $11 \quad 4$ rec 4 cr

## Beginning French I

A conversation course that will enable the student to understand, read, write and speak simple everyday French. Audio laboratory practice.

## FRN $12 \quad 4$ rec 4 cr

Beginning French II
Continuation of FRN 11
Prerequisite: FRN 11 or placement test.

## FRN 13 <br> 4 rec 4 cr

## Intermediate French

Continuation of FRN 12.
Prerequisite: FRN 12 or placement test.

## FRN $21 \quad 4$ rec 4 cr <br> Language and Civilization of France

Review of grammar, conversation, oral reports, composition and analysis based on reading and interpretation of literacy masterpieces

## FRN $111 \quad 3$ rec, 1 conf $/$ rec 3 cr

## Beginning French

Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on French and Francophone cultural themes. Use of instructional technology.

## Flexible Core - World Cultures and Global Issues

FRN 1123 rec, 1 conf $/$ rec 3 cr
Beginning French II
Continuation of FRN 11. Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on French and Francophone cultural themes. Use of instructional technology.
Prerequisite: FRN 11 or FRN 111 or placement test
Flexible Core - World Cultures and Global Issues
FRN 122
3 rec 3 cr

## Readings in Modern French

This course offers an introduction to the study of literary texts in French. Specific texts and topics may vary by semester. Course conducted in French.
Co-Requisite: FRN 13 or Placement
Flexible Core - Creative Expression (Formerly FRN 22)

## Italian

## ITL 11

4 rec 4 cr

## Beginning Italian I

Pronunciation; language structure; conversation; reading of simple texts; dictation. Audio laboratory practice.

## ITL 12 <br> 4 rec 4 cr <br> Beginning Italian II

Continuation of ITL 11. Language structure; reading of elementary literary texts; dictation.
Prerequisite: ITL 11 or placement test.

## ITL 13 <br> 4 rec 4 cr

## Intermediate Italian

Advanced language structures; conversation reading; translation and discussion of modern texts; composition. Prerequisite: ITL 12 or placement test.

## ITL 21 <br> 4 rec 4 cr <br> Language and Civilization of Italy

Review of grammar, conversation, oral reports, composition and analysis based on reading and interpretation of literacy masterpieces.

## ITL $23 \quad 3$ rec 3 cr

Dante's Divine Comedy
The course will introduce Dante's Divine Comedy and will cover a selection of canti from Inferno, Purgatorio and Paradiso. Through readings, oral reports, and written assignments students will explore historical, literary, cultural and political themes which will provide a backdrop of the Commedia. Course will be conducted in English.
Corequisites: ENG 02 and RDL 02 if required.
Flexible Core - Creative Expression
ITL 111
3 rec, 1 conf $/$ rec 3 cr

## Beginning Italian I

Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on Italian cultural themes. Use of instructional technology.
Flexible Core - World Cultures and Global Issues
ITL 112
3 rec, 1 conf $/$ rec 3 cr

## Beginning Italian II

Continuation of Italian 11. Continue to develop listening, speaking, reading and writing language skills. Introduction to new vocabulary and grammatical structures. Use of textual materials and multimedia on Italian cultural themes.
Prerequisite: ITL 11 or ITL 111 or placement test
Flexible Core - World Cultures and Global Issues
ITL 122
3 rec 3 cr

## Readings in Modern Italian

The course will offer a broad introduction to literary, theatrical and poetic works that address social, political, and cultural topics of modern and contemporary Italy. Course taught in Italian.
Prerequisite: ITL 12 or placement test or permission of the instructor Flexible Core - Creative Expression

## Language

LAN $15 \quad 4 \mathrm{rec} 3 \mathrm{cr}$

## Comparative Grammar <br> for Native Spanish Speakers

A course for native speakers of Spanish that covers similarities and differences between Spanish and English syntax. The course strengthens students' command of English through comparison to Spanish structures.
Prerequisite: Registration only by departmental approval or placement.

## Portuguese

## POR $11 \quad 4$ rec 4 cr

## Beginning Portuguese I

Pronunciation; language structure; conversation and reading of simple texts; dictation. Audio
laboratory practice.
POR $12 \quad 4$ rec 4 cr

## Beginning Portuguese I

Pronunciation; language structure; conversation and reading of simple texts; dictation. Audio laboratory practice.
Prerequisite: POR 11 or placement test.

## POR 111 <br> 3 rec, 1 conf $/$ rec 3 cr

## Beginning Portuguese I

Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on Portuguese and Lusophone cultural themes. Use of instructional technology.
Flexible Core - World Cultures and Global Issues
POR 1123 rec, 1 conf/rec 3 cr

## Beginning Portuguese II

Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on Portuguese and Lusophone cultural themes. Use of instructional technology.
Prerequisite: POR 11 or POR 111 or placement test
Flexible Core - World Cultures and Global Issues

## Spanish

SPN 10
4 rec 4 cr

## Spanish for Heritage Speakers

An intensive introductory course with emphasis on reading and writing for students of Hispanic heritage born and/ or educated in the United States who demonstrate aural comprehension. The course will consist of Spanish grammar, selected readings, and essay writing.
Prerequisite: Placement based on department examination result.

## SPN 11

4 rec 4 cr

## Beginning Spanish I

Pronunciation; language structure; conversation and reading of simple texts; dictation. Audio laboratory practice.

## SPN $12 \quad 4$ rec 4 cr

## Beginning Spanish II

Continuation of SPN 11. Language structure; conversation; reading of elementary literary texts; dictation.
Prerequisite: SPN 11 or placement test.

## SPN 13 <br> 4 rec 4 cr

## Intermediate Spanish

Advanced language structures; conversation; reading, translation and discussion of modern texts; composition.
Prerequisite: SPN 12 or placement test.
SPN $14 \quad 4 \mathrm{rec} 3 \mathrm{cr}$
Practical Writing Skills
for Spanish-Speaking Students
Readings in Spanish on current events or model personalities used as a foundation for the development of reading, writing and critical thinking skills. Students learn techniques to identify the thesis of a written work, to distinguish the thesis from sustaining facts, and to write a summary. Students also apply the learning skills and structures to other genres of writing, such as the creation of a curriculum vitae, reviewing theatrical works, doing expository writing, and business letters.
Prerequisite: LAN 15 in the ESL Sequence.

## SPN $15 \quad 4$ rec 4 cr

Spanish for Urban Conversation and Careers I
For non-Spanish-speaking students. Intensive conversation course emphasizing practical and realistic situations including business, community and civil service areas. Use of audio lab required.

SPN 16

$$
4 \mathrm{rec} 4 \mathrm{cr}
$$

## Spanish for Urban Conversation and Careers II

Continuation of SPN 15. Conversation based on social and work situations. Use of audio lab required.
Prerequisite: SPN 15 or placement test.

## SPN 17 <br> 4 rec 4 cr

## Advanced Spanish Conversation

Continuation of SPN 16. Students participate in dialogues and conversations related to contemporary problems and everyday situations to improve conversational skill. Course conducted in Spanish.
Prerequisite: SPN 13 or SPN 16 or placement test.

## SPN 18 <br> 4 rec 4 cr

## Elementary Spanish for Nurses and Hospital Personnel I

For non-Spanish-speaking students. Basic Spanish pronunciation, intonation and sentence structure; relevant medical terminology; idiomatic and colloquial expressions. Model dialogues on taking medical history; routine medical examination; diet and nutrition; nursing care; treatment instruction; pediatrics; cardiology; and others. Additional vocabulary according to the student's interests and field of medical specialization.

## SPN $19 \quad 4$ rec 4 cr <br> Elementary Spanish for Nurses and Hospital Personnel II

Review and continuation at a higher level of pronunciation, speaking and understanding. Additional vocabulary in new medical situations such as admissions, X-rays, and pregnancy. Prerequisite: SPN 18 or placement test.

SPN $20 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Advanced Spanish Composition and Creative Writing

Style illustrations with literary texts, text analysis, reading for comprehension, paragraph construction, imitation of models, expository writing, translation of literary texts, thematic discussions, stylistic discussions, written reports on research. Prerequisites: SPN 13 or 17 or placement.

## SPN $21 \quad 4$ rec 4 cr

## Spanish Language and Culture

A literary and historical study of Spanish culture; develops basic language skills. Class discussions on social, historical and artistic values of Spain, past and present. Course conducted in Spanish.
Prerequisite: SPN 13 or 17 or placement test.

SPN 22
4 rec 4 cr

## Latin-American Language and Culture

Readings in Latin-American literature. Representative texts on Latin-American and Caribbean culture, civilization, history and tradition. Conversation, literary analysis and interpretation. Course conducted in Spanish.
Prerequisite: SPN 13 or 17 or placement test.

## SPN $23 \quad 3$ rec 3 cr

## 19th Century Spanish Literature: Romanticism and Realism

Nineteenth century Spanish literature. Literary analysis of selections from representative Spanish authors.

SPN 24
3 rec 3 cr
Don Quijote and Other Cervantes Masterpieces
Reading, discussion, analysis and written reports on selections from the original text of Don Quijote. Selections from Cervantes' Novelas Ejemplares. Course conducted in Spanish.
Prerequisite: SPN 13 or 17 or placement test.

## SPN 25

3 rec 3 cr

## Generation of 1898

Literary analysis of selections from the principal writers of the movement. Reading, discussion, oral and written reports. Course conducted in Spanish.
Prerequisite: SPN 13 or 17 or placement test.

## SPN 263 rec 3 cr

## Spanish for Business Communication

The purpose of this course is to give advanced-level students a foundation in Spanish business vocabulary, economic and cultural aspects of business in Spanish-speaking countries, and situational practice that will help prepare them for success in today's Spanish-speaking business world. Course conducted in Spanish. Prerequisites: Placement based on department examination result.

SPN 28
3 rec 3cr

## Interpreting and Translation Skills for Legal Personnel

Basic skills required for bilingual personnel serving the Hispanic community in the metropolitan area. Advanced Spanish course which emphasizes translating and interpreting for legal personnel. Students should be bilingual, fluent in both English and Spanish.
Prerequisites: RDL 02 or ENG 02 if required, and SPN 13 or placement.

## SPN $30 \quad 4$ rec 4 cr

## Literature and Culture of Puerto Rico

Survey of Puerto Rican history, culture and literature. Reading, discussion, oral and written reports based on representative Puerto Rican authors. Course conducted in Spanish.
Prerequisite: SPN 13 or 17 or placement test.

## SPN $31 \quad 4$ rec 4 cr

## Literature and Culture of the Spanish Caribbean

Study of contemporary literature and culture in Cuba, the Dominican Republic, and Puerto Rico. Reading, discussion, oral and written reports based on representative Cuban, Dominican, and Puerto Rican authors. Course conducted in Spanish.
Prerequisite: SPN 13 or 17 or placement test.
SPN $111 \quad 3 \mathrm{rec}, 1$ conf $/ \mathrm{rec} 3 \mathrm{cr}$

## Beginning Spanish I

Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on Hispanic cultural themes. Use of instructional technology.
Flexible Core - World Cultures and Global Issues
SPN 1123 rec, 1 conf/rec 3 cr

## Beginning Spanish II

Continuation of Spanish 11. Development in listening, speaking, reading and writing skills. Introduction to basic vocabulary and grammatical structures. Use of textual materials and multimedia on Hispanic cultural themes. Use of instructional technology.
Prerequisite: SPN 11 or SPN 111 or placement test
Flexible Core - World Cultures and Global Issues

## SPN $113 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Intermediate Spanish Language and Culture

Intermediate language structures, communicative work in listening, speaking, reading and writing, work with authentic literary texts and Hispanic cultural material. Use of instructional technology.
Prerequisite: SPN 10 or SPN 12 or SPN 112 or placement test Flexible Core - World Cultures and Global Issues

## SPN 121 <br> 3 rec 3 cr

## Spanish Language and Culture

A study of the development of the civilization and culture of Spain. Through the critical analysis of texts, discussions, oral reports, and written essays, a higher level of sophistication in speaking, reading, and writing in Spanish will be achieved. This course will be conducted in Spanish.
Prerequisite: SPN 13 or SPN 17 or placement test
Flexible Core - World Cultures and Global Issues (Formerly SPN 21)

## SPN 122 <br> 3 rec 3 cr

## Latin American Language and Culture

Readings in Latin American literature. Representative texts on Latin American and Caribbean culture, civilization, history and tradition. Conversation, literary analysis and interpretation. Course conducted in Spanish.
Prerequisite: SPN 13 or SPN 17 or placement test
Flexible Core - World Cultures and Global Issues (Formerly SPN 22)

SPN $125 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Generation of 1898

Literary analysis of selections from the principal writers of the movement. Reading, discussion, oral and written reports. Course conducted in Spanish.
SPN 13 or SPN 17 or Placement
Flexible Core - Creative Expression
SPN $130 \quad 3$ rec 3 cr

## Literature and Culture of Puerto Rico

This course aims to give the students a comprehensive view of the historical and cultural aspects of the Puerto Rican people, as reflected in representative literary works from 1493 to the present.
Prerequisite: SPN 13 or SPN 17 or placement test
Flexible Core - Creative Expression
SPN $131 \quad 3$ rec 3 cr

## Literature and Culture of the Spanish Caribbean

This course aims to give the student a comprehensive view of the historical and cultural aspects of the Hispanic Caribbean people, as reflected in representative literary works from 1800 to the present.
Prerequisite: SPN 13 or SPN 17 or placement test Flexible Core-Creative Expression
Prerequisite: SPN 13 or 17 or placement test.

## MISSION STATEMENT

The faculty acknowledges, supports and endorses the college's mission and goals which are reflected in the mission of the Nursing Program. The Bronx Community College Registered Nursing Program serves students of diverse backgrounds, preparations and aspirations by providing a rigorous nursing education that addresses current nursing practice. The program prepares the entry-level Registered Nurse (RN) to provide safe, quality, evidence-based nursing practice to diverse patient/client populations in diverse health care settings.
Office: Carl Polowczyk Hall [CP], Room 413
Phone: 718.289.5425
Website: http://www.bcc.cuny.edu/Nursing/
Professor and Chariperson: Deborah Morris Deputy Chairperson and Professor: Ellen Hoist
Professors: H. Papas-Kavalis, V. Mishkin
Associate Professors: G. Burghart, V. Bernard, C. Carew-Joyner, D. Goetz, M. Jones, K. Harris, R. Panettieri,

Assistant Professors: C. Gordon, P. Green, S. Mais-Jeter, C. Mbewe, A. Ortiz, A. Shabazz, E. Williams-Woodley

Lecturer: C. Hodge
Approximately 10 adjuncts per semester
Chief CLT: G. Schelberger
Adjunct CLT: E. Martin

## CERTIFICATE AND DEGREE PROGRAMS

Licensed Practical Nursing, Certificate
Registered Nursing, A.A.S.
Radiologic Technology, A.A.S.

## COURSES

Clinical Education (CLE)
Nursing (NUR)
Nutrition (NTR)
Pharmacology (PHM)
Practical Nursing (PNR)
Radiologic Technology (RAD)

## R.N. Program Advisory Committee

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BCC Department of Nursing and Allied Health Sciences
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Lincoln Medical and Mental Health Center
Nancy Lacen, RN
Staff Development/Nursing School Affiliations Coordinator James J. Peters VA Medical center

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Phyllis Lisanti, Ph.D., R.N., Undergraduate Program Director Division of Nursing, New York University

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Theodore Richardeanea, MPA, MA, RN, CS, Jacobi Medical Center
Noreen Rosselli, RN, MA,
Education and Professional Development; Clinical Affiliations St. Barnabas Hospital

Jitinder Walia, Executive Director
Bronx Community College, Child Development Center

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Director of Licensed Practical Nursing Certificate Program
BCC Department of Nursing and Allied Health Sciences
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Visiting Nurse Services of New York Home Care
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Greater New York City Nursing Home Consultant; Chair LPN Advisory Board

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BCC Department of Nursing and Allied Health Sciences
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New York Presbyterian Hospital
Geraldine Burghart, M.A., R.T. (R) (MR) (M) Clinical Coordinator
BCC Radiologic Technology Program
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BCC Radiologic Technology
Andrew Worhel, Chief Technologist
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Larry Kassen, Radiology Manager
Department of Radiology, Jacobi Medical Center
Christopher Etienne, Radiology Manager
Department of Radiology, Montefiore North

## *BCC Alumna

## Notice of Changes

The Nursing and Allied Health Sciences Department reserves the right to make modifications of any nature in the academic programs without notice.

## LICENSED PRACTICAL NURSING

## Certificate Program

Department of Nursing and Allied Health Sciences
The Licensed Practical Nursing Program (LPNP), a program within the Department of Nursing and Allied Health Sciences, is an evening and weekend 56-credit certificate program with 22 transferable Nursing credits to the RN program at BCC. Upon successful completion of the required coursework, students are eligible to sit for the New York State National Council Licensure Examination for Practical Nurses (NCLEXPN).

NOTE: The College has been certified by the New York State Education Department to offer instruction (included within the LPN curriculum) leading to New York State Nurse Aide Certification. Students are eligible to take the Nurse Aide Competency Examination after completion of the first semester courses of the LPN curriculum upon request.

To be eligible for admission into practical nursing course work (PNR designated courses), students must:

- Have achieved a passing score on both the CUNY/ACT Reading and Writing Skills Assessment Tests.
- Score a 35/40 on M1 Arithmetic and M2 Algebra of the Math COMPASS or CUNY Exemption
- A cumulative GPA of 2.70 must be obtained, with a minimum grade of C or better in COMM 11, ENG 10 or 11, PSY 11. If a student has earned a passing grade of "C-"', "D+", "D","D-" or a failing grade of " $F$ " or "WU" in COMM 11, ENG 10 or 11, or PSY 11, the student will not be eligible for admission into the Licensed Practical Nursing Program (LPNP) even if she/he retakes the course. A "C + " or better is required in BIO 23. BIO 23 may be repeated once to achieve a grade of "C"+ or better. This policy also applies to students who transfer into BCC's LPNP from other institutions.
- Complete all remediation courses per CUNY policy.
- BCC students out for one year or more will be held to the new standards.
- Transfer students from other institutions must be in good academic standing. Students who are on academic probation, have failed out of a nursing program, or have been dismissed(ethical, integrity or safety issues) from any nursing program at a previous school (LPN/RN) are not eligible for admission to the BCC Licensed Practical Nursing (LPN) Program.

Further requirements include a percentile score of Basic 55 or higher to Proficient or better on the ATI TEAS V Examination. Admission to the Licensed Practical Nursing Program is very competitive and priority is given to students with the highest GPA.
While in the program, students must maintain a grade of "C+" in all PNR courses and a " C " in supporting course work (BIO 24, BIO 28, NTR 11, and PHM 11). Students may repeat each supporting course with a grade of "C-"or less once in order to achieve a " C " grade.

## Progression Requirements

- All PNR courses required for graduation must be taken within three years from the date of admission into the program.
- Practical Nursing (PN) students may not repeat any firstsemester PNR course(PNR 11, PNR 12, PNR 13) in which they have earned less than a grade of "C+".
- A PN student with a grade of "C-"or less may repeat two different PNR courses (PNR 21, 31, 41-45).

Students must provide documentation for one of the following categories:

1. U.S. Citizenship.
2. Permanent Residency.
3. International Student with F1 Status.
4. Granted Asylum, Refugee Status, Temporary Protected Status, Withholding of Removal, Deferred Enforced Departure, or Deferred Action Status by the U.S. government.

In addition to College tuition and book costs the student is required to:

1. Be medically cleared through the College's Health Services Office.
2. Have completed Basic Cardiac Life Support (BCLS).
3. Purchase malpractice insurance through the College.
4. Be prepared to pay the cost for taking competency exams at the end of each clinical semester and the cost of the New York State Board NCLEX-PN Examination at the completion of the program for NYS Licensure (cost is approximately $\$ 335.00$ ).

Some courses are offered online, as distance learning courses. Computer access is available for student use on campus.

CLINICAL NOTE: As a policy of the clinical facility, nursing students may be subject to substance abuse screening and criminal background checks in order to practice in certain clinical

## Licensed Practical Nursing Curriculum <br> 56 Credits required for Certificate

Director: Prof. Ellen Hoist, M.S., R.N.

## Pre-Clinical Sequence

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- BIO 23 Human Anatomy and Physiology (4 Credits) TOTAL 13


## First Semester

- PNR 11 Nursing Skills I (2 Credits)
- PNR 12 Mental Health Concepts (2 Credits)
- PNR 13 Practical Nursing Arts (4 Credits)
- BIO 24 Human Anatomy and Physiology II (4 Credits)
- NTR 11 Nutrition in Physical and Emotional Disorders (3 Credits) TOTAL 15


## Second Semester

- PNR 21 Nursing Skills II (1 Credit)
- PNR 22 Medical Surgical Nursing I (4 Credits)
- PHM 11 Pharmacology as Applies to Health Sciences (3 Credits)
- BIO 28 Microbiology and Infection Control (4 Credits) TOTAL 12


## Summer Session

- PNR 31 Medical Surgical Nursing II (4 Credits)

TOTAL 4

## Third Semester

- PNR 41 Nursing Skills III (1 Credit)
-PNR 42 Psychiatric Nursing (2 Credits)
- PNR 43 Pediatric Nursing (4 Credits)
- PNR 44 Maternal Child Nursing (4 Credits)
- PNR 45 Vocational Adjustment and Leadership (1 Credit) TOTAL 12


## NURSING

Associate in Applied Sciences Degree | Career Program Department of Nursing and Allied Health Sciences

The A.A.S. nursing degree program is registered by the New York State Department of Education and a member of the National League for Nursing.

## Accreditation Information

Accredited by Accreditation Commission for Education in Nursing, Inc. (ACEN); formerly NLNAC, National League for Nursing Accrediting Commission, Inc.
3343 Peachtree Rd. NE, Suite 850
Atlanta, GA 30326
1-400-975-5000
www.acenursing.org
Approved by the State Education Department The University of the State of New York
89 Washington Avenue
Albany, New York 12234
(518) 486-2967

HEGIS Code: 5208.10
Member of The National League for Nursing (NLN)
The National League for Nursing
The Watergate 2600 Virginia Avenue, NW 8th Floor
Washington, DC 20037
800 669-1656
http://www.nln.o rg/aboutnln/blast/blast

## Academic Requirements

Academic requirements for all students who want to apply for entry into the Registered Nursing (RN) Program include:

- A passing score on both the CUNY/ACT Reading and Writing Skills Assessment Tests.
- To be eligible for PHM 10, the student must be exempt from MTH 5 (including 40 or above on M2 on the CUNY COMPASS Exam) or has a grade of " C " or better, or a grade of " $P$ " in MTH 5.
- Students must achieve a cumulative GPA of 2.70, with a minimum grade of "C" or better in COMM 11, ENG 10 or $11, \mathrm{PSY} 11$ and " $\mathrm{C}+$ " or better in BIO 23 and PHM 10. If a student has earned a passing grade of "C-", " $\mathrm{D}+$ ", " D ", " $\mathrm{D}-$ " or a failing grade of " F " or "WU" in COMM 11, ENG 10 or 11, or PSY 11, the student will not be eligible for admission into the registered nursing program (RN), even if she/he retakes the course. This also applies to students who transfer into BCC's Nursing program from other institutions. PHM 10 and BIO 23 must be passed with a "C+" or better. These courses can only be repeated once to achieve that grade. BCC students absent for one year or more will be held to the new standards.

NOTE: An attempt is defined as having registered in the course for at least 3 weeks, appeared on the roster and received any grade (academic or administrative).

## TEAS V Examination

Effective Fall 2013, the Bronx Community College (BCC) RN Nursing Program will be administering the TEAS V Admissions Examination for students interested in entering into the program for the Spring 2014 semester. The National League for Nursing PAX-RN Examination will no longer be administered for admission into the program after Spring 2013. Students who have a valid PAX-RN score will not be required to take the TEAS V. PAX-RN passing results (no older than two [2] years) will be honored until Spring 2015 for admission into the program. Students who are unsuccessful on the Spring 2013 PAX-RN examination will be required to take the TEAS V examination.

To be considered for admission into the BCC RN Nursing Program, applicants must obtain an individual score within the "Proficient "range. The TEAS V examination may be repeated provided the applicant participates in the Assessment Technologies Institute (ATI) testing remediation program before repeating the TEAS V examination.

The TEAS V examination is a multiple-choice test that evaluates essential academic skills: Math, Science, Reading and English. It is recommended that applicants review Biology, Chemistry, and Math content in preparation for taking the TEAS V examination. Assessment Technologies Institute, INC. (ATI) testing, the author of the TEAS V examination, has study materials and programs available for interested students.

The test will take approximately $31 / 2$ hours to complete. Testing fees are not refundable. Information about ATI is available at: https://atitesting.com/Home.aspx

The testing schedule will be published each semester. The initial testing must be completed at Bronx Community College. TEAS $\checkmark$ Scores from another institution are not accepted.

## Additional Admission Information

Admission into the RN Program's nursing (NUR) courses is based on the approved priority list posted in the Nursing Department. Admissions are competitive and meeting the above requirement is not a guarantee of placement. Requirements for admission must be met by mid-November for admission into the following spring semester and mid-May for admission into the following fall semester. Candidates for admission must contact the Admissions Coordinator for the RN Program in the Nursing Department and declare intent to be admitted.

## Returning Students

Students who have withdrawn from the program and wish to return to the clinical sequence must:

- be in good academic standing;
- be able to complete the clinical program within five years from the date of entry into the clinical sequence and meet current progression criteria; and
- have completed BIO 23, BIO 24, BIO 28, and PHM 10 within seven years of the date of re-admission into the clinical sequence.
- BCC students absent for one year or more will be held to the new standards.

A returning student who cannot meet the time requirements as stated above must reapply to the program and be subject to the current admission criteria.

## Transfer Students

Transfer students from other institutions must be in good academic standing. Students who are on academic probation, have failed out of a nursing program, or have been dismissed (ethical, integrity or safety issues) from any nursing program at a previous school are not eligible for admission to the BCC Registered Nursing (RN) Program.
The nursing program does not accept transfer credits for nursing or pharmacology courses taken at other colleges. In addition, Biology courses that are seven or more years old will not be accepted by the nursing program. Transfer grades are not posted on the BCC transcript and must be provided at the student's request to the College's Office of Admission and sent to the nursing program for entry into the nursing student's file.
Any student transferring in credits from another accredited college cannot receive a combined total of more than 30 credits of advanced standing and/or examination.

## Advancement into The Nursing Clinical Sequence

Effective in the Fall 2009 semester, in order to advance into nursing clinical sequence, students must provide documentation for one of the following categories:

1. U.S. Citizenship.
2. Permanent Residency.
3. International Student with F1 Status.
4. Granted Asylum, Refugee Status, Temporary Protected Status, Withholding of Removal, Deferred Enforced Departure, or Deferred Action Status by the U.S. government.

The Department of Nursing offers instruction in clinical experience in a variety of hospitals, healthcare facilities and community agencies in the Bronx and easily accessible areas.

## Criminal Background Checks

Current laws generally permit a state licensing board or agency to deny a license to practice nursing if the applicant has been convicted of a felony or other specified crime. Like many state licensing boards, the Office of the Professions of the New York State Education Department requires that a criminal background check be conducted prior to granting a license to practice nursing.

The Department of Nursing and Allied Health Sciences at Bronx Community College does not require a criminal background check for admittance, but the department's educational requirements include placement at one or more hospitals or other off-campus clinical training sites. These sites frequently require a student to undergo a criminal background check before the student can be placed for clinical training. If, based upon the results of a criminal background check, the site determines that a student's participation in its clinical training program would not be in the best interest of the site, the site may deny that student admission to the training program. Even if the student has already begun the placement when the results are received, the site may elect to dismiss the student, regardless of the student's performance while in the training program. Each clinical training site that requires a criminal background check sets its own standards and procedures, and you may be asked by the site to pay the cost of the background check. Please note that if a clinical training site determines that you may not take part in its training program based on the results of a criminal background check, you may be unable to complete your course requirements and to continue in the nursing program. It is important for you to consider this before you enroll in the nursing program. Bronx Community College has no obligation to refund your tuition or fees or to otherwise accommodate you in the event you are ineligible to complete your course requirements based on the results of a criminal background check, or if you are denied a license to practice nursing.

Please note that some of the facilities used by the nursing department may require screening for substance abuse. If this is a mandate of the clinical facility the student must comply. Failure to comply or a positive finding will result in the student having to withdraw from the nursing courses they are registered in at the time of the finding. No alternate clinical placement will be done.

## Legal Limitations for State Licensure

A student who has charges pending or has ever been convicted of a felony or misdemeanor and/or has been found guilty of professional misconduct, unprofessional conduct or negligence may enter the nursing program. The student may sit for the professional licensing examination after completing the program. However, the student may or may not be rendered a permit to practice and/or receive the registered professional nurse license following review of the student's Application for License and First Registration by the Regents of the University of the State of New York.

## Basic Life Support (BLS)

Certification by the American Heart Association is required of all nursing students and must remain current. Health
Clearance for Nursing must be completed each semester.

## Health Requirements

The nursing program requires a specific detailed physical examination that exceeds the college requirements for physical examination and immunizations. These requirements comply with the New York State Department of Health regulations and must include immunization titers. The physical examination form is available in the Nursing Department.

