CATALOG
1987 — 1989

KINGSBOROUGH COMMUNITY COLLEGE
The City University of New York

2001 Oriental Boulevard
Manhattan Beach, Brooklyn, N.Y. 11235
718—934-5000
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### ACADEMIC CALENDAR
#### FALL 1987—SEMESTER

**September**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day(s)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>Tue.-Thur.</td>
<td>Registration-Day &amp; Evening</td>
</tr>
<tr>
<td>4</td>
<td>Fri.</td>
<td>Registration-DAY ONLY</td>
</tr>
<tr>
<td>7</td>
<td>Mon.</td>
<td>NO CLASSES - Labor Day</td>
</tr>
<tr>
<td>8</td>
<td>Tue.</td>
<td>Registration-EVENING ONLY</td>
</tr>
<tr>
<td>10</td>
<td>Thur.</td>
<td>CLASSES BEGIN-DAY &amp; EVENING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Late Registration &amp; Program Changes</td>
</tr>
<tr>
<td>11</td>
<td>Fri.</td>
<td>Day &amp; Evening</td>
</tr>
<tr>
<td>12</td>
<td>Sat.</td>
<td>SATURDAY CLASSES BEGIN</td>
</tr>
<tr>
<td>23</td>
<td>Wed.</td>
<td>NO CLASSES after 4:00 P.M.</td>
</tr>
<tr>
<td>24-25</td>
<td>Thur.-Fri.</td>
<td>NO CLASSES - Rosh Hashanah</td>
</tr>
<tr>
<td>28</td>
<td>Mon.</td>
<td>Period Opens to File Applications for:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spring 1988</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced Standing</td>
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<tr>
<td></td>
<td></td>
<td>Change of Curriculum</td>
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<td></td>
<td></td>
<td>Transfer of Sessions</td>
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<td></td>
<td></td>
<td>(Day to Evening-Evening to Day)</td>
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<tr>
<td></td>
<td></td>
<td>Change of Status (Non-Degree to Degree)</td>
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<tr>
<td></td>
<td></td>
<td>January 1988 Degrees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LAST DAY to Apply for Deletion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of Fall 1987 Courses</td>
</tr>
</tbody>
</table>

**October**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day(s)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Fri.</td>
<td>NO CLASSES after 4:00 P.M.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LAST DAY to File Petitions for Make-Up</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exams for Preceding Spring 1987 &amp;/or Summer 1987 Sessions (Due to Absence from Final Exams)</td>
</tr>
<tr>
<td>3</td>
<td>Sat.</td>
<td>NO CLASSES - Yom Kippur</td>
</tr>
<tr>
<td>12</td>
<td>Mon.</td>
<td>NO CLASSES - Columbus Day</td>
</tr>
<tr>
<td>16</td>
<td>Fri.</td>
<td>LAST DAY to File Applications for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 1988 Degrees</td>
</tr>
</tbody>
</table>

**November**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day(s)</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>Tue.</td>
<td>NO CLASSES - Election Day</td>
</tr>
<tr>
<td>9</td>
<td>Mon.</td>
<td>EVENING CLASSES ONLY follow Wednesday Schedule</td>
</tr>
<tr>
<td>10</td>
<td>Tue.</td>
<td>LAST DAY for Students doing Passing Work in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a Course to Withdraw from that Course with</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;W&quot; Grade</td>
</tr>
<tr>
<td>11</td>
<td>Wed.</td>
<td>NO CLASSES - Veterans Day</td>
</tr>
<tr>
<td>16-18</td>
<td>Mon.-Wed.</td>
<td>Make-Up Final Exams Administered for Preceding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spring 1987 &amp;/or Summer 1987 Sessions</td>
</tr>
<tr>
<td>26-28</td>
<td>Thur.-Sat.</td>
<td>NO CLASSES - Thanksgiving Recess</td>
</tr>
<tr>
<td>30</td>
<td>Mon.</td>
<td>Classes Resume</td>
</tr>
</tbody>
</table>

**December**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day(s)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Fri.</td>
<td>LAST DAY to File Applications for:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spring 1988</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced Standing</td>
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<tr>
<td></td>
<td></td>
<td>Change of Curriculum</td>
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<tr>
<td></td>
<td></td>
<td>Transfer of Sessions</td>
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<tr>
<td></td>
<td></td>
<td>(Day to Evening-Evening to Day)</td>
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<tr>
<td></td>
<td></td>
<td>Change of Status (Non-Degree to Degree)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 1988 Degrees</td>
</tr>
<tr>
<td>11</td>
<td>Fri.</td>
<td>LAST MEETING - Day Classes</td>
</tr>
<tr>
<td>12</td>
<td>Sat.</td>
<td>LAST MEETING - Saturday Classes</td>
</tr>
<tr>
<td>14</td>
<td>Mon.</td>
<td>LAST MEETING - Evening Classes</td>
</tr>
<tr>
<td>15-21</td>
<td>Tue.-Mon.</td>
<td>FINAL EXAMS - Day &amp; Evening Classes</td>
</tr>
<tr>
<td>19</td>
<td>Sat.</td>
<td>FINAL EXAMS - Saturday Classes</td>
</tr>
<tr>
<td>22</td>
<td>Tue.</td>
<td>Registration for Fall 1987 - Winter 1988 Module Day &amp; EVENING</td>
</tr>
<tr>
<td>24-Jan.2</td>
<td>Thur.-Sat.</td>
<td>NO CLASSES - Winter Recess</td>
</tr>
</tbody>
</table>
FALL 1987—WINTER 1988 MODULE

January
4  Mon. ............... CLASSES BEGIN - DAY & EVENING
      Late Registration & Program Changes
11  Mon. ............... LAST DAY to Apply for Deletion of Winter
      1988 Courses
18  Mon. ............... NO CLASSES - Dr. Martin Luther King, Jr. Day
26  Tue. ............... DAY & EVENING CLASSES follow Monday Schedule
28  Thur. ............... LAST DAY for Students doing Passing Work in
                     a Course to Withdraw from that Course with
                     "W" Grade

February
1  Mon. ............... LAST DAY for Removal of "INC" for Spring 1987
                     &/or Summer 1987 Sessions (except for Students
                     who received "INC" due to absence from Final
                     Exams)
12  Fri. ............... NO CLASSES - Lincoln's Birthday
15  Mon. ............... NO CLASSES - Washington's Birthday
16  Tue. ............... LAST MEETING - Day & Evening Classes
17  Wed. ............... FINAL EXAMS - Day & Evening Classes
# ACADEMIC CALENDAR

## SPRING 1988—SEMESTER

### February

<table>
<thead>
<tr>
<th>Date</th>
<th>Monday-Thursday</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-25</td>
<td>Registration - DAY &amp; EVENING</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Late Registration &amp; Program Changes - Day &amp; Evening</td>
<td></td>
</tr>
</tbody>
</table>

### March

<table>
<thead>
<tr>
<th>Date</th>
<th>Tuesday</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CLASSES BEGIN - DAY &amp; EVENING</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SATURDAY CLASSES BEGIN</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Period Opens to File Applications for: Fall 1988</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Standing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Change of Curriculum</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transfer of Sessions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Day to Evening - Evening to Day)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Change of Status (Non-Degree to Degree)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>LAST DAY to Apply for Deletion of Spring 1988 Courses</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>LAST DAY to File Petitions for Make-Up Exams for Preceding Fall 1987 &amp;/or Winter 1988 Sessions (Due to Absence from Final Exams)</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>LAST DAY to File Applications for June 1988 Degrees</td>
<td></td>
</tr>
</tbody>
</table>

### April

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-8</td>
<td>NO CLASSES - Spring Recess</td>
</tr>
<tr>
<td>9</td>
<td>CLASSES RESUME</td>
</tr>
<tr>
<td>12</td>
<td>DAY &amp; EVENING CLASSES follow Monday Schedule</td>
</tr>
<tr>
<td>27</td>
<td>DAY CLASSES ONLY follow Friday Schedule</td>
</tr>
</tbody>
</table>

### May

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4</td>
<td>Make-Up Final Exams Administered for Preceding Fall 1987 &amp;/or Winter 1988 Sessions</td>
</tr>
<tr>
<td>3</td>
<td>LAST DAY for Students doing Passing Work in a Course to Withdraw from that Course with &quot;W&quot; Grade</td>
</tr>
<tr>
<td>27</td>
<td>LAST DAY to File Applications for: Fall 1988</td>
</tr>
<tr>
<td></td>
<td>Advanced Standing</td>
</tr>
<tr>
<td></td>
<td>Change of Curriculum</td>
</tr>
<tr>
<td></td>
<td>Transfer of Sessions</td>
</tr>
<tr>
<td></td>
<td>(Day to Evening - Evening to Day)</td>
</tr>
<tr>
<td></td>
<td>Change of Status (Non-Degree to Degree)</td>
</tr>
<tr>
<td>28</td>
<td>LAST MEETING - Saturday Classes</td>
</tr>
<tr>
<td>30</td>
<td>NO CLASSES - Memorial Day</td>
</tr>
<tr>
<td>31</td>
<td>LAST MEETING - Evening Classes</td>
</tr>
</tbody>
</table>

### June

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>LAST MEETING - Day Classes</td>
</tr>
<tr>
<td>2-9</td>
<td>FINAL EXAMINATIONS - Day &amp; Evening Classes</td>
</tr>
<tr>
<td>4</td>
<td>FINAL EXAMINATIONS - Saturday Classes</td>
</tr>
<tr>
<td>10</td>
<td>COMMENCEMENT</td>
</tr>
</tbody>
</table>
SPRING 1988—SUMMER 1988 MODULE

June
13 Mon. .......... Registration - DAY & EVENING
14 Tue. .......... Registration - EVENING ONLY
15 Wed. .......... CLASSES BEGIN - DAY & EVENING
22 Wed. .......... LAST DAY to Apply for Deletion
                of Summer 1988 Courses
30 Thur. .......... LAST DAY to File Applications for
                Summer 1988 Degrees

July
4 Mon. .......... NO CLASSES - Independence Day
13 Wed. .......... Day & Evening Classes follow Monday Schedule
14 Thur. .......... LAST DAY for Students doing Passing Work
                in a Course to Withdraw from that Course
                with "W" Grade
18 Mon. .......... LAST DAY for Removal of "INC" for Fall
                1987 &/or Winter 1988 Sessions (except
                for Students who received "INC" due to
                absence from Final Exams)
27 Wed. .......... LAST MEETING - Day & Evening Classes
28 Thur. .......... FINAL EXAMS - Day & Evening Classes

ACADEMIC CALENDAR for 1988 - 1989 will be available May 1988

ACADEMIC CALENDAR

Kingsborough conducts classes on an innovative, special academic calendar. Classes are held during a 12-week Fall session which starts in September, and ends late in December. This is followed by a 6-week Winter module which ends during February. A 12-week Spring session starts at the beginning of March, and ends in the middle of June. This is followed by a 6-week Summer module which runs until the end of July.

All matriculated students in the degree programs are required to attend both 12-week sessions. Attendance during the 6-week modules are optional. No additional tuition fees are required from full-time matriculated students who attended the previous 12-week session. Among the advantages the 6-week modules offer is the opportunity to take added courses that, in some programs, may make it possible to earn the Associate Degree in less than two full years. Students who choose to attend only the two 12-week sessions have an opportunity to seek employment to earn additional funds, obtain field experience, fill co-op requirements, etc., or, to use the periods for rest and relaxation before starting the next regular 12-week session.

<table>
<thead>
<tr>
<th>12/6 ACADEMIC CALENDAR</th>
<th>12/6 ACADEMIC CALENDAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL SEMESTER</td>
<td>SPRING SEMESTER</td>
</tr>
<tr>
<td>SEPT. OCT. NOV. DEC.</td>
<td>MAR. APR. MAY JUNE</td>
</tr>
<tr>
<td>12 WEEKS (REQUIRED)</td>
<td>12 WEEKS (REQUIRED)</td>
</tr>
<tr>
<td>ONE TUITION</td>
<td>ONE TUITION</td>
</tr>
<tr>
<td>JAN. FEB</td>
<td>JUNE JULY</td>
</tr>
<tr>
<td>6 WEEKS (OPTIONAL)</td>
<td>6 WEEKS (OPTIONAL)</td>
</tr>
</tbody>
</table>
Leon M. Goldstein, President
A.A.S., B.A., M.A.

Israel Glasser, Vice-President and Dean of the College
B.A., M.P.A., Ph.D.

Michael Zibrin, Provost and Dean of Faculty
A.A., A.B., M.B.A., Ed.D.

Milton Drucker, Dean of Marine Education
B.A., M.A., Ed.D.

Ralph Edwards, Dean of Administration and Planning
B.S., M.S., Ed.D.

Gene J. Flanagan, Dean of Continuing Education
B.A., M.A., Ed.D.

David Gomez, Dean of Instructional Services
B.A., M.A., Ed.D.

Anthony F. Russo, Dean of Students
B.A., M.A.

Fred B. Malamet, Associate Dean of Faculty
B.A., M.A., Ed.D.

Thelma L. Malle, Associate Dean of Faculty for Open Admissions
B.S., M.A.

David B. Silver, Associate Dean of Administration and Planning
A.B., J.D.

A. Steven Young, Associate Dean of Faculty for Evening and Summer Studies
B.A., J.D.

Joseph Musicus, Administrator for Business Affairs
A.A.S., B.B.A.
History

Kingsborough Community College was founded in 1963 as the ninth Community College of The City University of New York and the twenty-seventh State-wide two-year college. It is administered by the Board of Trustees of The City University of New York.

Kingsborough offers three degree programs. The Liberal Arts program leads to the Associate in Arts (A.A.) degree; programs in the Arts (Music, Fine Arts and Theatre Arts), Mathematics and the Sciences lead to the Associate in Science (A.S.) degree; programs in Business, the Health Sciences and Human Services lead to the Associate in Applied Science (A.A.S.) degree. Daytime and Evening Sessions are held throughout the academic year. A wide variety of Continuing Education, non-credit courses are available.

In September 1964, Kingsborough admitted its first students into two temporary locations in Sheepshead Bay and in mid-Brooklyn. In the Fall of 1965, the College received its permanent, unique and beautiful, 67-acre site at Manhattan Beach. Cradled on three sides by the waters of Sheepshead Bay, Jamaica Bay and the Atlantic Ocean, the College's ultra-modern campus, composed of a continuous series of inter-connected buildings has been lauded as a forward-looking solution to the problems of College growth and urban pressure. Outstanding features include: spacious classrooms; unusual facilities such as an interactive terminal and microcomputer laboratories, rotational chemistry labs, individual study and experimental stalls; sophisticated learning aids; library and media center; computer center; lecture halls and learning resource center; science technology and visual arts buildings; College Hall lounge, study, counseling and faculty offices; theatre-auditorium, student-faculty center; physical education facilities with two gymnasiums and an Olympic-size indoor swimming pool; special facilities for the nursing, business, and secretarial/office administration departments; offices for administration, general services and a power plant.

Construction of the new Marine & Academic Center and a Marina has been approved. In addition to adding needed academic facilities, classrooms, offices, conference and meeting rooms, dining facilities, theatre, the Center will house the Center for Marine Development and Research with laboratories, aquarium and space for nautical displays.

Campus facilities for the disabled, including maximum accessibility and usability by the physically handicapped is a primary college concern.
Goals

Kingsborough Community College is committed to the advancement of the goals of the New York State Board of Regents. Toward this objective, Kingsborough's activities include:

I. Promoting recognition and support of community colleges as the basic institutional approach to provide broader public educational opportunities above the high school level.

II. Encouraging efforts to have community colleges: open to all high school graduates or persons with equivalent educational backgrounds; operated at low cost to students; be located within reasonable daily commuting distance of students' homes.

III. Enhancing college performance goals with:
   a. General Education. (To provide post secondary-school general background and experience for all students in conjunction with their major academic fields of study.)
   b. College or University Transfer Education. (To offer the requisite courses for two years of collegiate study to competent students who are interested in continuing for the bachelor's degree and to develop articulation agreements with four-year institutions so that there is little or no loss of credit upon transfer.)
   c. Occupational or Career Education. (To present programs beyond high school, but below professional levels of education and training, for students who seek immediate entry into the productive labor force, as well as for employed individuals who wish to improve their skills, or learn new ones. These programs serve business, industry, or government organizations that need employees with higher level abilities.)
   d. Adult or Continuing Education. (To assist adults of all ages to meet changing educational, cultural, and economic conditions and/or implement changes in their personal objectives with continuing education programs above the high school level.)
   e. Guidance and Counseling. (To furnish necessary testing, guidance, and counseling which enables students to recognize and accept their individual strengths and limitations, and to choose the most suitable programs based on objective information and personal situations.)
   f. Open Admissions. (To provide supportive services, tutorial and remedial assistance and guidance programs which will most effectively help students meet the CUNY standards of competence, a requirement for every Kingsborough graduate.)
Objectives

Kingsborough is committed to: meeting its educational mission by finding and implementing additional innovative features; fulfilling its obligations to students and community; contributing to the overall performance of the CUNY system.

To achieve these objectives Kingsborough:

a. exerts every effort to serve the educational needs of those within the geographic area;

b. offers educational programs that contribute to a balanced university educational system and avoid duplication where needs are already being met by other university units;

c. responds as far as possible with educational programs in areas where it has the capacity to fill demonstrated needs not already being met;

d. furthers its obligation to develop and define logical areas of specialization without scattering its energies;

e. continues to focus efforts on Liberal Arts transfer programs, as well as on the career programs in Business, Human and Public Service, Health and Related Services, Fine and Performing Arts.

f. remains in compliance with existing Federal, State and City rules, regulations and requirements as they apply to educational institutions.
The Future

Kingsborough Community College will continue to respond and grow in order to most effectively meet the ever-changing complexion of the dynamic urban area in which it is situated. New programs will be introduced and existing ones routinely re-examined in light of shifting economic, social, occupational, and recreational requirements of the community. Any defined needs will be translated into educational programs. The College will always attempt to meet its responsibilities by contributing its facilities and its reservoir of talent to the population it serves.