Students who become ill, disabled or pregnant during clinical enrollment must provide current medical clearance before continuing the clinical portion of the program.
Students with disabilities must notify the Disabilities Services Office in Loew Hall, room 215, before any accommodation in a specific nursing course can be considered.

## Progression Requirements

- PHM 10, BIO 23, BIO 24, and BIO 28 must be taken within seven (7) years of the clinical sequence.
- All nursing (NUR) courses required for graduation must be passed with a grade of "C+" or better within five years of entry into the clinical sequence.
- A nursing student may repeat one Nursing (NUR) course, excluding Level I Courses (Gerontological Nursing and Nursing Care Across the Lifespan I).
- Nursing students who do not achieve a "C"+ or better in two Nursing (NUR) courses Nursing Care Across the Lifespan level II-IV may not continue in the program.

NOTE: An attempt is defined as having registered in the course for at least 3 weeks, appeared on the roster and received any grade (academic or administrative).

## NCLEX-RN Examination

Graduates of the Nursing program are eligible to take the R.N. Licensure Examination (NCLEX-RN) given by the State of New York. Nursing students are required to pay for the NCLEX-RN Examination. The cost is approximately $\$ 335$.

## Transfer and Articulation

The Nursing A.A.S. degree program articulates with SUNY Empire State College, Lehman College, The College of Staten Island and Mercy College. Eligible graduates may also transfer 60 credits to other senior colleges in The City University of New York or enroll in other colleges to continue study for baccalaureate and higher degrees.

## Nursing Curriculum (Pathways)

Curriculum Coordinator: Professor Deborah C. Morris
67 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR

ENG 11 Composition and Rhetoric I (3 Credits)
C. Life and Physical Sciences

- BIO 23 Human Anatomy and Physiology I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- SOC 11 Sociology (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- BIO 24 Human Anatomy and Physiology II (4 Credits)
- CHM 17 Fundamentals of General Chemistry I (4 Credits) SUBTOTAL 21


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credit)
- PEA Physical Education-one activity course (1 Credit)
- PHM 10 Pharmacology Computations (2 Credits)
- PSY 11 Introduction to Psychology (3 Credits) SUBTOTAL 7


## Specialization Requirements

- BIO 28 Microbiology and Infection Control (4 Credits)
- NUR 41 Nursing Process and Therapeutic Communication (2 Credits)
- NUR 42 Fundamental Skills in Nursing (4 Credits)
- NUR 43 Mental Health Nursing (4 Credits)
- NUR 44 Nursing of the Adult I (4 Credits)
- NUR 45 Maternal, Newborn and Women's Health (4 Credits)
- NUR 46 Nursing of the Adult II (4 Credits)
- NUR 47 Pediatric Nursing (4 Credits)
- NUR 48 Nursing of the Adult III (4 Credits)

SUBTOTAL 34
ELECTIVES

- To complete the required 67 credits (5 Credits) Choose from Art, Astronomy, Biology, Chemistry (CHM 18), Communication, Computer Literacy I (CPL 11), English, Health and Physical Education, History (HIS 10 OR HIS 11), Probability and Statistics (MTH 23), Modern Language, Music, Nutrition in Physical and Emotional Disorders (NTR 11), Pharmacology as It Applies to Health Sciences (PHM 11), OR a Social Sciences course.
SUBTOTAL 5
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

Health Requirements - All nursing students must meet
special health requirements to practice in clinical agencies.
Additional Requirements-Substance abuse screening and a criminal background check may be required of students by certain clinical agencies. Positive findings will result in dismissal of the student from that agency.

Nursing Fast Track - Qualified Licensed Practical Nurses (LPN) who apply to the A.A.S. program in Nursing must meet the following requirements:

1. Possess a current New York State LPN license in good standing.
2. Meet all requirements for admission to the clinical phase of the program, including a grade of "C+" in PHM 10.
3. Obtain admission to Bronx Community College via the College Office of Admissions. Application for the Fast Track Program must be filed in the Department of Nursing and Allied Health Sciences within the first semester of attending BCC.
4. Pass the National League for Nursing (NLN) Profile examinations.
5. Submit proof of one year's work in an acute care medical/ surgical environment within three years prior to filing the application. Students admitted to the RN Fast Track may receive course credit, based on examinations, for:

- NUR 41 Nursing Process and Therapeutic Communication (2 Credits)
- NUR 42 Fundamental Skills in Nursing (4 Credits)
- NUR 44 Nursing of the Adult I (4 Credits)
- NUR 45 Maternal, Newborn and Women's Health (4 Credits) TOTAL 14

Any student transferring in credits from another accredited college cannot receive a combined total of more than 30 credits of advanced standing and/or examination.

## RN Pathway Option for BCC LPN Graduates Only

Graduates who meet all other requirements for entry into the clinical phase of the RN program and who have achieved a 2.7 GPA or better in the BCC LPN Program; passed the NCLEXPN Exam with License granted; completed a satisfactory interview; and received recommendation of LPN faculty shall be admitted to the RN Pathway and receive 22 credits.
With the above exceptions, core requirements, required areas of study and specialization requirements are as stated in the description of the Nursing Curriculum for A.A.S. degree. All N.Y. State LPN's (Licensed Practical Nurses) entering the RN Fast Track and the RN Pathway are required to take NUR 10, which is part of the pre-clinical course sequence.

- NUR 10 Transition in Nursing (1 Credit)

NOTE: All Nursing (NUR) courses required for graduation must be successfully completed within a five-year time span. The minimum acceptable grade in Nursing (NUR) courses is "C+." A nursing student may repeat one Nursing (NUR) course, excluding Level I Courses (Gerontological Nursing and Nursing Care Across the Lifespan I). Nursing students who do not achieve a " C " + or better in two Nursing (NUR) courses Nursing Care Across the Lifespan level II-IV) may not continue in the program.

## NURSING (PRE-PATHWAYS)

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Nursing Curriculum

67 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- PHM 10 Pharmacology Computations (2 Credits)
- BIO 23 Human Anatomy and Physiology I (4 Credits) TOTAL 15


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey ( 1 Credit)
- CHM 17 Fundamentals of General Chemistry I (4 Credits)
- SOC 11 Sociology (3 Credits)
- PEA Physical Education (one activity course) (1 Credit) TOTAL 9


## Specialization Requirements

- BIO 24 Human Anatomy and Physiology II (4 Credits)
- BIO 28 Microbiology and Infection Control (4 Credits)
- NUR 41 Nursing Process and Therapeutic Communication (2 Credits)
- NUR 42 Fundamental Skills in Nursing (4 Credits)
- NUR 43 Mental Health Nursing (4 Credits)
- NUR 44 Nursing of the Adult I (4 Credits)
- NUR 45 Maternal, Newborn and Women's Health (4 Credits)
- NUR 46 Nursing of the Adult II (4 Credits)
- NUR 47 Pediatric Nursing (4 Credits)
- NUR 48 Nursing of the Adult III (4 Credits)

TOTAL 38
Students receiving less than a grade of " $C$ " in NUR 41/42 may not remain in the Program.

ELECTIVES

- To complete the required 67 credits (5 Credits) Choose from Art, Astronomy, Biology, Chemistry (CHM 18), Communication, Computer Literacy I (CPL 11), English, Health and Physical Education, History (HIS 10 OR HIS 11), Probability and Statistics (MTH 23), Modern Language, Music, Nutrition in Physical and Emotional Disorders (NTR 11), Pharmacology as It Applies to Health Sciences (PHM 11), OR a Social Sciences course.

TOTAL 5

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

Health Requirements - All nursing students must meet special health requirements to practice in clinical agencies.

Additional Requirements-Substance abuse screening and a criminal background check may be required of students by certain clinical agencies. Positive findings will result in dismissal of the student from that agency.

## Nursing Fast Track

Qualified Licensed Practical Nurses (LPN) who apply to the A.A.S. program in Nursing must meet the following requirements:

1. Possess a current New York State LPN license in good standing.
2. Meet all requirements for admission to the clinical phase of the program, including a grade of "C+" in PHM 10.
3. Obtain admission to Bronx Community College via the College Office of Admissions. Application for the Fast Track Program must be filed in the Department of Nursing and Allied Health Sciences within the first semester of attending BCC.
4. Pass the National League for Nursing (NLN) Profile examinations.
5. Submit proof of one year's work in an acute care medical/ surgical environment within three years prior to filing the application. Students admitted to the RN Fast Track may receive course credit, based on examinations, for:

- NUR 41 Nursing Process and Therapeutic Communication (2 Credits)
- NUR 42 Fundamental Skills in Nursing (4 Credits)
- NUR 44 Nursing of the Adult I (4 Credits)
- NUR 45 Maternal, Newborn and Women's Health (4 Credits) TOTAL 14

Any student transferring in credits from another accredited college cannot receive a combined total of more than 30 credits of advanced standing and/or examination.

## RN Pathway Option for BCC LPN Graduates Only

Graduates who meet all other requirements for entry into the clinical phase of the RN program and who have achieved a 2.7 GPA or better in the BCC LPN Program; passed the NCLEXPN Exam with License granted; completed a satisfactory interview; and received recommendation of LPN faculty shall be admitted to the RN Pathway and receive 22 credits.

With the above exceptions, core requirements, required areas of study and specialization requirements are as stated in the description of the Nursing Curriculum for A.A.S. degree.
All N.Y. State LPN's (Licensed Practical Nurses) entering the RN Fast Track and the RN Pathway are required to take NUR 10, which is part of the pre-clinical course sequence.

## - NUR 10 Transition in Nursing (1 Credit)

NOTE: All Nursing (NUR) courses required for graduation must be passed with a "C + " or better within five years of entry into the clinical sequence of the nursing program.

## RADIOLOGIC TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Department of Nursing and Allied Health Sciences

A radiologic technologist is a skilled professional who provides a specialized health care service. This rewarding profession involves the operation of sophisticated equipment in a rapidly expanding field. The Radiologic Technology Program in the Department of Nursing and Allied Health Sciences at Bronx Community College prepares students as entry-level qualified licensed and registered radiographers.
The term "diagnostic radiography" is used to describe a variety of radiographic or x-ray examinations. Most people are familiar with chest $x$-rays and also $x$-rays to diagnose broken bones. The radiographer performs these procedures as well as those which require the use of contrast agents that make it possible to study organs that otherwise cannot be seen.
Admission requirements for Radiologic Technology curriculum include:

- Complete all required remediation and successfully pass all CUNY Skills Assessment Tests.
- Achieve a minimum grade of C+ in BIO 23 and MTH 13 by the conclusion of spring semester prior to entry. The Radiologic Technology Program only admits students in the fall.
- Possess a pre-clinical course sequence average of 2.77 or higher in ENG 10/11, HIS 10/11, COMM 11, PSY 11 and PEA. Students who have completed these courses at another college will have to submit their transcripts. It is recommended that ENG 10/11, HIS 10/11, COMM11, PSY 11, BIO 24, and PEA be completed prior to entry to the Radiologic Technology course work (RAD and CLE designated courses).
- Pre-radiologic technology students are allowed two attempts to achieve a C+ in BIO 23 (Human Anatomy and Physiology I) and MTH 13 (Trigonometry and College Algebra). A grade of W (official withdrawal) will not count as an attempt in these two courses. A minimum grade of $\mathrm{C}+$ in these courses is a requirement for admission into the Radiologic Technology Program. The Radiologic Technology Program's Committee on Admissions and Waivers has the right to allow the student an additional attempt when there is evidence of extenuating circumstances. Extenuating circumstances need to have legal and/or official documentation and must be presented to the Committee on Admissions and Waivers before a waiver will be granted.
Radiologic Technology (RAD, CLE) courses are open only to Radiologic Technology majors.

The Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology and the New York State Department of Health.
Joint Review Committee on Education in Radiologic Technology 20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone: (312) 704-5300 | Fax: (312) 704-5304
http://www.jrcert.org/
Students receive their clinical education at Montefiore Medical Center, Jacobi Medical Center, New York Presbyterian Hospital, or Montefiore Wakefield Division. All facilities are accessible by public transportation.

Upon successful completion of the program, students are eligible for the national and state certifying examinations. Graduates may go on to earn a higher degree in radiological health sciences.
Graduates have a wide selection of clinical settings to choose from, including hospitals and medical centers, out-patient imaging facilities, public health institutions, and government and private research institutes that require radiographers.

## Mission Statement

The mission of the Bronx Community College Radiologic Technology program is to graduate competent radiographers who are eligible for taking the examination of the American Registry of Radiologic Technologists.

## Program Goals and Student Learning Outcomes

Goal 1: Students will be clinically competent radiographers who demonstrate sound reasoning and competent care
Student Learning Outcomes:
Students will be able to perform radiographic examinations.
Students will demonstrate effective patient care skills.
Students will utilize the principles of ALARA to protect the patient, themselves, and general public from unnecessary radiation

Goal 2: Students will demonstrate growth in ethical behavior in accordance with professional standards over the course of the program.
Student Learning Outcomes:
Students will conduct themselves in accordance with professional standards.
Students will work as effective members of the health care team.
Goal 3: Students will demonstrate a progression of technical skills accompanied by critical thinking, communication, and problem solving skills in the practice of diagnostic radiography.
Student Learning Outcomes:
Students will be able to apply alternate methodologies for trauma and non-conforming patients.
Students will apply sound judgment when performing pediatric radiography.
Students will demonstrate oral communication skills cultural diversity.
Students will demonstrate effective written communication.
Students will be able to recognize and modify diagnostic
images to improve quality if necessary.
Goal 4: The program will support and maintain its commitment to the health care community with competent entry-level radiographers who possess a broad range of general education proficiencies.

Student Learning Outcomes:
Students will evaluate their experiences as positive Graduates will pass the ARRT exam on the first attempt. Employers will rate graduates' job performance.
Graduates seeking employment will be employed within six months of graduation.

## CREDENTIALING EXAMINATION (ARRT) PASS RATE

Five-year average credentialing examination (American Registry of Radiologic Technologists Radiography examination) pass rate of not less than $75 \%$ at first attempt within six months of graduation.

| Year | Percent passing on 1st attempt | Number of students |
| :---: | :---: | :---: |
| 2009 | $100 \%$ | 36 out of 36 passed on 1st attempt |
| 2010 | $100 \%$ | 37 out of 37 passed on 1st attempt |
| 2011 | $100 \%$ | 24 out of 24 passed on 1st attempt |
| 2012 | $100 \%$ | 33 out of 33 passed on 1st attempt |
| 2013 | $97 \%$ | 29 out of 30 passed on 1st attempt |
| Five Year Average | $99.4 \%$ |  |

## PROGRAM COMPLETION RATE

Program completion rate is defined as the number of students who complete the didactic and clinical phase of the program within $150 \%$ of the program length. The program length is $\mathbf{2 4}$ months.

| Year | Percent completion | Number of students |
| :---: | :---: | :---: |
| 2009 | $92.3 \%$ | 39 began, 36 graduated |
| 2010 | $71.4 \%$ | 35 began, 25 graduated |
| 2011 | $69.4 \%$ | 36 began, 25 graduated |
| 2012 | $82.5 \%$ | 40 began, 33 graduated |
| 2013 | $91.6 \%$ | 36 began, 33 completed |
| Five Year Average | $81.4 \%$ |  |

## JOB PLACEMENT RATE

Five-year average job placement rate of not less than $75 \%$ at first attempt within twelve months of graduation.

| Year | Percent job placement | Number of students |
| :---: | :---: | :---: |
| 2009 | 75.6\% | 12 Graduates completed graduate survey or telephone survey <br> O Not actively seeking employment <br> 9 Employed within 12 months of graduation |
| 2010 | 96.2\% | 27 Graduates completed graduate survey or telephone survey <br> 0 Not actively seeking employment 26 Employed within 12 months of graduation |
| 2011 | 66.6\% | 15 Graduates completed graduate survey or telephone survey <br> 2 Not actively seeking employment <br> 10 Employed within 12 months of graduation |
| 2012 | 86.6\% | 15 Graduates completed graduate survey or telephone survey <br> 2 Not actively seeking employment <br> 13 Employed within 12 months of graduation |
| 2013 | 84.4\% | 15 Graduates completed graduate survey or telephone survey <br> 4 Not actively seeking employment <br> 13 Employed within 12 months of graduation |
| Five Year Average | 81.88\% |  |

## Radiologic Technology Curriculum (Pathways)

## 65 Credits required for A.A.S. Degree

Curriculum Coordinator:
Professor Virginia Mishkin, M.S., R.T. (R) (M) (QM)

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR

ENG 11 Composition and Rhetoric I (3 Credits)
C. Life and Physical Sciences

- BIO 23 Human Anatomy and Physiology I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- BIO 24 Human Anatomy and Physiology II (4 Credits)

Additional Flexible Core Requirement - Area D.

- PSY 11 Introduction to Psychology (3 Credits) SUBTOTAL 20


## Required Areas of Study

- MTH $13^{1}$ Trigonometry and College Algebra (3 Credits)
- PEA Physical Education activity course ( 1 Credit) SUBTOTAL 4


## Specialization Requirements ${ }^{2}$

- RAD 11 Fundamentals of Radiologic Sciences and Health Care (3.5 Credits)
- RAD 12 Radiographic Exposure I (2.5 Credits)
- RAD 13 Radiographic Procedures I (3 Credits)
- RAD 14 Recording Media and Processing (1 Credit)
- RAD 15 Radiographic Anatomy I (2 Credits)
- RAD 16 Patient Care and Pharmacology in Radiologic Sciences (2.5 Credits)
- CLE 11 Clinical Radiography Fundamentals (1 Credits)
- CLE 15 Clinical Radiography I ( 0.5 Credit)
- RAD 22 Radiographic Exposure II (2.5 Credits)
- RAD 23 Radiographic Procedures II (3 Credits)
- RAD 24 Radiation Protection (2 Credits)
- RAD 25 Radiographic Anatomy II (1 Credit)
- CLE 21 Clinical Radiography II ( 0.5 Credit)
- CLE 31 Clinical Radiography III (1.5 Credit)
- RAD 32 Imaging Modalities (2 Credits)
- RAD 33 Radiographic Procedures III and Cross Sectional Anatomy (2 Credits)
- RAD 34 Radiographic Pathology (2 Credits)
- CLE 41 Clinical Radiography IV (1 Credit)
- CLE 45 Clinical Radiography V (0.5 Credit)
- RAD 42 Radiation Biology (2 Credits)
- RAD 43 Quality Assessment/Management (1 Credit)
- RAD 71 Radiation Physics (2 Credits)
- CLE 51 Clinical Radiography VI (0.5 Credit)
- CLE 61 Clinical Radiography VII/Senior Seminar (1.5 Credits) SUBTOTAL 41

1 MTH 30 should be considered for transfer to a senior college.
2 Note that the sequence of the academic and clinical curriculum of the program is scheduled Monday-Thursday between 8 a.m. and 4 p.m. (the exception is CLE 11, 9 a.m. to 3 p.m. on Friday).

Basic Life Support and Basic First Aid - All radiologic technology students are required to be certified in cardiopulmonary resuscitation and basic first aid by December 15 of their first clinical year.
Health Requirements - All radiologic technology students must meet special health requirements to practice in clinical agencies.
Malpractice Insurance - Radiologic technology students are required to carry $\$ 1-3$ million malpractice insurance purchased through Bronx Community College. This must be purchased before September 15 of the first semester of each year.
Students will be accepted and assigned to clinical experiences and otherwise treated without regard to sex, sexual orientation, race, creed, color, national origin, age, marital or veteran status in accordance with the laws of the city, state and nation.

## RADIOLOGIC TECHNOLOGY (PRE-PATHWAYS)

## Radiologic Technology Curriculum

65 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric I OR ENG 11 Composition and Rhetoric I (3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- PEA Physical Education activity course (1 Credit)
- BIO 23 Human Anatomy and Physiology I (4 Credits)
- BIO 24 Human Anatomy and Physiology II (4 Credits)
- MTH 13* Trigonometry and College Algebra (3 Credits) TOTAL 21


## Required Areas of Study

- PSY 11 Introduction to Psychology (3 Credits) TOTAL 3


## Specialization Requirements

- RAD 11 Fundamentals of Radiologic Sciences and Health Care (3.5 Credits)
- RAD 12 Radiographic Exposure I (2.5 Credits)
- RAD 13 Radiographic Procedures I (3 Credits)
- RAD 14 Recording Media and Processing (1 Credit)
- RAD 15 Radiographic Anatomy I (2 Credits)
- RAD 16 Patient Care and Pharmacology in Radiologic Sciences (2.5 Credits)
- CLE 11 Clinical Radiography Fundamentals (1 Credit)
- CLE 15 Clinical Radiography I (. 5 Credit)
- RAD 22 Radiographic Exposure II (2.5 Credits)
- RAD 23 Radiographic Procedures II (3 Credits)
- RAD 24 Radiation Protection (2 Credits)
- RAD 25 Radiographic Anatomy II (1 Credit)
- CLE 21 Clinical Radiography II (. 5 Credit)
- CLE 31 Clinical Radiography III (1.5 Credits)
- RAD 32 Imaging Modalities (2 Credits)
- RAD 33 Radiographic Procedures III and Cross Sectional Anatomy (2 Credits)
- RAD 34 Radiographic Pathology (2 Credits)
- CLE 41 Clinical Radiography IV (1 Credit)
- CLE 45 Clinical Radiography V (0.5 Credit)
- RAD 42 Radiation Biology (2 Credits)
- RAD 43 Quality Assessment/Management (1 Credit)
- RAD 71 Radiation Physics (2 Credits)
- CLE 51 Clinical Radiography VI (0.5 Credits)
- CLE 61 Clinical Radiography VII / Senior Seminar (1.5 Credits) TOTAL 41

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* MTH 30 should be considered for transfer to a senior college.
$\dagger$ Note that the sequence of the academic and clinical curriculum of the program is scheduled Monday-Thursday between 8 a.m. and 4 p.m. (the exception is CLE 11, 9 a.m. to 3 p.m. on Friday).
Basic Life Support and Basic First Aid - All radiologic technology students are required to be certified in cardiopulmonary resuscitation and basic first aid by December 15 of their first clinical year.
Health Requirements - All radiologic technology students must meet special health requirements to practice in clinical agencies.
Malpractice Insurance - Radiologic technology students are required to carry $\$ 1-3$ million malpractice insurance purchased through Bronx Community College. This must be purchased before September 15 of the first semester of each year.
Students will be accepted and assigned to clinical experiences and otherwise treated without regard to sex, sexual orientation, race, creed, color, national origin, age, marital or veteran status in accordance with the laws of the city, state and nation.


## COURSES

## Licensed Practical Nursing

## PNR 11

3 rec 2 cr

## Nursing Skills I

This course, taken over three semesters, is designed to instruct the student practical nurse in basic computation principles essential to performing mathematical calculations for the safe and accurate administration of medications. Included in this course is an introduction to the special vocabulary of medical terminology used in the communication process of health care professionals. Students will be exposed to computer assisted instruction (CAI) and Internet research methods as integral adjuncts to the learning process.
Prerequisite: Pre-clinical nursing sequence.

## PNR $12 \quad 2$ rec 2 cr

## Mental Health Concepts

This course is designed to familiarize the student with an overview of the history of nursing, therapeutic communication principles, mental health terminology and cultural concepts as they relate to understanding mental health. Students will be introduced to Maslow's Hierarchy of Basic Human Needs and the nursing process as the prioritizing framework that is used in assisting individuals. The nursing process and critical thinking strategies will be explained as the organizing and problemsolving tools that are to be used when assessing the mental status of clients and their families. The scope of practice of the PN in mental health and other health care settings will be defined and explored.
Prerequisite: Pre-clinical nursing sequence.
PNR $13 \quad 2$ lec 5 clin 2 lab 4 cr

## Practical Nursing Arts

This course is designed to assist the student PN to gain knowledge of essential nursing skills and procedures, inclusive of scientific principles that will support the development of critical thinking abilities. Maslow's Hierarchy of Basic Human Needs and the Nursing Process is the theoretical framework the PN student will use to problem solve and deliver safe effective care. With direction, PN students will develop skills in collecting data; recognizing a nursing diagnosis; assisting with the planning and implementation of the nursing care plan; perfecting their ability to perform procedures; handling equipment; and evaluating, reporting and documenting client outcomes.
Prerequisite: Pre-clinical nursing sequence.

## PNR $21 \quad 2$ lab 1 cr

## Nursing Skills II

This second course in a three-part series continues instruction in the principles of pharmacology computation with the addition of basic principles for reconstituting medication, practicing IV and heparin calculations. Course content will also include instruction in diagnostic testing procedures and the related nursing implications.
Prerequisites: PNR 11, PNR 12, PNR 13, NTR 11.
Corequisite: PNR 22.

## PNR $22 \quad 2$ lec 6 clin 2 lab 4 cr

## Medical Surgical Nursing I

This course is designed to introduce Practical Nursing (PN) students to their role in caring for older adult and disabled clients in a variety of health care settings. PN students will learn how to identify, prevent and manage the most common clinical problems associated with chronic medical and psychosocial disorders. With assistance, PN students will utilize the nursing process, Maslow's Hierarchy of Basic Human Needs, therapeutic communication principles and cultural sensitivity to collect data and implement a holistic plan of care. This course has a clinical requirement. A clinical failure results in a failure for the course.
Prerequisites: PNR 11, PNR 12, PNR 13, NTR 11.
Corequisite: PHM 11.

## PNR $31 \quad 2$ lec 6 clin 2 lab 4 cr

## Medical Surgical Nursing II

This course continues to develop critical thinking skills required to apply fundamental knowledge and technical abilities necessary to provide nursing care for adult clients with complex medical and surgical problems in acute health care settings. Content will be presented using the conceptual framework of the nursing process and Maslow's Hierarchy of Basic Human Needs. With guidance, the student will apply the nursing process to prioritize nursing care of adult clients with complex needs. Clinical practice in a variety of acute care settings is provided. A clinical failure results in failure for the course.
Prerequisite: PNR 22.
PNR $41 \quad 2$ lab 1 cr

## Nursing Skills III

The purpose of this third calculation course is to reinforce the student's ability in pharmacology computation. Calculation skills are introduced for pediatric dosages. Students will be required to demonstrate mastery of previously learned computation skills by obtaining a final grade of $\mathrm{C}+(77)$ or better to pass the course.

## PNR $42 \quad 2$ lab 2 cr <br> Psychiatric Nursing

This course focuses on current concepts of psychiatric/ mental health nursing. It provides for continuing development of nursing process skills and is a nursing model for practice that is applicable in a variety of health care settings.
Prerequisites: PNR 22, PNR 31.
Corequisite: PNR 41.

## PNR $43 \quad 2$ lect 6 clin 2 lab 4 cr

## Pediatric Nursing

This course emphasizes utilization of the nursing process and Maslow's Hierarchy of Needs to prioritize nursing care based upon disease entity and principles of growth and development. This involves a holistic approach, which includes preventative, curative, rehabilitative, physical, and psychosocial aspects of the hospitalized child and family. The principles of therapeutic communication and cultural competency are strategies the practical nursing student will learn to incorporate when providing care for pediatric clients and their families. This course has a clinical requirement. A clinical failure results in a failure for the course.

## Prerequisites: PNR 22, PNR 31.

Corequisites: PNR 41, PNR 42.

## PNR $44 \quad 2$ lect 6 clin 2 lab 4 cr

## Maternal and Child Care

This course utilizes the nursing process and Maslow's Hierarchy of Human Needs to prioritize care to the expectant mother and family during pregnancy, labor, birth and puerperium. In addition, maternity nursing includes the care of the fetus and the neonate. Critical thinking skills, therapeutic communication and cultural competence are integral components in providing and delivering safe and competent care to the pregnant mother and family. This course has a clinical requirement. A clinical failure results in a failure for the course.
Prerequisites: PNR 22, PNR 31, PNR 43.
Corequisite: PNR 41.

## PNR $45 \quad 1 \mathrm{rec} 1 \mathrm{cr}$

## Vocational Adjustment and Leadership

This course is designed to familiarize the senior practical nursing student with behavioral expectations of the new graduate practicing in the work place setting. Nursing leadership, management and professional practice for the LPN will be explored. Content will be presented that will aid in the completion of a professional portfolio. In addition, emphasis will be placed on the behaviors of professional decorum necessary in preparing for the job search and interview process. Employment opportunities, licensure and certification requirements, and continuing education options will be provided.
Corequisites: PNR 41, PNR 44.

## Nutrition

## NTR 113 rec 3 cr

## Nutrition in Physical and Emotional Disorders

Basic course in therapeutic nutrition that focuses upon major health problems in western society and the influence of diet on their causes and cures. Traditional and controversial nutritional approaches are presented. Nursing care in selected situations is emphasized.
Prerequisites: Open to RN's and LPN's. For RN Students, NUR 41 and 42 or permission of instructor. For LPN students, pre-clinical nursing sequence.

## Nursing*

Admission to Nursing (NUR) courses is based on the approved priority list that is on file in the Nursing Department and Student Development.
*NUR courses are open only to students with full matriculation in the Nursing (046) curriculum.
$\dagger$ The minimum acceptable grade in Nursing (NUR) courses is " $\mathrm{C}+$."
This should read: Courses with grades of C, C-, D+, D, D-, F and W must be repeated if the student wishes to receive a degree in Nursing. A minimum grade of $\mathrm{C}+$ is required when a course is repeated.

The courses must be repeated according to the following conditions:

1. The course must be repeated before the next higher-level course is taken.
2. A nursing student may only repeat one different Nursing (NUR) courses, excluding NUR 41 and NUR 42. A grade of " $\mathrm{C}+$ " or better must be obtained in the repeated course to remain in the program.

NOTE: An attempt to repeat a course is defined as having registered in the course for at least 3 weeks, appeared on the roster and received any grade (academic or administrative).
3. Nursing students who are unsuccessful in three different Nursing (NUR) courses may not continue in the program.
4. All Nursing courses required for graduation must be taken within a five-year time span.

## NUR $10 \quad 1$ lect 1 cr

## Transition in Nursing

Designed for Licensed Practical Nurses entering the RN Fast Track and the RN Pathway. The focus is on the expectations for coursework in the program, pharmacology calculation review, changes in role from LPN to RN.
Prerequisite: Pre-Clinical Nursing Sequence

NUR 41
2 lect 2 cr

## Nursing Process and Therapeutic Communication $\dagger$

This introductory course focuses on issues, concepts and the nursing process utilizing therapeutic communication techniques when dealing with clients, families and groups. Nursing 41 builds on previously acquired knowledge from the humanities and social sciences. The concepts of critical thinking and legal and ethical issues are introduced as they pertain to the discipline of nursing.
Prerequisite: Pre-Clinical Nursing Sequence.
Corequisites: NUR 42, BIO 24.

## NUR $42 \quad 2$ lect 5 clin 2 lab 4 cr

## Fundamental Skills In Nursing $\dagger$

This web-enhanced course introduces students to health care needs of older adults. It focuses on providing a safe effective care environment, while promoting and maintaining physiological and psychosocial integrity. In addition, this course helps students apply knowledge from the humanities, biophysical and psychosocial sciences to the science of Nursing. Students learn to apply the nursing process at a beginning level, develop critical thinking skills, perform selected psychomotor skills and use therapeutic communication.

Prerequisite: Pre-Nursing Sequence.
Corequisites: NUR 41, BIO 24.

## NUR $43 \quad 2$ lect 6 clin 4 cr

## Mental Health Nursing $\dagger$

This course focuses on the mental health of adults in the community and in the inpatient setting. The student will provide nursing care, utilizing the nursing process, to a variety of clients who have mental illness and various mental health needs. Emphasis will be upon the promotion, restoration and maintenance of mental health of individuals and groups of clients as they prepare to return to the community.
Prerequisites: NUR 41, NUR 42, B10 24.
Corequisites: NUR 44, BIO 28.
NUR 44
2 lect 6 clin 4 cr
Nursing of the Adult I $\dagger$
This course introduces students to disease processes by focusing on the care of adult clients with selected medicalsurgical problems. Nursing assessments and interventions are discussed. A planned program of supervised experiences on medical and surgical units in selected health care agencies is provided.
Prerequisites: NUR 41, NUR 42, BIO 24.
Corequisites: NUR 43, BIO 28.

## NUR 45

2 lect 6 clin 4 cr

## Maternal, Newborn and Women's Health $\dagger$

This course focuses on the physiological and psychosocial integrity occurring in women. Emphasis is on the childbearing process, wellness of the family and maintenance of health. Adverse outcomes of pregnancy, care of the newborn and selected women's health issues of contraception, infertility and infections are discussed.
Prerequisites: NUR 43, NUR 44, BIO 28.
Corequisite: NUR 46.
NUR $46 \quad 2$ lect 6 clin 4 cr

## Nursing of the Adult II $\dagger$

This intermediate nursing course builds on previously learned content and experiences. The course focuses on adult clients with selected traumatic, inflammatory and neoplastic disorders. Select problems of the aged and the chronically ill are also discussed. Emphasis is placed on the promotion, restoration and maintenance of physiological and psychosocial health. Continued supervised experiences on medical and surgical units in selected health care agencies are provided.
Prerequisites: NUR 43, NUR 44, BIO 24, BIO 28.
Corequisite: NUR 45.

## NUR $47 \quad 2$ lect 6 clin 4 cr

## Pediatric Nursing $\dagger$

This course focuses on the physiological and psychosocial health care needs of pediatric clients and their families receiving care in an acute care setting. The focus is on the unique needs of the pediatric population including identifying and promoting the growth and developmental needs of the infant, child and adolescent.
Prerequisites: NUR 45, NUR 46.
Corequisite: NUR 48.
NUR $48 \quad 2$ lect 6 clin 4 cr

## Nursing of the Adult III $\dagger$

This senior level course provides students with the opportunity to practice advanced medical surgical nursing skills as well as leadership and management skills where adult clients have multiple complex acute/chronic health care needs. It focuses on collaboratively restoring physiologic and psychosocial integrity in selected medical-surgical disorders and emergency conditions amidst complex technology and life support. Legal and ethical issues pertaining to the discipline of nursing continue to be explored.
Prerequisites: NUR 45, NUR 46. Corequisite: NUR 47.

## Pharmacology

## PHM $10 \quad 2$ rec 2 cr

## Pharmacology Computations

This course focuses on the principles related to the calculation of dosages and medication administration. Topics include the systems of measurement, equipment used in medication administration, calculation of oral medications, injectable medications and calculations related to intravenous and pediatric dosages. Emphasis is placed upon safe medication administration. Technology is used to enhance course content.
Prerequisites: CUNY math proficiency or MTH 05 grade of C or higher. PHM $11 \quad 3$ rec 3 cr

## Pharmacology as It Applies to Health Services

This online hybrid distance learning course introduces the student to the key principles and concepts used in medication administration in the treatment, maintenance and prevention of disease and illness. Approaching this topic from a holistic perspective, students will gain knowledge relating to drug, nutrient and natural alternative interactions. Emphasis is placed on assisting the student to gain an understanding of the legal, ethical and cultural issues pertinent to successful medication therapy in diverse populations.
Prerequisite: Students need to complete all remediation for admission to nursing. PHM 11 is also available to RN, LPN, and Health Care workers authorized to administer medications. It is recommended that students in the RN program complete NUR 42 before taking PHM 11.
For students in the LPN program:
Prerequisites: PNR 11, PNR 13, and NTR 11.
Corequisite: PNR 22.

## Radiologic Technology

Department of Nursing and Allied Health Sciences Radiologic Technology (CLE and RAD) courses are open only to Radiologic Technology majors. CLE courses are given at Montefiore North Division, Montefiore Medical Center, New York Presbyterian Medical Center, and Jacobi Medical Center.

## CLE $11 \quad 14$ days 1 cr

## Clinical Radiography Fundamentals

Students function as learning members of the hospital's radiology department under laboratory conditions. Experience in patient preparation, selection of proper technical factors, administration of ionizing radiation for diagnostic examination with appropriate radiation protection control. Close supervision to develop and evaluate students' clinical skills. Film evaluation included.
Prerequisites: BIO 23, MTH 13.
CLE $15 \quad 15$ days 0.5 cr (3 equated cr )

## Clinical Radiography I

This course is an orientation to the hospital radiology department. Students are involved in actual patient care situations and utilize radiography equipment for diagnostic examinations with appropriate radiation protection control. Close supervision is provided by faculty to develop and evaluate students' clinical skills.
Prerequisite: CLE 11.

## CLE $21 \quad 0.5 \mathrm{cr}$

## Clinical Radiography II

CLE 21 is a fourteen week clinical experience, designed to put into practice, and demonstrate competency in the procedures learned in CLE 11, RAD 13 and RAD 23. Students are expected to complete a minimum of 11 mandatory and elective competencies.
Prerequisite: CLE 15.
CLE $31 \quad 29$ days 1.5 cr ( 6 equated cr)
Clinical Radiography III
Continuation of Clinical Education II. Film evaluation included. Prerequisite: CLE 21.

CLE $41 \quad 40$ days 1 cr
Clinical Radiography IV
Continuation of Clinical Education III. Film evaluation included. Prerequisite: CLE 31.

## CLE $45 \quad 15$ Days 0.5 cr (3 equated cr)

## Clinical Radiography V

Students advance sequentially in learning special imaging modalities in the hospital radiology department. Students will rotate through Computed Tomography, Magnetic Resonance Imaging, and other specialty areas.
Prerequisite: CLE 41.

## CLE $51 \quad 40$ days 0.5 cr

## Clinical Radiography VI

CLE 51 is a fourteen week clinical experience designed to afford students the opportunity to put into practice, and demonstrate competency in the procedures learned in RAD 33 and RAD 43. Students must complete 11 mandatory and elective competencies.
Prerequisite: CLE 45.
CLE $61 \quad 29$ days 1.5 cr ( 6 equated cr)

## Clinical Radiography VII / Senior Seminar

Continuation of Clinical Education V. Film evaluation included. Prerequisite: CLE 51.

RAD $11 \quad 2$ lect 3 lab 3.5 cr

## Fundamentals of Radiologic Sciences and Health Care

Orientation course includes history of radiology: major advances; radiologic technology as a health profession specialty; and history and organization of hospitals. Medical Ethics and Law: scope and nature of moral, legal and professional ethics. Professional guidelines of confidentiality; interpersonal relationships and medicolegal considerations. Medical Terminology: study of written and spoken language of medicine. Common terms used in diagnostic radiology education.
Prerequisite: Completion of Pre-RT Sequence.

## RAD $12 \quad 1$ lect 3 lab 2.5 cr

## Radiographic Exposure I

Study of formation of the radiographic image with emphasis on production of quality radiographs. Topics include radiographic exposure factors; density, contrast, recorded detail and distortion; devices to improve radiographic quality such as grids, and pathology affecting radiographic exposure factors.
Prerequisite: MTH 13.
Corequisite: CLE 11.
RAD 132 lect 3 lab 3 cr

## Radiographic Procedures I

Covers detailed information on various standard positions of structures and organs of the body; practical instruction and application in laboratory and clinical environment. Film evaluation included.
Corequisites: CLE 11, RAD 11, 15.

## RAD $14 \quad 2$ lect 1 cr

## Recording Media and Processing

History and development of x-ray film and dark-room accessories; chemical constituents of processing solutions and their functions; theory of the photographic process; radiographic film artifacts and their causes.
Corequisite: RAD 12.

## RAD 15 <br> 1 lect 2 lab 2 cr

## Radiographic Anatomy I

Structure and function of human anatomy in all body planes with emphasis on the topographic mode. Film evaluation included.
Prerequisite: BIO 23.
Corequisite: RAD 13.
RAD $16 \quad 1$ lect 3 lab 2.5 cr

## Patient Care and Pharmacology in Radiological Sciences

Provides students with basic concepts of patient care, including consideration of physical and psychological needs of patient and family. Routine and emergency patient care procedures as well as infection control procedures and Universal Precautions, drug interactions and pharmacology. Lab practice is integrated to enhance the development of patient care skills.
Prerequisites: BIO 23 or equivalent; MTH 13 or equivalent.
RAD 221 lect 3 lab 2.5 cr

## Radiographic Exposure II

Continuation of RAD 12. Examination of technique guides, technical conversions, AEC, contrast, recorded detail distortion and effects of pathology on technique.
Prerequisite: RAD 12.
Corequisite: CLE 21.
RAD $23 \quad 2$ lect 3 lab 3 cr

## Radiographic Procedures II

Continuation of RAD 13. More detailed and complex positions of the structures and organs of the body; film evaluation, practical instruction and application in the laboratory and clinical environment.
Prerequisites: RAD 12, 13, 14, 15, 16.
Corequisite: RAD 25.

## RAD 24 <br> 2 lect 2 cr

Radiation Protection
Enables student radiologic technologists to recognize the need for good radiation protection procedures, which provide minimum exposure to patients and personnel. Topics include interactions of radiation with matter; units and measurement of radiation; maximum permissible dosages; and methods for minimizing operator and patient exposure.
Prerequisite: RAD 11.
RAD 251 lect 1 cr
Radiograpic Anatomy II
Continuation of RAD 15. Structures and function of human anatomy in all body planes with emphasis on the skull and spine. Film evaluation included.
Prerequisite: RAD 15.
Corequisite: BIO 24.

## RAD 32 <br> 1 lect 2 lab 2 cr

## Imaging Modalities

Study of various imaging systems and their application in radiography. Various recording media and techniques are discussed. Some imaging systems described are Mobile Units, Image Intensification, Video Tube and Recorders, CT, Digital Imaging, and MRI.
Prerequisites: RAD 22, 23, 25.

## RAD $33 \quad 1$ lect 3 lab 2 cr

Radiographic Procedures III and Cross Sectional Anatomy
Radiographic positioning of specialized procedures in radiography, the equipment, contrast media use and general indications for each examination. The cross sectional aspect of the course develops an understanding of three dimensional anatomy and the physical relationship of anatomical structures to one another. Systems studied are digestive system; urinary system; female reproduction system; biliary system; myelography; venography; arthrography; mammography and interventional radiography.
Prerequisites: RAD 23, 25, CLE 21.
Corequisites: RAD 32, 34.
RAD $34 \quad 1$ lect 2 lab 2 cr
Radiographic Pathology
Survey of medical and surgical diseases to acquaint the student with changes caused by disease which relate to radiography. Emphasis on pathogenesis, signs, symptoms, diagnosis and treatment. Film evaluation included.
Prerequisites: BIO 23, 24.
RAD $42 \quad 2$ lect 2 cr

## Radiation Biology

Comprehensive study of the radiation effects on cells including direct and indirect action of ionizing radiation; damage induced by free radicals in DNA; interpretation of survival data; radiation genetics; radiation effects on embryos; delayed effects; radiation safety and health physics. Corequisite: RAD 71.

RAD $43 \quad 3$ lab 1 cr

## Quality Assessment/Management I

Topics include concepts of a quality assurance program, state and federal regulations, sensitometric monitoring, film-screen contact, protective device integrity, radiographic illuminators, kVp accuracy, timer accuracy and mAs reciprocity. Mammography QA will be discussed.
Prerequisites: RAD 22, 32.
Corequisite: RAD 71.
RAD 71
1 lect 3 lab 2 cr

## Radiation Physics

Elements of atomic and nuclear physics, interaction of radiation with matter, radioactivity, half-life, elements of health physics.
Prerequisites: MTH 13, RAD 12, 22.

## Physics and Technology

## ABOUT THE DEPARTMENT

The Physics and Technology department is committed to preparing students who are interested in careers in technical fields as well as students who continue their education in the physical sciences and all branches of engineering. We stress academic excellence and value our role as an educational leader, embracing change and responding to the complex needs of the community we serve. To this end, we strive to maintain the relevance of our programs by creating partnerships with industry and updating our curricular offerings so that our students are well positioned to begin their professional careers upon graduation.
Professor and Chairperson: Dr. Jalil Moghaddasi
Professors: J. Malinsky
Associate Professors: B. Grossman, A. Lal
Assistant Professors: A. Romito, A. Sana, I. Zelikovich
Lecturers: H. Khan, G. Patchoros, V. Rigaglia, A. Szabo
Higher Education Officer: C. Drummond
Assistant Higher Education Officer: K. Registe
Senior College Laboratory Technicians: N. Trotman
College Laboratory Technicians: R. Troise, J. Perez (Substitute)
Approximately 38 adjuncts per semester

## DEGREE PROGRAMS

Automotive Technology, A.A.S.
Electronic Engineering Technology, A.A.S.
Energy Services and Technology, A.A.S.
Engineering Science, A.S.
Liberal Arts and Sciences, Physics Option, A.S.
Nuclear Medicine Technology, A.A.S.
Telecommunications Technology, A.A.S.
Telecommunications Technology (Verizon), A.A.S.

## CERTIFICATE PROGRAM

Automotive Mechanic, Certificate

## COURSES

Astronomy (AST)
Automotive Technology (ACS)
Electronic Engineering Technology (ELC)
Energy Services and Technology (EST)
Engineering (EGR)
Nuclear Medicine Technology (NMT)
Physics (PHY)
Telecommunications (TEC)

## Industrial Advisory Committee

Travers M. Dennis
Engineering Supervisor, Distribution Engineering
Consolidated Edison Co. of New York, Inc.
Gary Geiger, Director, Biomedical Engineering
Jacobi Medical Center
Maria Duran, Deputy Chief, Location Services Unit NYC Department of Environmental Protection
Anthony J. Sucich, Quality Assurance
Next Step Program, Verizon
Peter Aro, Borough Chief Engineer
Maintenance Engineer, NYS, MTA
John Santiago, Acting Supervisor, Environmental Control Technicians NYC Department of Environmental Protection
Andres Valencia, Retired Supervisor,
Environmental Control Technicians
NYC Department of Environmental Protection, Consultant

## Nuclear Medicine Advisory Committee

Irina Agrest. B.S., R.T. (N), CNMT, Department of Nuclear Medicine and Ultrasound NY Presbyterian Medical Center
Angelina Almonte, M.S., RT(N), CNMT
Department of Nuclear Medicine, Brooklyn Hospital Center
Geraldine Burghart, M.A., RT(N) (M) (MR)
Associate Professor
BCC Radiologic Technology Program
Charito Love, M.D., Attending, Department of Nuclear Medicine, Montefiore Medical Center
Lynette Blunt, A.A.S.
Department of Nuclear Medicine, Montefiore Medical Center
Man Yu Chen, M.S., RSO
Department of Environmental Safety, Montefiore Medical Center
Mario DiDea, B.S., R.T. (N), CNMT,
Department of Nuclear Medicine, Montefiore Medical Center
Margaret Doonan, M.S., R.T. (N), CNMT, Regional Manager, Nuclear Diagnostic Products
Emilia Enriquez, R.T. (N), CNMT
Department of Nuclear Medicine, Montefiore Medical Center
Virginia Mishkin, M.S., R.T. (R)(M)(QM), Associate professor BCC Radiologic Technology Program Director
Jalil Moghaddasi, Ph.D, Chairperson
Physics and Technology, BCC
Luis Montenegro, Ph.D, Interim Associate Dean
Academic Affairs, BCC
Alfred Romito, M.S., R.T. (N), CNMT, Assistant Professor BCC Nuclear Medicine Technology Program Director
Ted Rubel, B.S., R.T. (N), CNMT, President and CEO JRT Associates

## AUTOMOTIVE MECHANIC

## Certificate Program

Physics and Technology Department
The Automotive Mechanic program is designed to develop basic automotive skills required for entry-level in most automotive repair shops. The program integrates automotive theory with an emphasis on shop experience. Upon successful completion of this program, students receive a certificate and are encouraged to complete the requirements for the A.A.S. degree in Automotive Technology.
Curriculum Coordinator: Clement Drummond

## Automotive Mechanic Curriculum

30 Credits required for Certificate

## Core Requirements

- ACS 10 Introduction to Automotive Technology (1 Credit)
- ACS 11 Engine Repair (4 Credits)
- ACS 12 Brake Systems (3 Credits)
- ACS 13 Engine Performance (3 Credits)
- ACS 14 Manual Drive Train and Axles (3 Credits)
- ACS 24 Electrical Systems (3 Credits) TOTAL 17


## Required Areas of Study

- ACS 21 Steering and Suspension (3 Credits)
- ACS 22 Automatic Transmission and Transaxle (4 Credits)
- ACS 23 Heating and Air-Conditioning (3 Credits)
- ACS 35 Alternate Fuel Technology OR ACS 45 Diesel Technology (3 Credits) TOTAL 13

For information regarding gainful employment, please visit: http://www.bcc.cuny.edu/Gainful-EmploymentDisclosure/?page2=GedtAM

## AUTOMOTIVE TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Physics and Technology Department
The Automotive Technology curriculum, the only one of its kind in the City University of New York, prepares the student for a career as an automotive technician. This curriculum develops understanding of operational principles, service sequences and diagnostic techniques for the automobile. Upon completion of this curriculum, the graduate is prepared for entry-level positions in various areas of the automotive industry dealing with development, testing, diagnosis and service of mechanical, hydraulic, electrical and thermodynamic automotive systems.
Automotive Technology graduates are employed in a variety of automotive-oriented positions including test technician, diagnostician, equipment sales and service, independent business administrator, dealership service manager, service writer, engine machinist, fuel injection, automatic transmission and engine management specialist, as well as general service technician.

Further training and education can lead to careers in technical education, engineering, insurance appraisal, and accident investigation, and other specialties. The program articulates with SUNY Empire State College. See the Transfer Planning web site for more information
Curriculum Coordinator: Clement Drummond

## Automotive Technology Curriculum (Pathways)

 60 Credits required for A.A.S. Degree
## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric $O R$

ENG 11 Composition and Rhetoric I (3 Credits)

- ENG 12 Composition and Rhetoric II (3 Credits)
C. Life and Physical Sciences
- CHM 11 General Chemistry I OR

CHM 17 Fundamentals of General Chemistry I (4 Credits)

## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- PHY 11 College Physics I (4 Credits)

A-D. 3 credits of Humanities Restricted Electives must be selected to fulfill Pathways Flexible Core requirements. Choose courses from Flexible Core Areas A through D. SUBTOTAL 23

## Required Areas of Study

- MTH 13 Trigonometry and College Algebra (3 Credits)
- PEA Physical Education Activity Course OR WFA 10 Workplace First Aid (1 Credit)
- ART 10 Art Survey OR MUS 10 Music Survey ( 1 Credit)
- ELC 15 Computer Applications in Technology (2 Credits) SUBTOTAL 7


## Specialization Requirements

- ACS 10 Introduction to Automotive Technology (1 Credits)
- ACS 11 Engine Repair (4 Credits)
- ACS 12 Brake Systems (3 Credits)
- ACS 13 Engine Performance (3 Credits)
- ACS 14 Manual Drive Train and Axle (3 Credits)
- ACS 21 Steering and Suspension Systems (3 Credits)
- ACS 22 Automatic Transmission and Transaxle (4 Credits)
- ACS 23 Heating and Air-Conditioning (3 Credits)
- ACS 24 Electrical Systems (3 Credits)
- ACS 35 Alternate Fuel Systems OR
- ACS 45 Diesel Technology (3 Credits)

SUBTOTAL 21

## AUTOMOTIVE TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Physics and Technology Department

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

Curriculum Coordinator: Clement Drummond

## Automotive Technology Curriculum

60 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 13 Trigonometry and College Algebra (3 Credits)
- PEA Physical Education activity course OR WFA 10 Workplace First Aid (1 Credit)
- CHM 11 General College Chemistry I OR CHM 17 Fundamentals of General Chemistry (4 Credits) TOTAL 17


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey ( 1 Credit)
- PHY 21 Physics for Engineering Technology I (4 Credits)
- ELC 15 Computer Applications in Technology (2 Credits)
- HUMANITIES ELECTIVES* (6 Credits) TOTAL 13


## Specialization Requirements

- ACS 10 Introduction to Automotive Technology (1 Credit)
- ACS 11 Engine Repair (4 Credits)
- ACS 12 Brake Systems (3 Credits)
- ACS 13 Engine Performance (3 Credits)
- ACS 14 Manual Drive Train and Axles (3 Credits)
- ACS 21 Steering and Suspension Systems (3 Credits)
- ACS 22 Automatic Transmission and Transaxle (4 Credits)
- ACS 23 Heating and Air-Conditioning (3 Credits)
- ACS 24 Electrical Systems (3 Credits)
- ACS 35 Alternate Fuel Technology (3 Credits) OR ACS 45 Diesel Technology (3 Credits) TOTAL 30

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the

Registration Guide and Schedule of Classes.

* Select from Art, Communication, English, Geography, History, Music, Modern Languages, or Social Sciences (one selection must be from English).


## ELECTRONIC ENGINEERING TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Physics and Technology Department

Curriculum Coordinator: Dr. Jalil Moghaddasi
Electrical and electronic technicians build, test and maintain complex electronic equipment such as computers, control systems, communication networks, power systems, and medical devices. The Electronic Engineering Technology (EET) program at Bronx Community College prepares graduates to join the workforce as technical professionals in a variety of industries and services or to transfer to a four-year baccalaureate program in engineering technology.

The technical curriculum is combined with a program of general education to assure that graduates of the EET program have the prerequisite skills in reading, writing, and communication that are necessary to function effectively in the workplace. The Electronic Engineering Technology program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology: 111 Market Place, Suite 1050, Baltimore Md. 21202-4012; Telephone: (410) 347-7700. http://www.abet.org/

Electronic Engineering Technology students who plan to continue their studies may transfer directly to New York City College of Technology or other colleges offering the baccalaureate degree in Engineering Technology. Graduates' transfer credits for technology courses taken at BCC will be evaluated by each college.

## Program Objectives

Within two or more years after graduation from Bronx Community College:

- students in the Electronic Technology Program are expected to be graduates of a four-year baccalaureate program in Engineering Technology or pursuing additional formal education;
- gainfully employed as engineering technologists; attaining increasing levels of responsibility in their chosen career;
- and respectful of cultural diversity and practicing the profession in an ethical manner.


## Graduate Outcomes

Upon graduation from Bronx Community College:

- students in Electronic Engineering Technology will be able to join the workforce as engineering technologists;
- work effectively in a team environment; read and write effectively;
- use mathematics to solve problems in electronics; analyze and interpret technical data;
- read circuit schematics, select electronic components, solder and assemble circuits and printed circuit boards (PCBs);
- and simulate electronic circuits.

Annual student enrollment and graduation data for students in the Electronic Engineering Technology program

| Semester <br> and Year | Enrollment | Academic Year | Graduates |
| :--- | :--- | :--- | :--- |
| Fall 2009 | 122 | $2008-2009$ | 14 |
| Fall 2010 | 115 | $2009-2010$ | 8 |
| Fall 2011 | 127 | $2010-2011$ | 9 |
| Fall 2012 | 123 | $2011-2012$ | 14 |
| Fall 2013 | 139 | $2012-2013$ | 6 |

## Electronic Engineering Technology Curriculum (Pathways)

66 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 30 Pre-Calculus Mathematics (4 Credits)
C. Life and Physical Sciences
- PHY 11 College Physics I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communications (3 Credits)
E. Scientific World
- PHY 12 College Physics II (4 Credits) SUBTOTAL 24


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credit)
- MTH 31 Calculus and Analytical Geometry I (4 Credits)
- PEA Physical Education Activity Course (1 Credit)
- FREE ELECTIVE (1 Credit) SUBTOTAL 7


## Specialization Requirements

- ELC 11 DC Circuit Analysis (4 Credits)
- ELC 15 Computer Applications in Technology (2 Credits)
- ELC 18 Computer Programming for Engineering Technology (2 Credits)
- ELC 21 AC Circuit Analysis (4 Credits)
- ELC 25 Electronics I (4 Credits)
- ELC 35 Electronics II (4 Credits)
- ELC 51 Electronics Controls (3 Credits)
- ELC 81 Electronics Communications (4 Credits)
- ELC 94 Laser and Fiber Optic Communications (4 Credits)
- ELC 96 Digital Systems I (4 Credits) SUBTOTAL 35


## ELECTRONIC ENGINEERING TECHNOLOGY (PRE-PATHWAYS)

## Associate in Applied Sciences Degree | Career Program

 Physics and Technology DepartmentIf you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Jalil Moghaddasi

## Electronic Engineering Technology Curriculum 66 Credits required for A.A.S. Degree <br> Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 13* Trigonometry and College Algebra (3 Credits)
- PEA Physical Education activity course (1 Credit) TOTAL 13


## Required Areas of Study

- ENG 223 Scientific and Technical Writing (3 Credits)
- ART 10 Art Survey OR MUS 10 Music Survey ( 1 Credit)
- MTH 14* College Algebra and Introduction to Calculus (3 Credits)
- MTH 15* Calculus (3 Credits)
- PHY 21**Physics for Engineering Technology I (4 Credits)
- PHY 22** Physics for Engineering Technology II (4 Credits) TOTAL 18


## Specialization Requirements

- ELC 11 DC Circuit Analysis (4 Credits)
- ELC 15 Computer Applications in Technology (2 Credits)
- ELC 18 Computer Programming for Engineering Tech (2 Credits)
- ELC 21 AC Circuit Analysis (4 Credits)
- ELC 25 Electronics I (4 Credits)
- ELC 35 Electronics II (4 Credits)
- ELC 51 Electronic Controls (3 Credits)
- ELC 81 Electronic Communications (4 Credits)
- ELC 94 Laser and Fiber Optic Communications (4 Credits)
- ELC 96 Digital Systems I (4 Credits)

TOTAL 35
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may choose to take MTH 30, 31, and 32 in lieu of MTH 13,14 and 15 if they plan to continue their studies after completing the A.A.S.
**Students may choose to take PHY 31 and 32 in lieu of PHY 21 and 22 if they plan to continue their studies after completing the A.A.S.