Accreditation

Kingsborough Community College is fully accredited and approved by the Middle States Association of Colleges and Secondary Schools. The Nursing Program has received accreditation from the National League for Nursing. Academic programs have been approved by the University of the State of New York, and the State Education Department.

The College is a member of the American Association of Junior Colleges, American Council on Education, Association of Colleges and Universities of the State of New York, Council of Higher Educational Institutions in New York City, Junior College Council of the Middle Atlantic States, Middle States Association of Colleges and Secondary Schools, New York State Association of Junior Colleges, and the Association of College Unions-International.

Affirmative Action

Kingsborough Community College is an Affirmative Action Equal Opportunity Institution. The College DOES NOT DISCRIMINATE in any way, on the basis of sex, age, color, race, religion, national or ethnic origin or physical handicap in its admission policy, educational or activities programs or hiring procedures. The Affirmative Action Officer is in room A-217, ext. 5650.
ADMISSIONS INFORMATION
AND PROCEDURES

Students must accept personal responsibility for fulfilling their individual program, admission, degree and graduation requirements; for meeting college deadline and attendance dates; for abiding by the rules and regulations as printed in official Kingsborough publications and announcements.

Admission Information Center
Room F-123, ext. 5800

Information about attending Kingsborough Community College is available from the Admission Information Center.

Matriculation

Prospective students who plan to attend the College to earn a degree, apply for "Matriculated Status" and may attend either Day or Evening sessions. Day session matriculants should be prepared to carry a minimum of 16 credits or 16 equated credits per semester (see page 47).

Basic Admission Requirements

Applicants who have not previously attended any college require a High School Diploma or its equivalent (GED). A High School Certificate is not acceptable.

Applicants who earned a United States Armed Forces Institute Diploma must submit proof of having earned a total score of 225 on GED examinations.

Applicants who have attended any college or university, and wish to be considered for matriculated status, must hold a High School or Equivalency Diploma, and submit an official college transcript. Transfer students are required to meet CUNY Standards of Retention indices as a condition for admission.

The College has been authorized to admit, each semester, a limited number of matriculated students over the age of 21 who are not high school graduates or equivalent but who are GED examination candidates.

Non-Degree Students*

Prospective students who are not interested in earning a degree should apply for admission directly to Kingsborough. The application forms are available only from the College Admission Information Center.

As application deadline dates (see academic calendar pages 5-8) are sometimes extended, the Admission Information Center should be contacted for any possible changes in filing dates.

Non-degree students and part-time matriculants are classified as Evening Session students but are permitted to take day classes on a space available basis.

*Non-degree students are not eligible for financial aid.

Transfer of Credits

Upon evaluation and acceptance by the College, applicants may receive a maximum of thirty (30) credits for courses completed at other accredited institutions, provided:

a. each course was completed with a satisfactory grade;

b. each course content is related to similar course work at Kingsborough;

c. a statement of honorable dismissal is submitted from each institution attended.
Admission Application Procedures

Matriculated Status

A. United States Citizens and Permanent Residents who have not attended a college or university previously, apply for admission by requesting the “University Application Processing Center (UAPC) Form” from either number 1, 3, 4 or 5 below.

NOTE: Current high school seniors in the New York City public schools (and several parochial schools) must use the UAPC Personalized Application which is obtained from the “College Advisor’s” Office in their High School.

B. United States Citizens and Permanent Residents with previous college attendance must file an Advanced Standing (Transfer) application. The application form may be obtained from either number 1 or 4 below.

NOTE: Applicants whose post-secondary school attendance was limited solely to institutions such as Hospital Schools of Nursing, Secretarial Science Schools, non-college-degree-granting Technical Institutes and LPN Training Schools, are considered “applicants without advanced standing” and should apply for admission through the University Application Processing Center number 3 below.

C. Students with Foreign Educational Experience

Applicants who hold (or expect to obtain) temporary (non-immigrant) visas should apply for admission through number 6 below.

NOTE: Kingsborough is authorized under Federal Law to enroll non-immigrant alien students. The College issues Immigration Form I-20 to international students accepted as full-time matriculants. The College does not issue immigration forms to international students who wish to attend part-time (carrying less than 12 credits or less than 12 equated credits) or who are non-degree students.

1. Kingsborough Community College
   Admission Information Center — Room F-123
   2001 Oriental Boulevard
   Brooklyn, New York 11235

2. Kingsborough Community College
   Admissions Services — Room A-105
   2001 Oriental Boulevard
   Brooklyn, New York 11235

3. University Application Processing Center
   Box 136, Bay Station
   Brooklyn, New York 11235

4. Office of Admission Services
   101 West 31st Street
   New York, New York 10001

5. College Advisor’s Office of any local High School

6. International Student’s Office
   The City University of New York
   101 West 31st Street
   New York, New York 10001
Admission Deadline Dates

Students who wish to be assigned to Kingsborough as their first choice of college, should strictly observe the deadline dates for filing their applications to attend the College. Preference may be given to applications received by dates listed.

I. Students who wish admission as matriculants for:

- **September admission**
  apply directly through the University Application Processing Center by .................. January 15

- **September admission with advanced standing,**
  apply directly to CUNY Office of Admission Services by .................. March 15

- **February admission**
  apply directly through the University Application Processing Center by .................. October 15

- **February admission with advanced standing,**
  apply directly to CUNY Office of Admission Services by .................. November 1

II. Students who wish admission as non-degree students for:

- **September admission**
  apply directly to Kingsborough by .................. August 15

- **February admission**
  apply directly to Kingsborough by .................. January 15

NOTE: Occasionally the application deadline dates indicated above are extended on the basis of available space. Kingsborough's Admission Information Center should be contacted for any possible changes in filing dates.

Advanced Standing

Prospective students may be granted advanced standing, exemption, or credit, subject to departmental approval, if they received the following grades in courses which are appropriate to Kingsborough's degree program course offerings;

- Satisfactory scores earned on the Advanced Placement Examinations administered by Educational Testing Service;
- Score of 50 or higher on subject examinations of the College Level Examination Program (CLEP);
- "C" grade or higher, on the New York State College Proficiency Examination (CPE);
- "P" (pass) grade on the New York State College Proficiency Examination (CPE) in the area of Foreign Languages.
TUITION

Tuition is charged each semester* and is payable at registration.

New York State TAP Awards (where the student can prove eligibility with an Award Certificate) reduces the student's liability on the day of registration.

NEW YORK CITY RESIDENTS — residents of NYC for 12 consecutive months immediately preceding the first day of classes.

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<tr>
<td><strong>FULL-TIME</strong></td>
<td>(12 or more credits + or, 12 or more equated credits ++)</td>
<td>$612.50</td>
</tr>
<tr>
<td><strong>PART-TIME</strong></td>
<td>(less than 12 credits + or, less than 12 equated credits ++)</td>
<td>40.00</td>
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</table>

NOTE: Students who reside in counties outside New York City but within New York State are eligible for New York City resident rates if they present a valid certificate of residency from their county on the day of registration. The certificate must have been issued within two months prior to the completion of registration and must be filed with the Bursar's Office before the completion of registration.

OUT-OF-CITY RESIDENTS
OUT-OF-STATE RESIDENTS
FOREIGN STUDENTS

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<td><strong>FULL-TIME</strong></td>
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<tr>
<td><strong>PART-TIME</strong></td>
<td>(less than 12 credits + or, less than 12 equated credits ++)</td>
<td>76.00</td>
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FOREIGN STUDENTS WHO HAVE AN ALIEN REGISTRATION CARD MUST PRESENT IT TO THE REGISTRAR. THE REGISTRAR DETERMINES RESIDENCY STATUS FOR TUITION PURPOSES.

Students who already possess at least an Associate Degree or its equivalent, will be charged tuition according to their residency status.

Upper division students (61 or more credits with passing grades) on permit from another CUNY unit, will pay tuition, per credit ........................................... 40.00

SUPER CITIZENS (65 years of age and over with proof of age and New York State residency) do not pay tuition. However, a registration fee of $25.00 per semester is required.

(See Required Fees page 25)

*A semester consists of either the FALL session plus WINTER module or the SPRING session plus SUMMER module.

+ The number of credits for each course is indicated with course title and description.

++ Equated credits pertain to non-credit remedial courses. See course descriptions.

All tuition and fee schedules are subject to change without prior notice, at any time, upon action of the Board of Trustees of The City University, the City and/or State of New York. Should fees or tuition be increased, payments previously made to the College will be counted as partial payment. Notification of additional amounts due, time, and method of payment, will be sent to individuals involved.
REQUIRED FEES

These Fees are NOT Refundable

Student Activity Fee Per Semester (including University Senate Fee)

Payable By Mail Before Registration

a. Full-time Students ................................................................. $45.00
b. Part-time Students ................................................................. 20.00

c. Special Fees

a. Application ................................................................. 25.00
b. Readmission to the College .................................................. 10.00
c. Special or Make-up Examinations

(Permission to take an exam other than scheduled times)

First examination ................................................................. 15.00
Additional examinations ......................................................... 5.00 each
Maximum charge, per semester ............................................... 25.00
d. Transcripts (to other than CUNY units) .................................. 4.00 each
e. Duplicate receipt fee ............................................................ 5.00
f. Super Citizens (65 years of age and over with proof of age and N.Y.S. residence)

pay a Registration Fee—PER SEMESTER ...................................... 25.00
g. Cooperating Teacher—PER SEMESTER ...................................... 25.00

Penalty Fees

A. Late Registration ................................................................. 15.00
(to enroll after last day of regular registration)

* B. Program change ................................................................. 10.00
(a program change involves)

1. Adding a course or courses at the same time
2. Changing a course section for student's convenience

* This fee is waived when:

a. the College cancels or withdraws a course;
b. course hours are changed by the College;
c. a course is dropped without replacement

C. Non-payment Service Fee .................................................... 15.00

D. Payment Reprocessing ......................................................... 10.00
(payment with a personal check which is not honored by the bank)

E. Debts

(no student will be permitted to register for a new term unless, and until, any indebtedness is cleared)

NOTE: Payments must be only by personal check or money order, made payable to Kingsborough Community College. A separate check is required for Student Activity Fee. Enrollment is not complete until all fees are paid.
Tuition Refund Policy

In general, no portion of the Student Activity, Miscellaneous, Penalty or Special Fees will be refunded. A student who withdraws after the scheduled opening date of the session, or during the term, *(full-time students who decrease their credit load, will be charged per credit)* will receive tuition refunds according to the following schedule.*

<table>
<thead>
<tr>
<th>Date of Formal Withdrawal from Course(s) or the College</th>
<th>Fall and Spring Sessions</th>
<th>Winter and Summer Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the scheduled opening date</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Within six (6) calendar days after the scheduled opening date</td>
<td>75%</td>
<td>50%</td>
</tr>
<tr>
<td>Between the seventh and twelfth calendar days after the scheduled opening date</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>Between the thirteenth and seventeenth calendar days after the scheduled opening date</td>
<td>25%</td>
<td>none</td>
</tr>
<tr>
<td>Beyond the seventeenth calendar day after the opening day</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

Should the sixth, twelfth, or seventeenth day fall on a weekend, the refund period would be extended to the next business day.

* Students entering Military Service may qualify for a refund other than as listed. The Registrar should be notified of the military status at the time of withdrawal.

Withdrawal from the College

The date that the withdrawal form is completed and submitted—NOT the last date of class attendance—is considered the official date of withdrawal from the college. No portion of the Student Activity, Special, Penalty or Miscellaneous Fees is refundable except when a student's registration is cancelled or when the College withdraws or cancels courses.
The Registrar's Office, under the jurisdiction of the Dean of Instructional Services, maintains academic records for all students and is responsible for the registration of students into classes after they have been admitted to the College.

A prerequisite to attend classes is the completion of registration each semester, following instructions from the Registrar's Office. Students who do not receive registration material by the start of announced registration periods should immediately contact the Registrar's Office. No student is considered registered until all appropriate forms are filed with the Registrar's Office and tuition and fees are paid.

The following services performed by the Registrar's Office are available upon application:

- Advanced Standing
- Certification to Outside Agencies
- Change of Address
- Curriculum Grade
- Name Status
- Day to Evening
- Evening to Day
- Exams—Finals—Conflicts
- Exams—Finals—Make-Ups
- Graduation
- Permit to Attend Other Colleges
- Readmission
- Records Access
- Residency Determination
- Transcripts
- Transfer to CUNY Senior College after completion of two (2) year degree
- Withdrawal from College and/or
- Withdrawal from Course

Information—page 23; filing dates—Academic Calendar

Information—page 50; filing dates—Academic Calendar

Information—page 5-8, 47; filing dates—Academic Calendar

Information—page 51; filing dates—Academic Calendar

Information—page 349; information—page 24;

Information—page 25; information—page 57;

Information—page 26; filing dates—Academic Calendar

filing dates—Academic Calendar
Health Regulations

All entering matriculated students should have a complete physical examination including a Chest X-Ray or Tuberculin Skin Test taken within the past year.

Nursing program students require specific immunizations and tests which must be completed prior to attending hospital affiliations. Nursing and Early Childhood Education/Child Care students whose TB tests prove positive require a chest x-ray.

A completed health statement, on the form distributed by the Health Services Office, Room A-108, ext. 5684, should be completed by the student's personal physician. The College requires signed authorization (by parent or legal guardian for students under 18 years of age) to release any medical records.

IMPORTANT NOTE

The College will not monitor student participation in physical education or athletics. Students are responsible for following the advice of their physicians in these matters. The college will take no responsibility whatsoever for any injury students may suffer should they participate without medical advice, or against medical advice, or for any injury suffered as a result of any physical incapacity.
Side view of outside stairwell connecting the award-winning Health and Physical Education Building with the Administration Building.
The Department of Student Development is dedicated to helping students achieve self-understanding and direction so that they can develop their maximum educational, social, and personal potential.

To aid students in their adjustments to the college community, and toward the realization of goals during and after college, the Department offers a wide variety of services within a framework designed to highlight individual growth.

**Student Handbook**

An important resource and guide, the Student Handbook provides students with information on all aspects of college life: campus rules and regulations; academic standards; counseling and related services; special programs; student activities, and more.

**Orientation**

All incoming Freshmen are invited to participate in an Orientation Program. An integral part of the Department's offerings are two credit-bearing courses designed to prepare students to obtain maximum personal and scholastic benefit from their attendance at Kingsborough.

**Course Offerings**

**SD 10 Freshman Seminar**
1 cr. 1 hr.

Group discussion and seminars are the basis for a course geared to help incoming freshmen meet typical problems encountered in college. The specific areas covered include study habits, learning problems, career and program planning, college resources, adjustment to college life, and related problems.

**SD 11 Career Decision Making**
1 cr. 1 hr.

This course is designed to provide students with an opportunity to explore careers in relation to their interests, abilities and aptitudes and to their college experiences. Dealt with are such topics as the nature of work, contemporary changes occurring in careers and the "work ethic". An introduction to current labor market information is given, followed by intensive research and exploration of occupations on an individual basis. Instruction, enhanced by practical assignments, is given in the dynamics and techniques of job-seeking.

**Co-Curricular Activities—Office of Student Life**

Room U-204, ext. 5597

The Department of Student Development co-curricular activities program was designed to enrich students' total college experience. These activities make possible: development of leadership skills and a sense of responsibility; contact with individuals of diverse backgrounds and interests; opportunity to serve the college and the community.

Students and faculty work together in making decisions in areas of college governance, discipline, etc. Opportunities are available on the College Council, the Kingsborough Community College Association, and the Faculty Student Committee on Student Discipline.

Over sixty student organizations, organized and administered by students with assistance from faculty advisors, develop programs which are academic, cultural, educational and social. Included are team sports and athletics, dramatics, special interest groups, social groups, a radio station, newspaper, yearbook and a peer advisor program.

There are five Student Government Councils, each representing a different curriculum area (Business, Evening Studies, Liberal Arts, Mathematics and Science, Public and Health Services).

Open to all students, many events are scheduled throughout the semester. They include lectures, films, art shows, dances, and music. Dates and campus locations of each event are published in "What's Happening", the weekly newsletter.

All activities are coordinated by the Office of Student Life.
Counseling and Related Services

Individual and group counseling conferences are scheduled as needed by the counselor, and/or student to deal with academic orientation, pre-registration, mid-semester evaluations and advance program planning. Counselors are always available to assist with academic planning and to discuss matters of personal, social or vocational concerns. Students who require intensive help with individual problems can receive professional, specialized counseling, which is given on a strictly confidential basis. Where protracted or particular help is required, referrals are made to appropriate experts on campus or, in community resources or agencies. Among the programs available to achieve additional goals, are: Peer Advisor Programs; Health Counseling; Veterans Counseling; Health Services; Special Services for Disabled Students; Foreign Students Counseling; Counseling for Mature Adults; Selected Educational and Vocational Testing; High Risk Student Advisement; My Turn; Honors Option; New Start; College Now; Diploma Now; GED Support Seminar.

Career Placement and Transfer Counseling
Room C-102, ext. 5115

Career counseling, career opportunities, and occupational information is made available to all incoming freshmen, current students, and Kingsborough's alumni. The Office also serves as a central clearing house for off-campus part- and full-time employment opportunities. "Career Day" meetings are arranged on campus so students can meet with corporation and business representatives for first-hand information on future employment opportunities. In addition, counselors explain and interpret policies, particularly as they relate to The City University, which guarantees that all CUNY community college graduates be admitted to CUNY senior colleges (see page 57). College acceptance policies, which require that certain conditions be met, are spelled out in the Kingsborough Student Handbook, in various publications, in materials published by CUNY, SUNY, and other public and private senior colleges and universities. Special "Transfer Days" are arranged enabling students to meet with representatives of many of those public and private institutions. Career seminars and recruitment activities are appropriately scheduled with the business community.

GED Support Seminar
Room I-516, ext. 5786

A program of support, instruction and counseling for students who entered Kingsborough with the GED credential. The College offers an orientation and study skills course including: career exploration, math anxiety, vocabulary improvement, note taking and time management. Individual counseling and group sessions help these special students who traveled a non-traditional route in their educational and vocational development to reach this point.
Bilingual Program
Room D-206, ext. 5576

The Bilingual Studies Program started at Kingsborough in 1970. It offers academic training toward a 2-year degree for bilingual (Spanish-English) High School Graduates or holders of the GED Equivalency Diploma in the fields of business, science, and liberal arts.