## ENERGY SERVICES AND TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Physics and Technology Department

The Energy Services and Technology program is a specialized building science technology program created to meet the needs of the real estate, property management, utility and energy services, construction, contracting, equipment operations and maintenance, and performance contracting industries. Technicians entering the field become members of a team working with supervision by more experienced technicians or engineering personnel. They can be found working in building management; engineering and construction companies; heating, ventilation, and air conditioning (HVAC) and utility companies; energy service companies (ESCOs); and building automation system suppliers such as Johnson Controls, Siemens, and Honeywell. They use and interpret information for building instrumentation and field assessment tools including temperature and pressure gauges, flow meters, BTU meters, electric meters and test equipment, building automation system logs, data loggers, infra-red cameras, air hoods, blower doors, tachometers, anemometers, light meters, combustion test kits and carbon monoxide monitors. They are also called upon to interpret energy bills, demand charges, and load profiles. The work environment requires technicians to be well trained in analytical and computer methods as applied to the operation of building systems and equipment, as well as to job safety, health and environment regulations. Please note that the program articulates with SUNY Empire State College. Please visit the Transfer Planning web site for more details.
Curriculum Coordinator: Dr. Akhil Lal

## Energy Services and Technology Curriculum (Pathways)

60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH $23^{1}$ Probability and Statistics (3 Credits)
C. Life and Physical Sciences
- PHY 11 College Physics I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communications (3 Credits)
E. Scientific World
- ENV 11 Introduction to Environmental Health OR CHM 11 General College Chemistry I (4 Credits)
SUBTOTAL 23


## Required Areas of Study

- BUS 10 Introduction to Business OR

BUS 51 Business Organization and Management (3 Credits)

- COMM 12 Voice and Diction : Business and Professional Speech (2 Credits)
- ECO 11 Microeconomics OR ECO 12 Macroeconomics (3 Credits)
- ELC 11 DC Circuit Analysis (4 Credits)
- ELC 15 Computer Applications in Technology (2 Credits)
- MTH $13{ }^{1}$ Trigonometry and College Algebra (3 Credits)
- RESTRICTED ELECTIVE ${ }^{2}$ (1 Credit) SUBTOTAL 18


## Specialization Requirements

- EST 11 Introduction to Energy Technology (2 Credits)
- EST 15 Energy Economics (3 Credits)
- EST 21 Energy Analysis of Mechanical and Electrical Equipment (2 Credits)
- EST 31 Building Systems I (3 Credits)
- EST 32 Building Systems II (3 Credits)
- EST 41 Principles of Energy Management I (3 Credits)
- EST 42 Principles of Energy Management I (3 Credits) SUBTOTAL 19

1 Students planning on transferring to a four-year program may substitute MTH 30 and MTH 31 for MTH 13 and MTH 23.
2 Choose from ART 10, MUS 10, any PEA one credit course, CPR 10, or WFA 10.

## ENERGY SERVICES AND TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Physics and Technology Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Curriculum Coordinator: Dr. Akhil Lal

## Energy Services and Technology Curriculum 60 Credits required for A.A.S. Degree <br> Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 13* Trigonometry and College Algebra (3 Credits)
- ECO 11 Microeconomics OR ECO 12 Macroeconomics (3 Credits)
- OCD 01 Orientation and Career Development (0 Credit) TOTAL 19


## Required Areas of Study

- MTH 23* Probability and Statistics (3 Credits)
- BUS 10 Introduction to Business OR BUS 51 Business Organization and Management (3 Credits)
- ELC 11 DC Circuit Analysis (4 Credits)
- ELC 15 Computer Applications in Technology (2 Credits)
- CMS 12 Voice and Diction: Business and Professional Speech (2 Credits)
- ENG 23 Scientific and Technical Writing (3 Credits)
- ENV 11 Introduction of Environmental Health OR CHM 11 General College Chemistry I (4 Credits)
- RESTRICTED ELECTIVE** (1 Credit) TOTAL 22


## Specialization Requirements

- EST 11 Introduction to Energy Technology (2 Credits)
- EST 15 Energy Economics (3 Credits)
- EST 21 Energy Analysis of Mechanical and Electrical Equipment (2 Credits)
- EST 31 Building Systems I (3 Credits)
- EST 32 Building Systems II (3 Credits)
- EST 41 Principles of Energy Management I (3 Credits)
- EST 42 Principles of Energy Management II (3 Credits) TOTAL 19

NOTE: At least two courses must be taken from a list designated
as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students planning on transferring to a four-year program may substitute MTH 30 and MTH 31 for MTH 13 and MTH 23.
**Choose from ART 10, MUS 10, any PEA one credit course, CPR 10, or WFA 10.

## ENGINEERING SCIENCE

Associate in Science Degree | Transfer Degree Physics and Technology Department
The Engineering Science curriculum is designed for students with a special interest in engineering and provides a thorough preparation in mathematics and physical science.
Graduates of this program may transfer to a senior college to continue their education in engineering and earn a baccalaureate degree in engineering.
Curriculum Coordinator: Dr. A. Lal

## Engineering Science Curriculum (Pathways)

60 Credits required for A.S. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{1}$

- MTH 30 Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits)
C. Life and Physical Science ${ }^{1}$
- PHY 31 Physics I (4 Credits) SUBTOTAL 14


## Flexible Core

A. World Cultures and Global Issues ${ }^{2}$ (3 Credits)
B. US Experience and its Diversity ${ }^{2}$ ( 3 Credits)
C. Creative Expression ${ }^{2}$ (3 Credits)
D. Individual and Society ${ }^{2}$ (3 Credits)
E. Scientific World ${ }^{1}$

- PHY 32 Physics II AND
- CHM 11 General Chemistry I (8 Credits) SUBTOTAL 20


## Specialization Requirements

- EGR 11 Introduction to Engineering Design (1 Credit)
- EGR 21 Analysis Tools for Engineers OR EGR 31 Circuit Analysis (2-3 Credits)
- MTH 31 Analytic Geometry and Calculus I (0-4 Credits)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- MTH 33 Analytical Geometry and Calculus III (5 Credits)
- MTH 34 Differential Equations and Selected Topics in Advanced Calculus (4 Credits)
- PHY 33 Physics III (4 Credits)
- RESTRICTED ELECTIVES ${ }^{3}$ (0-5 Credits) SUBTOTAL 26

1 This program has received a waiver to require students to take MTH 30 or MTH 31 to fulfill Required Core Area B, PHY 31 to fulfill Required Core Area C, PHY 32 to fulfill Flexible Area E and CHM 11 to fulfill the 6th Flexible Area course.
Note that MTH 30 is a prerequisite to MTH 31. If students
transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.
2 In choosing courses to fulfill Pathways Flexible Core requirements for Areas A, B, C, and D, students are strongly advised to select courses from no fewer than three (3) different departments.
3 Select from the following:

- CHM 12 General Chemistry II (4 Credits) or CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
- CHM 31 Organic Chemistry I (5 Credits)
- EGR 21 Analysis Tools for Engineers (2 Credits)
- EGR 31 Circuit Analysis (3 Credits)
- ENG 223 Scientific and Technical Writing (3 Credits)
- ENG 96 Digital Systems I (4 Credits)


## ENGINEERING SCIENCE (PRE-PATHWAYS)

Associate in Science Degree | Transfer Degree Physics and Technology Department
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Curriculum Coordinator: Dr. A. Lal

## Engineering Science Curriculum

60 Credits required for A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- CHM 11 General College Chemistry I (4 Credits) TOTAL 13


## Required Areas of Study

- ENG 12 Composition and Rhetoric II (3 Credits)
- MTH 31* Analytic Geometry and Calculus I (4 Credits)
- HUMANITIES ELECTIVE** (3 Credits) TOTAL 10


## Specialization Requirements

- EGR 11 Introduction to Engineering Design (1 Credit)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits)
- MTH 34 Differential Equations and Selected Topics in Advanced Calculus (4 Credits)
- PHY 31 Engineering Physics I (4 Credits)
- PHY 32 Engineering Physics II (4 Credits)
- PHY 33 Engineering Physics III (4 Credits)
- RESTRICTED ELECTIVES (10 Credits)

Select from the following:
CHM 12 General College Chemistry II (4 Credits) OR
CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
CHM 31 Organic Chemistry I (5 Credits)
EGR 21 Analysis Tools for Engineers (2 Credits)
EGR 31 Circuit Analysis (3 Credits)
ELC 96 Digital Systems I (4 Credits)
ENG 23 Scientific and Technical Writing (3 Credits)
TOTAL 37
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* MTH 30 or equivalent is a corequisite for EGR 11 and the restricted elective ELC 96 and a prerequisite for MTH 31
**ENG 23 is not to be taken to fulfill this requirement. Students who are considering transferring to the Grove School of Engineering at CCNY must select from the following list of courses: ART 11, ECO 11, ECO 12, FRN 11, FRN 12, MUS 11/12, POL 11, POL 51, PSY 11, PSY 22, PSY 31, SOC 11, SOC 33, SOC 34, SOC 37, and HIS 13.


## LIBERAL ARTS AND SCIENCES

Associate in Science Degree | Transfer Degree
Physics Option
A student interested in the Associate in Science (A.S.) degree in Liberal Arts and Sciences has to choose one of four options: Biology, Chemistry, Earth Systems and Environmental Science, or Physics. Each option prepares students for transfer to a complementary four-year degree program. Students in the Physics option usually transfer to colleges offering bachelor's degrees in engineering (civil, electrical, mechanical, etc.) or in the physical sciences. Enrichment programs are offered to encourage students to continue their education beyond the bachelor degree by attending graduate or other professional schools. Please note that the option articulates with SUNY Empire State College. Please visit the Transfer Planning web site for more details.
Curriculum Coordinator: Dr. Akhil Lal

## Liberal Arts and Sciences Curriculum (Pathways)

 60 Credits required for A.S. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning

- MTH $30^{1}$ Pre-Calculus Mathematics OR MTH 31 Analytic Geometry and Calculus I (4 Credits)
C. Life and Physical Science - CHM $11^{1}$ General Chemistry I (4 Credits) SUBTOTAL 14


## Flexible Core

A. World Cultures and Global Issues (3 Credits)
B. US Experience and its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World

- CHM $12^{1}$ General Chemistry II (4 Credits) *Restricted Elective Select one course from Area A-E. (3 Credits)
SUBTOTAL 19
Specialization Requirements
- MTH 31 Analytic Geometry and Calculus I** (0-4 Credits)
- MTH 32 Analytical Geometry and Calculus II (5 Credits)
- FREE ELECTIVES (0-5 Credits)

SUBTOTAL 27

## Physics Option

- PHY 31 General Physics I (4 Credits)
- PHY 32 General Physics II (4 Credits)
- PHY 33 General Physics III (4 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits) SUBTOTAL 17

1 This program has obtained a waiver to require STEM variant courses in Required Core Area B and Area C and Flexible Core Area E. If students transferring into this program complete different courses in these areas, they will be certified as having completed the Common Core requirements, but it may not be possible for them to finish their degree within the regular number (60) of credits.

* Restricted Elective: must select one course from Flexible Core A-E. No more than two courses in any discipline or interdisciplinary field.
**For students that take MTH 30 to fulfill the Required Core.


## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Science Degree | Transfer Degree
Physics Option
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Akhil Lal

## Liberal Arts and Sciences Curriculum 60 Credits required for A.S. Degree <br> Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal

Communication (3 Credits)

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)
TOTAL 13-14

## Required Areas of Study

- CHM 11 General Chemistry I (4 Credits)
- CHM 22 General Chemistry II with Qualitative Analysis (5 Credits)
- MTH 31 Analytic Geometry and Calculus I (4 Credits)
- MTH 32 Analytic Geometry and Calculus II (5 Credits)
- ART 11 Introduction to Art OR MUS 11 Introduction to Music OR Humanities OR Social Sciences** (3 Credits)
- MODERN LANGUAGE† (0-8 Credits)

TOTAL 21-29

## Specialization Requirements \#

Physics Option

- PHY 31 General Physics I (4 Credits)
- PHY 32 General Physics II (4 Credits)
- PHY 33 General Physics III (4 Credits)
- MTH 33 Analytic Geometry and Calculus III (5 Credits) TOTAL 17
**See your advisor to determine the appropriate course from an approved list of Humanities or Social Science courses.
$\dagger$ Modern Language is a requirement for students planning to transfer to a CUNY four-year college and major in biology, chemistry, earth science or physics. Students planning to transfer should see the language requirements for the four-year degree program at the senior college.


## NUCLEAR MEDICINE TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Physics and Technology Department

Affiliated with Montefiore The University Hospital for the Albert Einstein College of Medicine
Program Director: Professor Alfred Romito
This rewarding technology field involves collaboration and interactions with highly specialized people, the operation of sophisticated instruments, and excellent salaries. Nuclear Medicine is a relatively new branch of medicine that uses isotopes for the diagnosis and treatment of certain diseases.

The Nuclear Medicine Technologist assists the physician in the operation of the gamma camera, the positioning of patients under the gamma camera, and in the calculation of the isotope doses to the patients.

In recent years, improved diagnoses of many important diseases have been achieved by methods used in Nuclear Medicine. These include diseases involving the liver, gastrointestinal tract, and spleen; disorders of the bone vertebral column, and the heart and cardiovascular system; and localization of tumors using the new and exciting field of Position Emission Tomography. The number of nuclear medicine procedures in hospitals has been increasing over the past few years.
The Nuclear Medicine Technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), nationally recognized by the Council for Higher Education Accreditation (CHEA).

The minimum acceptable cumulative G.P.A. for entering specialization requirement courses of the Nuclear Medicine Technology Program is 2.7 (B-). For students transferring from another college, grades received from transferred courses will be used in the calculation of their effective index. Transferred courses may not include NMT designated courses.

Upon the completion of the program at Bronx Community College, students are required to pass one of two national registry examinations to become identified as a Registered Nuclear Medicine Technologist and to practice as a Nuclear Medicine Technologist. Further study in this field is possible in institutions offering a baccalaureate degree in Nuclear Medicine Technology. The program articulates with New York City College of Technology and SUNY Empire State College. Visit the Transfer Planning web site for more information.

## Nuclear Medicine Graduate Outcomes

Percentage of Students Successfully Passing the The American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB)Accreditation Exams:

## Nuclear Medicine Technology Curriculum (Pathways)

63 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 30 Pre-Calculus Mathematics (4 Credits)
C. Life and Physical Sciences
- BIO 23 Human Anatomy and Physiology I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)

| Year | ARRT |  |  |
| :---: | :---: | :---: | :---: |
|  | Number of Examinees | Passed | $\%$ |
| 2009 | 8 | 8 | 100 |
| 2010 | 10 | 9 | 90 |
| 2011 | 12 | 9 | 75 |
| 2012 | 8 | 7 | 88 |
| 2013 | 9 | 8 | 89 |


| Year | NMTCB |  |  |
| :---: | :---: | :---: | :---: |
|  | Number of Examinees | Passed | $\%$ |
| 2009 | 11 | 11 | 100 |
| 2010 | 14 | 14 | 100 |
| 2011 | 10 | 9 | 90 |
| 2012 | 6 | 6 | 100 |
| 2013 | 6 | 6 | 100 |


| Year of Program Entry | \# Initially Enrolled |
| :---: | :---: |
| 2009 | 30 |
| 2010 | 18 |
| 2011 | 14 |
| 2012 | 14 |
| 2013 | 13 |


| Year of Program Entry | \# Graduated |
| :---: | :---: |
| 2009 | 21 |
| 2010 | 11 |
| 2011 | 6 |
| 2012 | 7 |
| 2013 | 10 |


| Year of Program Entry | Graduation Rate (\%) |
| :---: | :---: |
| 2009 | $70 \%$ |
| 2010 | $61 \%$ |
| 2011 | $43 \%$ |
| 2012 | $50 \%$ |
| 2013 | $77 \%$ |

Average Graduation Rate: 58\%
D. Individual and Society

- COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
E. Scientific World
- BIO 24 Human Anatomy and Physiology II (4 Credits)

Additional Flexible Core course

- CHM 17 Fundamentals of General Chemistry I (4 Credits) SUBTOTAL 25


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey ( 1 Credit)
- BIO 22 Medical Terminology (2 Credits)
- LAW 45 Medical Law (3 Credits)
- PHY 24 Principles of General Physics (4 Credits) SUBTOTAL 10


## Specialization Requirements

- NMT 781 EKG - Interpretation and Techniques (2 Credits)
- NMT 791 Phlebotomy (2 Credits)
- NMT 71 Nuclear Medicine Laboratory ( 1 Credit)
- NMT 81 Orientation to Nuclear Medicine (3 Credits)
- NMT 82 Radio-Pharmaceutical Chemistry (3 Credits)
- NMT 831 Radiation Physics and Dosimetry (3 Credits)
- NMT 84 Radiation Biology (2 Credits)
- NMT 851 Nuclear Medicine Procedures (2 Credits)
- NMT 86 Didactic Nuclear Medicine (1 Credit)
- NMT 871 Clinical Nuclear Medicine I (3 Credits)
- NMT 88 Senior NMT Seminar (3 Credits)
- NMT 901 Clinical Nuclear Medicine II (3 Credits) SUBTOTAL 28

1 Parts or all of these courses are taught at Montefiore Medical Center including NMT 78, 79. NMT 71 and 81-88 are taught sequentially, although listed concurrently. These instructional hours for NMT 81-84 generally extend from January through May, just prior to the start of clinical training. Students may not register for any NMT course without permission of the program Director.

## NUCLEAR MEDICINE TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Physics and Technology Department

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

[^3]
## Nuclear Medicine Technology Curriculum

63 Credits required for A.A.S. Degree
Nuclear Medicine Technology Curriculum
63 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- OCD 01 Orientation and Career Development (0 Credit)
- MTH 30 Pre-Calculus Mathematics (4 Credits)
- BIO 23 Human Anatomy and Physiology I (4 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits) TOTAL 17


## Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey (1 Credits)
- BIO 24 Human Anatomy and Physiology II (4 Credits)
- CHM 17 Fundamentals of General Chemistry I (4 Credits)
- BIO 22 Medical Terminology (2 Credits)
- LAW 45 Medical Law (3 Credits)
- PHY 24 Principles of General Physics (4 Credits) TOTAL 18


## Specialization Requirements

- NMT 78 EKG - Interpretation and Techniques (2 Credits)
- NMT 79 Phlebotomy (2 Credits)
- NMT 71* Nuclear Physics Laboratory (1 Credit)
- NMT 81* Orientation to Nuclear Medicine (3 Credits)
- NMT 82* Radio-Pharmaceutical Chemistry (3 Credits)
- NMT 83* Radiation Physics and Dosimetry (3 Credits)
- NMT 84* Radiation Biology (2 Credits)
- NMT 85* Nuclear Medicine Procedures (2 Credits)
- NMT 86* Didactic Nuclear Medicine (1 Credit)
- NMT 87* Clinical Nuclear Medicine I (3 Credits)
- NMT 88* Senior NMT Seminar (3 Credits)
- NMT 90* Clinical Nuclear Medicine II (3 Credits)

TOTAL 28
NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* Parts or all of these courses are taught at Montefiore Medical Center including NMT 78, 79. NMT 71 and 81-88 are taught sequentially, although listed concurrently. These instructional hours for NMT 81-84 generally extend from January through May, just prior to the start of clinical training. Students may not register for any NMT course without permission of the Program Director.


## TELECOMMUNICATIONS TECHNOLOGY

Associate in Applied Sciences Degree | Career Program Physics and Technology Department

The Telecommunications Technology curriculum provides training in the expanding field of telecommunications. For students interested in technology, the program will provide state-of-the art training for fulfilling telecommunications careers. In addition, the program aims to retrain telecommunications workers with technological advances in the field. The program also provides a smooth transition to baccalaureate programs of four-year schools, specifically the bachelor's degree program in Telecommunications at CUNY New York City Technical College. Graduates can expect to be hired by various companies ranging from small businesses to telecommunication giants such as AT\&T, Verizon, MCl and cable television companies.
Curriculum Coordinator: Dr. Ajaz Sana

## Telecommunications Technology Curriculum (Pathways)

65 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 30 Pre-Calculus Mathematics (4 Credits)
C. Life and Physical Sciences
- PHY 11 College Physics I (4 Credits)


## Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
D. Individual and Society
- COMM 11 Fundamentals of Interpersonal Communications (3 Credits)
E. Scientific World
- PHY 12 College Physics II (4 Credits)

SUBTOTAL 24
Required Areas of Study

- ART 10 Art Survey OR MUS 10 Music Survey ( 1 Credit)
- MTH 31 Calculus and Analytical Geometry I (4 Credits)
- PEA Physical Education activity course (1 Credit)
- FREE ELECTIVE (1 Credit) SUBTOTAL 7


## Specialization Requirements

- ELC 11 DC Circuit Analysis (4 Credits)
- ELC 15 Computer Applications in Technology (2 Credits)
- ELC 21 AC Circuit Analysis (4 Credits)
- ELC 25 Electronics I (4 Credits)
- ELC 96 Digital Systems I (4 Credits)
- TEC 11 Voice Communications (4 Credits)
- TEC 21 Data Communications (4 Credits)
- TEC 31 Local Area Networks (4 Credits)
- TEC 41 Advanced Topics in Telecommunications (4 Credits) SUBTOTAL 34


## TELECOMMUNICATIONS TECHNOLOGY (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Physics and Technology Department<br>If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.<br>Curriculum Coordinator: Dr. Ajaz Sana

## Telecommunications Technology Curriculum

65 Credits required for A.A.S. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 13* Trigonometry and College Algebra (3 Credits)
- PEA Physical Education (one activity course) (1 Credits) TOTAL 13


## Required Areas of Study

- ENG 23 Scientific and Technical Writing (3 Credits)
- MTH 14 College Algebra and Introduction to Calculus (3 Credits)
- MTH 15 Calculus (3 Credits)
- PHY 21** Physics for Engineering Technology I (4 Credits)
- PHY 22 Physics for Engineering Technology II (4 Credits)
- MUS 10 Music Survey OR ART 10 Art Survey (1 Credit) TOTAL 18


## Specialization Requirements

- ELC 15 Computer Applications in Technology (2 Credits)
- ELC 11 D.C. Circuit Analysis (4 Credits)
- ELC 21 A.C. Circuit Analysis (4 Credits)
- ELC 25 Electronics I (4 Credits)
- ELC 96 Digital Systems I (4 Credits)
- TEC 11 Voice Communications (4 Credits)
- TEC 21 Data Communications (4 Credits)
- TEC 31 Local Area Networks (4 Credits)
- TEC 41 Advanced Topics in Telecommunications (4 Credits) TOTAL 34

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may choose to take MTH 30, 31, and 32 in lieu of MTH 13,14 , and 15 if they plan to continue their studies at CCNY after completing the A.A.S. degree.
** Students may choose to take PHY 31 and 32 in lieu of PHY 21 and 22 if they plan to continue their studies at CCNY after completing the A.A.S. degree.

## COURSES

Astronomy

## AST $11 \quad 2$ lect 1 rec 2 lab 4 cr

## Stellar Astronomy

This course covers early astronomy; astronomical coordinate systems; structure and evolution of the sun, stars and stellar systems; spectroscopy; the Milky Way and external galaxies; and cosmological models and implications.
Prerequisite: MTH 05 or CUNY math proficiency. Corequisite: ENG 02 or RDL 02 if required.

## AST 12 <br> 2 lect 1 rec 2 lab 4 cr

## Planetary Astronomy

History of astronomy: Structure of the universe; origin and evolution of the solar system including the sun, planets, and minor bodies; architecture of the solar system with emphasis on orbital motions, planetary surfaces, atmospheres and internal structures; the expanding universe.
Prerequisite: ENG 02 or RDL; MTH 05 or CUNY math proficiency.

## AST $101 \quad 1 \mathrm{cr}$

Laboratory Exercises in Stellar Astronomy
This course is the laboratory component of AST 111. Experiments are designed to explore the major discoveries in astronomy including the laws of planetary motion, the nature of light, telescopes, the internal dynamics of the sun, classification and evolution of stars, the Milky Way and external galaxies; and the evolution of the universe.

## AST $111 \quad 2$ lect 1 rec 3 cr

## Stellar Astronomy

This course covers early astronomy; astronomical coordinate systems; structure and evolution of the sun, stars and stellar systems; spectroscopy; the Milky Way and external galaxies; and cosmological models and implications.
Prerequisite: MTH 05 or CUNY Math Proficiency. Corequisite: ENG 02 or RDL 02
Required Core-Life and Physical Sciences

## AST 112

2 lect 1 rec 3 cr

## Planetary Astronomy

History of astronomy; ground-based observation and space exploration; physical processes in the solar system including the sun, planets, and minor bodies; architecture of the solar system with emphasis on orbital motions, planetary surfaces, atmospheres and internal structures; formation and evolution
of the solar system.
Prerequisite: ENG 02 or RDLO2; MTH 05 or CUNY Math Proficiency Flexible Core-Scientific World

## Automotive Technology

## ACS 10 <br> 3 lab 1 cr

## Introduction to Automotive Technology

This course will introduce students to career choices in, and basic skills related to, the automotive industry. Topics covered include basic shop safety, overview of electrical principles and automotive systems and proper use of tools and diagnostic instrumentation.
Corequisites: ENG 02, RDL 02, MTH 05, if required.
ACS $11 \quad 2$ rec 4 lab 4 cr

## Engine Repair

A study of the modern internal combustion gasoline engine including basic principles of design and operation. This course covers disassembly, inspection and precision measuring and continues with reassembly including fitting and reconditioning parts. It also includes material covering engine support systems including cooling, lubrication and basic ignition system fundamentals and engine lubricants.
Corequisite: ACS 10
ACS 12
1 rec 4 lab 3 cr

## Brake Systems

This course will study the design, operation and maintenance of the automotive brake system including diagnostics and servicing of rotors and drums, measuring and resurfacing. Anti-lock brake systems, traction control systems and front wheel drive axle shaft service are also covered.
Corequisite: ACS 10
ACS $13 \quad 2$ rec 2 lab 3 cr
Engine Performance
This course begins with engine operation including conventional ignition systems and focuses on modern ignition techniques, engine, transmission and body control systems and other computer control systems. It explores modern diagnostic test techniques, equipment and procedures, and provides a thorough understanding of modern vehicle fuel control systems.
Prerequisites: ACS 11, ACS 24
ACS $14 \quad 1$ rec 4 lab 3 cr

## Manual Drive Train and Axle

This course covers both conventional rear-drive systems and front-drive configurations. It concentrates on transmission maintenance, service and repair, and includes drive line service and repair of clutch, ring gear and pinion, differential case
assembly, drive shaft, half shaft and four wheel drive systems. Prerequisites: ACS 11, ACS 24

ACS $21 \quad 2$ rec 3 lab 3 cr

## Steering and Suspension Systems

A study of the design, operating principles and service of automotive suspension and steering systems including McPherson strut and multi-link designs, solid axle and independent systems. Tire construction, wear diagnosis and service are covered and emphasis is placed on wheel alignment procedures, including computerized four-wheel alignment. New technologies are covered including four-wheel steering, electronic steering, and computerized suspension systems.
Prerequisites: ACS 10, ACS 24

## ACS $22 \quad 1$ rec 6 lab 4 cr

## Automatic Transmission and Transaxle

This course begins with the basics of hydraulics and how they are applied to traditional automatic transmissions with rear drive vehicles and focuses on modern computer controlled transaxle applications. It includes in-car and out-of-vehicle service, maintenance, repair and adjustment using modern diagnostic techniques and equipment.
Prerequisites: ACS 11, ACS 24.

## ACS $23 \quad 2$ rec 3 lab 3 cr

## Heating and Air Conditioning

A study of vehicle climate control systems including heating and air conditioning. Includes theory, operational specifics, test procedures and service of factory and aftermarket equipment. It touches briefly on R12 system service and upgrades and focuses on 134A systems including testing, diagnosis, parts replacement and charging of $A / C$ systems and troubleshooting electrical, electronic and mechanical heating and cooling system controls.
Prerequisites: ACS 10, ACS 24.
ACS $24 \quad 2$ rec 2 lab 3 cr

## Electrical Systems

This course begins with the basics of electrical theory and advances through the operation of all 12 Volt systems used in the modern automobile including: storage batteries, alternator/ charging systems, starter circuitry, wiring harnesses lighting and body accessories. The course places emphasis on the use of both DVOM technology and computer based diagnostics. Corequisite: ACS 10

ACS $35 \quad 2$ rec 3 lab 3 cr

## Alternative Fuel Technology

This course will overview alternative fuels: ethanol, methanol, compressed natural gas (CNG), liquid natural gas (LNG), propane (LPG), hydrogen, electricity (including hybrids), and fuel cells. It will explain the sources and processing of alternative fuel. It will discuss alternative fuels currently in use and under development, and compare the benefits and
drawbacks of each. It will explain lean burn technology, how combustion is different with a gaseous fuel, and major policies and regulations pertaining to the installation, operation and inspection of alternate fuel vehicles.
Prerequisite: ACS 11 and AVS 34
ACS $36 \quad 2$ rec 3 lab 3 cr

## Hybrid / Electric Vehicles

This course begins with the introduction of Hybrid vehicles and their impact on the environment. It explores the different kind of hybrid vehicles and their configurations. The course also focuses on modern battery technology, the safety concerns associated with high voltage components and a thorough understanding of regenerative braking systems. The course also includes a review of electric motors and charging system, and a review of first responder procedures.

## Prerequisites: ACS 11, ACS 24

ACS $45 \quad 2$ rec 2 lab 3 cr

## Diesel Technology

This course introduces the student to diesel technology theory and operation starting with early designs and construction but focuses mostly on modern diesel engine design and controls. It explores modern diagnostic test techniques and provides a thorough understanding of the importance of maintenance procedures and modern diesel engine control systems.
Prerequisites: ACS 11, ACS 24

## ACS $45 \quad 2$ rec 2 lab 3 cr

## Air Brakes and Suspension

This course begins with the introduction of compressed air systems for the activation of brakes and suspension on trucks and trailers. It explores the different components for the production and storage of air under pressure as well as the various control valves. The course also focuses on dehumidifiers, air driers, and foundation brake components for both, tractors and trailers as well as ABS and traction control systems. The course also looks at the rules and regulations from DOT concerning air brakes specification and safety for heavy duty trucks.
Prerequisites: ACS 10 and ACS 12
ACS $46 \quad 2$ rec 2 lab 3 cr

## Diesel Engine Performance

This course begins with engine operation including conventional diesel injection, but focuses on modern common rail injection techniques. The course will explore the GM Duramax system, the Ford Powerstroke Systems, the Cummins PT and common rail systems, as well as Bosh Systems used by several manufacturers. The course explores modern diagnostic and test techniques, equipment and procedures and provides a thorough exposure to modern diesel electronic control systems.
Prereq: ACS 13, ACS 45

ACS $47 \quad 2$ rec 2 lab 3 cr

## Air Brakes and Suspension

This course begins with the introduction of compressed air systems for the activation of brakes and suspension on
trucks and trailers. It explores the different components for the production and storage of air under pressure as well as the various control valves. The course also focuses on dehumidifiers, air driers, and foundation brake components for both, tractors and trailers as well as ABS and traction control systems. The course also looks at the rules and regulations from DOT concerning air brakes specification and safety for heavy duty trucks.
Prerequisites: ACS 10 and ACS 12

## Electrical Technology

ELC 11<br>4 rec 3 lab 4 cr

## DC Circuit Analysis

Resistance: Ohm's Law, Kirchhoff's laws, networks with DC current and voltage sources, branch-current analysis, mesh and nodal analysis, superposition. Thevenin's, Norton's maximum power theorems, capacitance and inductance. Use of basic test instruments.
Corequisite: MTH 06.

## ELC $13 \quad 2$ lect 2 lab 3 cr

## Computer Applications in Telecommunications

Introductory course in basic computer orientation and implementation of hardware and software applications in telecommunications. Students use various software packages to create documents, spreadsheets, graphs, databases and presentations with lectures, interactive learning and demonstrations. Laboratory exercises required.

## Corequisite: MTH 10.

## ELC $15 \quad 1$ lect 2 lab 2 cr

## Computer Applications in Technology

Introductory course in basic computer orientation and implementation of hardware and software applications in technology. Students will use various software packages to create documents, spreadsheets, graphs, databases and presentations. Students will utilize this knowledge to solve problems and transfer information via electronic media. Lectures, interactive learning and demonstrations will be employed. Laboratory exercises will be required.
Corequisite: MTH 05.

## ELC $18 \quad 1$ lect 2 lab 2 cr

Computer Programming for Engineering Technology
Introduction to computer programming using a visual programming language. The student is introduced to the concepts of application development, user interface design, program development methodology, structured programming, and object-oriented programming. Projects relevant to electrical and electronic circuits are developed to emphasize areas of problem-solving methods, modeling, data analysis and graphing, and interfacing.
Prerequisite: ELC 15.

## Corequisite: MTH 06.

## ELC $21 \quad 3$ rec 3 lab 4 cr

## AC Circuit Analysis

Sinusoidal waveform, phasor quantities, impedance, Kirchhoff's laws, network theorems, power, frequency response of RC and RL circuits, and resonance. Laboratory hours complement class work.
Prerequisite: ELC 11.
Corequisite: MTH 13 and RDL 02 or ENG 02 if required.

## ELC 253 rec 3 lab 4 cr

## Electronics I

In this course students are taught the characteristics of amplifiers using op-amps with respect to amplification, dB frequency response, and input and output impedance. Op-amp applications are introduced with emphasis on the uses of these devices in the telecommunications industry. Electro-optical devices, power supplies, and switches are studied.
The frequency response of passive networks and amplifiers is measured. Analysis by computer simulations is stressed.
Prerequisite: ELC 11 or ELC 31.

## ELC $26 \quad 3$ rec 3 lab 4 cr

## Electronic Systems for Telecommunications I

Students practice the analysis and application of advanced electronic circuits as applied to the telecommunications industry. Topics include frequency response of filters, op-amps, oscillators, amplitude modulation, noise and LC circuits. Troubleshooting and analysis by computer simulation software is stressed throughout.
Prerequisites: ELC 31, PHY 21

## ELC $31 \quad 3$ rec 3 lab 4 cr

## Electric Circuits

In this course students learn to analyze DC and AC passive circuits using Ohm's Law, Kirchhoff's laws and superposition. RC and RL circuits are analyzed for impedance and phase angles. Troubleshooting, analysis by simulation software, and telecommunications applications are stressed throughout.
Prerequisites: MTH 11, ELC 13.
ELC $35 \quad 3$ rec 3 lab 4 cr

## Electronics II

Students practice the analysis and application of advanced electronic circuits as applied to the electronics and telecommunications industry. Topics include frequency response of active filters and oscillators; amplitude modulation, frequency modulations, phase locked loops; pulse modulation concepts; introduction to television; theoretical and hands-on trouble-shooting of test circuits; and analysis by computer simulation.
Prerequisite: ELC 25.

## ELC 36

## 3 rec 3 lab 4 cr

## Electronic Systems for Telecommunications II

Students practice the analysis and application of advanced electronic circuits as applied to the telecommunications industry. Topics include frequency modulation, communication techniques: digital, wired, and wireless, transmission lines, antennas, and fiber optics. Troubleshooting and analysis by computer simulation software is stressed throughout.
Prerequisites: ELC 26
ELC $51 \quad 2$ rec 3 lab 3cr
Electronic Controls
The course introduces discrete and continuous control systems. Open and closed loop systems are analyzed. The use of semi-conductor devices, operational amplifiers, programmable logic controllers and other topics are discussed. Prerequisites: ELC 35, ELC 96.

## ELC $81 \quad 3$ rec 3 lab 4 cr

## Electronic Communications

Generation and processing of signals, including modulation, frequency conversation, bandwidth, oscillators, and noise. Amplitude, frequency, phase modulators, demodulators, phase-locked loops transmission, digital communications, and phase-shift keying. Laboratory hours complement class work.
Prerequisite: ELC 35.
Corequisites: ELC 18, PHY 22, MTH 15.
ELC 94
3 rec 3 lab 4 cr

## Laser and Fiber Optic Communications

Trains students to understand fiber optic technology and to provide the necessary skill for handling, installing, and maintaining complete optical communication systems. Topics include principles of light and lasers, optical fiber and its properties, fiber fabrication and cable design, optical sources and the injection laser diode, photo detectors, modulation schemes for fiber optics, practical optical transmitters and receivers, installation and testing of fiber systems, troubleshooting of test circuits and analysis by computer simulation.
Prerequisites: PHY 22, ELC 35, ELC 81.
Corequisite: ELC 81.

## ELC 963 lect/rec 3 lab 4 cr

## Digital Systems I

This course presents topics in hardware and systems as used in the electronics and telecommunications industry. Electrical and digital circuits are explored. Binary codes and logic systems are discussed as they apply to electronic and telecommunications equipment. Students will explore hardware to the modular level. Students will simulate and demonstrate digital circuits.
Prerequisite: ELC 13 or ELC 15, or EGR 11
Corequisite: MTH 10 or MTH 13 or MTH 30.

ELC $97 \quad 3$ lect/rec 3 lab 4 cr

## Digital Systems II

Students will work with hardware and software installation and be introduced to personal computer fundamentals. Students will connect a personal computer to a network, and install and setup a printer. The course will cover managing and supporting Windows; configuring user related issues and customization; and learning how to maintain a computer and troubleshooting fundamentals.
Prerequisites: ELC 96

## Engineering Science

## EGR 11 <br> 3 lab 1 cr

## Introduction to Engineering Design

An introduction to the major engineering disciplines. Basic concepts in engineering are covered in an integrated manner to: illustrate basic concepts in the context of real applications; illustrate a logical way of thinking about problems and their solutions; and convey the excitement of the profession. These goals are attained through analysis, construction, and testing of various projects that incorporate concepts from a broad range of areas within major engineering fields.
Corequisite: MTH 30.
EGR $21 \quad 1$ rec 2 lab 2 cr
Analysis Tools for Engineers
An introduction to analysis techniques necessary for the solution of engineering problems such as the design of electrical systems. Concepts that are suited to computational solutions are introduced through short lectures and are examined thoroughly during workstation-based workshops in computer labs. Practical technical examples and problems within the engineering disciplines are covered. Among the topics studied are: functions of real variables and their graphs, complex numbers, difference equations, numerical integration and an introduction to system analysis.
Prerequisite: MTH 31.

## EGR $31 \quad 2$ lect 2 lab 3 cr

## Circuit Analysis

This is a study of basic circuit laws: Ohm's law and Kirchhoff's law. Methods of circuit analysis. Circuit theorems. Operational amplifiers. Capacitors and inductors. Sinusoids and phasors. Sinusoidal steady state analysis. Introduction to digital circuits. Corequisites: MTH 33, PHY 33.

## Energy Services and Technology

## EST 11 <br> 1 lec 1 rec 2 cr

## Introduction to Energy Technology

Introduces energy concepts and resources, energy conversion systems, institutions and global implications. Infrastructure and technology at micro-sale (household and personal electrification) and at macro-sale (transportation, electricity). Societal use patterns. Evolution of and alternatives to present dominant energy systems. Exercises in recognizing and evaluating energy
infrastructure, use, waste and costs in everyday life.
Corequisites: ENG 02 and RDL 02, if required.

## EST $15 \quad 2$ lect 1 rec 3 cr

## Energy Economics

A survey of market factors affecting the availability and pricing of various forms of energy, public policy dimensions, and the micro-economic decision-making of firms with respect to projects and investments. Utility regulation and rates. Project economic analysis and financing methods.
Corequisite: ECO 11 or ECO 12.

## EST 21

1 lect 2 lab 2 cr

## Energy Analysis of Mechanical and Electrical Equipment

Development of basic heat flow and thermodynamics concepts, emphasizing practice in applying basic concepts and analytical methods to physical systems and equipment. Application of thermodynamics and instrumentation for heuristic measures of system performance, characterization of efficiency, and as basis of energy audits. Fieldwork and lab benchwork demonstrating various kinds of systems and measurements. Prerequisite: PHY 21.

## EST $31 \quad 2$ lect 1 rec 3 cr

## Building Systems I

Introduction to building systems as related to energy use. Particular focus on thermal comfort, understanding and calculation of building loads. Coverage of mechanical (HVAC) and electrical systems, equipment components and the role of codes and standards within the industry.
Prerequisites: EST 11, PHY 21.

## EST 32 <br> 2 lec 2 lab 3 cr

## Building Systems II

Practicum/Internship course emphasizing quantitative analysis of energy use and opportunities for improvement in specific building systems and equipment. Students will work with actual building plan sets, energy use histories, and manual calculations, and be introduced to computermodeling, including an option for projects at the student's place of work or assigned practicum or internship. Topics include quantity take-offs from plans, set-up, calibration and validation of building models, schematics and control sequences of operation, energy reduction analysis and greenbuilding standards.
Prerequisites: EST 21, EST 31.

## EST 41

2 lec 1 rec 3 cr

## Principles of Energy Management I

An introduction to the principles of energy management in organizations. Energy purchasing and risk management. Energy auditing, project development, monitoring and verification for improvement in various systems. Practice with data management and spreadsheet applications. Organizational aspects of energy accounting, use and management.
Prerequisite: EST 21.
Corequisite: EST 31.

## EST $42 \quad 1$ lec 2 rec 3 cr <br> Principles of Energy Management II

Capstone practicum course in which students will conduct and prepare an energy audit of a specific facility (selected in consultation and with approval of the instructor) and create a strategic plan for gaining organizational commitment to energy management goals and a specific energy management implementation. Classes review technical measures and methods, and organizational analysis in the context of student field projects.
Prerequisites: EST 21, EST 31.

## Nuclear Medicine Technology

The following courses will be given at the Albert Einstein College of Medicine or at the hospitals affiliated with it.

## NMT 71 <br> 2 lab 1 cr

## Nuclear Physics Laboratory

Chronological development of nuclear physics in the 20th century as represented by the experimental work on blackbody radiation, photoelectric effect, matter waves, Compton scattering and pair-production. Comparison of radiation measuring devices including G.M. and scintillation survey meters, gamma cameras, well counters and dosimeters. Quality control and radiation safety.
Prerequisites: PHY 24 and permission of the NMT Program Director; Corequisites: NMT 81-84

## NMT 78 <br> 2 lab 1 lect 2 cr

## EKG - Interpretation and Techniques

Introduction to EKG. Topics include: electrical physiology of the heart, electrocardiographic tracing, leads (3 vs. 12), and analog and digital EKG. Some clinical hours may extend beyond the semester.
Prerequisites: BIO 24 and permission of the NMT Program Director, or BIO 21 and BIO 22 and permission of the Medical Office Assistant Curriculum Coordinator.

NMT $79 \quad 2$ lab 1 lect 2 cr

## Phlebotomy

Introduction to phlebotomy. Topics include: phlebotomy principles, anatomy and physiology of the circulatory system, safety, equipment and techniques. Students completing this course qualify for the certification exam in phlebotomy.
Prerequisite: BIO 24 and permission of the NMT Program Director, or BIO 21 and BIO 22 and permission of Medical Office Assistant Curriculum Coordinator.

## NMT $81 \quad 3$ lect/dem 3 cr

## Orientation in Clinical Nuclear Medicine

Orientation to the hospital environment and to various phases of Nuclear Medicine Technology; hospital administration and procedures.
Prerequisite: Completion of Pre-NMT Sequence.
NMT 823 lect/dem 3 cr
Radio-Pharmaceutical Chemistry

Preparation and use of radio-pharmaceuticals, uptake of radiopharmaceuticals by various organs, time dependent effects.
Prerequisites: BIO 23, CHM 17, NMT 81.

## NMT $83 \quad 2$ rec 2 lab 3 cr

## Radiation Physics and Dosimetry

Elements of nuclear physics, the conservation laws; alpha, beta, and gamma decay; the neutrino; elements of health physics; the roentogen, REM, REP, and RAD; maximum safe human exposure to radiation; regulations governing exposure. Corequisite: NMT 81.

## NMT $84 \quad 2$ lect 2 cr

Radiation Biology
Comprehensive study of radiation effects on cells including direct and indirect action of ionizing radiation; damage induced by free radicals in DNA: interpretation of survival data; radiation genetics; radiation effects on embryos; delayed effects; radiation safety and health physics. Corequisite: NMT 81.

NMT $85 \quad 1$ lect 3 lab 2 cr

## Nuclear Medicine Procedures

Nuclear medicine procedures related to cardiovascular pulmonary system, endocrine system, central nervous system, gastrointestinal system, genitourinary system, skeletal system, hematological system and other therapeutic procedures; introduction to radioimmunoassay principles and procedures.
Prerequisites: BIO 24, NMT 83.

## NMT $86 \quad 2 \mathrm{rec} 1 \mathrm{cr}$

## Didactic Nuclear Medicine

Rationale for applications of radio pharmaceuticals for in vivo and in vitro procedures; discussion of individual organ systems, RIA principles and procedures; review of relevant medical law and patient care.
Prerequisite: NMT 84.
Corequisite: NMT 85.

## NMT $87 \quad 500$ clin/lab 3 cr

## Clinical Nuclear Medicine I

Static and dynamic radionuclide procedures on patients; tomographic procedures; interpretation of radionuclide scans and gamma-camera images; nuclear medicine instrumentation; alternative imaging processes.
Corequisite: NMT 84.
NMT $88 \quad 1$ lect 2 rec 3 cr

## Senior NMT Seminar

Students meet with Medical Director's liaison and Clinical Director to discuss research topics in Nuclear Medicine. Term papers and oral reports based on assigned reading material and concepts analyzed during the didactic and laboratory
segments of the NMT program.
Prerequisite: NMT 87.
Corequisite: NMT 85, NMT 86, NMT 90.

## NMT $89 \quad 2$ lect 4 lab 160 clin 4 cr

## Introduction to Cardiac Ultrasound

Topics include physics of ultrasound, ultrasound instrumentation, emergency medical procedures, Doppler and transesophageal echocardiology. Clinical rotation is at Montefiore Medical Center where each student participates in approximately 150 procedures. Students completing this course will receive a certificate from Montefiore Medical Center.
Prerequisite: BIO 24, permission of NMT Program Director. NMT $90 \quad 500$ clin/lab 3 cr

## Clinical Nuclear Medicine II

Static and dynamic radionuclide procedures on patients; tomographic procedures; interpretation of radionuclide scans and gamma-camera images; nuclear medicine instrumentation; alternative imaging processes.
Prerequisite: NMT 87.

## Physics

## PHY $01 \quad 4$ rec 0 cr

## Introduction to College Physics

Fundamental laws and principles of classical physics; vectors, Newton's Laws, conservation principles, laws of thermodynamics. (Required for Engineering Science and Physics majors who have not had high school physics.)
Prerequisite: MTH 06 or equivalent.
Corequisite: RDL 02 if required.
PHY 10
2 lect 1 rec 2 lab 4 cr

## Concepts of Physics

An elective course that introduces major ideas about the nature of the physical world and methods used in exploring them. Topics include motion and forces; work and energy; nature of light and sound; electricity, magnetism and applications to modern technology; and nature of the atom.
Prerequisite: MTH 05 or CUNY math proficiency.
Corequisites: RDL 02 and ENG 02.
PHY $11 \quad 2$ lect 1 rec 2 lab 4 cr

## College Physics I

Introduction to principles and methods of physics. Topics include Newton's Laws of Motion, mechanics, heat, and sound. (Recommended for Liberal Arts and life science majors, including biology and psychology.)
Prerequisite: Intermediate Algebra or MTH 06.
Corequisite: ENG 02 or RDL 02
Required Core-Life and Physical Sciences
Flexible Core - Scientific World

## PHY 12 <br> 2 lect 1 rec $2 \operatorname{lab} 4 \mathrm{cr}$

## College Physics II

Elements of electric circuits, electromagnetic theory, light, selected topics in atomic and nuclear physics.
Prerequisite: PHY 11.
Flexible Core - Scientific World
PHY $14 \quad 2$ lect 1 rec 3 cr

## Physics Through Film

A conceptual introduction to principles of physics as portrayed in popular films. A qualitative and quantitative understanding of elementary physics using simple estimates and dimensional analysis. Concepts studied include kinematics, forces, work and energy, conservation laws, heat and temperature, atoms, molecules and properties of materials.
Prerequisite or Corequisites: ENG 02 or RDL 02 and MTH 05 or CUNY math proficiency
Flexible Core - Scientific World
PHY $21 \quad 2$ lect 1 rec 2 lab 4 cr
Physics for Engineering Technology I
Statics, kinematics, dynamics, work and energy, circular motion, and simple harmonic motion with special applications to problems in technology.
Prerequisite: Intermediate Algebra or MTH 06.
Corequisite: ENG 02 or RDL 02 if required.
PHY 22
2 lect 1 rec 2 lab 4 cr

## Physics for Engineering Technology II

Fluid dynamics, thermodynamics, electricity and magnetism, optics, superconductors.
Prerequisite: PHY 21.

## PHY $24 \quad 3$ rec 3 lab 4 cr

## Principles of General Physics

Basic principles of general physics; survey of mechanics, heat, electricity, magnetism, optics and modern physics. (This course does not fulfill the Physics requirement for curricula requiring a year or more of Physics.)
Prerequisite: MTH 06 or equivalent.
PHY $31 \quad 2$ lect 2 rec 2 lab 4 cr

## Physics I

Statics and dynamics of particles and rigid bodies; force and motion; energy and momentum; rotational motion, elasticity and simple harmonic motion. First semester of a three-semester sequence for students in Engineering or Computer Science (PHY 31, 32, and 33). Also recommended for Science or Mathematics majors in a Liberal Arts and Sciences transfer program.
Prerequisite: High School physics or PHY 01.
Corequisites: MTH 31 and ENG 02 and RDL 02
Required Core - Life and Physical Sciences

## PHY $32 \quad 2$ lect 2 rec 2 lab 4 cr

## Physics II

Hydrostatics and hydrodynamics; properties of gases; thermodynamics and kinetic theory of matter; wave motion; sound; electrostatics.

Prerequisite: PHY 31.
Corequisite: MTH 32.

## PHY 33 <br> 3 lect 2 rec 3 lab/alt wks 4 cr <br> Physics III

Electromagnetic theory; direct and alternating currents; electromagnetic waves; geometrical and physical optics; modern physics.
Prerequisite: PHY 32.
Corequisite: MTH 33.

## PHY $35 \quad 3$ lect 3 cr

## Thermodynamics

Introductory concepts and definitions of thermodynamics. Zeroth Law of thermodynamics and absolute temperature. Work and heat. First Law and applications. Second Law, Carnot theorem, entropy, thermodynamic state variables and functions, reversibility. Power and refrigeration cycles.
Prerequisites: CHM 11 and PHY 32.
Corequisite: MTH 33.
PHY $40 \quad 2$ rec 2 lab 3 cr

## Physics of Light and Sound

A qualitative treatment of wave phenomena and associated properties of light and sound; reflection, refraction, image formation, optics of the eye, interference and diffraction sound, sympathetic vibrations, acoustical properties, laser applications, music. (Required for students in Media Technology.)
Prerequisite: MTH 05 or CUNY math proficiency.

## PHY 51 <br> 3 lect 2 lab 3 cr

## Modern Physics

Elementary quantum theory, quantum numbers, atomic shell structures and the periodic table; structure of solids; band theory of metals, insulators, and semiconductors; x-rays and gamma radiation; relativity; nuclear physics.
Prerequisite: PHY 33.
Corequisite: MTH 34.
PHY $110 \quad 2$ lect 1 rec 3 cr
Concepts of Physics
This course introduces major ideas about the nature of the physical world and methods used in exploring them. Topics include motion and forces; work and energy; nature of light and sound; electricity, magnetism and applications to modern technology; and nature of the atom.
Prerequisite: MTH 05 or CUNY Math Proficiency. Corequisite: ENG 02 or RDL 02
Required Core - Life and Physical Sciences

## Telecommunications

## TEC 11

3 rec 2 lab 4 cr
Voice Communications
Introduction to techniques, principles, and terminology of voice telecommunications. Public and private telecommunication networks are examined.
Telecommunication equipment, switching and transmission
technology are demonstrated. Frequency spectrum modulation schemes and multiplexing techniques are explored. Lectures and interactive learning demonstrations. Laboratory exercises required.
Prerequisite/Corequisite: ELC 25.
TEC $15 \quad 3$ rec 2 lab 4 cr

## Telecommunications I

This course is designed to train students in the organization, architecture, setup, maintenance, hardware and software aspects of local area networks. Topics include: introduction to networks; types and characteristics of different network architectures and network topologies; intra and inter-network devices; network operating systems; peer-to-peer and client/ server environments; LAN setup and maintenance; network printing; internal web server. A hands-on approach will be taken, with team projects throughout.
Prerequisites: ELC 31, ELC 97.
Corequisite: ELC 26.
TEC $21 \quad 3$ rec 2 lab 4 cr

## Data Communications

Introduction to techniques, principles, and terminology of data communications. Public and private networks are examined. Data communication equipment multiplexing and interactive learning, and demonstrations. Laboratory exercises required.
Prerequisite: ELC 25.
Corequisite: TEC 11.
TEC $25 \quad 3$ rec 2 lab 4 cr

## Telecommunications II

This course will cover the basics of Voice over Internet Protocol (VoIP) systems. Topics include: an overview of TCP/ IP networks with a focus on VoIP; an introduction to VoIP; Quality of Service (QoS); VoIP system components; VoIP protocols and VoIP protocol analysis; VoIP architecture and VoIP codecs. A hands-on approach will be taken, with team projects throughout.
Prerequisites: TEC 15, ELC 97.
Corequisite: ELC 36.
TEC $31 \quad 3$ rec 2 lab 4 cr

## Local Area Networks

Introduction to the technology of local area networks (LANs). Topologies, transmission media, network interfaces, and the access methods are examined. Shared resources and interconnecting of LANs are explored. Lectures, interactive learning, and demonstrations are employed. Laboratory exercises are required.
Prerequisite: TEC 21.

## TEC 35 <br> 3 rec 2 lab 4 cr

## Telecommunications III

This course covers the organization, architecture, setup, hardware and software aspects of networked video delivery systems. Topics include: video transport; compression; packet transport; multicasting; content ownership and security; transport security; IPTV-IP video to the home; video file transfer; VPN's and home-office video links. A hands-on approach will be taken, with team projects throughout.
Prerequisites: TEC 25.
TEC 41
3 rec 2 lab 4 cr
Advanced Topics in Telecommunications
Survey of current and emerging technologies in telecommunications. Lectures, interactive learning, demonstrations, and site visits. Laboratory exercises required.
Prerequisite: TEC 21.
Corequisite: TEC 31.
TEC $45 \quad 3$ rec 2 lab 4 cr

## Telecommunications IV

A survey of current and emerging technologies in telecommunications will be presented. Lectures, interactive learning, demonstrations, and hands-on work will be employed. Prerequisites: TEC 35

## ABOUT THE DEPARTMENT

We are dedicated to the development of well-rounded students through the promotion of abstract reasoning, analysis and the scientific method. We focus on how underlying concepts, theories, principles, and laws affect human behavior, social justice, societal systems, and institutions.

Our social science courses expose students to the disciplines of anthropology, criminal justice, economics, human services, political science, psychology, and sociology. By gaining insight into the social sciences, students can confidently assume the responsibilities of global citizenship and enhance personal growth in their chosen career.
Office: Colston Hall [CO], Room 312
Phone: 718.289.5662
Website: http://www.bcc.cuny.edu/Social-Sciences/
Chairperson and Professor: Dr. James Freeman
Professors: J. Asimakopoulous, K. Berger, M. Garrido
Associate Professors: G. Marzan, R. Mendez, R. Shane
Assistant Professors: J. Eugene, G. Campagna, P. Kolozi, D. Mangiante, E. McSpadden, D. Molina, J. Polanco, B. Rima, B. Somerville, V. Thomas, L. Ticke, G. Weber

Lecturers: L. Battista, M. Guishard ,J. Nawabi, C. Rodriguez, G. Rodriguez

CUNY Office Assistant: Marie Romani, Amariliz Gomez-Sanchez
Approximately 25 adjuncts per semester

## DEGREE PROGRAMS

Criminal Justice, A.A. Human Services, A.A.S.
Liberal Arts and Sciences, A.A.:
Human Services Option
International Studies Option
Political Science Option
Psychology Option
Sociology Option

## COURSES

Anthropology (ANT)
Criminal Justice (CRJ)
Economics (ECO)
Human Services (HSC)
Political Science (POL)
Psychology (PSY)
Sociology (SOC)

## CRIMINAL JUSTICE

Associate in Arts Degree | Joint Degree Program Department of Social Sciences
This program is for students who have an interest in the field of criminal justice. It is a joint degree program with John Jay College of Criminal Justice, in which students receive an Associate in Arts degree at Bronx Community College and a Bachelor of Arts degree in Criminal Justice at John Jay College. BCC graduates of the associate program are automatically accepted into John Jay's program provided that they meet the academic and grade requirements (2.0 or better GPA) to continue with a Bachelor of Arts degree in Criminal Justice at John Jay College. Criminal Justice is a growing field of study that provides intellectual stimulation and practical experience for students with an interest in police science, law, security management, and other fields that incorporate supporting the infrastructure of the law, as well as working with people.
Curriculum Coordinator: Dr. James Freeman Program Director: Dr. Michael Roggow

## Criminal Justice Curriculum (Pathways)

 60 Credits required for A.A. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning ${ }^{1}$ (3 Credits)
C. Life and Physical Science ${ }^{2}$ (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. US Experience and its Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

SUBTOTAL 18

## BCC Required Areas of Study I

Students will complete a minimum of 12 credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR

ART 12 Introduction to Art History: Africa, the Americas, Asia, and the Middle East OR
MUS 11 Introduction to Music OR
MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)

- ENG ${ }^{3}$ English Elective (0-3 Credits)
- COMM 11 Fundamentals of Interpersonal Communication OR COMM 20 Public Speaking and Critical Listening (0-3 Credits)
- HISTORY ${ }^{4}$ Select ONE from HISTORY, GEOGRAPHY, OR PHILOSOPHY (0-3 Credits)
- HIS 20 American Nation (0-3 Credits)
- POL 11 American National Government (0-3 Credits)
- SOC 11 Sociology (0-3 Credits)
- SOC 31 Race and Ethnic Relations OR SOC 37 Social Inequality (0-3 Credits)
- PSY 11 Introduction to Psychology (0-3 Credits) SUBTOTAL 12-15


## BCC Required Areas of Study II

- SCIENCE LAB ${ }^{1}$ Science Laboratory (0-1 Credits)
- PEA Physical Education OR CPR 10 Cardiopulmonary Resuscitation (1 Credit)
- FREE ELECTIVES ( $1-4$ Credits) SUBTOTAL 1-6

Specialization Requirements

- CRJ 11 Introduction to Criminal Justice (0-3 Credits)
- CRJ 21 Introduction to Criminology ( 3 Credits)
- CRJ 22 Introduction to Policing (3 Credits)
- CRJ 23 Introduction to Corrections OR LAW 65 Criminal Law and Procedures (3 Credits) SUBTOTAL 12

1 Students who take or transfer with MTH 30 or MTH 31 will have fulfilled Required Core B \& will reduce free elective credits by one.