Assistance offered in English and Spanish, includes intensive counseling and orientation, developmental instruction, tutorial services, financial aid, and cultural activities.

The Program's objectives include: offering bilingual students instruction to further their educational goals; increasing their ability to function comfortably within this society's framework; stressing the importance of maintaining a viable identity within the Spanish speaking minority communities in New York.

College Discovery
Room D-102, ext. 5520

The College Discovery Program was designed to assist economically and academically disadvantaged students with good potential to succeed in college. Under the sponsorship of The City University of New York, College Discovery students receive financial assistance, specialized counseling, tutorial and remedial services. Students are accepted into the program through the University Application Processing Center (see page 359).

Day Care Center
Room T-7118, ext. 5157

A limited number of Kingsborough's day students' children—who are from 2 years and 9 months to 5 years of age—are professionally cared for at the campus Day Care Center while their parents attend classes. Funded by the Kingsborough Community College Association, applicants are accepted on a first come, first served basis. The facility is under the direction of, and administered by, Kingsborough student-parents.

Peer Advisor Program
Room U-204, ext. 5597

The Peer Advisor Program prepares students to play a significant part in assisting freshmen to make an easier adjustment to college. Qualified students are trained to use a student-to-student approach to help with problems and provide needed support.

Veterans Affairs Program
Room D-206, ext. 5159

All veterans and/or their dependents are urged to visit the Office of Veterans Affairs for information and assistance relating to: educational benefits; jobs; housing; insurance; personal and business loans; dental and medical referrals; vocational rehabilitation and other entitlements.

33
New Start Program
Room C-102, ext. 5115

The New Start Program assists referred, eligible students who experienced academic difficulty at participating senior colleges. At KCC, these students receive specialized counseling and support services and may use up to 30 previously earned credits toward an associate degree. After graduation from Kingsborough, they may continue their education at a senior college, under the CUNY transfer guarantee policy.

Special Advisement/Counseling Program
Room F-102, ext. 5975

Select groups of high risk students are assisted to maintain good academic standing, and progress toward meeting appropriate degree requirements in the Special Academic Advisement Program. Academic advisors assist in planning course schedules, monitoring progress, and help deal with any ongoing academic problems. Counselors provide educational and vocational guidance, assist with individual development and handling personal problems. Advisors and counselors refer the students in the Program to any necessary remedial and supportive services.

Student Publications
Room T-7112, ext. 5603

Student publications provide an outlet for the expression of ideas, opinions, creativity and talent. Scepter, the College newspaper, prints college news, reviews college activities and sports, carries letters, opinions, commentary and items of interest to KCC students and faculty. Mace publishes longer articles and thematic work in a magazine format. Antheon, the College literary journal, allows for the expression of student poetry and fiction. Odyssey offers students an opportunity to produce a yearbook representative of the college, the year, and its graduates.

All publications are written, produced, managed and distributed by KCC students with a faculty advisor. They are supported by the KCC Association, and have been cited for excellence.
Financial Aid*
Room U-201, ext. 5681

Financial assistance is available to students through programs administered by the College or by outside agencies. The financial aid programs aim to assure that no qualified student is denied the opportunity for higher education because of the need for supplementary financial assistance.

Applicants for admission, and students already enrolled in the College who are citizens or permanent United States residents, are invited to meet with a financial aid counselor to determine eligibility and type of assistance available. Allocation of funds is subject to existing Federal, State and City University guidelines.

General Information
Prospective students may apply for financial aid when they confirm their acceptance at the College. Applications and detailed financial aid information are available upon request at Kingsborough's Financial Aid Office.

Continuing Eligibility
All students receiving financial aid must be in good academic standing and making satisfactory progress toward their degree. In addition, they are also subject to the existing rules and regulations of the Federal and State Governments, CUNY Board of Trustees and KCC.

* Non-Degree students and those holding foreign students' visas are NOT ELIGIBLE for aid.

* Any student required to register with the Military Selective Service, who fails to do so is INELIGIBLE for Federal Financial Aid.
Financial Aid Programs Currently Available Include:

I. SCHOLARSHIPS AND GRANTS

a. New York State Regents Scholarships—Freshmen holding the Regents College and Nursing Scholarships will be awarded $250, annually without regard for amount of tuition or family income. This award is based on a competitive examination.

b. Agency Scholarships—Kingsborough students may be eligible for scholarship assistance provided by various religious, fraternal and community agencies, business and industrial firms.

c. Supplementary Educational Opportunity Grants—Federal funds are allocated for grants to financially needy and educationally deserving students under the Higher Education Act of 1965. Amounts range from $200 to $2,000, depending on need, family ability to contribute, and availability of funds.

d. Pell (Basic) Grant Program—A federal aid program authorized by the Education Amendments of 1972. Designed to provide financial assistance for students who could not otherwise attend post-high school institutions. The amount of the grant is based on family contribution, cost of education, and the amount of federal funds actually available for the program. Important criteria must be met when considering an applicant's eligibility:
   1. citizenship or permanent residency status;
   2. at least part-time attendance as a student;
   3. a student who attempted 30 remedial (equated credits) will not be eligible for Pell Grant payment for remedial credits taken in excess of the 30 credit limit. (ESL courses are excluded).

e. Tuition Assistance Program (TAP)*—Designed to assist full-time students taking 12 or more credits to pay all or a portion of their tuition. To be eligible, a student must be a U.S. Citizen or permanent resident, a resident of New York State and meet the approved academic and program requirements. You may qualify for TAP if you and/or your family's N.Y. State net taxable income is $32,000. or less. The amount of the award varies and does not have to be repaid.

f. Supplemental Tuition Assistance Program (STAP)*—Full-time undergraduate students who received TAP for the first time on or after July 1, 1981, who are educationally disadvantaged and require remedial courses may be eligible for up to one year of the STAP funds.

g. Aid for Part-Time Study (APTS)—Provides tuition assistance to eligible part-time undergraduate students taking between 6-11 credits per semester in a degree granting program. Eligibility requirements include good academic standing, filing for PELL, N.Y. State residency and other program requirements. The income limitation for dependent students and their families is $22,000 or less. The net taxable income cut-off for independent students is $15,000 or less. The amount of the award cannot exceed $2,000 or tuition, whichever is less.

h. Mayor's Scholarship Program (MSP)—This program was established by the Mayor's Office of New York City and sponsored by the Federal Housing and Urban Development agency. It is designed to provide supplemental financial aid to full-time students enrolled in degree-granting programs. Eligibility is based on financial need and residence in certain designated areas. The amount of each award ranges from $200 to $500.

* Detailed requirements for eligibility to receive and continue in the TAP and STAP Programs are available in the Financial Aid Office. They should be obtained and carefully read by each applicant and/or recipient.
II. LOANS

a. Perkins (Direct) Loans (formerly NDSL)—Provided under the National Direct Education Act—these loans, in amounts up to $1,500 per year, are available to eligible students. No payment is required during the student's attendance at college. Repayment, at an annual interest rate of 5%, starts six months after graduation or termination of studies, and may be extended over a ten-year period, depending on the amount borrowed. Up to 50% of the indebtedness may be canceled for students who enter the teaching profession for a period of five years. Students who teach for seven years, in areas designated as disadvantaged, may have the loan canceled.

b. Guaranteed Student Loans (GSL)—Loans are available for students enrolled in degree programs, who carry at least six credits per semester. The funds may be borrowed from any local bank participating in the program. The student begins to repay the loan six months after studies are terminated, at an annual interest rate of 8%. Maximum annual amounts available may not exceed $2,500 a year.

c. Supplemental Loans for Students (SLS—formerly known as ALAS)—The SLS program provides loan amounts that supplement Guaranteed Student Loans. Independent undergraduate students are eligible to borrow up to $4,000 per year with an aggregate maximum of $20,000. However, these annual limits include any amounts borrowed through the SLS. The current interest rate on SLS loans is 12%. A student may not borrow if the estimated costs of attendance minus financial aid shows no need.

d. Parent Loans for Undergraduate Students (PLUS)—Parents of dependent undergraduate students may borrow, for any one student, up to $4,000 per academic year to a maximum of $20,000 for each child. Repayment is required to begin within 60 days after disbursement. Interest rate is 12%. Amount borrowed must not exceed cost of attendance as determined by the institution, minus financial aid received.

e. Nursing Student Loans—For eligible students enrolled at least half-time in the Nursing program. Maximum amount available to an individual borrower in an academic year may not exceed $2,500, or the amount of the student's need, whichever is less. Repayments commence nine months after graduation or termination of studies. Annual interest is 6%. Effective September 29, 1979, with the enactment of Public Law 96-76 loans made from Nursing Loan Funds are not eligible for cancellation for employment. Loans made prior to September 29, 1979 are eligible for cancellation benefits.

f. Commercial Loan Programs—Many banks, insurance companies, and finance corporations lend funds for educational purposes. In many cases these loans are made without regard to financial need. While interest rates may be relatively higher, such loans may be helpful to those who are not in serious financial need.

III. WORK-STUDY PROGRAM

The College Work-Study Program provides jobs for students who must earn money while attending college. Students may work an average of 20 hours a week while they attend classes and up to 40 hours a week during vacation periods. Students are paid from $3.50 to $3.85 an hour and are employed on-campus or in approved off campus positions.
ESTIMATED STUDENT EXPENSES

In addition to tuition and fees, dependent student expenses for an academic year are estimated at approximately:

- Books and supplies: $300
- Transportation: $540
- Personal Expenses: $1173
- Room and Board: $1100

Additional information is available upon request in the Financial Aid Office.

RIGHTS AND RESPONSIBILITIES OF THE STUDENT AS A CONSUMER

Part 178 of Title 45 U.S. Code of Federal Regulations of the Higher Education Act of 1976 requires that the Financial Aid Office have available certain types of information concerning the rights and responsibilities of prospective students. Accordingly, in compliance with federal and state laws and regulations relating to truth-in-lending, all students are hereby advised to review carefully the appropriate sections, in the College Catalog and Student Handbook, dealing with such areas as academic programs, cost of attendance, types of aid available, need analysis, refund procedures, satisfactory rate of academic progress, complying with deadlines for applications and documentation requests, etc.
SPECIAL PROGRAMS

The Administration and faculty have inaugurated a number of far-reaching "Special Programs" designed to benefit Kingsborough students. They are available to the general college population, meeting the needs of a variety of specialized groups.

Health Services Center—Room A-108

Health Services—ext. 5684

The College Health Office reviews the student medical forms and evaluates health status, facilitates the removal of handicaps to learning and ascertains the need for special adaptations of the college program to ensure the maximum development of each student.

First aid, emergency treatment, educational, preventative and advisory services are provided. Registered Nurses are in attendance when classes are in session to assist students with specific health problems. Any accident or illness incurred during school hours or en route to the college should be reported immediately.

Special Services—ext. 5175

Disabled and handicapped students will find all Career Programs easily accessible due to the special architectural design of the college, as well as its over-all academic structure. Specific assistance (such as special registration, tutoring, reserved parking permits, etc.) and individual counseling are offered to students with special needs. Disabled prospective students should visit the College before applying for admission. Contact this office to arrange for an appointment and interview.

For information contact Dr. Alfredo Torres, Director, Health Services Center.

Center for Marine Development and Research

Room T-301, ext. 5525

Kingsborough Community College's ideal waterfront site presented still another unique opportunity for the College to play a significant role. The Center for Marine Development and Research provides a locus for community recreation PLUS an outstanding instructional program. Students can prepare for careers in the seafood industry. Courses involve merchandising, marketing, sales, fishery research and development. Shipboard training to seafood processing including development of many other skills currently unavailable in the Port of New York are included.

Program requirements, page 115 Course descriptions page 267

For information contact Dr. Milton Drucker, Dean of Marine Education.
"College Now" Program

Room L-705, ext. 5170

A Kingsborough Community College cooperative educational venture with CUNY and the NYC Public School System. High School seniors are offered the opportunity, tuition free to; improve their basic academic skills, take college level courses, earn college credit while still attending their own high schools.

Among the College level offerings are courses in Behavioral Science (page 229), Business (page 167), English (page 183), Humanities (page 251), Natural Sciences (page 159).

FAME Program

Room T-301, ext. 5525

Administered by Kingsborough Community College, the FAME (Fisheries and Marine Education) program for high school students is a cooperative project with the NYC public high schools.

To stimulate student interest in higher education and future careers; help clarify higher education goals; accelerate academic advancement toward a college degree, the program familiarizes high school seniors with the many career opportunities in the seafood and marine related industries.

Classroom instruction and shipboard experience are combined on the college campus. Accepted High School students can earn 3 college credits each semester and can apply those credits toward the Fisheries and Marine Technology A.A.S. degree.

Program requirements page 115; course descriptions page 267.

"Honors Option" Program

Room F-106, ext. 5365

An enriched, challenging and rewarding curriculum is available to academically skilled, high achieving students. Courses are especially designed to stimulate thinking and research and provide exposure to classical and interdisciplinary studies.

First semester students who are enrolled for at least 9 credits and achieve a scholastic index of 3.20 or better are given the opportunity to apply for this special "Honors Option" program the following semester. Those who are accepted may enroll in one or more of the enrichment courses each semester, are invited to attend faculty lecture programs, receive priority registration and benefit from other privileges and activities.

Students who complete at least 12 credits of the courses offered in this program have the designation "Honors Option" entered on their transcripts. A cumulative index of 3.00 and at least a "B" grade in every course offered by the "Honors Option" is required for retention in the program.

For information contact Dr. Eric Willner, Director, Honors Option Program.

Cultural Affairs

Professional entertainment and "name" personalities are brought to the College campus during the entire school year. Students, faculty, and community members are given the opportunity to see, hear, and participate in many different art forms at nominal fees in an easily accessible, modern center. Presentations include: Performing Arts Festival, children's theatre, concerts, dance, films, lectures, music, mime, plays.
Mature Adults Resource Center
Room L-516, ext. 5157

The Mature Adults Resource Center offers assistance to adults who return to college by including assessment of their interest in continued college education. Referrals are made for vocational interest tests, support groups, resources and events of particular interest to returning, (or new) adult students.

A special meeting place; the Mature Adults Center (L-516), is open and available all day. Mature adults can meet there during the semester to talk with each other, study together, etc. Beginning the second week of classes, meetings are held on Wednesdays from 11:30 A.M. to 12:30 P.M.

"My Turn" Program
Room F-219, ext. 5079

"My Turn" is a tuition-free college education program for New York State residents 65 years of age and older. Kingsborough was granted permission to waive CUNY’s admission requirements for a high school or GED diploma from qualified applicants.

"My Turn" students are permitted to take as few or as many credits per semester as they wish. The program includes special counseling and other services.

A $25. registration fee is charged each semester and all penalty fees must be paid. Documentation of age and residence must be submitted with the admission application. Students are accepted on a matriculated or non-degree basis subject to availability of space. To apply as a matriculated student, check appropriate filing dates (page 23).

Teacher Studies
Room F-123, ext. 5946

Teachers and other school personnel on sabbatical leave for study, or those taking after school courses for salary differentials, are assisted by KCC counselors who are familiar with public and private schools. The Kingsborough Center for Teacher Studies, provides advisement in: submitting courses for approval; arranging programs and time schedules; interpreting regulations and explaining financial and legal aspects such as tax deductions, pensions and service credit. An exclusive pre-registration service is available. Seminars and varied cultural activities offer valuable opportunities for social interaction and professional development and advancement, in a stimulating academic environment with all campus privileges.

Tutorial Services
Room L-605, ext. 5118

Free tutoring in most academic and business courses is available on an individual or small group basis to Day and Evening Session students. Students requiring this service apply in the Institute’s Office which is under the auspices of the Dean of Instructional Services.

Radio Station WKRB
Room U-228, ext. 5604

The College’s student operated FM radio station broadcasts on 90.9 FM to the entire community of South Brooklyn. It is the first FM license in Brooklyn in over 40 years, is an affiliate of the American Information Radio Network and a subscriber to the Associated Press News Service. Programming includes heavy news, public affairs commitments, entertainment, and music. The station organization allows students to develop skills in engineering, management, public relations, business, news, community relations, and disc-jockey work.
Overseas Academic Programs
Room E-309, ext. 5403

Kingsborough's Department of Foreign Languages and the CUNY Council on Foreign Language Studies co-sponsor several summer-and-winter-module overseas program courses in England, France, Italy, Spain and in the Caribbean.
For information and details, contact Professor Julio Hernández-Miyares, Chairman, Department of Foreign Languages.

CUNY Baccalaureate Degree Program
Room E-309, ext. 5403

Dr. Julio Hernández-Miyares is available on campus for advice and additional information concerning the program (see page 365).

Computer Center

The Kingsborough Community College Computer Center is available to students involved in computer science and data processing, faculty members engaged in research, and administrative departments requiring data processing support. The Computer Center installation includes an IBM 4341 and a remote job-entry station that links Kingsborough with the CUNY University Computer Center which has an IBM 3090 and an IBM 3081 Computer thus making the very latest in computing equipment available to KCC. (See CUNY Computer Facilities, page 365).

Administrative Computing — Room L-117, Ext. 5640
(under the auspices of the Dean of Instructional Services)

Instructional Computing — Room L-116, ext. 5037.
(under the auspices of the Provost)

Institute for Public Service (KIPS)
Room F-309, ext. 5524

The Kingsborough Institute for Public Service, started in 1970, continues to pursue its mission of education and service for the College and the community. It makes it possible for the entire college population to take an active part in social, economic, public service and political action projects. The Institute serves as an initiator and facilitator in the exploration and development of public service projects recommended by faculty, students and community members. In the development of these projects, KIPS does not take any particular political or social point of view, but treads the line between education and activism fairly and objectively by presenting varying approaches, philosophies and viewpoints in its debates, panels, conferences, publications and other programs. Programs include: Conferences, lectures and debates primarily in response to campus needs, community requests or joint campus-community involvement; Special services such as the annual Health Fair, Community Services Referral, Voter Registration, and others; Non-credit projects such as voluntary work in public and private social services institutions and agencies.
Rear entrance to the ultra modern award winning Physical Education building.
Olympic-size swimming pool, one of the many outstanding sports and recreational facilities in the Health and Physical Education building.
SPORTS*

The Health, Physical Education and Recreation Department offers a program of intramural, recreation, and athletic activities geared to promote a variety of interests and skills.