2 This requirement is satisfied if a student takes a 4-credit STEM variant course in Required Area C or Flexible Core E.
3 Choose from any ENG course above ENG 16 with the exception of ENG 223.
4 Choose from GEO, PHL or any HIS course other than HIS 20.

## CRIMINAL JUSTICE (PRE-PATHWAYS)

Associate in Arts Degree | Joint Degree Program || Department of Social Sciences
If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. James Freeman
Program Director: Dr. Michael Roggow

## Criminal Justice Curriculum

60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR

MTH 23* Probability and Statistics (3 Credits)

- PEA** OR CPR 10 Cardiopulmonary Resuscitation (1 Credit)
- SCIENCE Choose two laboratory science courses from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)
TOTAL 24


## Required Areas of Study

- ART 11 Introduction to Art OR

MUS 11 Introduction to Music (3 Credits)

- HIS 20 American Experience (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits)
-ENG*** English (3 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- POL 11 American National Government (3 Credits)
- SOC 11 Sociology (3 Credits)
- SOC 31 Race and Ethnic Relations OR

SOC 37 Social Inequality (3 Credits)
TOTAL 24

## Specialization Requirements

- CRJ 11 Introduction to Criminal Justice (3 Credits)
- CRJ 21 Introduction to Criminology (3 Credits)
- CRJ 22 Introduction to Policing (3 Credits)
- LAW 65 Criminal Law and Procedures OR CRJ 23 Introduction to Corrections (3 Credits) TOTAL 12

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

* Students are encouraged to take MTH 23.
** PEA 81 (Self Defense) or PEA 82 (Tai Chi Chuan) are


## recommended.

*** Excluding English 23, Technical Writing.

## HUMAN SERVICES

Associate in Applied Sciences Degree | Career Program Social Sciences Department

Curriculum Coordinator: Professor Donna Mangiante
The Human Services curriculum, accredited by the Council for Standards in Human Service Education, prepares students for entry-level career positions in a variety of human services occupations. Students interested in transferring to a four-year college to major in Social Work after completing their studies at BCC should see the program description for the Human Services Option of the Liberal Arts and Sciences Associate in Arts, A.A.

The A.A.S. curriculum prepares students for employment as mental health aides, group residence workers, neighborhood outreach workers, social case work assistants, geriatric counselors, assistant probation officers, and other similar positions. Employment opportunities exist in such areas as day care, mental health, social services, aging, rehabilitation of the disabled, group and community work at the public and private level.

Graduates are prepared to pursue further education at senior colleges leading to a baccalaureate degree in several professional areas including social work, gerontology, juvenile justice, psychology, sociology, education and counseling. Human Services students are required to participate in two Human Services field work internships which provide supervised learning experiences in work situations. Students learn to apply theoretical material from the classroom and test career choices in the real world.

The degree articulates with SUNY Empire State College and Boricua College. Students are encouraged to visit the Transfer Planning web site for more information.

## Human Services Curriculum (Pathways) <br> 60 Credits required for A.A.S. Degree

## Required Core

A. English Composition

- ENG 10 Fundamentals of Composition and Rhetoric $O R$ ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
B. Mathematical and Quantitative Reasoning
- MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
C. Life and Physical Sciences
- BIO 21 The Human Body (4 Credits)

SUBTOTAL 13

## Flexible Core

A. World Cultures and Global Issues

- SOC 11 Sociology (3 Credits)
- HIS 10 or History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
B. US Experience in its Diversity
- POL 11 American National Government (3 Credits)
C. Creative Expression
- ART 11 Introduction to Art History OR

ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East $O R$
MUS 11 Introduction to Music OR
MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (3 Credits)
D. Individual and Society

- PSY 11 Introduction to Psychology (3 Credits)


## SUBTOTAL 15

## Required Areas of Study

- COMM 11 Fundamentals of Interpersonal Communication OR COMM 20 Public Speaking and Critical Listening (3 Credits)
- HLT 91 Critical Issues in Health (2 Credits) SUBTOTAL 5


## Specialization Requirements

- HSC 10 Human Services and Social Welfare Institutions (3 Credits)
- HSC 11 Case Management (3 Credits)
- HSC 12 Human Services Skills and Methods (3 Credits)
- HSC 91 Fieldwork and Seminar in Human Services I (3 Credits)
- HSC 92 Fieldwork and Seminar in Human Services II (3 Credits)
- SOC 35 Introduction to Social Work (3 Credits)
- SOC 37 Social Inequity (3 Credits)
- PSY 31 Abnormal Psychology (3 Credits)
- PSY 40 Life Span Development (3 Credits)

SUBTOTAL 27

## HUMAN SERVICES (PRE-PATHWAYS)

Associate in Applied Sciences Degree | Career Program Social Sciences Department

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Professor Donna Mangiante

## Human Services Curriculum <br> 60 Credits required for A.A.S. Degree <br> Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 12* Introduction to Mathematical Thought OR MTH 21 Survey of Mathematics I OR MTH 23 Probability and Statistics (3 Credits)
- BIO 21 The Human Body (4 Credits) TOTAL 16


## Required Areas of Study

- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- ENG 12 Composition and Rhetoric II OR ENG 14 Written Composition and Prose Fiction OR ENG 15 Written Composition and Drama OR ENG 16 Written Composition and Poetry (3 Credits)
- SOC 11 Sociology (3 Credits)
- PSY 11 Introduction to Psychology (3 Credits)
- POL 11 American National Government (3 Credits)
- HLT 91 Critical Issues of Health (2 Credits) TOTAL 17


## Specialization Requirements

- HSC 10 Human Services and Social Welfare Institutions (3 Credits)
- HSC 11 Case Management (3 Credits)
- HSC 12 Human Services Skills and Methods (3 Credits)
- HSC 91 Fieldwork and Seminar in Human Services I (3 Credits)
- HSC 92 Fieldwork and Seminar in Human Services II (3 Credits)
- SOC 35 Introduction to Social Work (3 Credits)
- SOC 37 Social Inequality (3 Credits)
- PSY 31 Abnormal Psychology (3 Credits)
- PSY 40 Life Span Development (3 Credits) TOTAL 27

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students planning on transferring to a four-year college are advised to take MTH 21 or MTH 23.

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree
Social Sciences Department
Human Services Option
The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The Human Services Option offers a greater degree of specialization.

Curriculum Coordinator: Professor Donna Mangiante

## Liberal Arts and Sciences Curriculum (Pathways)

 60 Credits required for A.A. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$ (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World ${ }^{2}$ (3 Credits)

SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR

ART 12 Introduction to Art History: Africa, the Americas,Asia and the Middle East OR MUS 11 Introduction to Music OR
MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)

- COMMUNICATIONS COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH ${ }^{3}$ Any English above ENG 16 except ENG 223 (0-3 Credits)
- HISTORY Select ONE from HIS, GEO, PHL (0-3 Credits)
- MODERN LANGUAGES ${ }^{4}$ Select TWO from the same language at the appropriate level (0-6 Credits)
- SOCIAL SCIENCE Select ONE from ANT, CRJ, ECO, POL, PSY, SOC (0-3 Credits)


## SUBTOTAL 6-15

## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE LAB ${ }^{1}$ Science Laboratory ( $0-1$ Credit)
- FREE ELECTIVES (0-10 Credits) SUBTOTAL 1-13


## Human Services Specialization

- PSY 11 Introduction to Psychology (0-3 Credits)
- SOC 11 Sociology (0-3 Credits)
- SOC 35 Introduction to Social Work (3 Credits)
- HSC 10 Social Welfare Institutions (0-3 Credits) SUBTOTAL 12

1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
2 It is recommended that Human Services students take at least ONE course in Biology
3 Choose from any ENG course above ENG 16 with the exception of ENG 223

4 Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college language requirement. These students will take additional language coursework or choose other free elective credits.

The Liberal Arts A.A. Human Services Option is fully articulated with Lehman College's B.A. Program in Social Work and with SUNY Empire State College. See the Transfer Planning web site for details.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree Social Sciences Department

## Human Services Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.

## Liberal Arts and Sciences Curriculum* <br> 60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH $21^{* *}$ Survey of Mathematics I OR

MTH 22** Survey of Mathematics II OR
MTH 23** Probability and Statistics OR

MTH 26** Mathematics in the Modern World (3 Credits)

- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)

- BIO 21 The Human Body (lab science) (4 Credits)
- SCIENCE Two lab science chosen from Astronomy,Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)
TOTAL 24-25
Required Areas of Study
- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE*** (8 Credits)
- ENG**** English (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits) TOTAL 23


## Specialization Requirements

- PSY 11 Introduction to Psychology (3 Credits)
- SOC 11 Sociology (3 Credits)
- SOC 35 Introduction to Social Work (3 Credits)
- HSC 10 Social Welfare Institutions (3 Credits) TOTAL 12
FREE ELECTIVES
- To complete the 60 credit requirement ( $0-1$ Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*The Liberal Arts A.A. Human Services Option is fully articulated with Lehman College's B.A. Program in Social Work and with SUNY Empire State College. See the Transfer Planning web site for details.
**Students may substitute MTH 30 or 31 if they reduce elective credits.
***Choose from a modern language at the appropriate level. Both courses must be in the same language.
****Excluding English 23, Technical Writing.

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree Social Sciences Department

## International Studies Option

The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The International Studies Option offers a greater degree of specialization.
Curriculum Coordinator: Dr. James Freeman

## Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.A. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences 1 (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in Diversity ( 3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR
MUS 11 Introduction to Music OR
MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)
- COMMUNICATIONS COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH ${ }^{2}$ Any English above ENG 16 except ENG 223 (0-3 Credits)
- HISTORY Select ONE from HIS, GEO, PHL (0-3 Credits)
- MODERN LANGUAGES Select TWO from the same language at the appropriate level ( $0-6$ Credits)
- SOCIAL SCIENCES Select ONE from ANT, CRJ, ECO, HSC, POL,PSY, SOC (0-3 Credits) SUBTOTAL 6-15


## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE LAB ${ }^{1}$ Science Laboratory (0-1 Credit)
- FREE ELECTIVES (0-10 Credits) SUBTOTAL 1-13


## International Studies Specialization

Select FOUR courses from the following:

[^4]- MODERN LANGUAGES ${ }^{3}$ (0-3 Credits) SUBTOTAL 0-12

RESTRICTED ELECTIVE

- Select ONE from ANT 11, GEO 10, HIS 10/11, HIS 13, HIS 14, HIS 15, HIS 24, HIS 25, HIS 27, HIS 31, HIS 35, HIS 39, SOC 11 (0-3 Credits)
SUBTOTAL 0-3
1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
2 Choose from any ENG course above ENG 16 with the exception of ENG 223
3 Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college language requirement. These students will take additional language coursework or choose other free elective credits.
The Liberal Arts A.A. International Studies Option articulates with SUNY Empire State College. See the Transfer Planning web site for details.


## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree Social Sciences Department

## International Studies Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. James Freeman
Liberal Arts and Sciences Curriculum
60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Two lab sciences chosen from Astronomy, Biology, Chemistry, Earth Science, Environmental


## Science or Physics (8 Credits)

TOTAL 24-25

## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE** (8 Credits)
- ENG ${ }^{* * *}$ English (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits) TOTAL 23
Specialization Requirements
- Select four from the following: One course in a Modern Language of designated area (3 Credits) One course in Politics of designated area (3 Credits) One course in History of designated area (3 Credits) One course in Economics of designated area (3 Credits) One course in Literature of designated area ( 3 Credits) TOTAL 12
FREE ELECTIVES
- To complete the 60 credit requirement (0-1 Credits)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may substitute MTH 30 or 31 if they reduce elective credits.
**Choose from a modern language at the appropriate level. Both courses must be in the same language.
***Excluding English 23, Technical Writing.
The Liberal Arts A.A. International Studies Option articulates with SUNY Empire State College. See the Transfer Planning web site for details.

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree Social Sciences Department

## Political Science Option

The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The Political Science Option offers a greater degree of specialization.
Curriculum Coordinator: Dr. Peter Kolozi

## Liberal Arts and Sciences Curriculum (Pathways)

 60 Credits required for A.A. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$ (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART and MUSIC

ART 11 Introduction to Art History OR
ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR MUS 11 Introduction to Music OR MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)

- COMMUNICATIONS

COMM, THEA, FILM, MEST (0-3 Credits)

- ENGLISH ${ }^{2}$ Any English above ENG 16 except ENG 223 (0-3 Credits)
- HISTORY Select ONE from HIS, GEO, PHL (O-3 Credits)
- MODERN LANGUAGES Select TWO from the same language at the appropriate level (0-6 Credits)
- SOCIAL SCIENCE Select ONE from ANT, CRJ, ECO, HSC, PSY, SOC (0-3 Credits)


## SUBTOTAL 6-15

## Required Areas of Study II

- PEA Physical Education OR

HLT 91 Critical Issues in Health (1-2 Credits)

- SCIENCE LAB ${ }^{1}$ Science Laboratory ( $0-1$ Credit)
- FREE ELECTIVES (0-10 Credits)


## SUBTOTAL 1-13

## Political Science Specialization

- POL 11 American National Government (0-3 Credits)
- POLITICAL SCIENCE Choose any THREE from POL 21, POL 31, POL 41, POL 42, POL 51, POL 61, POL 71, POL 72, POL 81 (0-9 Credits)
SUBTOTAL 12
1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
2 Choose from any ENG course above ENG 16 with the exception of ENG 223.
3 Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college
language requirement. These students will take additional language coursework or choose other free elective credits.
The Political Science option is fully articulated with Lehman's B.A. in Political Science and with SUNY Empire State College. Students should review the articulation agreement available on the Transfer Planning web site.


## LIBERAL ARTS AND SCIENCES <br> (PRE-PATHWAYS)

Associate in Arts Degree || Transfer Degree
Social Sciences Department

## Political Science Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Peter Kolozi

## Liberal Arts and Sciences Curriculum

## 60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Two lab sciences chosen from Astronomy,Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits) TOTAL 24-25


## Required Areas of Study

- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE** (8 Credits)
- SOCIAL SCIENCE Choose from Anthropology, Economics, Geography, Political Sciences, Psychology, and Sociology (select from two different disciplines) (6 Credits)
- RESTRICTED ELECTIVE-CMS or ENG*** (3 Credits) TOTAL 23


## Specialization Requirements

- POL 11 American National Government (3 Credits)
- Three other courses from the following: POL 31

Comparative Politics, POL 41 Civil Rights in America since 1954, POL 51 Urban Politics, POL 81, Independent Study and Internships in Government (9 Credits)
TOTAL 12
FREE ELECTIVES

- To complete the 60 credit requirement ( $0-1$ Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.

NOTE: Students planning on transferring to Lehman College should take Economics 11 or 12 and select one additional Social Science course.
The Political Science option is fully articulated with Lehman's B.A. in Political Science and with SUNY Empire State College. Students should review the articulation agreement available on the Transfer Planning web site.
*Students may substitute MTH 30 or 31 if they reduce elective credits.
**Choose from a modern language at the appropriate level. Both courses must be in the same language.
***Excluding English 23, Technical Writing.

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree
Social Sciences Department
Psychology Option
The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The Psychology Option offers a greater degree of specialization.

## Curriculum Coordinator: Dr. Rafael Mendez

## Liberal Arts and Sciences Curriculum (Pathways)

 60 Credits required for A.A. Degree
## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$ (3-4 Credits) SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits)

## SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR MUS 11 Introduction to Music OR MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)
- COMMUNICATIONS COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH ${ }^{2}$ Any English above ENG 16 except ENG 223 (0-3 Credits)
- HISTORY Select ONE from HIS, GEO, PHL (0-3 Credits)
- MODERN LANGUAGES ${ }^{3}$ Select TWO from the same language at the appropriate level (0-6 Credits)
- SOCIAL SCIENCE Select ONE from ANT, CRJ, ECO, HSC, POL, SOC (0-3 Credits)


## SUBTOTAL 6-15

## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE LAB ${ }^{1}$ Science Laboratory ( $0-1$ Credit)
- FREE ELECTIVES (0-10 Credits) SUBTOTAL 1-13


## Psychology Specialization

- PSY 11 Introduction to Psychology (0-3 Credits)
- PSYCHOLOGY Choose any THREE from PSY 22, PSY 23, PSY 27, PSY 31, PSY 35, PSY 40, PSY 41, PSY 42, PSY 43, PSY 44, PSY 51, PSY 71, PSY 72 (9 Credits) SUBTOTAL: 9-12

1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3-credit course must also complete an additional 1 -credit lab course to fulfill graduation requirements.
2 Choose from any ENG course above ENG 16 with the exception of ENG 223.
3 Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college language requirement. These students will take additional language coursework or choose other free elective credits.
NOTE: The Psychology Option articulates with Lehman College, The College of New Rochelle, SUNY Stony Brook and SUNY Empire State. Visit the Transfer Planning web site for more information.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

Associate in Arts Degree | Transfer Degree Social Sciences Department

Psychology Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with an academic advisor.
Curriculum Coordinator: Dr. Rafael Mendez

## Liberal Arts and Sciences Curriculum

60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)
- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Two lab sciences chosen from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits)
TOTAL 24-25
Required Areas of Study
- ART 11 Introduction to Art OR MUS 11 Introduction to Music (3 Credits)
- MODERN LANGUAGE** (8 Credits)
- HISTORY ${ }^{* * *}$ and SOCIAL SCIENCE Choose from Anthropology, Economics, Geography History, Philosophy, Political Science, Psychology and Sociology (no more than one course in any discipline) (9 Credits)
- RESTRICTED ELECTIVE CMS 20, 22, 26, 41, 60, 61, OR ENG 14, 15, 16, 23, 53, 54, 56, 61, 65, 72 (3 Credits) TOTAL 23


## Specialization Requirements

- PSY 11 Introduction to Psychology (3 Credits)
- PSY Select three other courses (9 Credits)

TOTAL 12
FREE ELECTIVES

- To complete the 60 credit requirement ( $0-1$ Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may substitute MTH 30 or 31 if they reduce elective credits.
**Choose from a foreign language at the appropriate level. Both
courses must be in the same language.
***Although HIS 20 is not required, it is recommended as one course of the three.

NOTE: The Psychology Option articulates with Lehman College, The College of New Rochelle, SUNY Stony Brook and SUNY Empire State. Visit the Transfer Planning web site for more information.

## LIBERAL ARTS AND SCIENCES

Associate in Arts Degree | Transfer Degree Social Sciences Department

Sociology Option
The Liberal Arts and Sciences curriculum prepares a student to be an accomplished and productive human being. A liberal arts degree opens doors to the professions and to rewarding and responsible careers. Future physicians, teachers, scientists, lawyers, and businessmen, for example, develop themselves as well-rounded, individuals, in addition to completing their pre-professional work. The academic experiences in liberal arts and sciences provide the foundation for later specialization, graduate study, and professional school. The Sociology Option offers a greater degree of specialization.
Curriculum Coordinator: Dr. Vaso Thomas

## Liberal Arts and Sciences Curriculum (Pathways) 60 Credits required for A.A. Degree

## Required Core

A. English Composition (6 Credits)
B. Mathematical and Quantitative Reasoning (3 Credits)
C. Life and Physical Sciences ${ }^{1}$ (3-4 Credits)

SUBTOTAL 12-13

## Flexible Core

A. World Cultures and Global Issues (6 Credits)
B. U.S. Experience in Diversity (3 Credits)
C. Creative Expression (3 Credits)
D. Individual and Society (3 Credits)
E. Scientific World (3 Credits) SUBTOTAL 18

## Required Areas of Study I

NOTE: Students will complete a minimum of six credits of these requirements within the Flexible Core. Transfer students who have completed Common Core requirements at a previous institution will not be required to complete credits in excess of the 60 credit requirement.

- ART 11 Introduction to Art History OR ART 12 Introduction to Art History: Africa, the Americas, Asia and the Middle East OR MUS 11 Introduction to Music OR MUS 12 Introduction to Music: A Multi-Cultural Survey of World Music (0-3 Credits)
- COMMUNICATIONS COMM, THEA, FILM, MEST (0-3 Credits)
- ENGLISH ${ }^{2}$ Any English above ENG 16 except ENG 223 (0-3 Credits)
- HISTORY Select ONE from HIS, GEO, PHL (0-3 Credits)
- MODERN LANGUAGES ${ }^{3}$ Select TWO from the same language at the appropriate level ( $0-6$ Credits)
- SOCIAL SCIENCE Select ONE from ANT, CRJ, ECO, HSC, POL, PSY (0-3 Credits)

SUBTOTAL 6-15

## Required Areas of Study II

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE LAB ${ }^{1}$ Science Laboratory ( $0-1$ Credit)
- FREE ELECTIVES (0-10 Credits) SUBTOTAL 1-13


## Sociology Specialization

- SOC 11 Sociology (0-3 Credits)
- SOCIOLOGY Select Three from the following: SOC 31 Race and Ethnic Relations;
SOC 32 Sociology of the City;
SOC 33 Marriage and Family; SOC 34 Social Deviance;
SOC 35 Introduction to Social Work ${ }^{4}$;
SOC 37 Social Inequality;
SOC 92 Religion and Society (9 Credits)
SUBTOTAL 12
1 Students may select either a 4-credit STEM variant science course or a 3-credit science course to fulfill Required Core C. Students selecting a 3 -credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.
2 Choose from any ENG course above ENG 16 with the exception of ENG 223

3 Students who enter with successful completion of two years of a foreign language in high school have fulfilled their college language requirement. These students will take additional language coursework or choose other free elective credits.

4 Students planning to transfer to Lehman College to major in Sociology should not take SOC 35.

NOTE: The Sociology Option articulates with Lehman College and SUNY Empire State. Visit the Transfer Planning web site for more information.

## LIBERAL ARTS AND SCIENCES (PRE-PATHWAYS)

## Associate in Arts Degree | Transfer Degree

Social Sciences Department

## Sociology Option

If you began studying at BCC in or after Fall 2013, Pathways applies. Pathways also applies to students who have returned to CUNY after an absence of more than one semester. If you are a continuing student who entered before Fall 2013, you will be able to choose whether you remain with your existing requirements or change to Pathways. You should consult with
an academic advisor.
Curriculum Coordinator: Dr. Vaso Thomas

## Liberal Arts and Sciences Curriculum <br> 60 Credits required for A.A. Degree

## Core Requirements

- ENG 10 Fundamentals of Composition and Rhetoric OR ENG 11 Composition and Rhetoric I (3 Credits)
- ENG 12 Composition and Rhetoric II (3 Credits)
- CMS 11 Fundamentals of Interpersonal Communication (3 Credits)
- HIS 10 History of the Modern World OR HIS 11 Introduction to the Modern World (3 Credits)
- MTH 21* Survey of Mathematics I OR

MTH 22* Survey of Mathematics II OR MTH 23* Probability and Statistics OR MTH 26* Mathematics in the Modern World (3 Credits)

- PEA Physical Education OR HLT 91 Critical Issues in Health (1-2 Credits)
- SCIENCE Two lab sciences chosen from Astronomy, Biology, Chemistry, Earth Science, Environmental Science or Physics (8 Credits) TOTAL 24-25


## Required Areas of Study

- ART 11 Introduction to Art (3 Credits)
- MUS 11 Introduction to Music (3 Credits)
- HIS 20 American Nation: Political and Social Development of a People (3 Credits)
- MODERN LANGUAGE** (8 Credits)
- ENGLISH*** (3 Credits)
- CMS 20 Public Speaking and Critical Listening (3 Credits) TOTAL 23


## Specialization Requirements

- SOC 11 Sociology (3 Credits)
- Choose two (2) from:

SOC 31 Race and Ethnic Relations
SOC 33 Marriage and Family
SOC 34 Social Deviance
SOC 35 Introduction to Social Work ****
SOC 37 Social Inequality (6 Credits)

- SOCIAL SCIENCE - Choose one from Anthropology, Criminal Justice, Economics, Geography, Philosophy, Political Science, Psychology, or Sociology (3 Credits)
TOTAL 12
FREE ELECTIVE
- To complete the 60 credit requirement ( $0-1$ Credit)

NOTE: At least two courses must be taken from a list designated as "Writing Intensive" as published each semester in the Registration Guide and Schedule of Classes.
*Students may substitute MTH 30 or 31 if they reduce elective credits.
** Choose from a modern language at the appropriate level. Both courses must be in the same language.
***Excluding English 23, Technical Writing.
**** Students planning to transfer to Lehman College should not take SOC 35 if they wish to major in Sociology.
NOTE: The Sociology Option articulates with Lehman College and SUNY Empire State. Visit the Transfer Planning web site for more information.

## COURSES

## Anthropology

## ANT 11 <br> 3 rec 3 cr

## Introduction to Anthropology

Development of human societies and cultures from early origins to present day. Touches all major fields of anthropology, such as physical anthropology, linguistics, and archeology; but focuses on cultural anthropology. Issues of economics, politics, family structure and religion from an anthropological point of view.
Prerequisite or Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - World Cultures and Global Issues

## Criminal Justice

## CRJ $11 \quad 3$ lect 3 cr

## Introduction to Criminal Justice

This course will familiarize students with the Criminal Justice system and four of its components: the police, courts, corrections and the juvenile justice system. At the end of the course, students should be able to describe the goals, organization and procedures of the Criminal Justice system, as well as the interrelationships of its four components.
Corequisite: ENG 02 or RDL 02, if required.
Flexible Core - US Experience in its Diversity
CRJ 21
3 lect 3 cr

## Introduction to Criminology

This course will explore theories and empirical research used to understand deviant and criminal behavior, and their implications for the control of crime. Applications of these theories to practice and in policy will be discussed.
Prerequisite: SOC 11, CRJ 11
Corequisite: ENG 02 or RDL 02, if required.

## CRJ 22 <br> 3 lect 3 cr

## Introduction to Policing

This course will examine the origins of American policing, focusing on police field behavior and issues that police departments face today.
Prerequisite: CRJ 11
Corequisite: ENG 02 or RDL 02, if required.
CRJ 23
3 rec 3 cr
Introduction to Corrections
The aim of this course is to familiarize students with the

American corrections system. The course will introduce students to an overview of current institutional practices, policies, theories, and legal issues. This course focuses on the field of corrections including a review of the historical development of crime and corrections, sentencing, Ojails, prisons, correctional policies, agencies, prison life, and challenges facing correctional populations. It will further explore the principles and practices of treatment accorded to offenders in various types of correctional settings.
Prerequisite: CRJ 11.

## Economics

## ECO $11 \quad 3$ rec 3 cr

## Microeconomics

Nature of the market system via supply and demand; analysis of prices, costs and profits for various firms and markets. Applying economic theory to policy issues such as wage determination, discrimination, education, unionization, government intervention, rent control and employment of resources. (May be taken before or with ECO 12.)
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Individual and Society
ECO $12 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Macroeconomics

Analysis of economic growth and determination of domestic output, employment, and income; examining GDP, price index, the business cycle, unemployment, and theories/effects of inflation. Exploring differences between Classical and Keynesian Economics via consumption, savings, investment, and the interest rate. Evaluating government fiscal policy and monetary policy. Studying Federal Reserve System and role of money and banking. (May be taken before or with ECO 11.)
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - US Experience in its Diversity

## ECO $15 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## History of Economic Thought*

Study of evolution of economic ideas; basic problems of economics: factor allocation, distribution and growth. Major schools of economic thought [primitive, feudal, classical, marginalist, Keynesian, Neo-classical synthesis, modern socialism) are emphasized.
Prerequsite: ECO 11 or 12, or permission of the instructor.
Flexible Core - World Cultures and Global Issues

## ECO $31 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Economics of Labor

Study of all labor resources; their utilization, allocation, and compensation; unionism; government regulation, and other factors affecting the labor resource.
Pre or Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Individual and Society
ECO $71 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Economics of Developing Areas

This course introduces students to basic principles and current problems of economic growth and development in developing and underdeveloped nations in Africa, Asia, Central and South America.
Prerequisite: ECO 11, ECO 12, HIS 10 or SOC 11
Flexible Core - World Cultures and Global Issues

## Human Services

## HSC $10 \quad 3$ rec 3 cr

## Human Services and Social Welfare Institutions

Introduces the student to the foundations and influences of social welfare policy and the human services movement. Social welfare institutions and societal response to human needs will be examined. The course will discuss the influences of political, social and cultural factors upon past and present approaches to meeting the needs of individuals, families, groups, and communities.
Corequisites: ENG 02 or RDL 02 if required, and PSY11 or SOC 11. Flexible Core - US Experience in its Diversity

HSC $11 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Introduction to Case Management

Addresses the complex situation of children and adolescents who require long-term assistance and whose needs fall along a continuum of care. Objective is to facilitate and ensure the effective delivery of service by improving the 'fit' between client capacity and demands of the environment. Includes focus on crisis intervention with regard to child abuse, family violence, substance abuse, HIV and AIDS, and teenage pregnancy.
Prerequisite: HSC 10, PSY 11, SOC 11.

## HSC 12

3 rec 3 cr

## Human Services Skills and Methods

This course introduces students to essential skills, techniques and methods necessary for success in the field of human services. The course will help students transfer knowledge gained in the classroom to future practice and fieldwork placements. Students will become acquainted with the methods and skills used in the human service field to assist clients on an individual basis (micro-level) or in larger group settings (mezzo-level). Counseling approaches used to assist clients from culturally diverse backgrounds will be explored. Advocacy techniques which aid clients who are receiving inadequate services from public assistance agencies will be discussed.
Prerequisite or Corequisite: HSC 10.

## HSC $91 \quad 2$ rec 14 hrs field work 3 cr

## Field Work and Seminar in Human Services I

Supervised fieldwork at a community social agency to provide practical human service skill development in the diagnosis, treatment and evaluation of individual, family, group and institutional problems. Weekly seminars are designed to assure that skills and values are being appropriately integrated.
Prerequisites: PSY 11, SOC 11, HSC 12 and permission of department.
Prerequisites or Corequisites: ENG 10 or ENG 11, HSC 11, SOC 35

HSC $92 \quad 2$ rec 14 hrs field work 3 cr

## Field Work and Seminar in Human Services II

Supervised field work at a community social agency to provide practical human service skill development in the diagnosis, treatment and evaluation of individual, family, group and institutional problems. Weekly seminars to assure that skills and values are being appropriately integrated. Prerequisite: HSC 91 and permission of department.

## Political Science

## POL 11

## 3 rec 3 cr

## American National Government

Survey of structure and activities of the national government: bases of present political system, pressure groups, political parties, elections, Congress, the President, the Supreme Court, and the protection and deprivation of individual rights.
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - US Experience in its Diversity

## POL 21 <br> 3 rec 3 cr

## State and Local Government

How the American states and localities govern themselves. Relationships with the national government; governors, legislators, and judges; finances; metropolitan and local governments; public policy issues. Attention on special situations of New York City and State.
Prerequisites: POL 11 or permission of the department.
POL 31

## 3 rec 3 cr

## Comparative Government

The purpose of this course is to get students interested in, and knowledgeable about, the politics of other nations. To accomplish this, we will examine various nations, with particular attention to nations within Western Europe, Africa, Asia, and the Middle East. The comparative method will be discussed as well as case studies of specific nations. This will be accomplished by comparing the historical experiences, political institutions and public policies of countries. We will also explore issues related to globalization.
Prerequisite: POL 11 or permission of the department.
Flexible Core - World Cultures and Global Issues
POL 41
3 rec 3 cr

## Civil Rights in America Since 1954

An analysis of the US Government and the civil rights movements since 1954. Topics include Jim Crow, desegregation, Brown V. Board of Education, Voting/Civil Rights Acts, Martin Luther King, SNCC, SCLC, Malcolm X, Black Panther Party, National Organization of Women, Cesar Chavez, Puerto Rican and Chicano movements.
Prerequisite: POL 11 or permission of the department.
Flexible Core - US Experience in its Diversity

POL 42
3 rec 3 cr

## Civil Rights Throughout the World

The purpose of this course is past and present comparison of governmental civil rights activities throughout the world, including civil rights and color; civil rights and religion; women's rights in various countries.
Prerequisite: POL 11, or HIS 10, or SOC 11, or permission of the department.

POL $51 \quad 3$ rec 3 cr
Urban Politics
Politics and government of the American city: municipal political institutions, suburban and metropolitan government, relations with the state and federal governments, racial and ethnic politics, planning, crime and the police, public education.
Prerequisite: POL 11 or SOC 11 or permission of department. Flexible Core - Individual and Society

POL 61
3 rec 3 cr

## Solving Social Problems

## Through the Political Process

This is a practical course showing how to work through existing channels for a more civically meaningful life. Focus on formal and informal responsibilities of officials in all levels of government. How to use political channels to address public issues and solve social problems.
Prerequisite: POL 11, or SOC 11, or permission of the department.
POL 71
3 rec 3 cr
Politics of Developing Areas
This course is an introduction to the politics and government of developing areas of the world. Study of modernization and political development, influences of internal and external forces on political evolution, social bases of political life, national political institutions and processes, political thought and ideology, regional and international institutions and politics, and foreign policy problems.
Prerequisite: POL 11, or HIS 10/11, or SOC 11
Flexible Core - World Cultures and Global Issues
POL $72 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## International Politics

This course is an introduction to the field of international politics. It explores the foundations of modern international politics, the relationship between domestic and international politics, the various means for the pursuit of foreign policy goals by states, role of non-governmental organizations on the international scene, and some approaches to problems of war and peace. Prerequisite: POL 11, or HIS 10/11, or SOC 11 or permission of the department.
Flexible Core - World Cultures and Global Issues

POL $81 \quad 3$ rec 3 cr
Independent Study and Internships in Government
Permission of Instructor required

## Psychology

## PSY $11 \quad 3$ rec 3 cr

## Introduction to Psychology

Scientific method in the understanding of human behavior. Introductory study of growth and development, motivation, emotions and mental health, learning, intelligence and personality evaluation.
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - Individual and Society
PSY 22
3 rec 3 cr

## Social Psychology

Introduction to social psychology, focusing upon the nature of aggression and violent behavior; role of social influence in determination of deviant and conformist behavior, attitude change and decision making; affiliation; primary and group relationships; social norms and interrelationship of personality and culture.

## Prerequisite: PSY 11.

Flexible Core - Individual and Society

## PSY $23 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Environmental Psychology

Relationship between individuals and their natural environments as well as built environments such as housing, neighborhoods, schools, workplaces, hospitals, and other shared spaces. Focus is on the psychological aspects of issues such as crowding, stress, privacy, access, community identity, pollution, sustainability, and quality-of-life.
Prerequisite: PSY 11.

## PSY 27 / BIO 273 rec 3 cr

## Introduction to Behavioral Neuroscience

This course is a survey of the field of Neuroscience including: an introduction to the structures and functions of the nervous system; understanding sensation, perception and movement; sleep and dreaming; learning and memory; and neurological disorders.
Prerequisite: BIO 11 or PSY 11.
Flexible Core-Scientific World
PSY $31 \quad 3$ rec 3 cr

## Abnormal Psychology

Major forms of psychological disorders, such as neuroses, psychoses, psychosomatic disturbances and character disorders; their origin, development and treatment.
Prerequisite: PSY 11.
Flexible Core - Individual and Society
PSY 35
3 rec 3 cr

## Dynamics of Human Motivation

Introduction to complex human motivation; emphasis on interaction of conscious and unconscious motives, inner conflict, and adaptive and maladaptive coping techniques. Applications to relevant contemporary problems, such as child rearing, psychotherapy, education and drug addiction. Prerequisite: PSY 11.

## PSY $40 \quad 3$ rec 3cr

Life Span Development

This course enables students to understand human growth and development, from conception through late adulthood, in varied contexts and cultures. The emphasis is on the interaction between biological, cognitive and social changes over time, within families and within communities. Research data and key ideas, not only from psychology and sociology, but also from neuroscience, genetics, economics, and anthropology are included. The goal is to provide students with a solid understanding of the causes and manifestations of human behavior.
Prerequisite: PSY 11.
Flexible Core - Individual and Society

## PSY $41 \quad 3$ rec 3 cr

## Psychology of Infancy and Childhood

Major factors in psychological development from infancy through childhood; influence of the family biological, cultural, and socio-economic factors in producing normal and abnormal intellectual and emotional growth.
Prerequisite: PSY 11.
Flexible Core - Individual and Society

## PSY 42 <br> 3 rec 3cr

## Psychology of Adolescence and Adulthood

Study of development from adolescence to adulthood with regard to implications for self-realization, love, marriage, vocation, parenthood, retirement and aging. Changing attitudes and values about sex, drugs, aging and politics are explored in regard to different stages of adult development.
Prerequisite: PSY 11.
Flexible Core - Individual and Society
PSY $43 \quad 3$ rec 3 cr

## Psychological Development During Maturity and Aging

Normal and abnormal psychological development during adulthood and old age. Emphasis on dynamics of the life cycle; theories of the mature personality; forces affecting continuing growth of the adult personality and intellect; biological, social and cultural determinants of aging; and influence of normal and abnormal aging processes on perception, psychomotor skills, learning, intelligence, and personality.
Prerequisite: PSY 11.
Flexible Core - Individual and Society

## PSY $44 \quad 3$ rec 3 cr

## Psychology of Women

Development, personality characteristics, and needs of women; and similarities to and differences from men. Psychological aspects of uniquely feminine experiences. Issues are examined from a theoretical as well as an empirical perspective.
Prerequisite: PSY 11.
PSY $51 \quad 3$ rec 3 cr

## Principles of Group Dynamics

Introduction to theory of group behavior, including analysis of the psychological structure of groups, cohesive and disruptive forces, conflict and adjustment in group relationships and relationship of groups to society.
Prerequisite: PSY 11.

## PSY $71 \quad 3$ rec 3 cr

## Clinical Techniques of Assessment: The Interview

Interpersonal approach in assessing psychological problems of individuals and minigroups. Practical experience with clinical interview techniques; psychological evaluation of data and case history write-ups. Methods of referral to appropriate professional and community resources are discussed.
Prerequisite: PSY 11.
PSY $81 \quad 3$ rec 6 hrs field work 3 cr

## Field Work and Seminar in Psychology I

Supervised field work or independent research. Required seminar integrates practical experience with coursework.
Prerequisite: 9 credits in the social sciences (Economics, Political Science, Psychology, Sociology) and/or permission of the department; 6 of these credits must be in Psychology.

## Sociology

## SOC 11 <br> 3 rec 3 cr

Sociology
Introduction to the scientific study of human life as group life. Culture and personality; courtship, marriage and family; religious behavior; education and communication; theories of social stratification and social change.
Corequisite: ENG 02 or RDL 02 if required.
Flexible Core - World Cultures and Global Issues
SOC 31
3 rec 3 cr

## Race and Ethnic Relations

Characteristics of American ethnic minorities and religious groups, including theories explaining prejudice and discrimination. Intergroup relations, with particular reference to the New York metropolitan area, and techniques for relieving problems in human relations.
Prerequisite: SOC 11.
Flexible Core - Individual and Society
SOC 32
3 rec 3 cr

## Sociology of the City

Sociological concepts of urbanism and community; current patterns of urban stratification and group life. History, spatial patterning, and social organization of urban areas related to different groups making up the city and its suburbs and to the processes and impact of change affecting them. Effect of urban living on personality and culture.

SOC 33
3 rec 3 cr

## Marriage and the Family

Introduction to the study of the family as a social institution. Evolution of form and functions of the family and how its structure is shaped by forces in society. Significance of family as a socialization agent, courtship and the romantic love complex, women's roles and changing family structure, minority culture families in American society and consideration of the future of the family.

Prerequisite: SOC 11.
SOC $34 \quad 3$ rec 3 cr

## Social Deviance

Explores what is regarded as deviant within a society, with emphasis on criminality and mental illness. Deviance from the perspective of the deviant (e.g., the process by which the initial deviance becomes a career or master status). Deviance from the perspective of society, its social structure, norms and sanctions relevant to deviance, and functions or dysfunctions served by those committing acts of deviance.
Prerequisite: SOC 11.
Flexible Core - Individual and Society

## SOC $35 \quad 3$ rec 3 cr

## Introduction to Social Work

Nature of social work and its functions; family casework, child welfare, psychiatric and medical social work, correctional services, public welfare and community welfare organizations.
Prerequisite: SOC 11 or PSY 11 or permission of instructor.
Flexible Core - Individual and Society

## SOC $36 \quad 3$ rec 3 credits

## Sociology of Sex Roles

The nature of women's and men's participation in the family, at school, at work, at play, and in government. Comparative study of various classes and races of contemporary Americans and their historical and international counterparts. Analysis of the impact of the sexual revolution and the movement for sexual equality.
Prerequisite: SOC 11.
SOC $37 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Social Inequality

This course is an introduction to the nature, causes and consequences of social inequality, both in the U.S. and worldwide. Inequality of economics, gender, sexual orientation, race and class are examined. The course also includes definitions, concepts, sociological theories and economic systems pertaining to diversity and inequality.
Prerequisite: SOC 11 or permission of department.
Flexible Core - Individual and Society
SOC $38 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Social Advocacy

Introduction to roles and problems of advocates in the social services system; nature, need and processes of advocacy; legal administrative aspects of social services programs (social security, welfare, family court); advocating rights of special groups (handicapped, poor, youth, aged).
Prerequisite: POL 11 or SOC 11 or department permission.
SOC $92 \quad 3 \mathrm{rec} 3 \mathrm{cr}$

## Religion and Society

Social origins and phenomena of religion including its meaning for the individual and what functions it serves for society.

# Strategic Initiatives 

## OFFICE OF STRATEGIC INITIATIVES

## Vice President: Dr. Eddy Bayardelle

Strategic Initiatives is the bridge between Bronx Community College and the world beyond BCC's gates. Its various offices link on-campus academic programs to business and industry, alumni, foundations and donors, local high schools, the media and community organizations. In doing so, the division plays the dual role of preparing future BCC students for the challenges of higher education and preparing current BCC students for the demands of the job market after they graduate.

Offices under its auspices include: EOC (the Economic Opportunity Center), which helps disadvantaged clients with classes in job skills and other programs designed to advance their education or careers; a GED program that is among the most successful in the state; continuing education programs offering certified training for professionals in various occupations; and outreach programs designed to help high school students advance to college.

SI is also the college's main philanthropic arm, connecting BCC to foundations, individual donors and alumni with the goal of providing additional resources for students and faculty. In addition, Strategic Initiatives oversees the Office of Communications and Marketing, which coordinates BCC's promotional and branding activities through media outreach, publications and special events targeted to the campus and the larger community it serves.

## Descriptions of the six offices of the Division:

## OFFICE OF WORKFORCE DEVELOPMENT AND CONTINUING EDUCATION

Interim AVP for Workforce Development, Continuing Education and Assistant Pre-College Programs: Mr. Lawrence B. Sharpe

The Office of Continuing and Professional Studies (CPS) and Workforce Development offer non-credit fee-based continuing education programs (as well as customized industry certifications courses and programs meeting industry standards) for life-long learning and professional and community development. The courses provide students and workers the opportunity to attain skills that support their career development and compete in the technological environment of today's businesses and industries. CPS also offers professional development and personal enrichment courses. Classes are conducted both on campus and at satellite learning centers. The Office of Hall of Fame for Great Americans, managed by CPS and WF, is responsible for providing increased community awareness and campus visits as well as curriculum development as it pertains to the Hall of Fame and fundraising.

## OFFICE OF GRANTS AND CONTRACTS

Grants Officer: Ms. Carin Savage

The Office of Grants and Contracts develops and administers grant and contract-funded programs from federal, state and local governmental agencies and private foundations. These programs are designed to strengthen the College's academic offerings, student services and learning environment. They also support faculty development and research. Additionally, the Office of Grants and Contracts responds to the needs of the surrounding community, collaborating with the public schools, business and labor organizations, government agencies and community groups to obtain sponsored support for a variety of educational and outreach programs for the people of the Bronx.

## OFFICE OF DEVELOPMENT

Assistant Vice President of Grants and Development: Angela Wambugu Cobb
The Office of Development establishes relationships with and secures resources from corporate, foundation, alumni and individual donors in support of the College's priorities.

## OFFICE OF COMMUNICATIONS AND MARKETING

Assistant Vice President: Ms. Diane M. Weathers
The Office of Communications and Marketing provides the strategic direction for the college's internal and external marketing and public relations. It oversees and coordinates the College's media relations, marketing, ad vertising, website design and content, and internally driven print and electronic publications. The Office is also responsible for maintaining and upholding the BCC brand reputation and visual identity. It helps craft speeches, letters, editorials and other important marketing and promotional items for the president and other members of senior leadership. The Office plays a major role in helping shape public events in ways that enhance the college's reputation within CUNY, among other key stakeholders and the larger community that it serves. Communications and Marketing also develops initiatives to advance the college president as a thought leader in her field.

## BRONX EDUCATIONAL OPPORTUNITY CENTER

## Executive Director: Mr. Thomas Jordan

The Bronx EOC is an educational institution of the State University of New York, established to educate and train economically and educationally disadvantaged youth and adults throughout the borough. The Center offers continuing, remedial and technical education and college preparation classes in a life-long learning process, in order to develop a skilled work force for the future. Students receive intensive training in the technical and interpersonal skills necessary to compete in today's job market. Through its educational activities, the Center is also a catalyst for community revitalization and personal development.

## OFFICE OF PRE-COLLEGE PROGRAMS

Interim AVP for Workforce Development, Continuing Education and Assistant Pre-College Programs: Mr. Lawrence B. Sharpe
The Office of Pre-College Programs is comprised of six programs: Adult Education and Training Program, Collaborative Programs, Future Now, POISED for Success, College Now, and TRIO Upward Bound, Upward Bound Math and Science, and Talent Search. These units respond to the needs of the diverse populations served by the College, providing access to instruction and services for academic improvement, institutional and faculty development, occupational training and career development and personal enrichment. Through the work of a foundation, the Office secures private sector support for the College. Programs and services are developed in collaboration with academic departments, business and labor organizations, government agencies, foundations and other educational institutions, and community groups. The Division of Strategic Initiatives is committed to excellence in education and to services that are responsive to the needs of the college community and its neighbors.

## Governance of the College

## BOARD OF TRUSTEES OF THE CITY UNIVERSITY OF NEW YORK

Bronx Community College, a unit of The City University of New York, is administered by the Board of Trustees of The City University of New York. The Board of Trustees of The City University of New York is composed of 17 members, five of who are appointed by the Mayor and ten by the Governor, all with the advice and consent of the New York State Senate. The chairperson of the University Student Senate is a voting ex officio member. The chairperson of the University Faculty Senate is a non-voting ex officio member. The terms of all members, except ex officio members are for seven-year staggered terms. Board headquarters are at 205 E 42nd Street, New York, NY 10017.

Benno C. Schmidt, Jr., Chairperson
B.A., J.D.

Philip Alfonso Berry, Vice Chairperson
M.B.A., M.S.W., B.A., A.A.

Valerie Lancaster Beal, B.A., M.B.A.
Wellington Z. Chen, B.S.
Rita DiMartino, M.P.A., B.A., A.A.
Freida D. Foster, B.A., M.S.
Jay Hershenson, Secretary of the Board of Trustees and Senior Vice Chancellor for University Relations B.A., M.A.

Judah Gribetz, A.B., LL.B., LL.M.
Joseph J. Lhota, B.S., B.A., M.B.A.
Hugo M. Morales, M.D., DPN-P, F.A. P.A.
Brian D. Obergfell, B.S., J.D.
Peter S. Pantaleo, J.D., B.A.
Carol A. Robles-Roman, B.A., J.D.
Barry F. Schwartz, A.B., J.D.
Charles A. Shorter, B.A., M.A.
Muhammad W. Arshad, B.S.
Terrence F. Martell, B.A., Ph.D.

## UNIVERSITY STAFF

James B. Milliken
Chancellor

## Julia Wrigley

Interim Executive Vice Chancellor and University Provost

## Allan H. Dobrin

Executive Vice Chancellor and Chief Operating Officer

## Jay Hershenson

Senior Vice Chancellor for University Relations
and Secretary of the Board of Trustees
Frank D. Sanchez
Vice Chancellor for Student Affairs
Matthew Sapienza
Vice Chancellor for Budget and Finance

## Gloriana B. Waters

Vice Chancellor for Human Resources Management

## Frederick P. Schaffer

Senior Vice Chancellor for Legal Affairs and General Counsel

## Judith Bergtraum

Interim Vice Chancellor for Facilities Planning,
Construction and Management
Pamela S. Silverblatt
Vice Chancellor of Labor Relations
Gillian Small
Vice Chancellor for Research
Brian Cohen
Associate Vice Chancellor and University CIO
Andrea Shapiro Davis
Associate Vice Chancellor for Corporate,
Foundation and Major Gifts Development

## Dave Fields

Senior University Dean/Special Counsel to the Chancellor
Marc V. Shaw
Senior Advisor to the Chancellor for Fiscal Policy

## UNIVERSITY DIRECTORS AND DEANS

Richard P. Alvarez
University Director of Admission

## Howard Apsan

University Director of Environmental, Health, Safety
and Risk Management
Michael Arena
University Director of Communications and Marketing
Annamarie Blanco
University Registrar

## John B. Clark

Acting University Executive Director for Business
and Industry Relations

## David Crook

University Dean for Institutional Research and Assessment

## Paulette M. Dalpes

Deputy to the Vice Chancellor for Student Affairs
and Chief of Staff

## Suri Duitch

University Dean for Continuing Education and Deputy to the Senior University Dean for Academic Affairs

## William Ebenstein

University Dean for Health and Human Services

## Carlos Flynn

University Dean of Advancement

## Howard Kaplan

University Director of the Application Processing Center

## Curtis Kendrick

University Dean for Libraries and Information Resources

## Robert Lemieux

Director of Design, Construction and Management

## Donna Linderman

University Associate Dean for Student Success Initiatives

## Cheryl Littman

University Director of the Performance Management Process

Joan M. Lucariello<br>University Dean for Education<br>John Mogulescu<br>Senior University Dean for Academic Affairs and Dean of School of Professional Studies<br>\section*{James Murphy}<br>University Dean for Enrollment Management<br>\section*{Raymond F. O'Brien}<br>Senior University Executive Director for<br>Human Resources Operations<br>\section*{George Otte}<br>University Director of Academic Technology<br>Robert Ptachik<br>Senior University Dean for the Executive Office and Enrollment<br>Jennifer S. Rubain<br>University Dean for Recruitment, Diversity and Compliance<br>Burton Sacks<br>Deputy Chief Operating Officer for Management Services<br>\section*{Ronald Spalter}<br>Deputy Chief Operating Officer<br>\section*{Gordon Taylor}<br>Director of Internal Audit \& Management Services<br>Esdras Tuller<br>Deputy to the Vice Chancellor for<br>Human Resources Management<br>Meghan Moore-Wilk<br>Director of Space Planning<br>Cheryl Williams<br>Associate University Dean for Special Programs<br>Leonard Zinnanti<br>University Controller<br>Lucinda Zoe<br>University Dean for Undergraduate Studies

## BRONX COMMUNITY COLLEGE OFFICERS OF ADMINISTRATION

Carole M. Berotte Joseph<br>President

Claudia V. Schrader
Vice President of Academic Affairs and Provost

## Athos K. Brewer

Vice President for Student Affairs
Eddy Bayardelle
Vice President for Strategic Initiatives
Sidney Alfonso Grimes, Jr.
Assistant Vice-President for Administrative Affairs
Paulete Zalduondo-Henriquez
Deputy to the President
and Assistant Vice President for External Relations

## Diane Weathers

Assistant Vice President for Communications and Marketing

## Angela Wambugu-Cobb

Assistant Vice President for Development

## Lawrence B. Sharpe

Interim Assistant Vice President for Workforce Development
Assistant Administrator for Pre-College Programs
Division of Strategic Initiatives
Bernard J. Gantt
Dean of Enrollment Management

Nancy K. Ritze
Dean for Research, Planning and Assessment

## David Hadaller

Interim Dean of Academic Affairs
Fenix N. Arias
Associate Dean for Student Engagement and Student Success
Karla R. Williams
Labor Designee and Legal Counsel
Alexander Ott
Associate Dean of Academic Affairs for Curriculum Matters and Faculty Development

John Berman
Acting Assistant Dean for Evening and Weekend Programs
Loïc Audusseau
Chief Technology Officer
Donovan Thompson
Director for Financial and Business Services
Karla R. Williams
Labor Designee and Legal Counsel
Jesenia Minier-Delgado
Chief Diversity Officer/Director of Affirmative Action
Compliance and Diversity

## Directions to the College

## PUBLIC TRANSPORTATION

## Subway:

## No. 4 Train

IRT Jerome-Woodlawn Avenue No. 4 train to Burnside Avenue or 183rd Street. From the No. 4 IRT train at Burnside Avenue, walk west 4 blocks to University Avenue. The BCC campus is located to the right (north) of Burnside Avenue on the hill.

## D Train

From the IND "D" train at the 179th Street stop, walk north on Grand Concourse to Burnside Avenue, turn left on Burnside and walk west 8 blocks to University Avenue. The BCC campus is located to the right (north) of Burnside on the hill.

## Bus:

Bx 3
University Avenue bus to 181st Street.

## Bx 40/42

Tremont Avenue crosstown or No. 36 180th Street crosstown bus to University Avenue.

## Bx 12

Fordham Road crosstown bus stops at University Avenue where it connects with the Bx 3 bus.

## BY CAR

## From Manhattan, East Side:

FDR Drive across Willis Avenue Bridge to Major Deegan Expressway. Exit at West 179th Street and continue across intersection to Sedgwick Avenue. Turn left following Sedgwick Avenue to Hall of Fame Terrace. Turn right to entrance one block on right.

## From Manhattan, West Side:

West Side Highway to Cross Bronx Expressway. Follow signs for Major Deegan Expressway, upstate ( 87 North) and exit at West 179 Street. Continue as above.

## From Westchester:

New York State Thruway into Major Deegan Expressway to Fordham Road exit. Turn left on Fordham Road. Continue to second traffic light (Sedgwick Avenue). Turn right and proceed two blocks to Hall of Fame Terrace. Turn left to entrance one block on right.

## From Long Island:

Throgs Neck Bridge to Cross Bronx Expressway. Follow signs for George Washington Bridge. Exit at Major Deegan Expressway, upstate ( 87 North). Proceed north to West 179th Street exit. Continue across intersection to Sedgwick Avenue. Turn left following Sedgwick Avenue to Hall of Fame Terrace. Turn right to entrance one block on right.

## From New Jersey:

From George Washington Bridge across the Alexander Hamilton Bridge, follow sign for Major Deegan Expressway, upstate (87 North) and exit at West 179th Street. Continue across intersection to Sedgwick Avenue. Turn left following Sedgwick Avenue to Hall of Fame Terrace. Turn right to entrance one block on right.

# Directory of Buildings, Offices and Facilities 

|  | ADMINISTRATIVE OFFICES BUILDING | CO 800 | Computer Center |
| :---: | :---: | :---: | :---: |
| LH 27 | President's Office | PH 14 | Continuing \& Professional Studies |
| LH 11 | Academic Affairs | LO 119 | C.O.P.E. (College Opportunity to Prepare for Employment) |
| SH 211 | Administration \& Finance | PH 35 | Development Office |
| PH 26 | Strategic Initiatives | LO 213 | Disability Services |
| LO 201 | Student Development | GH 309 | Displaced Homemaker Program |
|  |  | CH LL | Duplicating |
|  | DEPARTMENT OFFICES BUILDING | CC | Early Childhood Center |
| BL 303 | Art \& Music | CO 506A | Evening \& Weekend Office |
| ME 415 | Biological Sciences | HL 104 | ECC After School Program |
| ME G18 | Business \& Information Systems | LH LL | Faculty \& Staff Lounge |
| ME 813 | Chemistry \& Chemical Technology | CO 504 | Financial Aid |
| CO 700 | Communication Arts \& Sciences | AG 204 | Fitness Center |
| CO 400 | Education \& Reading | GH 512 | Future Now |
| CO 600 | English | PH 26 | Grants Office |
| AG 300 | Health, Physical Ed \& Wellness | LO 432 | General Counseling |
| CO 301 | History | HF | Hall of Fame for Great Americans |
| NL | Library | LO 101 | Health Services \& Infirmary |
| CP 315 | Mathematics \& Computer Science | SH 104 | Human Resources |
| CO 200 | Modern Languages | CH ML | I.D. Room |
| CP 413 | Nursing \& Allied Health Sciences | CO 806 | Information Technology |
| CP 118 | Physics \& Technology | PH 34 | Institutional Research |
| CO 312 | Social Sciences | LO 214 | International Students |
|  |  | BC 309 | Inter-Organizational Council (Student Clubs) |
|  | OFFICES \& SERVICES BUILDING | NL | Library |
| SH 308 | Administrative \& Events Management | CH LL | Mail Room |
| LO 224 | Admissions | BC 102 | Multicultural Center |
| SA 212 | Academic Computing Center | ME 209 | NYPIRG (NY Public Interest Research Group) |
| SA 201 | Academic Success Center | CH ML | Parking Decals |
| GH 410 | Adult Education \& Training | NH 12 | Physical Plant Services |
| GM 14 | Alumni Relations | AL | POISED for Success |
| BA 101 | A.S.A.P. (Accelerated Study in Associate Programs) | AG | Pool |
| AG 403 | Athletics | GH 211 | Project HIRE |
| CH LL | Audio-Visual Services | LO 210/212 | Psychological Services |
| CO 810 | BCC Association, Inc. | LO 505 | Public Safety |
| BC 111B | Bookstore | LA 09A | Receiving \& Stores |
| CH ML | Bursar | CO 513 | Registrar |
| CO 816 | Business Office | ME | Schwendler Auditorium |
| BC 111 | Cafeteria | LO 202 | Student Assistance Center (SAC) |
| LO 328 | Career Development | ME 209 | Student Government Association (SGA) |
| SN | Center for Sustainable Energy | BC 309 | Student Life |
| PH LL | Center for Teaching Excellence | NI 311 | Testing Computer Center |
| LO 406 | College Discovery | NI 101 | Testing Office |
| CO 527 | College Work Study | LO 330 | Transfer Center |
| LH 16 | Communications \& Marketing | CO 509 | Veterans Affairs Resource Center |
|  |  | SA 100 | Writing Center |

## Campus Map




## APPENDIX A

## NOTICE OF ACCESS TO CAMPUS CRIME STATISTICS, THE CAMPUS SECURITY REPORT, AND INFORMATION ON REGISTERED SEX OFFENDERS

The College Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the U.S. Department of Education, as well as the annual campus security report. The campus security report includes: (1) the campus crime statistics for the most recent calendar year and the two preceding calendar years; (2) campus policies regarding procedures and facilities to report criminal actions or other emergencies on campus; (3) policies concerning the security of and access to campus facilities; (4) policies on campus law enforcement; (5) a description of campus programs to inform students and employees about campus security procedures and practices and to encourage students and employees to be responsible for their own security and the security of others; (6) campus crime prevention programs; (7) policy concerning the monitoring through the police of criminal activity at off-campus locations of student organizations officially recognized by the college;
(8) policies on illegal drugs, alcohol, and underage drinking;
(9) where information provided by the State on registered sex offenders may be obtained (also see below); and (10) policies on campus sexual assault programs aimed at the prevention of sex offenses and procedures to be followed when a sex offense occurs. This information is maintained pursuant to the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act.