Intramurals

The intramural program is designed to enable students to participate in a wide variety of athletic and recreational activities on a voluntary basis.

The program consists of individual and team events such as touch football, ping-pong, tennis, swimming, body-building, 3- and 5-man basketball, bowling, soccer, racquetball, weight-lifting, volleyball, and karate. Special events include a 2-mile Kingsborough Classic Run, bike-a-thon, jump-rope-a-thon, and Wheelchair Superstars.

Recreation

The recreation program offers students the opportunity to participate in sports and physical fitness activities at their own convenience. Activities include swimming, tennis, training with weights, and racquetball. Recreational clubs include modern dance, karate, skiing and yoga.

Athletics

The Athletic Program is renowned in the northeastern part of the United States, offering men and women the opportunity to participate in a wide range of sports. Emphasis is placed upon promoting enjoyment, fitness, skill development, knowledge, and sportsmanlike competition.

For women the growing program includes the following varsity teams: basketball, softball, tennis, and volleyball. The women's program is sanctioned by the Metropolitan Community College Athletic Conference (MCCAC) the local conference, and by the National Junior College Athletic Association (NJCAA) on the regional, district, and national levels.

Male varsity team programs include baseball, basketball, golf, and tennis. The men's program is sanctioned by the Metropolitan Community College Athletic Conference (MCCAC) the local conference, and by the National Junior College Athletic Association (NJCAA), on a regional, district and national level.

Coed teams include swimming and bowling.

Kingsborough is a member of Region XV, District of the NJCAA. There are 24 regions and 10 more encompassing districts geographically within the NJCAA. Victorious teams in the Regional structure compete against each other to determine District champions in each sport. The 10 District champions in turn compete for National titles.

*Note

The College does not monitor individual student participation in physical education or athletics. Students are responsible for following the advice of their physicians in these matters. The College will take no responsibility for any injury which may be suffered should a student participate without medical advice, or against medical advice or for any injury suffered as a result of any physical incapacity whatsoever.

45
Matriculation

A matriculated student is one who is registered for a specific degree in a particular program (curriculum).

All full-time students must enroll in a program of study carrying a minimum of 12 credits or 12 equated credits during the Fall and Spring sessions. Full-time students usually carry a program of 16 to 18 credits or equated credits.

Part-time students, those carrying fewer than full-time credits, generally attend the Evening Studies Program. It is possible to carry a full-time program during the Evening. However, full-time Evening Study is not available for all Kingsborough degree programs, but can be used for basic necessary courses and credits before completing requirements in Day Session. Counselors are available for consultation and for specific information.

Non-Degree Students* who request a change to Matriculated Status must meet the following requirements:
1. Proof of high school graduation or equivalent on file in the Registrar's Office.
2. Take required CUNY Skills Assessment Tests.
3. Good academic standing at the end of the current semester (at least a 2.00 cumulative index).

If a college was attended previously, the following criteria must also be met:
A. Meet requirements in 1, 2, 3 listed above.
B. Have an official copy (copies) of previous college(s) transcript(s) on file in the Registrar's Office.
   If the cumulative average at the previous college(s) was below a 2.00, the completion of a minimum of 12 credits or 12 equated credits, will be required at Kingsborough Community College with at least a 2.00 cumulative index.
*Non-Degree students are NOT eligible for financial aid.

Freshman Course Placement

AFTER acceptance by the College but BEFORE registration each entering matriculated student (and non-degree students attempting to achieve matriculation), will be required to take the CUNY Freshman Skills Assessment Tests. Results of these mandatory placement tests (in reading comprehension, writing and mathematics) determine specific course assignments in appropriate English and Mathematics classes (pages 146, 241).

Basic Skills Proficiency

Each student must meet standards of proficiency in the basic skills areas of reading, writing and mathematics established by the College. In addition, the CUNY Board of Trustees has mandated that students meet a University-wide minimal level of skills proficiency before entrance to the upper division. Consequently, students will be tested in these areas after admission but prior to their freshman year, to determine whether they meet the minimal University standards and the College's standards. Those who initially fail to meet these requirements will be given appropriate remedial instruction to assist them to achieve the required skills competency levels. Students who fail to achieve the minimal CUNY standards by the end of their sophomore year* will not be permitted to continue in the University.
*The end of the sophomore year is the semester, or session, in which the program's degree requirements for graduation are completed.
MAINTENANCE OF ACADEMIC STANDARDS*

The grade of "INC" (incomplete), or its equivalent, shall be awarded only when the course requirement has not been completed for good and sufficient reasons and where there is reasonable expectation that the student can, in fact, successfully complete the requirements of the course.

The grade of "W" (withdrawal without penalty), shall be awarded only when it is clear that the student has good and sufficient reasons for withdrawing from the course, and is doing so at a time when passing work is being done in the course.

Non-credit grades, failing grades, withdrawal grades and their equivalents shall be incorporated in a student's cumulative average for the purpose of determining academic standing and satisfactory progress toward a degree.

The following table is used when evaluating a student's academic progress and determining satisfactory progress toward a degree.

<table>
<thead>
<tr>
<th>Attempted Credits or Equated Credits</th>
<th>Minimum Satisfactory Rate of Completion</th>
<th>Minimum Cumulative GPA (Index)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 to 23½</td>
<td>50%</td>
<td>1.50</td>
</tr>
<tr>
<td>24 to 35½</td>
<td>66%</td>
<td>1.75</td>
</tr>
<tr>
<td>36 and over</td>
<td>75%</td>
<td>2.00</td>
</tr>
</tbody>
</table>

(Both the "W" grade and equated credits are included in the determination of a student's rate of completion).

Students who fail to achieve these standards will be placed on probation for one semester and if unable to correct their deficiencies during that semester will be dropped from the College. The normal academic appeals procedure of the college will continue to consider individual cases, and to make such exceptions to the implementation of these guidelines as unusual circumstances may warrant.

Students who are dropped from the College for academic reasons may apply for readmission after one semester. Acceptance will be subject to faculty decisions (see pages 25, 52).

*Kingsborough Community College Council action.
Credits

Points allowed for courses taken in the College. Usually based on one credit for each weekly class hour. In some cases, the number of required hours may exceed the number of credits granted (i.e., science and physical education courses).

Example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry 12</td>
<td>6 hrs. 4 crs.</td>
</tr>
<tr>
<td>History 11</td>
<td>3 hrs. 3 crs.</td>
</tr>
<tr>
<td>Phys. Ed. 2</td>
<td>2 hrs. 1 cr.</td>
</tr>
</tbody>
</table>

Equate Credits

Weekly class hours in remediation and compensatory courses, for which actual credit is not allowed, may, for certain purposes, be counted in the same manner as are credits.

Example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math M1</td>
<td>4 hrs. 0 crs. AND 4 Equated credits.</td>
</tr>
<tr>
<td>English C1</td>
<td>5 hrs. 0 crs. AND 5 Equated credits.</td>
</tr>
</tbody>
</table>

Grade Point Index

The Grade Point Index is obtained by multiplying the grade point value by the number of credits for the course, then totaling the grade points and dividing by total credits. For example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade</th>
<th>Points Value</th>
<th>Credits</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>A</td>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>French</td>
<td>D</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>C</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Physics</td>
<td>B</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>History</td>
<td>F</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Total 16 Grade Point Total 34

Grade Point Index (34 divided by 16) equals 2.125 or just above "C" average.

Remedial Courses (□)

Remedial courses are specifically designed for students whose skills assessment test scores indicate that special remediation assistance is required. Remedial, no credit courses are designated by a □.

Basic Courses (+)

Basic courses are courses that individual Kingsborough departments feel are essential for college students so that they may learn the fundamental and basic concepts of a discipline. Basic Courses are designated by a +. Some basic courses require prerequisite courses or Department permission. This is indicated with the course description.

Advanced Courses

Advanced courses are courses that individual Kingsborough departments feel are important as follow-up courses to explore, either in breadth or depth, the areas of knowledge to which students have been introduced while taking the basic courses.
Grades indicate how well a student is doing academically. They deserve careful attention as evidence of good progress, or as an indication of the need for counseling, for increased effort, or both.

**Standard Grades***

Students receive an official grade for each course at the end of a session. This becomes part of the permanent record. The standard grades are:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Quality Points (Index)</th>
<th>Rate of Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90–100%</td>
<td>4</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>80–89%</td>
<td>3</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>70–79%</td>
<td>2</td>
<td>Fair or Average</td>
</tr>
<tr>
<td>D</td>
<td>60–69% (Lowest Passing Grade)</td>
<td>1</td>
<td>Below Average but Passing</td>
</tr>
<tr>
<td>F</td>
<td>59 and Below</td>
<td>0</td>
<td>Failure</td>
</tr>
<tr>
<td>R</td>
<td>Minimum Level of Proficiency Not Met for Remedial Courses</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>NC</td>
<td>Minimum Level of Proficiency Not Met for Compensatory Courses</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>INC</td>
<td>Term's Work Incomplete</td>
<td>—</td>
<td>Counts as an F unless Work is Completed within Six Months</td>
</tr>
<tr>
<td>W</td>
<td>Withdrew Without Penalty</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>WF</td>
<td>Withdrew Failing (Counts as Failure)</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>WU</td>
<td>Withdrew Unofficially (Counts as Failure)</td>
<td>0</td>
<td>—</td>
</tr>
<tr>
<td>AUD</td>
<td>Audit</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

**NOTE:** Grades cannot be altered by repeating a course. Students may register to repeat a course if they received an "F", "W", "R", "NC", "WF", or "WU" grade.

A course in which a "D" grade was received may be repeated only if a more advanced course in that discipline has not already been completed.

Students who receive a "C" grade or better in any course offered at the college MAY NOT REPEAT that course. In unusual and extenuating circumstances the rule may be waived by the appropriate college committee. (Regulations above do NOT apply to students in the Nursing Program page 257).

*Kingsborough Community College Council action.

"R" Grade

The "R" grade does not count in computing the scholastic index. It is given to a student in a remedial component who does not meet the minimum requirements at the completion of the semester. A student who receives the "R" grade in the same remedial component three times, will NOT be permitted to repeat that course again.

**Grade Change**

Students may request a review of a final grade NO LATER than the end of the semester following that in which the grade was given. Special requests and petitions, relating to Academic Standing, should be addressed to the Chairman, Committee on Admissions and Academic Standing.

**Scholastic Standing**

The measure of scholastic standing is based on the number of graded credits and/or equated credits taken and the grade received.
EXAMINATIONS

Mid-Term
Mid-term status is provided orally by Instructors. They are not entered on the permanent record.

Final
Students are responsible for meeting examination schedules (Final Exam dates pages 5–8). Students who have a conflict with a final examination schedule must immediately report to the Registrar’s Office for rescheduling.

To receive early notification of grades students may submit postcards to their Instructors at final exams. The Registrar’s Office mails grade reports to students at the conclusion of each session.

Make-up Final
Students who miss final examinations for legitimate reasons may apply for make-up examinations. Generally, permission is granted only to students who maintain passing grades up to the final examination period. For each make-up examination, a “Petition for Final Make-up Examination” form, with the Instructor’s signature, must be completed and received in the Registrar’s Office by deadline dates noted on Academic Calendar (pages 5–8).

Students pay $15, for the first make-up exam plus $5, for each additional exam. A maximum of $25, is charged per semester (page 25).

CHANGE OF CURRICULUM

For any curriculum change, except Nursing* which has special regulations, students must file the appropriate form in the Registrar’s Office, following the deadline dates on the Academic Calendar (pages 5–8). A curriculum change cannot go into effect until one semester in the original choice has been completed. The new curriculum goes into effect the semester following the student’s application. The most recent information on college policy, and all proper forms for a change of curriculum or change from Evening to Day Session, are available in the Registrar’s Office.

*Nursing Curriculum Requirements: Retention, Pre-Nursing Sequence (page 257).

AUDITING POLICY

To audit a course a student must:
   a. obtain permission from the Department Chairman and course Instructor.
      [Permission to remain in the class is on a space available basis.]
   b. formally register, as an auditor, for the course under current tuition policy.
The grade of “AUD”, which carries no credit and cannot be changed to any other grade will be given at the completion of the term.
WITHDRAWAL

From the College

Students who find it necessary to withdraw from the College must complete and file an official form in the Registrar's Office. Students who contemplate such action should first discuss the matter with a counselor to see if alternatives are possible and advisable. The date that the withdrawal form is completed and submitted to the Registrar's Office—NOT the last date of class attendance—is considered the official date of withdrawal from the College. For last days to withdraw without academic penalty, see Academic Calendar pages 5–8. For tuition refund, see page 26.

A student who expects to return to Kingsborough, should fill out a Readmission Form at the same time. A readmission fee is charged when the form is submitted (page 25).

Readmission deadline dates are:

- Fall readmission — June 15
- Spring readmission — December 15

From a Course

After consultation with a counselor and before such action is taken, the proper forms must be filed with the Registrar's Office. The date that a change of program or withdrawal form is completed and submitted to the Registrar's Office—NOT the last date of class—is considered the official date of withdrawal from the course. See "Grades Assigned" under Student Attendance Policy (page 53).

DISMISSAL

A student who is dismissed for academic reasons may not apply for readmission until one semester after dismissal.

Application for readmission, with required readmission fee, must be filed with a letter of appeal to the Committee on Admissions and Academic Standing explaining the reason for the poor scholarship. Academic records will then be evaluated by the Committee. If the Committee believes the records indicate that the student will be able to make satisfactory progress toward earning the degree within a reasonable period of time the student may be readmitted. If, at the end of the semester of readmission, the student's academic level has not been raised to CUNY's standards nor has adequate progress in achieving the appropriate standards been shown, the student will then be dismissed.
STUDENT ATTENDANCE POLICY

As it is to students advantage to attend all scheduled classes and laboratories in which they are enrolled, the College has instituted an attendance policy.

All students are expected to attend all classes regularly and punctually. Students enrolled in remedial courses are required to attend classes regularly to maximize the opportunity to overcome any diagnosed basic skills deficiencies.

A student in any course who has been absent 15% of the number of contact hours a class meets during a session is deemed excessively absent.

<table>
<thead>
<tr>
<th>12-Week Session</th>
<th>6-Week Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Hours per week</td>
<td>Excessive Absences per session</td>
</tr>
<tr>
<td>2 hours</td>
<td>4 hours of absences</td>
</tr>
<tr>
<td>3 hours</td>
<td>6 hours of absences</td>
</tr>
<tr>
<td>4 hours</td>
<td>8 hours of absences</td>
</tr>
<tr>
<td>5 hours</td>
<td>10 hours of absences</td>
</tr>
<tr>
<td>6 hours</td>
<td>12 hours of absences</td>
</tr>
</tbody>
</table>

Where the course includes classroom lectures plus another component such as laboratory/field placement, etc., the 15% excessive absences policy applies to either component.

If excessive absences were due to special circumstances, timely appeal may be made to the Dean of Students for permission to continue in class. Approval by the Instructor is necessary for reinstatement in class.

Students who officially withdraw from courses within the first seventeen days of a session will have “no grade” recorded on their student transcripts.

Students who register for a course(s), and then do not officially withdraw from the course(s) for which they registered will receive a “WU” grade even if they never attend that class. Consult the College Calendar for withdrawal dates.
INDEPENDENT STUDY

The college offers students the opportunity to take a limited number of credits outside the traditional course structure as Independent Study. These offerings are designated by the course number “81”. Students registering for such courses will undertake a prescribed program of individual and/or group research and may attend seminars or workshops dealing with their field of study. All work will be conducted under the supervision of the assigned instructor and will be evaluated and graded by the instructor.

Successful completion of the “81” courses generally requires from 1 to 3 hours per week and earns from 1 to 3 credits per semester. Independent Study courses are open ONLY to upper freshmen and sophomore students who have:

- an overall B average (3.00 index) in the subject area, and departmental approval.
- Students will be permitted or take no more than 6 credits of Independent Study in any one area and no more than 12 credits toward the degree.

TOPICAL and PILOT COURSES

In addition to the courses described in the catalog, the College offers a group of courses that meet the immediate needs and interests of various members of the student population or, gauge the appropriateness and popularity of new subject areas. These topical and pilot courses are designated by the course number “82”. Specific descriptions of these courses appear in the Schedule of Classes for the term in which they are given.

GRADUATION REQUIREMENTS

Students in all programs follow courses of study designed to provide a sound general education and a carefully developed program of occupational or pre-professional education.

Eligibility for Graduation requires the completion of one of the programs of study as outlined in the statement of requirements with an overall minimum Cumulative Index of 2.00 (at least a “C” grade) for all courses taken at Kingsborough Community College (see page 49).

In order to receive a Kingsborough degree, a student is required to have completed the final thirty credits toward that degree while enrolled at Kingsborough. Where one or more credit bearing courses to be included in this sum are to be earned at another institution, prior permission must be obtained from the appropriate KCC faculty committee.
HONORS

DEAN'S LIST

DAY SESSION

Matriculated students in the Day Session who complete at least 15 credits in a Fall or Spring semester with a 3.20 grade index or better, and who have not received a “WF,” “WU,” “F,” “R,” “NC” or an “INC.” for that semester at the time the Dean's List is produced are eligible for the Day Session Dean's List for the semester in which the superior record is achieved. Attainment of the Dean's List becomes a part of the student's permanent record and appears on all transcripts.

EVENING SESSION

Matriculated students in the Evening Session who complete at least 7 credits in a Fall or Spring semester with a 3.20 grade index or better, and who have not received a “WF,” “WU,” “F,” “R,” “NC” or an “INC.” for that semester at the time the Dean's List is produced, are eligible for the Evening Session Dean's List for the semester in which the superior record is achieved. Attainment of the Dean's List becomes a part of the student's permanent record and appears on all transcripts.

Note: Day and Evening work completed during the winter or summer modules is not considered.

HONOR SOCIETIES

PHI THETA KAPPA
National Junior College Honor Society

Society members are selected on the basis of academic excellence. Students who complete 45 credits or more, with at least 30 of them at Kingsborough, and earn a cumulative index of 3.70 or higher, are invited to join the Society.

MU ALPHA THETA
Junior College Mathematics Honor Society

Sponsored by the Mathematical Association of America, membership is open to students who complete six credits or more in mathematics courses numbered 14 or higher and in computer science courses; maintain at least a “B” grade in those courses, and receive the recommendation of the Mathematics Department Faculty.

PHI BETA LAMBDA
National Business Honor Society

Students majoring in Secretarial/Office Administration, who maintain a cumulative “B” average after completing 30 credits at Kingsborough and who have given service to the Secretarial/Office Administration Department, are eligible for membership.

HONORS OPTION PROGRAM

For academically skilled, high achieving students. See page 40 for description. Contact Dr. Eric Willner, Program Director Room F-106, ext. 5365 for information.
KCC "TWO-PLUS-TWO" PROGRAM

Articulation agreements are in effect between CUNY, SUNY, and many private senior colleges. These agreements make it possible for students who complete, and graduate from, specific KCC two-year programs, to transfer directly into the third year of the collaborating four-year institution without any loss of credit. These students, therefore, are able to earn two college degrees in four years.

TRANSFER TO SENIOR COLLEGES AND UNIVERSITIES

CUNY ARTICULATION POLICY:

WHEREAS, The City University of New York was established as an independent system of higher education governed by its own Board of Trustees responsible for the governance, maintenance, and development of both senior and community colleges; and

WHEREAS, The legislative intent leading to the enactment of The City University Governance and Financing Act stipulates that the University must remain responsive to its urban setting and maintain close articulation between senior and community colleges; and

WHEREAS, The educational mission of The City University includes a commitment to maintain and promote academic excellence while also providing open and equal access to the totality of the University's students; and

WHEREAS, The City University is an integrated, unique and comprehensive system of higher education, mandated in law and in fact to serve the special needs of the people of the City of New York for purposes of upward educational, social and intellectual mobility; and

WHEREAS, The goal of access implies that success on each step of the college ladder should be followed by access to higher levels of learning through vertical linkage between associate in arts, baccalaureate, and graduate programs; and also implies the inter-college transferability of courses and credits in the Liberal Arts and Sciences; and

WHEREAS, The courses in the Liberal Arts and Sciences offered at each college in the University were developed by their respective faculties and approved by the Trustees of The City University and the State Education Department for the University as well as for the relevant college units of the University,

*Adopted by the CUNY Board of Trustees, June 24, 1985.
THEREFORE BE IT RESOLVED,

That the Board policy statement of February 26, 1973 be fully implemented as a basic policy component of the Board of Trustees. This policy states that "All City University Community College Associate in Arts and Associate in Science degree recipients shall be accepted as matriculated students at a senior college of The City University and that these students be given priority for transfer over non-university students seeking transfer and that upon such transfer they be granted a minimum of 64 credits toward a baccalaureate degree and be required to complete only the difference in credits between 64 and the total credits required . . ."; and be it further

RESOLVED, That effective September 1, 1986 all Liberal Arts courses taken in one City University college be considered transferable, with full credit, to each college of The City University; and that full credit be granted for these courses in all departments and programs; and be recognized for the fulfillment of degree requirements; and be it further

RESOLVED, That based on a fair and reasonable evaluation of a student's transcript at least nine (9) credits* be granted in the student's major unless the senior college determines that it wishes to grant additional credit in the major; and be it further

RESOLVED, That effective September 1, 1988 all Science courses taken in one City University college be considered transferable, with full credit, to each college of The City University; and that full credit be granted for these courses in all departments and programs and be recognized for the fulfillment of degree requirements; and be it further

RESOLVED, That based on a fair and reasonable evaluation of a student's transcript at least nine (9) credits* in laboratory Science be granted in the student's major unless the senior college determines that it wishes to grant additional credit in the major; and be it further

RESOLVED, That when transferring from a community college to a senior college, credit be granted for course work taken in the Liberal Arts and Sciences in the community college irrespective of whether the student has fulfilled the requirements for the Associate degree; and that a maximum of 68 lower level (freshman and sophomore) credits be transferred from one college to another unless the senior college determines that it wishes to grant additional credit, and that no more than 64 credits be required above the Associate in Arts or the Associate in Science degrees in order to fulfill the requirements for a baccalaureate degree; and be it further

RESOLVED, That excluded from this policy are skills courses, such as writing, and professional courses, such as Nursing or Education, where instruction is begun at the community college and continued at the senior college. Such courses shall be granted credit, but the senior college shall determine the proper level of placement in its course sequence; and be it further

RESOLVED, That in order to maintain academic standards and to insure a higher degree of probable achievement, all community college students be required to pass all three Freshman Skills Assessment Tests, prior to transferring to a senior college. Those students who meet the admission requirements of a senior college, and who wish to transfer to a senior college from outside the University, shall be required to take the Freshman Skills Assessment Tests and be placed at the appropriate skills level as determined by the senior college; and be it further

*It is understood that the relationship of course sequence and credit within the major will vary from college to college and major to major and that the allocation of credits will vary slightly.
RESOLVED, That the President or his/her designee is hereby authorized to grant exceptions to the provisions regarding Freshman Skills placement to select students under special circumstances. The number and nature of exceptions shall be reported annually to the Chancellor; and be it further

RESOLVED, That as part of the foregoing resolutions, vocational and skills courses such as typing, taken independently or as part of a liberal arts degree program not be awarded credit upon transfer except in such cases where the senior college determines that it wishes to grant such credit; and be it further

RESOLVED, That the Office of the Chancellor (through the Vice-Chancellor for Academic Affairs) be responsible for arranging meetings between faculties and administrative staffs of the various colleges of the University, so that articulation in the Sciences will be fully completed by September 1, 1968, and that articulation in the professional and career areas on a course-by-course basis will be substantially improved; and be it further

RESOLVED, That within each discipline meetings shall be held by department chairs and program coordinators of each college or their designees from all branches of CUNY. These meetings shall be co-chaired by one community college and one senior college representative and shall have as their explicit goal the improvement of articulation; and be it further

RESOLVED, That at these meetings the departmental representatives shall review the syllabi, examinations, and student papers, as well as entrance and exit criteria; and be it further

RESOLVED, That the Vice-Chancellor for Academic Affairs shall monitor the progress of the articulation meetings. The co-chairs of each group shall report the results of their group's deliberations to the Vice-Chancellor, who shall, in turn, transmit these reports, together with a summary of the results to the University Faculty Senate, the heads of the faculty governance bodies of the individual colleges, the Council of Presidents, the Chancellor, and the Board of Trustees; and be it further

RESOLVED, That the Vice-Chancellor shall monitor the implementation of these articulation policies utilizing periodic and systematic audits; and be it further

RESOLVED, That the community colleges and senior colleges establish an articulation advisement unit at each of the colleges in order to counsel students on career goals, courses to be taken at the student's college prior to transfer, and the requirements expected upon transfer.

EXPLANATION: The above resolutions represent a clarification of the mission of The City University and will result in removing remaining barriers and arbitrary distinctions which may yet exist with respect to intra-University transfer. These resolutions strengthen the University's commitment to upward mobility and equality for opportunity for all students regardless of race, ethnicity or economic status.
SUNY Transfer Policy

The SUNY Transfer Guarantee Program pledges that "A New York State resident who wishes to transfer from a State University of New York two-year college, including all community colleges throughout the state, and who possesses, or who will have, an Associate in Arts or Associate in Science degree at the time of transfer, is guaranteed an opportunity to continue education on a full-time basis at a senior campus of the University." All other students, with or without a degree, may apply for admission to SUNY units but the guarantee does not extend to them.

Private College Transfer Policies

Students who wish to transfer to a private college should check catalogs, directories and other literature available at Kingsborough, or should obtain information directly from the college they wish to attend.

NOTE: Details are available from Kingsborough's Counseling Faculty, the KCC Student Handbook, or the Admissions Office of the unit desired.
During the first semester at the college, each Kingsborough student receives the college catalog from a counselor. The catalog is important now and may prove invaluable in the future.

Information spelled out in the catalog makes it possible to check on all the courses required for each particular degree. Course descriptions also help decide on those electives which are of the greatest interest and value. Other catalog information alerts students to specific college requirements, rules and regulations and the special opportunities and advantages available on campus. Information on articulation agreements with senior CUNY and private colleges and universities and transfer opportunities are described.

After graduating from Kingsborough, alumni discover that many senior colleges, universities and professional schools may require the Kingsborough Community College catalog course descriptions in order to properly evaluate credits. The catalog information may also be useful for employment consideration.

The Kingsborough catalogs are printed in very limited quantities and replacements may not be possible. Students are urged to carefully keep the catalog they receive.

Prospective students who are interested in attending Kingsborough should request publications about the college from the Admission Information Office.
The Evening Studies Program serves an integral role in the College's educational offerings. Individuals who are unable to attend courses during the day are given an opportunity to pursue part-time and/or full-time studies in the evening. Many courses are offered on Saturdays.

The Evening Studies Program serves:
- Adults eager for a second or new career or, for job upgrading;
- Parents planning to return to the work force;
- Super Citizens (New York State residents 65 years of age and over), who wish to avail themselves of opportunities in higher education under the College's tuition waiver policy for senior citizens. With proof of age and residency, only a $25 registration fee is charged each semester;
- Veterans pursuing their educational objectives by attending College;
- Adults seeking educational opportunities and cultural interests for self-improvement and intellectual stimulation.

An extensive variety of course offerings are available in the Evening Studies Program. They include courses in the liberal arts, humanities, business and commerce, and the health sciences. At present, evening students can pursue Associate Degrees in Accounting, Business, Marketing Management, Data Processing, Secretarial/Office Administration, and Liberal Arts. Students interested in other degree programs, which are only offered in the day session, can commence their studies in the evening and transfer to the day session to complete their degree.

Evening students may avail themselves of the following services:
- Counseling services, including Career Counseling and Placement;
- Financial Aid advisement;
- Tutoring in most subject areas;
- Accounting, English, Foreign Languages, and Mathematics Laboratories.

For information regarding matriculated and non-degree status in the Evening Program contact the Admission Information Center or Evening Studies Office.
Kingsborough Community College offers a choice among three degree programs. Graduates who successfully complete the courses prescribed for the two-year program of their choice can earn the degree that curriculum carries: the Associate in Arts (A.A.) degree, the Associate in Science (A.S.) degree, the Associate in Applied Science (A.A.S.) degree.

Students must consult with an advisor when selecting courses to assure that their choices meet the curriculum requirements of the prospective major.

The Associate in Arts (A.A.) degree is awarded upon satisfactory completion of the required credits for Liberal Arts. Candidates for this degree concentrate their studies in the fields of Languages; Literature and the Arts; Mathematics and the Natural Sciences; the Behavioral and Social Sciences; Health and Physical Education. Requirements and credits start on page 71.

The Associate in Science (A.S.) degree is awarded upon satisfactory completion of the required credits for programs offered in Mathematics, in the Sciences and in the Arts. Candidates for this degree follow programs which closely parallel the A.A. program, but have greater concentration in Mathematics or Science, or in one of the Arts areas in which they plan to major. These programs include Biology (with concentrations in Food Science and Pre-Physician Assistant), Chemistry (with concentration in Food Science), Community Health, Computer Science, Engineering Science, Environmental Health and Science, Mathematics, Mental Health and Human Services, Physics, Pre-Physical Therapy, Fine Arts, Music and Theatre Arts. Requirements and credits start on page 77.

The Associate in Applied Science (A.A.S.) degree is awarded upon satisfactory completion of the required credits in the Career programs: Business, Health and Social Service. Candidates for this degree follow programs which concentrate in the applied field. The professional fields in which these programs are offered include Accounting (with concentration in Tax Accounting), Broadcasting Technology and Management, Business Administration transfer programs, Data Processing (with concentrations in Computer Programming and Microcomputer Application), Early Childhood Education, Education Associate, Fashion Merchandising, Fisheries and Marine Technology (with concentrations in Seafood Business Management and Vessel Operations), Journalism and Print Media, Marketing Management (with concentrations in Supermarket Management and Food Marketing), Medical Record Technology, Nursing, Personnel Management and Labor Relations, Secretarial/Office Administration (with four options, Executive, Legal, Medical, School, plus a concentration in Word/Information Processing), Sports, Fitness, and Recreation Leadership, Travel and Tourism. Requirements and credits start on page 101.
The College expects that every Kingsborough student will make consistent and determined progress toward earning a degree; seriously strive to perform well in all courses; spend approximately two hours of outside preparation, study and work for EACH hour of classroom instruction and, is committed to taking full advantage of the opportunities the College offers for a quality education.

The Administration and faculty are concerned with providing education of the highest degree of excellence; building basic skills which will facilitate and encourage further learning; assisting students to develop their individual potentials to their highest levels, and helping students establish a firm foundation upon which to build their future careers.

Students in all programs follow courses of study designed to provide a sound general education and a carefully developed program of occupational or pre-professional education.

Non-credit, non-degree courses and programs are offered by Continuing Education (see page 317)
DEGREE PROGRAMS*

Associate in Arts (A.A.)
Liberal Arts

Associate in Science (A.S.)
Science and Mathematics Programs
- Biology
  - Food Science Concentration
  - Pre-Physician Assistant Concentration
- Chemistry
  - Food Science Concentration
- Community Health
- Computer Science
- Engineering Science
- Environmental Science
- Mathematics
- Mental Health and Human Services
- Physics
- Pre-Physical Therapy

Arts Programs
- Fine Arts
- Music
- Theatre Arts

Associate in Applied Science (A.A.S.)
Business Career Programs
- Accounting
  - Tax Accounting Concentration
- Broadcasting Technology and Management
- Business Administration
- Data Processing
  - Computer Programming Concentration
  - Micro-Computer Applications Concentration
- Fashion Merchandising
- Fisheries and Marine Technology
  - Seafood Business Management Concentration
  - Vessel Operations Concentration
- Journalism and Print Media
- Marketing Management
  - Supermarket Management
  - Food Marketing Concentration
- Medical Record Technology
- Personnel Management and Labor Relations
- Secretarial/Office Administration
  - (Executive, Legal, Medical, School) plus
    - Word/Information Processing Concentration
- Travel and Tourism

Health Programs
- Early Childhood Education/Child Care
- Nursing

Social Service Programs
- Education Associate
- Sports, Fitness, and Recreation Leadership

* NOTE: Enrollment in other than registered (or otherwise approved) programs may jeopardize a student's eligibility for certain student aid awards.
DEGREES

All matriculated students must successfully complete the total number of required credits for their degree, divided into four basic categories:

1. **College-Wide Requirements**—Four to eight credits in Freshman English courses. Three credit Health and Physical Education course (HPE 12) (required of ALL students except those majoring in Nursing (see page 257) or Vessel Operations (see page 115). Non-credit courses in Corrective Speech and/or remedial courses in English and/or Mathematics may be required.
2. **Department Requirements**—as specified in all curricula except Liberal Arts.
3. **Group Requirements**—limited courses are offered within five general areas.
4. **Free Electives**—choices from the entire range of course offerings. In some programs, Department or Program Director consultation may be required.

**Associate in Arts**

Students matriculated for the A.A. degree must successfully complete a minimum of 64 credits, divided into three basic categories.

1. **College-Wide Requirements**—courses which all students must take (see 1 above).
2. **Group Requirements**—47 credits chosen from: I) the Performing and Visual Arts; II) Language*, Literature □, and Philosophy; III) Social Sciences; IV) Behavioral Sciences; V) Mathematics and Natural Sciences. These choices are the foundation for future academic studies and depend on background, interests, area of prospective specialization, future career goals.
3. **Free Electives**—courses to make up the total number of credits required for the degree. Students may choose from groups already mentioned or from any other courses offered by the College. In some programs, Department or Program Director consultation may be required.

*Placement recommendations for entering freshmen who wish to continue with a familiar foreign language are made by the Department of Foreign Languages based on language proficiency.
□ Students who wish to do so, will be permitted to take a Foreign Language Literature Course taught in English to fulfill the literature requirement in this group.

**Associate in Science**

and

**Associate in Applied Science**

Students matriculated for the A.S. degree or the A.A.S. degree must successfully complete the number of credits specifically required for that degree. These credits are divided into four basic categories.

1. **College-Wide Requirements**—courses which all students must take (see 1 above).
2. **Group Requirements**—courses which offer limited choices within general areas. Students may choose from a wide selection of course offerings.
3. **Department Curriculum Requirements**—courses which students must successfully complete in the chosen area of specialization, such as Nursing, Sports, Fitness and Recreation Leadership, Chemistry, Biology, etc.
4. **Free Electives**—courses to make up the total number of credits required for the specific curriculum. Students may choose from groups already mentioned or from any other courses offered by the college. In some programs, Department or Program Director consultation may be required.

*Detailed statement of all degree requirements are in the Degree Programs section of the catalog.*
THE ASSOCIATE IN ARTS (A.A.) DEGREE

Students are exposed to the humanities, social sciences, natural sciences and mathematics. The objectives are similar to the prescribed courses frequently found in the first two years of baccalaureate liberal arts programs. Attention is focused on advanced and specialized courses of interest and concern. Students who plan to continue their studies and earn higher degrees, find that their Kingsborough A.A. degree serves as a solid foundation for transfer to a senior or professional college. Provisions for smooth transfer between KCC and CUNY, SUNY and many private colleges are in effect.

A student must earn at least a "C" grade (2.00 index), and have fulfilled all degree requirements to be certified for the degree.