The campus crime statistics and the annual campus security report are available at the reference desk of the library and the College website at www.bcc.cuny.edu. If you wish to be mailed copies of the campus crime statistics and the annual campus security report, you should contact public safety at 718-289-5923, and copies will be mailed to you within 10 days. The U.S. Department of Education's website address for campus crime statistics is www.ed.gov/security/InstDetail.asp (then input the name of the school).
In accordance with the federal Campus Sex Crimes Prevention Act, registered sex offenders now are required to register the name and address of any college at which he or she is a student or employee. The New York State Division of Criminal Justice maintains a registry of convicted sex offenders and informs the college's chief security (public safety) officer of the presence on campus of a registered sex offender as a student or employee. You may contact the College's public safety office (Loew Hall, RM 505) at 718-289-5923 to obtain information about Level 2 or Level 3 registered sex offenders on campus. To obtain information about Level 3 offenders, you may contact the Division's registry website at www. criminaljustice.state.ny.us/nsor/sor_about.htm and then click on "Search for Level 3 Sex Offenders" or access the directory at the college's public safety department or police precinct.

To obtain information about Level 2 offenders, you need to contact the public safety department, local police precinct in which the offender resides or attends college, or the Division's sex offender registry at 800-262-3257.
Dated: August 20, 2004

## APPENDIX B

## NOTIFICATION OF STUDENT IMMUNIZATION REQUIREMENTS

Students who do not submit proof of measles, mumps and rubella (MMR) immunization or who fail to return the meningococcal meningitis response form within a statutory grace period shall be prohibited from attending the institution. For additional information, you should contact the Health Services Center located in Loew Hall, room 101, or call 718-289-5858.

Public Health Law 2165 requires that post-secondary students be immunized against measles, mumps, and rubella (MMR).
All registered full-time students and part-time students born on or after January 1, 1957, who are enrolled for at least six, but fewer than twelve semester hours (or equivalent) per semester in an approved degree program or registered certificate program must submit proof of MMR immunization. Students may be exempt from the required MMR immunizations for religious or medical reasons. To qualify for a religious exception, students must submit a signed statement, or in the event the student is a minor (under 18), a signed statement from their parent or guardian, that they hold sincere and genuine religious beliefs that prohibit immunization. To qualify for a medical exception, students must submit a written statement from a licensed physician or nurse practitioner indicating that such immunization may be detrimental to their health.
Public Health Law 2167 requires that post-secondary institutions provide written information about meningococcal meningitis to its students and that students complete, sign, and return a meningococcal meningitis response form. Public Health Law 2167 does not require that students be immunized against meningitis.
Public Health Law 2167 requires colleges to distribute written information about meningococcal meningitis disease and vaccination and for students to complete, sign and return to the college, a meningococcal meningitis response form that: (a) confirms that the college has provided the information about meningococcal meningitis; and (b) indicates that either: (1) the student has received immunization against meningococcal meningitis within the 10 years preceding the date of the response form; or (2) the student has decided against receiving the vaccination. This law applies to students who are enrolled in at least six semester hours (or the equivalent) per semester. No student may be exempt from receiving information or returning the response form.

## APPENDIX C

## SPECIAL PROVISIONS FOR STUDENTS IN THE MILITARY

## The following policies apply to students who leave CUNY to fulfill military obligations.

I. Students called up to the reserves or drafted before the end of the semester.
A. Grades. In order to obtain a grade, a student must attend 13 weeks (five weeks for summer session).
B. Refunds. A student called up to the reserves or drafted, and who does not attend for a sufficient time to qualify for a grade is entitled to a 100\% refund of tuition and all other fees except application fees.
II. Students who volunteer (enlist) for the military.
A. Grades. Same provision as for students called up to the reserves. In order to obtain a grade, a student must attend 13 weeks (five weeks for summer session).
B. Refunds. The amount of the refund depends upon whether the withdrawal is before the 5th week of classes.

1. Withdrawal before beginning of the 5 th calendar week (3rd calendar week for summer session): 100\% refund of tuition and all other fees except application fees.
2. Withdrawal thereafter: 50\% refund. (A proportionate number of weeks may be used for Kingsborough Community College and LaGuardia Community College for each of the above provisions.)

## III. Other Provisions for Military Service.

A. Resident Tuition Rates. These lower rates are applicable to all members of the armed services, their spouses and their dependent children, on full-time active duty and stationed in the State of New York.
B. Re-enrollment of Veterans. Veterans who are returning students are given preferred treatment in the following ways:

1. Veterans who were former students with unsatisfactory scholastic records may be readmitted with a probationary program.
2. Veterans, upon their return, may register even after normal registration periods, without late fees.
3. Granting of college credit for military service and armed forces instructional courses.
4. Veterans returning too late to register may audit classes without charge.
C. Late Admissions. Veterans with no previous college experience are permitted to file applications up to the date of registration, and are allowed to begin classes pending completion of their application and provision of supporting documents.
D. Readmission Fee. Upon return from military service, a student will not be charged a Readmission Fee to register at the same college.
E. Veterans Tuition Deferrals. Veterans are entitled to defer the payment of tuition pending receipt of veterans' benefits.
F. New York National Guard Tuition Waivers. Active members of the New York National Guard, who are legal residents of New York State and who do not have a baccalaureate degree, are eligible for a tuition waiver for undergraduate study.

## APPENDIX D

## BOARD OF TRUSTEES THE CITY UNIVERSITY OF NEW YORK

## No. 8. A. THE CITY UNIVERSITY OF NEW YORK AMENDMENT TO THE POLICY ON WITHHOLDING STUDENT RECORDS RESOLVED:

That the existing Board of Trustees policy with respect to the withholding of student records as last amended on February 22,1993, Gal. No. 7.C., be amended as follows:
Students who are delinquent and/or in default in any of their financial accounts with the college, the university or an appropriate state or federal agency for which the university acts as either a disbursing or certifying agent, and students who have not completed exit interviews as required by the federal Perkins Loan Program, the federal Family Education Loan Programs, the William D. Ford Federal Direct Loan Program, and the Nursing Student Loan Program, are not to be permitted to complete registration, or issued a copy of their grades, a transcript of academic record, certificate, or degree, nor are they to receive funds under the federal campus-based student assistance programs or the federal Pell Grant Program unless the designated officer, in exceptional hardship cases and consistent with federal and state regulations, waives in writing the application of this regulation.
NOTE: Matter underlined is new.
EXPLANATION: The purpose of this amendment is to formally incorporate all of the applicable federal loan programs.

## APPENDIX E

## NOTIFICATION UNDER FERPA OF STUDENT RIGHTS CONCERNING EDUCATION RECORDS AND DIRECTORY INFORMATION

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. See Section "6" below on your right to prevent the disclosure of directory information. The FERPA rights of students are:
(1) The right to inspect and review your education records. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

All requests shall be granted or denied in writing within 45 days of receipt. If the request is granted, you will be notified of the time and place where the records may be inspected. If the request is denied or not responded to within 45 days, you may appeal to the college's FERPA appeals officer. Additional information regarding the appeal procedures will be provided to you if a request is denied.
(2) The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. You may ask the college to amend a record that you believe is inaccurate or misleading. You should write to the college official responsible for the record, clearly identify the part of the record you want changed, and specify why it is inaccurate or misleading. If the college decides not to amend the record as requested by you, the college will notify you of the decision and advise you of your right to a hearing before the college's FERPA appeals officer regarding the request for amendment. Additional information regarding the hearing procedures will be provided to you when notified of your right to a hearing.
(3) The right to consent to disclosure of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to college officials with legitimate educational interests. A college official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position; a person or company with whom the University has contracted; a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another college official in performing his or her tasks.

A college official has a legitimate educational interest if access is reasonably necessary in order to perform his/her instructional, research, administrative or other duties and responsibilities.
Upon request, the college discloses education records without consent to officials of another college or school in which a student seeks or intends to enroll.
(4) You may appeal the alleged denial of FERPA rights to the: General Counsel and Vice Chancellor for Legal Affairs, The City University of New York, 535 East 80th Street, New York, NY 10021.
(5) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are: Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue, SW Washington, D.C. 20202-4605.
(6) The college will make the following "directory information" concerning current and former students available to those parties having a legitimate interest in the information: name, attendance dates (periods of enrollment), address, telephone number, date and place of birth, photograph, e-mail address, full or part-time status, enrollment status (undergraduate, graduate, etc.), level of education (credits) completed, major field of study, degree enrolled for, participation in officially recognized activities and sports, height and weight of athletic team members, previous school attended, and degrees, honors and awards received. By filing a form with the Registrar's Office, you may request that any or all of this directory information not be released without your prior written consent. This form is available in the Registrar's Office and may be filed, withdrawn, or modified at any time.

## APPENDIX F

## FREEDOM OF INFORMATION LAW NOTICE

Requests to inspect public records at the college should be made to the Records Access Officer, Mary Rogan, Labor Designee and Legal Counsel to the President, who is located at Language Hall, RM27; 2155 University Avenue; Bronx NY, 10453; 718-289-5151. Public records are available for inspection and copying by appointment only at a location to be designated. You have a right to appeal a denial of a request for access to records to the CUNY General Counsel and Vice Chancellor for Legal Affairs. Copies of the CUNY Procedures for Public Access to Public Records pursuant to Article 6 of the Public Officers Law and the appeal form are available at the reference desk of the library and the college website.

## APPENDIX G

## THE CUNY WORKPLACE VIOLENCE POLICY AND PROCEDURES

The City University of New York has a long-standing commitment to promoting a safe and secure academic and work environment that promotes the achievement of its mission of teaching, research, scholarship and service. All members of the University community-students, faculty and staff-are expected to maintain a working and learning environment free from violence, threats of harassment, violence, intimidation or coercion. While these behaviors are not prevalent at the University, no organization is immune.

The purpose of this policy is to address the issue of potential workplace violence in our community, prevent workplace violence from occurring to the fullest extent possible, and set forth procedures to be followed when such violence has occurred.

## Policy

The City University of New York prohibits workplace violence. Violence, threats of violence, intimidation, harassment, coercion, or other threatening behavior towards people or property will not be tolerated. Complaints involving workplace violence will not be ignored and will be given the serious attention they deserve. Individuals who violate this policy may be removed from University property and are subject to disciplinary and/or personnel action up to and including termination, consistent with University policies, rules and collective bargaining agreements, and/or referral to law enforcement authorities for criminal prosecution. Complaints of sexual harassment are covered under the University's Policy Against Sexual Harassment.

The University, at the request of an employee or student, or at its own discretion, may prohibit members of the public, including family members, from seeing an employee or student on University property unless necessary to transact University-related business. This policy particularly applies in cases where the employee or student suspects that an act of violence will result from an encounter with said individuals.

## Scope

All faculty, staff, students, vendors, contractors, consultants, and others who do business with the University, whether in a University facility or off-campus location where University business is conducted, are covered by this policy. This policy also applies to other persons not affiliated with the University, such as former employees, former students and visitors. When students have complaints about other students, they should contact the Office of Student Affairs at their campus.

## Definitions

Workplace violence is any behavior that is violent, threatens violence, coerces, harasses or intimidates others, interferes with an individual's legal rights of movement or expression, or disrupts the workplace, the academic environment, or the University's ability to provide services to the public. Examples of workplace violence include, but are not limited to:

1. Disruptive behavior intended to disturb, interfere with or prevent normal work activities (such as yelling, using profanity, verbally abusing others, or waving arms and fists).
2. Intentional physical contact for the purpose of causing harm (such as slapping, stabbing, punching, striking, shoving, or other physical attack).
3. Menacing or threatening behavior (such as throwing objects, pounding on a desk or door, damaging property, stalking, or otherwise acting aggressively; or making oral or written statements specifically intended to frighten, coerce, or threaten) where a reasonable person would interpret such behavior as constituting evidence of intent to cause harm to individuals or property.
4. Possessing firearms, imitation firearms, knives or other dangerous weapons, instruments or materials. No one within the University community, shall have in their possession a firearm or other dangerous weapon, instrument or material that can be used to inflict bodily harm on an individual or damage to University property without specific written authorization from the Chancellor or the college President regardless of whether the individual possesses a valid permit to carry the firearm or weapon.

## REPORTING OF INCIDENTS

## 1. General Reporting Responsibilities

Incidents of workplace violence, threats of workplace violence, or observations of workplace violence are not to be ignored by any member of the University community. Workplace violence should promptly be reported to the appropriate University official (see below). Additionally, faculty, staff and students are encouraged to report behavior that they reasonably believe poses a potential for workplace violence as defined above. It is important that all members of the University community take this responsibility seriously to effectively maintain a safe working and learning environment.

## 2. Imminent or Actual Violence

Any person experiencing or witnessing imminent danger or actual violence involving weapons or personal injury should call the Campus Public Safety Office immediately, or call 911.

## 3. Acts of Violence Not Involving Weapons or Injuries to Persons

Any person who is the subject of a suspected violation of this policy involving violence without weapons or personal injury, or is a witness to such suspected violation, should report the incident to his or her supervisor, or in lieu thereof, to their respective Campus Public Safety Office. Students should report such incidents to the Office of Student Affairs at their campus or in lieu thereof, their campus Public Safety Office. The Campus Public Safety Office will work with the Office of Human Resources and the supervisor or the Office of Student Affairs on an appropriate response.

## 4. Commission of a Crime

All individuals who believe a crime has been committed against them have the right, and are encouraged, to report the incident to the appropriate law enforcement agency.

## 5. False Reports

Members of the University community who make false and malicious complaints of workplace violence, as opposed to complaints which, even if erroneous, are made in good faith, will be subject to disciplinary action and/or referral to civil authorities as appropriate.

## 6. Incident Reports

The University will report incidents of workplace violence consistent with the College Policies for Incident Reporting Under the Campus Security Policy and Statistical Act (Cleary Act).

## RESPONSIBILITIES

## 1. Presidents

The President of each constituent college of The City University of New York, the Chief Operating Officer at the Central Office, and the Deans of the Law School and the Sophie Davis School of Biomedical Education shall be responsible for the implementation of this policy on his or her respective campus. The responsibility includes dissemination of this policy to all members of the college community, ensuring appropriate investigation and follow-up of all alleged incidents of workplace violence, constituting a Workplace Violence Advisory Team (see \#7 below), and ensuring that all administrators, managers, and supervisors are aware of their responsibilities under this policy through internal communications and training.

## 2.Campus Public Safety Office

The Campus Public Safety Office is responsible for responding to, intervening, and documenting all incidents of violence in the workplace. The Campus Public Safety Office will immediately log all incidents of workplace violence and will notify the respective supervisor of an incident with his/her employee, or notify the appropriate campus official of an incident with a student. All officers should be knowledgeable
of when law enforcement action may be appropriate. Public Safety will maintain an internal tracking system of all threats and incidents of violence. Annual reports will be submitted to the President (at the same time as the report noted below) detailing the number and description of workplace violence incidents, the disposition of the incidents, and recommend policy, training issues, or security procedures that were or should be implemented to maintain a safe working and learning environment. These incidents will be reported in the Annual Report of the College Advisory Committee on Campus Security consistent with the reporting requirements of Article 129A Subsection 6450 of the NYS Education Law (Regulation by Colleges of Conduct on Campuses and Other College Property for Educational Purposes).
Officers will be trained in workplace violence awareness and prevention, non-violent crises intervention, conflict management, and dispute resolution.

Officers will work closely with Human Resources when the possibility of workplace violence is heightened, as well as on the appropriate response to workplace violence incidents consistent with CUNY policies, rules, procedures and applicable labor agreements, including appropriate disciplinary action up to and including termination.

When informed, Public Safety will maintain a record of any Orders of Protection for faculty, staff, and students. Public Safety will provide escort service to members of the college community within its geographical confines, when sufficient personnel are available. Such services are to be extended at the discretion of the Campus Public Safety Director or designee. Only the President, or designee in his/her absence, can authorize escort service outside of the geographical confines of the college.

## 3. Supervisors

Each dean, director, department chairperson, executive officer, administrator, or other person with supervisory responsibility (hereinafter "supervisor") is responsible within his/her area of jurisdiction for the implementation of this policy. Supervisors must report to their respective Campus Public Safety Office any complaint of workplace violence made to him/ her and any other incidents of workplace violence of which he/she becomes aware or reasonably believes to exist. Supervisors are expected to inform their immediate supervisor promptly about any complaints, acts, or threats of violence even if the situation has been addressed and resolved. After having reported such complaint or incident to the Campus Public Safety Director and immediate supervisor, the supervisor should keep it confidential and not disclose it further, except as necessary during the investigation process and/or subsequent proceedings.
Supervisors are required to contact the Campus Public Safety Office immediately in the event of imminent or actual violence involving weapons or potential physical injuries.

## 4.Faculty and Staff

Faculty and staff must report workplace violence, as defined above, to their supervisor. Faculty and staff who are advised by a student that a workplace violence incident has occurred or has been observed must report this to the Campus Public Safety Director immediately. Recurring or persistent workplace violence that an employee reasonably believes is not being addressed satisfactorily, or violence that is, or has been, engaged in by the employee's supervisor should be brought to the attention of the Campus Public Safety Director.

Employees who have obtained Orders of Protection are expected to notify their supervisors and the Campus Public Safety Office of any orders that list CUNY locations as protected areas.
Victims of domestic violence who believe the violence may extend into the workplace, or employees who believe that domestic or other personal matters may result in their being subject to violence extending into the workplace, are encouraged to notify their supervisor, or the Campus Public Safety Office. Confidentiality will be maintained to the extent possible.
Upon hiring, and annually thereafter, faculty and staff will receive copies of this policy. Additionally, the policy will be posted throughout the campus and be placed on the CUNY website and on the college's website, as appropriate.

## 5.Office of Human Resources

The Office of Human Resources at each campus is responsible for assisting the Campus Public Safety Director and supervisors in responding to workplace violence; facilitating appropriate responses to reported incidents of workplace violence; notifying the Campus Public Safety Office of workplace violence incidents reported to that office; and consulting with, as necessary, counseling services to secure professional intervention.

The Office of Human Resources is responsible for providing new employees or employees transferred to the campus with a copy of the Workplace Violence Policy and Procedures and insuring that faculty and staff receive appropriate training. The Office of Human Resources will also be responsible for annually disseminating this policy to all faculty and staff at their campus, as well as posting the policy throughout the campus and on the college's website, as appropriate.

## 6.Students

Students who witness violence, learn of threats, or are victims of violence by employees, students or others should report the incident immediately to the Campus Public Safety Office. If there is no imminent danger, students should report threatening incidents by employees, students or others as soon as possible to the Campus Public Safety Office or Office of Student Affairs. Students will be provided with workplace violence awareness information (including information regarding available counseling services) upon registration each year.

## 7. Workplace Violence Advisory Team

A college President shall establish a Workplace Violence Advisory Team at his/her college. This team, working with the College Advisory Committee on Campus Security, will assist the President in responding to workplace violence; facilitating appropriate responses to reported incidents of workplace violence; assessing the potential problem of workplace violence at its site; assessing the college's readiness for dealing with workplace violence; evaluating incidents to prevent future occurrences; and utilizing prevention, intervention, and interviewing techniques in responding to workplace violence. This team will also develop workplace violence prevention tools (such as pamphlets, guidelines and handbooks) to further assist in recognizing and preventing workplace violence on campus. It is recommended that this team include representatives from Campus Public Safety, Human Resources, Labor Relations, Counseling Services, Occupational Health and Safety, Legal, and others, including faculty, staff and students, as deemed appropriate by the President.

In lieu of establishing the Workplace Violence Advisory Team, a President may opt to expand the College Advisory Committee on Campus Security with representatives from the areas recommended above to address workplace violence issues at the campus and perform the functions outlined above.

## 8. University Communications

All communications to the University community and outside entities regarding incidents of workplace violence will be made through the University Office of University Relations after consultation with the respective President or his/her designee.

## EDUCATION

Colleges are responsible for the dissemination and enforcement of this policy as described herein, as well as for providing opportunities for training in the prevention and awareness of workplace violence. The Office of Faculty and Staff Relations will provide assistance to the campuses in identifying available training opportunities, as well as other resources and tools (such as reference materials detailing workplace violence warning signs) that can be incorporated into campus prevention materials for dissemination to the college community. Additionally, the Office of Faculty and Staff Relations will offer periodic training opportunities to supplement the college's training programs.

## CONFIDENTIALITY

The University shall maintain the confidentiality of investigations of workplace violence to the extent possible. The University will act on the basis of anonymous complaints where it has a reasonable basis to believe that there has been a violation of this policy and that the safety and well-being of members of the University community would be served by such action.

## RETALIATION

Retaliation against anyone acting in good faith who has made a complaint of workplace violence, who has reported witnessing workplace violence, or who has been involved in reporting, investigating, or responding to workplace violence is a violation of this policy. Those found responsible for retaliatory action will be subject to discipline up to and including termination.

## APPENDIX H

## PROCEDURES FOR HANDLING STUDENT COMPLAINTS ABOUT FACULTY CONDUCT IN ACADEMIC SETTINGS

RESOLVED, That the procedures for handling student complaints about faculty conduct in formal academic settings be adopted, effective February 1, 2007.
I. Introduction. The University and its Colleges have a variety of procedures for dealing with studentrelated issues, including grade appeals, academic integrity violations, student discipline, disclosure of student records, student elections, sexual harassment complaints, disability accommodations, and discrimination. One area not generally covered by other procedures concerns student complaints about faculty conduct in the classroom or other formal academic settings. The University respects the academic freedom of the faculty and will not interfere with it as it relates to the content or style of teaching activities. Indeed, academic freedom is and should be of paramount importance. At the same time the University recognizes its responsibility to provide students with a procedure for addressing complaints about faculty treatment of students that are not protected by academic freedom and are not covered by other procedures. Examples might include incompetent or inefficient service, neglect of duty, physical or mental incapacity and conduct unbecoming a member of the staff.
II. Determination of Appropriate Procedure. If students have any question about the applicable procedure to follow for a particular complaint, they should consult with the chief student affairs officer. In particular, the chief student affairs officer should advise a student if some other procedure is applicable to the type of complaint the student has.
III. Informal Resolution. Students are encouraged to attempt to resolve complaints informally with the faculty member or to seek the assistance of the department chairperson or campus ombudsman to facilitate informal resolution.
IV. Formal Complaint. If the student does not pursue informal resolution, or if informal resolution is unsuccessful, the student may file a written complaint with the department chairperson or, if the chairperson is the subject of the complaint, with the academic dean or a senior faculty member designated by the college president. (This person will be referred to below as the "Fact Finder.")
A. The complaint shall be filed within 30 calendar days of the alleged conduct unless there is good cause shown for delay, including but not limited to delay caused by an attempt at informal resolution. The complaint shall be as specific as possible in describing the conduct complained of.
B. The Fact Finder shall promptly send a copy to the faculty member about whom the complaint is made, along with a letter stating that the filing of the complaint does not imply that any wrongdoing has occurred and that a faculty member must not retaliate in any way against a student for having made a complaint. If either the student or the faculty member has reason to believe that the department chairperson may be biased or otherwise unable to deal with the complaint in a fair and objective manner, he or she may submit to the academic dean or the senior faculty member designated by the college president a written request stating the reasons for that belief; if the request appears to have merit, that person may, in his or her sole discretion, replace the department chairperson as the Fact Finder.
C. The Fact Finder shall meet with the complaining student and faculty member, either separately or together, to discuss the complaint and to try to resolve it. The Fact Finder may seek the assistance of the campus ombudsman or other appropriate person to facilitate informal resolution.
D. If resolution is not possible, and the Fact Finder concludes that the facts alleged by the student, taken as true and viewed in the light most favorable to the student, establish that the conduct complained of is clearly protected by academic freedom, he or she shall issue a written report dismissing the complaint and setting forth the reasons for dismissal and send a copy to the complaining student, the faculty member, the chief academic officer and the chief student affairs officer. Otherwise, the Fact Finder shall conduct an investigation. The Fact Finder shall separately interview the complaining student, the faculty member and other persons with relevant knowledge and information and shall also consult with the chief student affairs officer and, if appropriate, the college ombudsman. The Fact Finder shall not reveal the identity of the complaining student and the faculty member to others except to the extent necessary to conduct the investigation. If the Fact Finder believes it would be helpful, he or she may meet again with the student and faculty member after completing the investigation in an effort to resolve the matter. The complaining student and the faculty member shall have the right to have a representative (including a union representative, student government representative or attorney) present during the initial meeting, the interview and any post-investigation meeting.
E. At the end of the investigation, the Fact Finder shall issue a written report setting forth his or her findings and recommendations, with particular focus on whether the conduct in question is protected by academic freedom, and send a copy to the complaining student, the faculty member, the chief academic officer and the chief student affairs officer. In ordinary cases, it is expected that the investigation and written report should be completed within 30 calendar days of the date the complaint was filed.
V. Appeals Procedure. If either the student or the faculty member is not satisfied with the report of the Fact Finder, the student or faculty member may file a written appeal to the chief academic officer within 10 calendar days of receiving the report. The chief academic officer shall convene and serve as the chairperson of an Appeals Committee, which shall also include the chief student affairs officer, two faculty members elected annually by the faculty council or senate and one student elected annually by the student senate. The Appeals Committee shall review the findings and recommendations of the report, with particular focus on whether the conduct in question is protected by academic freedom. The Appeals Committee shall not conduct a new factual investigation or overturn any factual findings contained in the report unless they are clearly erroneous. If the Appeals Committee decides to reverse the Fact Finder in a case where there has not been an investigation because the Fact Finder erroneously found that the alleged conduct was protected by academic freedom, it may remand to the Fact Finder for further proceedings. The committee shall issue a written decision within 20 calendar days of receiving the appeal. A copy of the decision shall be sent to the student, the faculty member, the department chairperson and the president.
VI. Subsequent Action. Following the completion of these procedures, the appropriate college official shall decide the appropriate action, if any, to take. For example, the department chairperson may decide to place a report in the faculty member's personnel file or the president may bring disciplinary charges against the faculty member. Disciplinary charges may also be brought in extremely serious cases even though the college has not completed the entire investigative process described above; in that case, the bringing of disciplinary charges shall automatically suspend that process. Any action taken by a college must comply with the bylaws of the University and the collective bargaining agreement between the University and the Professional Staff Congress.
VII. Campus Implementation. Each campus shall implement these procedures and shall distribute them widely to administrators, faculty members and students and post them on the college website.
VIII.Board Review. During the spring 2009 semester, the Chancellery shall conduct a review of the experience of the colleges with these procedures, including consultation with administrators, faculty and students, and shall report the results of that review to the Board of Trustees, along with any recommended changes.


[^0]:    *CHM 02 is a 5 hour remedial course. The tuition charged for CHM 02 is calculated based on 4 hours not 5 , as this remedial course has a lab component.
    † See "Registration and Student Records" section of this catalog for definition of non-degree student.
    $\dagger \dagger$ There is no maximum tuition for non-resident and non-degree students in these categories.

[^1]:    ${ }^{1}$ Students who place into MTH 30 will not have free electives.
    ${ }^{2}$ Students that are required to take MTH 30 can only select PHY 11 so as not to exceed the 60 credit limit for the program.

[^2]:    Curriculum Coordinator: Dr. Cormac O'Sullivan

[^3]:    Affiliated with Montefiore The University Hospital for the Albert Einstein College of Medicine
    Program Director: Professor Alfred Romito

[^4]:    - POLITICAL SCIENCE Select ONE from POL 31, POL 42, POL 71 OR POL 72 (0-3 Credits)
    - ENGLISH Select ONE from ENG 47, ENG 48, OR ENG 57 (0-3 Credits)
    -ECONOMICS Select ONE from ECO 71, ECO 12, ECO 11, OR ECO 15 (0-3 Credits)