PROGRAMS
Art • Behavioral Sciences and Human Services • Biological Sciences • English • Foreign Languages • Health, Physical Education and Recreation • History, Philosophy and Social Sciences • Mathematics • Music • Physical Sciences • Speech and Theatre
COURSE DESCRIPTIONS

Art Department
Courses—pages 131-135

Behavioral Sciences & Human Services Department
Courses—pages 139-150

Biological Sciences Department
Courses—pages 153-159

Business Department
Courses—pages 163-173

English Department
Courses—pages 176-185

Foreign Languages Department
Courses—pages 189-200

Health, Physical Education & Recreation Department
Courses—pages 203-215

History, Philosophy & Social Sciences Department
Courses—pages 219-229

Mathematics & Computer Science Department
Courses—pages 233-244

Music Department
Courses—pages 247-254

Nursing Department
Courses—pages 257-261

Physical Sciences Department
Courses—pages 265-279

Secretarial/Office Administration Department
Courses—pages 283-293

Speech & Theatre Department
Courses—pages 297-305

Travel & Tourism Department
Courses—pages 309-310
A.A. LIBERAL ARTS
Requirements for Matriculants

**COLLEGE REQUIREMENTS**
(*Successful completion of the CUNY Freshman Skills Assessment Tests with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>0</td>
</tr>
<tr>
<td>ENG 22</td>
<td>0</td>
</tr>
<tr>
<td>HPE 12</td>
<td>4</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>3</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**
Select from EACH group—I thru IV
(6 of the 9 credits required from groups I, II, III & IV must be in Basic Courses)

I. Performing and Visual Arts (2 areas)                          | 9 credits |
   Art                                                            |          |
   Music                                                          |          |
   Speech                                                         |          |
   Theatre Arts                                                   |          |
II. Language and Literature (2 areas)                           | 9       |
   Foreign Language                                              |          |
   Literature                                                    |          |
   Philosophy                                                    |          |
III. Social Sciences                                            | 9       |
   Economics                                                     |          |
   History                                                       |          |
   Political Science                                             |          |
IV. Behavioral Sciences (2 areas)                               | 9       |
   Anthropology                                                  |          |
   Psychology                                                    |          |
   Sociology                                                     |          |
V. Mathematics and Science (2 areas)                            | 11      |
   Biological Science                                            |          |
   Mathematics and Computer Science                              |          |
   Physics                                                       |          |
   Chemistry                                                     |          |
   Earth Science                                                 |          |

**ELECTIVES**—Sufficient to meet required total of: 64 credits
THE ASSOCIATE IN SCIENCE (A.S.) DEGREE

The Science, Mathematics, Fine and Performing Arts courses offered in these programs provide sound foundations in those specialities as well as in the essential liberal arts. They were designed to permit students the opportunity for exploration with specialization in their major field. The Kingsborough A.S. degree will serve as a perfect foundation for transfer to a senior or professional college, or, for accepting a position in the chosen field.

A student must earn at least a "C" grade (2.00 index), and have fulfilled all degree requirements to be certified for the degree.

PROGRAMS

Arts

Fine Arts • Music • Theatre Arts

Mathematics

Mathematics • Computer Science

Science

• Biology •
• Chemistry (with concentration in Food Science)
• Community Health • Engineering Science •
• Environmental Health and Science •
• Mental Health and Human Services •
• Physics • Pre-Physical Therapy •
A.S. DEGREE PROGRAMS

ARTS PROGRAMS

Fine Arts
   Requirements, page 90
   Course Descriptions, page 131
Music
   Requirements, page 94
   Course Descriptions, page 247
Theatre Arts
   Requirements, page 98
   Course Descriptions, page 303

HEALTH AND SCIENCE PROGRAMS

Biology
   Requirements, page 81
   Course Descriptions, page 153
Chemistry
   Requirements, page 83
   Course Descriptions, page 265
Community Health
   Requirements, page 85
   Course Descriptions, page 211
Engineering Science
   Requirements, page 87
Environmental Health and Science
   Requirements, page 89
Mental Health and Human Services
   Requirements, page 93
   Course Descriptions, page 149
Physics
   Requirements, page 95
   Course Descriptions, page 273
Pre-Physical Therapy
   Requirements, page 96
Pre-Physician Assistant
   Requirements, page 82

MATHEMATICS PROGRAMS

Computer Science
   Requirements, page 86
   Course Descriptions, page 235
Mathematics
   Requirements, page 92
   Course Descriptions, page 241
A.S. BIOLOGY**
Requirements for Matriculants

**Total credits: 64-65**

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) ........................................ 0 credits
- ENG C1 (if required) .................................................... 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .......... 4
- ENG 22 ................................................................. 4
- HPE 12 ................................................................. 3
- Corrective Speech (if required) ........................................ 0
- MAT M1 & M2 or MAT R2 proficiency .................................. 0

DEPARTMENT REQUIREMENTS+ (course descriptions—pg. 153)
Preparatory Biology (BIO 10 if required) .................................. 0 credits
General Biology I and II (BIO 13-14) .................................... 8
Biology Laboratory Courses (excluding Allied Health Course) ......................... 8
General Chemistry I and II (CHM 11-12 pg. 265) .............................. 8
Analytic Geometry and Pre-Calculus Math (MAT 14 pg. 243) ................. 4

FOOD SCIENCE CONCENTRATION††
Biological Emphasis
Preparatory Biology (BIO 10 if required) .................................. 0 credits
Biology (BIO 13-14), Chemistry (CHM 11-12), Mathematics (MAT 14) .......... 20
Introductory Food Science (BIO 40) ....................................... 3
General Microbiology (BIO 50) ................................................ 4
Basic Principles of Molecular Biology (BIO 58) ................................ 4
Organic Chemistry I (CHM 31) .............................................. 5
Food Analysis (CHM 40) .................................................... 3
Science of Nutrition (SCI 70 pg. 159) .................................... 3
Recommended
Calculus I and II (MAT 15-16 pg. 243) .................................... 8
General Physics I (PHY 11 pg. 273) ....................................... 5

††Transfer to Cornell University’s College of Agriculture and Life Science to earn a B.A. Degree in Food Science is possible without loss of credit, to a limited number of high average KCC graduates. On a space-available basis, transfer is also available to additional graduates of this KCC program. For further information contact Department Chairperson.
PRE-PHYSICIAN ASSISTANT CONCENTRATION‡

Preparatory Biology (BIO 10 if required) ............................................. 0 credits
Biology (BIO 13-14), Chemistry (CHM 11-12), Mathematics (MAT 14) ............. 20 credits
Human Anatomy and Physiology (BIO 11-12) ......................................... 8 credits
General Psychology (PSY 11 pg. 141) ..................................................... 3 credits
Human Growth and Development (PSY 32) ............................................... 3 credits
Recommended Electives*
- Microbiology in Health and Disease (BIO 51) ........................................... 4 credits
- Science of Nutrition (SCI 70 pg. 159) ...................................................... 3 credits
- Cardiopulmonary Resuscitation (HE 20 pg. 203) ....................................... 1 credit
- Emergency Health Care (NUR 41 pg. 261) .............................................. 2 credits
- Organic Chemistry I-II (CHEM 31, 32, pg. 265) ........................................ 10 credits

*Specific electives must be discussed in advance with Department Advisor

PLUS Completion of voluntary program concerned with direct patient care at least one year before transfer to a Senior College offering a program leading to certification as a Physician Assistant.

GROUP REQUIREMENTS ................................................................. 12 credits

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts ............................................................. 3 credits
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature ............................................................... 3 credits
   - Foreign Language
   - Literature
   - Philosophy

III. Social Sciences ........................................................................... 3 credits
   - Economics
   - History
   - Political Science

IV. Behavioral Sciences ..................................................................... 3 credits
   - Anthropology
   - Psychology
   - Sociology

V. Mathematics and Science .............................................................. 24 credits
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

ELECTIVES—Sufficient to meet required total of ...................................... 64-65 credits

Departmental requirements may be used to satisfy groups I-V requirements.
‡Consultation with the Department Advisor is required.
**These programs are within the Biological Sciences Department.
A.S. CHEMISTRY**
Requirements for Matriculants

Total credits: 64-65

COLLEGE REQUIREMENTS*  
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

ENG 03 &/or 04 (if required) .................................................. 0 credits
ENG C1 (if required) ................................................................. 0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .... 4
ENG 22 .................................................................................. 4
HPE 12 .................................................................................. 3
Corrective Speech (if required) .................................................. 0
MAT M1 & M2 or MAT R2 proficiency ....................................... 0

DEPARTMENT REQUIREMENTS‡

General Chemistry I and II (CHM 11-12 pg. 265) ...................... 8 credits
Organic Chemistry I and II (CHM 31-32) .................................. 10
Advanced General Physics I and II (PHY 13-14 pg. 273) .......... 10
Calculus I and II (MAT 15-16 pg. 243) .................................... 8

FOOD SCIENCE CONCENTRATION‡

Chemistry Emphasis

General Biology I and II (BIO 13-14 pg. 153) ............................ 8 credits
General Microbiology (BIO 50) .................................................. 4
General Chemistry I and II (CHM 11-12 pg. 265) ...................... 8
Organic Chemistry I and II (CHM 31-32) ................................. 10
Analytic Geometry and Pre-Calculus Math (MAT 14 pg. 243) .... 4
Introductory Food Science (BIO 40) ........................................... 3
Food Analysis (CHM 40) ......................................................... 3
Science of Nutrition (SCI 70 pg. 159) ....................................... 3
Recommended
Calculus I and II (MAT 15-16 pg. 243) ..................................... 8
General Physics I (PHY 11 pg. 273) ......................................... 5

Transfer to Cornell University's College of Agriculture and Life Science to earn a B.A. Degree in Food Science is possible without loss of credit, to a limited number of high average KCC graduates. On a space-available basis, transfer is also available to additional graduates of this KCC program. For further information contact Department Chairperson.
GROUP REQUIREMENTS ............................................................ 12 credits

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts ................................................. 3 credits
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature ................................................... 3
    Foreign Language
    Literature
    Philosophy

III. Social Sciences ............................................................. 3
     Economics
     History
     Political Science

IV. Behavioral Sciences ...................................................... 3
    Anthropology
    Psychology
    Sociology

V. Mathematics and Science ............................................... 24 credits
    Biological Science
    Mathematics and Computer Science
    Physical Science

ELECTIVES—Sufficient to meet required total of ....................... 64-65 credits

Departmental requirements may be used to satisfy groups I-V requirements.
‡Consultation with the Department Advisor is required.
**These programs are within the Physical Sciences Department.
# A.S. COMMUNITY HEALTH**

**Requirements for Matriculants**

**COLLEGE REQUIREMENTS**

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)*

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<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
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</table>

**DEPARTMENT REQUIREMENTS**

(Internal and course descriptions - pg 211)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Community Health (COH 11)</td>
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<tr>
<td>Critical Issues in Community Health (COH 12)</td>
<td>3</td>
</tr>
<tr>
<td>Epidemiology (COH 13)</td>
<td>3</td>
</tr>
<tr>
<td>Addictions and Dependencies (HE 40 pg, 204)</td>
<td>3</td>
</tr>
<tr>
<td>Human Sexuality (HE 52)</td>
<td>3</td>
</tr>
<tr>
<td>Health Education Elective</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Gerontology (MH 35 pg, 149)</td>
<td>3</td>
</tr>
<tr>
<td>Human Anatomy and Physiology I &amp; II (BIO 11, 12 pg, 153)</td>
<td>8</td>
</tr>
<tr>
<td>Elements of Statistics (MAT 20 pg, 243)</td>
<td>3</td>
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<tr>
<td>General Psychology (PSY 11 pg, 141)</td>
<td>3</td>
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<tr>
<td>Human Growth and Development (PSY 32)</td>
<td>3</td>
</tr>
<tr>
<td>Science of Nutrition (SCI 70 pg, 159)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology (SOC 31 pg, 143)</td>
<td>3</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**

Select at least three credits from EACH group—I thru IV

All credits required from groups I, II, III & IV must be in Basic Courses

<table>
<thead>
<tr>
<th>Group</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Performing and Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>(Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Speech</td>
<td></td>
</tr>
<tr>
<td>Theatre Arts</td>
<td></td>
</tr>
<tr>
<td>II. Language and Literature</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td></td>
</tr>
<tr>
<td>III. Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td></td>
</tr>
<tr>
<td>IV. Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td>Anthropology</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td></td>
</tr>
<tr>
<td>V. Mathematics and Science</td>
<td>24</td>
</tr>
<tr>
<td>Biological Science</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Computer Science</td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td></td>
</tr>
<tr>
<td>VI. Select from among groups II, III, IV, additional.</td>
<td>6</td>
</tr>
</tbody>
</table>

**ELECTIVES**—Sufficient to meet required total of 64 credits

(‡Specific electives must be discussed in advance with the Department Advisor.)

Departmental requirements may be used to satisfy groups I-V requirements.

‡Consultation with the Department Advisor is required.

**This program is within the Health, Physical Education and Recreation Department.**

Total credits: 64
# A.S. COMPUTER SCIENCE**

**Requirements for Matriculants**

## COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

## DEPARTMENT REQUIREMENTS‡

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Computing (CS 12 pg. 235)</td>
<td>4</td>
</tr>
<tr>
<td>Computer and Assembly Language Programming (CS 14)</td>
<td>5</td>
</tr>
<tr>
<td>Discrete Structures (CS 35)</td>
<td>5</td>
</tr>
<tr>
<td>Program Design and Analysis (CS 37)</td>
<td>4</td>
</tr>
<tr>
<td>Calculus I, II and III (MAT 15, 16, 21 pg. 243)</td>
<td>12</td>
</tr>
<tr>
<td>Differential Equations (MAT 55)</td>
<td>3</td>
</tr>
<tr>
<td>Linear Algebra (MAT 56)</td>
<td>3</td>
</tr>
<tr>
<td>Biology I and II (BIO 13-14 pg. 153) OR, Physics I and II (PHY 11-12 pg. 273) OR, Advanced General Physics I and II (PHY 13-14)</td>
<td>8-10</td>
</tr>
</tbody>
</table>

## GROUP REQUIREMENTS

Select at least three credits from EACH group—I thru IV.

All credits required from groups I, II, III & IV must be in Basic Courses.

I. Performing and Visual Arts ........................................... 3 credits
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature ................................................ 3 credits
    - Foreign Language
    - Literature
    - Philosophy

III. Social Sciences ......................................................... 3 credits
     - Economics
     - History
     - Political Science

IV. Behavioral Sciences ..................................................... 3 credits
    - Anthropology
    - Psychology
    - Sociology

V. Mathematics and Science ................................................... 24 credits
    (Met by Departmental Requirements)
    - Biological Science
    - Mathematics and Computer Science
    - Physical Science

**ELECTIVES—Sufficient to meet required total of 68 credits**

Departmental requirements may be used to satisfy groups I-V requirements.

‡*Consultation with the Department Advisor is required.*

**This program is within the Mathematics and Computer Science Department.
A.S. ENGINEERING SCIENCE**
Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) ........................................ 0 credits
- ENG C1 (if required) .................................................. 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .......... 4
- ENG 22 ........................................................................ 4
- HPE 12 ........................................................................ 3
- Corrective Speech (if required) ......................................... 0
- MAT M1 & M2 or MAT R2 proficiency ................................ 0

DEPARTMENT REQUIREMENTS† (course descriptions pg. 293)

**ALL Engineering Science Majors Must Take:***
- Technical Drawing (ART 76 pg. 134) .................................. 2 credits
- General Chemistry I and II (CHM 11, 12 pg. 265) ............... 8
- Calculus I, II, III (MAT 15, 16, 21, pg. 243) ..................... 12
- Differential Equations (MAT 55) ....................................... 3
- Advanced General Physics I and II, (PHY 13, 14, pg. 273) .... 10
- Introduction to Engineering Thermodynamics (PHY 23) ....... 3

PLUS, ... SEQUENCES IN ENGINEERING CONCENTRATIONS

**Chemical Engineering**
- Organic Chemistry I, II, (CHM 31, 32) ............................ 10

**Civil Engineering**
- Modern Physics (PHY 21) .............................................. 4
- Physical Geology (GEO 33, pg. 271) ............................... 4
- Programming in Fortran (CP 51 pg 234) .......................... 4

**Electrical Engineering**
- Modern Physics (PHY 21) .............................................. 4
- Linear Algebra (MAT 56) ............................................... 3
- Introduction to Pascal (CP 54) ........................................ 4

**Mechanical Engineering**
- Modern Physics (PHY 21) .............................................. 4
- Linear Algebra (MAT 56) ............................................... 3
- Programming in Fortran (CP 51) ..................................... 4

Total credits: 69-71
GROUP REQUIREMENTS .......................................................... 12 credits

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts ........................................... 3 credits
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature ............................................. 3
   Foreign Language
   Literature
   Philosophy

III. Social Sciences .................................................... 3
   Economics
   History
   Political Science

IV. Behavioral Sciences .................................................. 3
   Anthropology
   Psychology
   Sociology

V. Mathematics and Science .......................................... 24 credits
   (Met by Departmental Requirements)
   Biological Science
   Mathematics and Computer Science
   Physical Science

ELECTIVES—Sufficient to meet required total of .................................. 69-71 credits

Departmental requirements may be used to satisfy groups I-V requirements.
‡Consultation with the Department Advisor is required.
**This program is within the Physical Sciences Department.
A.S. ENVIRONMENTAL HEALTH and SCIENCE**
Requirements for Matriculants

COLLEGE REQUIREMENTS* 
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

ENG 03 &/or 04 (if required) ............................................. 0 credits
ENG C1 (if required) .................................................... 0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ............... 4
ENG 22 ................................................................. 4
HPE 12 ................................................................. 3
Corrective Speech (if required) ........................................... 0
MAT M1 & M2 or MAT R2 proficiency .................................. 0

DEPARTMENT REQUIREMENTS:

Preparatory Biology (BIO 10 if required pg. 153) ............................................. 0 credits
Biology I and II (BIO 13-14) ..................................................... 8
Chemistry I and II (CHM 11-12 pg. 265) OR
Physics I and II (PHY 11-12 or 13-14 pg. 273) ........................................... 8-10
Physical Geology (GEO 33 pg. 271) ................................................. 4
Analytic Geometry and Pre-Calculus Math (MAT 14 pg. 243) ......................... 4
Introduction to BASIC (CP 30 pg. 233) ............................................. 4
Electives† - Biology, Chemistry OR Physics ............................................. 8-10
Public Health I and II (HE 31-32 pg. 203) OR
People and the Environment—BIO Emphasis (SCI 50 pg. 155)
and
People and the Environment—CHM Emphasis (SCI 51 pg. 219) .................. 4-6

GROUP REQUIREMENTS ..................................................... 12 credits
Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts .................................................. 3 credits
(Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature .................................................. 3
   Foreign Language
   Literature
   Philosophy

III. Social Sciences ......................................................... 3
   Economics
   History
   Political Science

IV. Behavioral Sciences ...................................................... 3
   Anthropology
   Psychology
   Sociology

V. Mathematics and Science .................................................. 6 credits
   Biological Science
   Mathematics and Computer Science
   Physical Science

VI. Select from among groups II, III, IV, for additional ................................ 6 credits

ELECTIVES—Sufficient to meet required total of .................................. 64-69 credits

Departmental requirements may be used to satisfy groups I-V requirements.
†Consultation with the Department Advisor is required.
**This program is within the Biological Sciences and Physical Sciences Departments.
### A.S. FINE ARTS**

#### Total credits: 64

#### Requirements for Matriculants

**COLLEGE REQUIREMENTS**

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
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</tr>
<tr>
<td>ENG C1</td>
<td>(if required)</td>
<td>0 credits</td>
</tr>
<tr>
<td>ENG C2 or ENG 12</td>
<td>(based on CUNY Test scores, students may be exempt)</td>
<td>4 credits</td>
</tr>
<tr>
<td>ENG 22</td>
<td></td>
<td>4 credits</td>
</tr>
<tr>
<td>HPE 12</td>
<td></td>
<td>3 credits</td>
</tr>
<tr>
<td>Corrective Speech</td>
<td>(if required)</td>
<td>0 credits</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td></td>
<td>0 credits</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS†** (course descriptions pg. 231)

**ALL Fine Arts Majors Must Take:**
- Survey of Art History I and II (ART 33-34) | 6 credits
- Design I (ART 55) | 3 credits
- Drawing I (ART 57) | 3 credits

**Plus, ...SEQUENCES IN FINE ARTS CONCENTRATIONS**

**Art History**
- Modern Art I and II (ART 35-36) | 6 credits
- African and Primitive Art (ART 37) | 3 credits
- Renaissance Art (ART 38) | 3 credits
- Recommended Electives‡ | 9 credits

**Communication Design**
- Illustration (ART 68) | 3 credits
- Publication Layout and Design (ART 73) | 3 credits
- Typography and Lettering (ART 74) | 2 credits
- Introduction to Advertising Skills (ART 75) | 3 credits
- Recommended Electives‡ | 9 credits

**Drawing and Painting**
- Drawing II (ART 58) | 3 credits
- Painting I and II (ART 59-60) | 7 credits
- Recommended Electives‡ | 7-9 credits

**Graphics and Design**
- Photography I (ART 51) | 3 credits
- Design II (ART 56) | 3 credits
- Printmaking (ART 66) | 3 credits
- Recommended Electives‡ | 8-10 credits

**Sculpture**
- Sculpture I and II (ART 61-62) | 7 credits
- Ceramics I (ART 63) | 3 credits
- Recommended Electives‡ | 7-9 credits
GROUP REQUIREMENTS ........................................... 12 credits

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts .................................. 3 credits
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature ................................... 3
    Foreign Language
    Literature
    Philosophy

III. Social Sciences ............................................ 3
    Economics
    History
    Political Science

IV. Behavioral Sciences ....................................... 3
    Anthropology
    Psychology
    Sociology

V. Mathematics and Science ................................ 24 credits
   Biological Science
   Mathematics and Computer Science
   Physical Science

   (Met by Departmental Requirements)

ELECTIVES—Sufficient to meet required total of ............... 64 credits

Departmental requirements may be used to satisfy groups I-V requirements.

Consultation with the Department Advisor is required.

This program is within the Department.
A.S. MATHEMATICS**
Requirements for Matriculants

**COLLEGE REQUIREMENTS**
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
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**DEPARTMENT REQUIREMENTS†** (course descriptions pg 241)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Calculus I, II and III (MAT 15, 16, 21)</td>
<td>12 credits</td>
</tr>
<tr>
<td>Differential Equations (MAT 55)</td>
<td>3</td>
</tr>
<tr>
<td>Linear Algebra (MAT 56)</td>
<td>3</td>
</tr>
<tr>
<td>Programming in Fortran IV (CP 51 pg. 234)</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics OR, Computer Programming Electives†</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>8-10</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**
Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

<table>
<thead>
<tr>
<th>Group</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Performing and Visual Arts</td>
<td>3 credits</td>
</tr>
<tr>
<td>II. Language and Literature</td>
<td>3</td>
</tr>
<tr>
<td>III. Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>IV. Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td>V. Mathematics and Science</td>
<td>24 credits</td>
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<tr>
<td>Biological Science</td>
<td></td>
</tr>
<tr>
<td>Mathematics and Computer Science</td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td></td>
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</tbody>
</table>

**ELECTIVES**—Sufficient to meet required total of...

Departmental requirements may be used to satisfy groups I-V requirements.
†Consultation with the Department Advisor is required.
**This program is within the Mathematics and Computer Sciences Department.
A.S. MENTAL HEALTH AND HUMAN SERVICES**
Requirements for Matriculants

**Total credits: 68**

**COLLEGE REQUIREMENTS**
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
<tr>
<td>PSY II (General Psychology)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 32 (Human Growth and Development)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 36 (Psychology of Behavior Pathology)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 31 pg. 143 (Introduction to Sociology)</td>
<td>3</td>
</tr>
<tr>
<td>Choice of 2 from the following 3 courses</td>
<td>6</td>
</tr>
<tr>
<td>Sociology of the Family (SOC 35)</td>
<td>3</td>
</tr>
<tr>
<td>Minority Groups in the U.S. (SOC 36)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Anthropology (SOC 37)</td>
<td>3</td>
</tr>
<tr>
<td>MH 11 pg. 149 (Introduction to Human Services)</td>
<td>3</td>
</tr>
<tr>
<td>MH 30 (Human Services Organizations)</td>
<td>3</td>
</tr>
<tr>
<td>MH 31 (Principles of Interviewing and Group Leadership)</td>
<td>3</td>
</tr>
<tr>
<td>MH 34 (Activities Therapy)</td>
<td>3</td>
</tr>
<tr>
<td>MH 35 (Introduction to Gerontology)</td>
<td>3</td>
</tr>
<tr>
<td>MH 36 (Theories and Principles of Psychotherapy)</td>
<td>3</td>
</tr>
<tr>
<td>MH 96-97 (Supervised Instructional Experience in Mental Health I and II)</td>
<td>6</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

<table>
<thead>
<tr>
<th>Group</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Performing and Visual Arts</td>
<td>Art, Music, Speech, Theatre Arts</td>
<td>3</td>
</tr>
<tr>
<td>II. Language and Literature</td>
<td>Foreign Language, Literature, Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>III. Social Sciences</td>
<td>Economics, History, Political Science</td>
<td>3</td>
</tr>
<tr>
<td>IV. Behavioral Sciences</td>
<td>Anthropology, Psychology, Sociology</td>
<td>3</td>
</tr>
<tr>
<td>V. Mathematics and Science</td>
<td>Choice of SCI 33 or SCI 37 or MAT 13</td>
<td></td>
</tr>
<tr>
<td>PLUS</td>
<td>Choice of SCI 25 or SCI 32 or SCI 50 or SCI 70 or BIO 37</td>
<td></td>
</tr>
<tr>
<td>ELECTIVES</td>
<td>Sufficient to meet required total of</td>
<td>68</td>
</tr>
</tbody>
</table>

Departmental requirements may be used to satisfy groups I-V requirements.

**Any of these courses may be used to satisfy the Group IV requirement.**

†Consultation with the Department Advisor is required.

**This program is within the Behavioral Sciences and Human Services Department.**
**A.S. MUSIC**

Requirements for Matriculants

**COLLEGE REQUIREMENTS**

(Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS**

(if Required)

- Basic Skills: Theory and/or Piano I and II (1 credit each) ..... 1 to 3

**GROUP REQUIREMENTS**

Select at least three credits from EACH group—I thru IV

All credits required from groups I, II, III & IV must be in Basic Courses

<table>
<thead>
<tr>
<th>Group</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Performing and Visual Arts</td>
<td>3 credits</td>
</tr>
<tr>
<td>II. Language and Literature</td>
<td>3 credits</td>
</tr>
<tr>
<td>III. Social Sciences</td>
<td>3 credits</td>
</tr>
<tr>
<td>IV. Behavioral Sciences</td>
<td>3 credits</td>
</tr>
<tr>
<td>V. Mathematics and Science</td>
<td>6 credits</td>
</tr>
<tr>
<td>VI. Select from among groups II, III, IV; for additional</td>
<td>6 credits</td>
</tr>
</tbody>
</table>

**ELECTIVES—Sufficient to meet required total of**

Departmental requirements may be used to satisfy groups I-V requirements.

**Consultation with the Department Advisor is required.**

**This program is within the Music Department.**
A.S. PHYSICS**
Requirements for Matriculants

Total credits: 64

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) ........................................... 0 credits
- ENG C1 (if required) ..................................................... 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .... 4
- ENG 22 ................................................................. 4
- HPE 12 ................................................................. 3
- Corrective Speech (if required) .......................................... 0
- MAT M1 & M2 or MAT R2 proficiency .................................. 0

DEPARTMENT REQUIREMENTS†:

Advanced General Physics I and II (PHY 13-14 pg. 273) ........ 10 credits
Advanced Physics Elective† ................................................ 8
General Chemistry I and II (CHM 11-12 pg. 265) ................. 8
Calculus I and II (MAT 15-16 pg. 243) ............................... 8

GROUP REQUIREMENTS .................................................. 12 credits

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts ................................................ 3 credits
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature .................................................. 3
   Foreign Language
   Literature
   Philosophy

III. Social Sciences ............................................................... 3
   Economics
   History
   Political Science

IV. Behavioral Sciences .......................................................... 3
   Anthropology
   Psychology
   Sociology

V. Mathematics and Science ................................................. 24 credits
   Biological Science
   Mathematics and Computer Science
   Physical Science

ELECTIVES—Sufficient to meet required total of .................. 64 credits

Departmental requirements may be used to satisfy groups I-V requirements.
†Consultation with the Department Advisor is required.
**This program is within the Physical Sciences Department.
# A.S. PRE-PHYSICAL THERAPY**

Requirements for Matriculants

## Total credits: 64

### COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
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</table>

### DEPARTMENT REQUIREMENTS†

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Preparatory Biology (BIO 10 if required pg. 153)</td>
<td>0</td>
</tr>
<tr>
<td>General Biology I and II (BIO 13-14)</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry I and II (CHM 11, pg. 265)</td>
<td>8</td>
</tr>
<tr>
<td>General Physics I and II (PHY 11, pg. 273)</td>
<td>10</td>
</tr>
<tr>
<td>Analytic Geometry and Pre-Calculus Math (MAT 14 pg. 243)</td>
<td>4</td>
</tr>
<tr>
<td>General Psychology (PSY 11 pg. 141)</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development (PSY 32)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology (SOC 31 pg. 143)</td>
<td>3</td>
</tr>
</tbody>
</table>

**PLUS** Completion of 50-100 hours of volunteer or paid work in a physical therapy facility approved by the Program Director.

### Recommended

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elements of Statistics (MAT 20 pg. 243)</td>
<td>3</td>
</tr>
<tr>
<td>First Aid and Personal Safety (HE 35 pg. 203)</td>
<td>2</td>
</tr>
<tr>
<td>Cardiopulmonary Resuscitation (HE 20)</td>
<td>1</td>
</tr>
</tbody>
</table>

### NOTE:

Due to limited availability of upper division facilities for training students, completion of the first two years does NOT guarantee admission to a four year program in physical therapy.
GROUP REQUIREMENTS  .................................................. 12 credits

Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts ........................................ 3 credits
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature.......................................... 3
   Foreign Language
   Literature
   Philosophy

III. Social Sciences .................................................. 3
   Economics
   History
   Political Science

IV. Behavioral Sciences ............................................... 3
   Anthropology
   Psychology
   Sociology

V. Mathematics and Science ......................................... 24 credits
   Biological Science
   Mathematics and Computer Science
   Physical Science

(Electives—Sufficient to meet required total of ........................................ 64 credits

Departmental requirements may be used to satisfy groups I-V requirements.
† Consultation with the Department Advisor is required.
** This program is within the Biological Sciences Department.
A.S. THEATRE ARTS**
Requirements for Matriculants

**Total credits: 64**

**COLLEGE REQUIREMENTS**
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS**
(Course descriptions pg. 303)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Theatre Arts (Th.A. 50)</td>
<td>3</td>
</tr>
<tr>
<td>Play Analysis (Th.A. 51)</td>
<td>3</td>
</tr>
<tr>
<td>Acting (Th.A. 52)</td>
<td>4</td>
</tr>
<tr>
<td>Stagecraft (Th.A. 55)</td>
<td>3</td>
</tr>
<tr>
<td>Basic Lighting (Th.A. 56)</td>
<td>3</td>
</tr>
<tr>
<td>Play Production (Th.A. 59) (3 semesters, 1 credit each)</td>
<td>3</td>
</tr>
<tr>
<td>Department Electives†</td>
<td>7-9</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**
Select at least three credits from EACH group—I thru IV
All credits required from groups I, II, III & IV must be in Basic Courses

<table>
<thead>
<tr>
<th>Group</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Performing and Visual Arts</td>
<td>3</td>
</tr>
<tr>
<td>II. Language and Literature</td>
<td>3</td>
</tr>
<tr>
<td>III. Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>IV. Behavioral Sciences</td>
<td>3</td>
</tr>
<tr>
<td>V. Mathematics and Science</td>
<td>6</td>
</tr>
<tr>
<td>VI. Select from among groups II, III, IV, ‡for an additional</td>
<td>6</td>
</tr>
</tbody>
</table>

**ELECTIVES—Sufficient to meet required total of | 64 credits**

Departmental requirements may be used to satisfy groups I-V requirements.
‡Consultation with the Department Advisor is required.
**This program is within the Speech and Theatre Department.**
View of the Robert J. Kibbee Library from inside the lobby of the KCC Theatre.
THE ASSOCIATE IN APPLIED
SCIENCE (A.A.S.) DEGREE

The Kingsborough A.A.S degree programs were specifically designed for students who wish to start a
career on a semi-professional level immediately after graduating from the college. The essential liberal
arts courses are included to equip students with knowledge, understanding and career flexibility
permitting options to continue for further education at any time.

A student must earn at least a "C" grade (2.00 index), and have fulfilled all degree requirements to be
certified for the degree.

CAREER PROGRAMS

Business
• Accounting (with concentration in Tax Accounting)
• Broadcasting Technology and Management
• Business Administration
• Data Processing (with concentrations in Computer Programming and
   Microcomputer Applications)
• Fashion Merchandising
• Fisheries and Marine Technology (with concentrations
   in Seafood Business Management and Vessel Operations)
• Journalism and Print Media
• Marketing Management (with concentrations
   in Supermarket Management and Food Marketing)
• Medical Record Technology
• Personnel Management and Labor Relations
• Secretarial/Office Administration (Executive, Legal, Medical, School)
• Word/Information Processing
• Travel and Tourism

Health
• Early Childhood Education/Child Care
• Education Associate
• Nursing
• Sports, Fitness, and Recreation Leadership

and Social Service
A.A.S. DEGREE PROGRAMS

BUSINESS CAREER PROGRAMS

Accounting
Requirements, page 105
Course Descriptions, page 163

Broadcasting Technology and Management
Requirements, page 107
Course Descriptions, page 297

Business Administration
Requirements, page 109
Course Descriptions, page 166

Data Processing
Requirements, page 110
Course Descriptions, page 237

Fashion Merchandising
Requirements, page 114
Course Descriptions, page 170

Fisheries and Marine Technology
Requirements, page 115
Course Descriptions, page 267

Journalism and Print Media
Requirements, page 117
Course Descriptions, page 184

Marketing Management
Requirements, page 118
Course Descriptions, page 170

Medical Record Technology
Requirements, page 120
Course Descriptions, page 283

Personnel Management and Labor Relations
Requirements, page 123
Course Descriptions, page 172

Secretarial/Office Administration
(Executive, Legal, Medical, School, Word/Information Processing)
Requirements, page 124
Course Descriptions, page 285

Travel and Tourism
Requirements, page 128
Course Descriptions, page 309

HEALTH and SOCIAL SERVICE CAREER PROGRAMS

Early Childhood Education/Child Care
Requirements, page 112
Course Descriptions, page 145

Education Associate
Requirements, page 113
Course Descriptions, page 147

Nursing
Requirements, page 121
Course Descriptions, page 259

Sports, Fitness and Recreation Leadership
Requirements, page 126
Course Descriptions, page 213
A.A.S. ACCOUNTING**
Requirements for Matriculants

**Total credits: 68

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

ENG 03 &/or 04 (if required) .................................................. 0 credits
ENG C1 (if required) ................................................................. 0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .... 4
ENG 22 ............................................................. 4
HPE 12 ................................................................. 3
Corrective Speech (if required) .................................................. 0
MAT M1 & M2 or MAT R2 proficiency ........................................ 0

DEPARTMENT REQUIREMENTS†

Fundamentals of Accounting I and II (ACC 11-12 pg. 163) ....................... 8 credits
Intermediate Accounting I and II (ACC 21-22) ...................................... 6
Cost Accounting I and II (ACC 31-32) ............................................. 6
Federal Taxation (ACC 41) ............................................................... 4
Business Management and Organization (BA 11 pg. 166) ......................... 3
Business Law (BA 12) ................................................................. 3
Introduction to Computer Concepts (BA 60) ........................................ 3
Fundamentals of Economics (ECO 12 pg. 168) ..................................... 3
Money and Banking (ECO 14) ......................................................... 3
Recommended
Advanced Federal Taxation (ACC 42) .............................................. 3
New York Taxes (ACC 43) .............................................................. 3

**TAX ACCOUNTING CONCENTRATION†

Fundamentals of Accounting I and II (ACC 11-12 pg. 163) ....................... 8 credits
Intermediate Accounting I and II (ACC 21-22) ...................................... 6
Federal Taxation I and II (ACC 41-42) ............................................. 7
New York Taxes (ACC 43) .............................................................. 3
Business Management and Organization (BA 11 pg. 166) ......................... 3
Business Law (BA 12) ................................................................. 3
Introduction to Computer Concepts (BA 60) ........................................ 3
Fundamentals of Economics (ECO 12 pg. 168) ..................................... 3
Money and Banking (ECO 14) ......................................................... 3
GROUP REQUIREMENTS
Course selections, from groups I through IV, must be from at least three different groups.
All credits required from groups I, II, III & IV must be in Basic Courses

<table>
<thead>
<tr>
<th>Group</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Performing and Visual Arts (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)</td>
</tr>
<tr>
<td></td>
<td>Art</td>
</tr>
<tr>
<td></td>
<td>Music</td>
</tr>
<tr>
<td></td>
<td>Speech</td>
</tr>
<tr>
<td></td>
<td>Theatre Arts</td>
</tr>
<tr>
<td>II.</td>
<td>Language and Literature</td>
</tr>
<tr>
<td></td>
<td>Foreign Language</td>
</tr>
<tr>
<td></td>
<td>Literature</td>
</tr>
<tr>
<td></td>
<td>Philosophy</td>
</tr>
<tr>
<td>III.</td>
<td>Social Sciences</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
</tr>
<tr>
<td></td>
<td>(NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III)</td>
</tr>
<tr>
<td></td>
<td>History</td>
</tr>
<tr>
<td></td>
<td>Political Science</td>
</tr>
<tr>
<td>IV.</td>
<td>Behavioral Sciences</td>
</tr>
<tr>
<td></td>
<td>Anthropology</td>
</tr>
<tr>
<td></td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td>Sociology</td>
</tr>
<tr>
<td>V.</td>
<td>Mathematics and Science</td>
</tr>
<tr>
<td></td>
<td>Biological Science</td>
</tr>
<tr>
<td></td>
<td>Mathematics and Computer Science</td>
</tr>
<tr>
<td></td>
<td>Physical Science</td>
</tr>
</tbody>
</table>

**ELECTIVES—Sufficient to meet required total of ................................................. 68 credits**

†Prior to preregistration or registration consultation with the Department Advisor is required.
**This program is within the Business Department.
**A.A.S. BROADCASTING TECHNOLOGY**  
and **MANAGEMENT**

**Total credits: 64**

**Requirements for Matriculants**

**COLLEGE REQUIREMENTS**

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>.4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>.4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>.3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
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</table>

**DEPARTMENT REQUIREMENTS** (course descriptions pg 297)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Broadcasting (MCB 35)</td>
<td>.3</td>
</tr>
<tr>
<td>Radio Station Operation (MCB 59) 3 semesters (1 cr. ea.)</td>
<td>.3</td>
</tr>
<tr>
<td>Three Program Courses† (3 crs. ea.)</td>
<td>.9</td>
</tr>
<tr>
<td>Mass Media (MCM 30) OR Communication Development and Application (MCM 42)</td>
<td>.3</td>
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**PLUS, ... FOR CONCENTRATIONS IN:**

**Advertising**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>.3</td>
</tr>
<tr>
<td>Principles of Marketing (BA 14)</td>
<td>.3</td>
</tr>
<tr>
<td>Advertising: Theory and Practice (BA 52)</td>
<td>.3</td>
</tr>
</tbody>
</table>

**Engineering**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics for Communication I, II, III (PHY 31, 32, 33 pg. 274)</td>
<td>.9</td>
</tr>
</tbody>
</table>

**Management**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>.3</td>
</tr>
<tr>
<td>Public Opinion (POL 55 pg. 227)</td>
<td>.3</td>
</tr>
</tbody>
</table>

**News**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Journalism (JRL 31 pg. 184)</td>
<td>.3</td>
</tr>
<tr>
<td>American Government and Politics (POL 51 pg. 227)</td>
<td>.3</td>
</tr>
<tr>
<td>International Relations (POL 59)</td>
<td>.3</td>
</tr>
</tbody>
</table>

**Performance**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Interpretation (SPE 27 pg. 300)</td>
<td>.3</td>
</tr>
<tr>
<td>Development of Voice (SPE 30)</td>
<td>.3</td>
</tr>
<tr>
<td>Development of Articulation (SPE 31)</td>
<td>.3</td>
</tr>
</tbody>
</table>
GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups.

All credits required from groups I, II, III & IV must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
   - Foreign Language
   - Literature
   - Philosophy

III. Social Sciences
   - Economics
   - History
   - Political Science

IV. Behavioral Sciences
   - Anthropology
   - Psychology
   - Sociology

V. Mathematics and Science
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

ELECTIVES—Sufficient to meet required total of ........................................... 64 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.
†Consultation with the Department Advisor is required.
**This program is within the Speech and Theatre Department.
A.A.S. BUSINESS ADMINISTRATION**  
Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) ......................... 0 credits
- ENG C1 (if required) .................................. 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ........ 4
- ENG 22 .................................................. 4
- HPE 12 .................................................. 3
- Corrective Speech (if required) ........ 0
- MAT M1 & M2 or MAT R2 proficiency ........... 0

DEPARTMENT REQUIREMENTS†

- Fundamentals of Accounting I and II (ACC 11-12 pg. 163) ................... 8 credits
- Business Management and Organization (BA 11 pg. 166) ..................... 3
- Business Law (BA 12) .................................. 3
- Principles of Marketing (BA 14) ........................................... 3
- Personnel Administration (BA 31) ......................................... 3
- Business Communications (BA 33) ........................................ 3
- Advertising: Theory and Practice (BA 52) ................................... 3
- Introduction to Computer Concepts (BA 60) .................................. 3
- Fundamentals of Economics (ECO 12 pg. 168) ............................ 3
- Money and Banking (ECO 14) ............................................. 3

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
   - Foreign Language
   - Literature
   - Philosophy

III. Social Sciences
   - Economics
     [NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III]
   - History
   - Political Science

IV. Behavioral Sciences
   - Anthropology
   - Psychology
   - Sociology

V. Mathematics and Science
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

ELECTIVES—Sufficient to meet required total of ...................................... 64 credits

†Consultation with the Department Advisor is required.

**This program is within the Business Department.
A.A.S. DATA PROCESSING**  
Requirements for Matriculants  

Total credits: 64  

**COLLEGE REQUIREMENTS**  
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)  

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS† for:**  

**COMPUTER PROGRAMMING CONCENTRATION**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Introduction to Data Processing (DP 11 pg. 237)]</td>
<td>4</td>
</tr>
<tr>
<td>(NOTE: C grade or better in DP 11 required to continue in this concentration.)</td>
<td></td>
</tr>
<tr>
<td>Assembler Language Programming (DP 12)</td>
<td>5</td>
</tr>
<tr>
<td>Cobol Programming (DP 31)</td>
<td>5</td>
</tr>
<tr>
<td>Advanced Programming (DP 32)</td>
<td>4</td>
</tr>
<tr>
<td>Choice: ONE of following Data Processing courses:</td>
<td>3-4</td>
</tr>
<tr>
<td>Microcomputer Applications I (DP 54)</td>
<td></td>
</tr>
<tr>
<td>Systems Analysis (DP 61)</td>
<td></td>
</tr>
<tr>
<td>Database Processing (DP 63)</td>
<td></td>
</tr>
<tr>
<td>Choice: ONE of following Programming courses:</td>
<td>3-4</td>
</tr>
<tr>
<td>Introduction to APL (CP 35 pg. 234)</td>
<td></td>
</tr>
<tr>
<td>PL/1 Programming (CP 53)</td>
<td></td>
</tr>
<tr>
<td>Introduction to PASCAL (CP 54)</td>
<td></td>
</tr>
<tr>
<td>Advanced Assembler Language Programming (DP 13)</td>
<td></td>
</tr>
<tr>
<td>RPG Programming (DP 41)</td>
<td></td>
</tr>
<tr>
<td>Choice: ONE of following Mathematics courses:</td>
<td>4</td>
</tr>
<tr>
<td>Survey of Mathematics (MAT 13 pg. 243)</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Analytic Geometry and Pre-Calculus Math (Mat 14)</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Accounting I and II (ACC 11, 12 pg. 163)</td>
<td>8</td>
</tr>
</tbody>
</table>
## MICROCOMPUTER APPLICATIONS CONCENTRATION
### (Office Automation Technology)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Data Processing (DP 11 pg. 237)</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to BASIC (CP 30 pg. 233)</td>
<td>4</td>
</tr>
<tr>
<td>Microcomputer Applications I, II, III, (DP 54, 55, 56)</td>
<td>9</td>
</tr>
<tr>
<td><strong>Choice:</strong> ONE of following Programming courses:</td>
<td>3-5</td>
</tr>
<tr>
<td>Introduction to COBOL Programming (CP 52)</td>
<td></td>
</tr>
<tr>
<td>Assembler Language Programming (DP 12)</td>
<td></td>
</tr>
<tr>
<td>Systems Analysis (DP 61)</td>
<td></td>
</tr>
<tr>
<td><strong>Choice:</strong> ONE of following Mathematics courses:</td>
<td>4</td>
</tr>
<tr>
<td>Finite Mathematics (MAT 11 pg. 242)</td>
<td></td>
</tr>
<tr>
<td>Survey of Mathematics (MAT 13)</td>
<td></td>
</tr>
<tr>
<td>Analytic Geometry and Pre-Calculus Math (MAT 14)</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Accounting I and II (ACC 11, 12 pg. 163)</td>
<td>8</td>
</tr>
</tbody>
</table>

### GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups. All credits required from groups I, II, III & IV must be in Basic Courses.

I. Performing and Visual Arts  
(Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)  
- Art  
- Music  
- Speech  
- Theatre Arts  

II. Language and Literature  
- Foreign Language  
- Literature  
- Philosophy  

III. Social Sciences  
- Economics  
- History  
- Political Science  

IV. Behavioral Sciences  
- Anthropology  
- Psychology  
- Sociology  

V. Mathematics and Science  
- Biological Science  
- Mathematics and Computer Science  
- Physical Science  

**ELECTIVES**—Sufficient to meet required total of. ........................................... 64 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.

*Consultation with the Department Advisor is required.*

**These programs are within the Mathematics and Computer Science Department.**
A.A.S. EARLY CHILDHOOD EDUCATION/
CHILD CARE**

Total credits: 68

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

ENG 03 &/or 04 (if required) ........................................ 0 credits
ENG C1 (if required) ........................................ 0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .................. 4
ENG 22 ........................................ 4
HPE 12 ........................................ 3
Corrective Speech (if required) ........................................ 0
MAT M1 & M2 or MAT R2 proficiency ........................................ 0

DEPARTMENT REQUIREMENTS†

General Psychology (PSY 11 pg. 141) ........................................ 3 credits
Human Growth and Development (PSY 32) ........................................ 3
Introduction to Sociology (SOC 31 pg. 143) ........................................ 3
Sociology of the Family (SOC 33) ........................................ 3
Minority Groups in the U.S. (SOC 36) ........................................ 3
Interdisciplinary Approach to Human Services (MH 20 pg. 145) ........................................ 3
Curriculum in Education (ECE 21 pg. 145) ........................................ 3
Art Workshop for Students in Education (ECE 22) ........................................ 2
Music and Movement Workshop for Students in Education (ECE 23) ........................................ 2
Supervised Instructional Experience in Education I, II, III (ECE 91, 92, 93) ........................................ 9
Recommended:
Psychological Disorders in Young Children (PSY 24) (ECE 24) ........................................ 3

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts

(Excluded from this group are Art and Music Studio courses,
Theatre Production and Technique courses)

Art
Music
Speech
Theatre Arts

II. Language and Literature

Foreign Language
Literature
Philosophy

III. Social Sciences

Economics
History
Political Science

IV. Behavioral Sciences

Anthropology
Psychology
Sociology

V. Mathematics and Science

Biological Science
Mathematics and Computer Science
Physical Science

ELECTIVES—Sufficient to meet required total of ........................................ 68 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.
†Consultation with the Department Advisor is required.

**This program is within the Behavioral Sciences and Human Services Department.
A.A.S. EDUCATION ASSOCIATE**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) .................................................. 0 credits
- ENG C1 (if required) ................................................................. 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ..... 4
- ENG 22 ................................................................................. 4
- HPE 12 ................................................................................... 3
- Corrective Speech (if required) .................................................. 0
- MAT M1 & M2 or MAT R proficiency ......................................... 0

DEPARTMENT REQUIREMENTS‡

- Education in Modern Society (EDU 33 pg. 147) ......................... 3 credits
- Seminar and Practicum in Education and the Behavioral Sciences (EDU 34) ... 4
- Seminar and Practicum in Education and Communication Skills (EDU 35) ..... 4
- Seminar and Practicum in Education and Art Forms (EDU 36) .............. 4
- Introduction to Sociology (SOC 31 pg. 143) .................................. 3
- General Psychology (PSY 11 pg. 141) ........................................ 3
- Human Growth and Development (PSY 32) ................................ 3
- Understanding Mathematics: A Practical Approach (MAT 9 pg. 242) ....... 4
- Effective Public Speaking (SPE 21 pg. 299) .................................. 3
- Spanish for Students in Career Programs (SPA 40 pg. 197) ................. 3

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
   - Foreign Language
   - Literature
   - Philosophy

III. Social Sciences
   - Economics
   - History
   - Political Science

IV. Behavioral Sciences
   - Anthropology
   - Psychology
   - Sociology

V. Mathematics and Science
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

ELECTIVES—Sufficient to meet required total of .......................... 64 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.

‡Consultation with the Department Advisor is required.

**This program is within the Behavioral Sciences and Human Services Department.
A.A.S. FASHION MERCHANDISING**

Requirements for Matriculants

COLLEGE REQUIREMENTS* (Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
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</table>

DEPARTMENT REQUIREMENTS+ (course descriptions pg. 170)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Concepts for Retailers and Fashion Marketers (BA 60 or MM 51)</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Retail Business Management (MM 31)</td>
<td>3</td>
</tr>
<tr>
<td>Salesmanship (MM 33)</td>
<td>3</td>
</tr>
<tr>
<td>Fashion Buying and Merchandising (MM 34)</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Information Analysis (MM 35)</td>
<td>4</td>
</tr>
<tr>
<td>Visual Merchandising and Display (MM 36)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Fashion Marketing (MM 38)</td>
<td>3</td>
</tr>
<tr>
<td>Fashion Sales Promotion (MM 39)</td>
<td>3</td>
</tr>
<tr>
<td>Seminar and Field Experience (MM 92)</td>
<td>3</td>
</tr>
<tr>
<td>Financial Planning for Business (ACC 50 pg. 164)</td>
<td>4</td>
</tr>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>3</td>
</tr>
<tr>
<td>Business Law (BA 12)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Marketing (BA 14)</td>
<td>3</td>
</tr>
</tbody>
</table>

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
    - Foreign Language
    - Literature
    - Philosophy

III. Social Sciences
     - Economics
     - History
     - Political Science

IV. Behavioral Sciences
    - Anthropology
    - Psychology
    - Sociology

V. Mathematics and Science
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

ELECTIVES—Sufficient to meet required total of: 68 credits

*Prior to preregistration or registration consultation with the Department Advisor is required.

**This program is within the Business Department.
A.A.S. FISHERIES and MARINE TECHNOLOGY**  
Requirements for Matriculants  
Total credits: 64-66

**COLLEGE REQUIREMENTS**
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0 credits</td>
<td></td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0 credits</td>
<td></td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>ENG 22</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>HPE 12 [NOT Required of Vessel Operations Majors]</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Vessel Operations Majors MUST take HE 36 for graduation</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0 credits</td>
<td></td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0 credits</td>
<td></td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS** (course descriptions pg. 267)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Fishing Industry (FMT 11)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Commercial Fisheries Science (FMT 12)</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>Introduction to Seafood (FMT 13)</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>PLUS, ... FOR CONCENTRATIONS IN:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Seafood Business Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seafood Business Management (FMT 20)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Seafood Processing (FMT 21)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Seafood Production Laboratory (FMT 22)</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>Seafood Retailing (FMT 23)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Financial Aspects of Decision Making (ACC 50 pg. 164)</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Principles of Marketing (BA 14)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Introduction to Computer Concepts (BA 60)</td>
<td>4 credits</td>
<td></td>
</tr>
<tr>
<td><strong>Vessel Operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seamanship (FMT 30)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Navigation (FMT 31)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Vessel Business Management (FMT 32)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Vessel Technology I and II (FMT 33, 34)</td>
<td>6 credits</td>
<td></td>
</tr>
<tr>
<td>Diesel Technology (FMT 35)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Commercial Fishing Methods (FMT 36)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Auxiliary Systems (FMT 37)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Electrical Systems and Marine Electronics (FMT 38)</td>
<td>3 credits</td>
<td></td>
</tr>
<tr>
<td>Vessel Maintenance (FMT 39)</td>
<td>3 credits</td>
<td></td>
</tr>
</tbody>
</table>
GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups. All credits required from groups I, II, III & IV must be in Basic Courses.

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
    - Foreign Language
    - Literature
    - Philosophy

III. Social Sciences
    - Economics
    - History
    - Political Science

IV. Behavioral Sciences
    - Anthropology
    - Psychology
    - Sociology

V. Mathematics and Science
    - Biological Science
    - Mathematics and Computer Science
    - Physical Science

ELECTIVES—Sufficient to meet required total of ................................................. 64-66 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.

†Consultation with the Department Advisor is required.

**These programs are administered by the Office of the Dean of Marine Education.
A.A.S. JOURNALISM and PRINT MEDIA**  Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS* (*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

ENG 03 &/or 04 (if required) ........................................... .0 credits
ENG C1 (if required) ........................................................... .0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ........................................... .4
ENG 22 ................................................................. .4
HPE 12 ................................................................. .3
Corrective Speech (if required) ........................................... .0
MAT M1 & M2 or MAT R2 proficiency ........................................... .0

DEPARTMENT REQUIREMENTS† (course description pg. 184)

Journalism: Basic and Advanced (JRL 31-32) .................................... .6 credits
Community Journalism (JRL 41) ..................................................... .3
The Critical Review (JRL 43) ....................................................... .3
Print Media Production (JRL 71) .................................................... .2
Internship (JRL 92) ................................................................. .3
†CHOICE from the following 5 courses for .................................... .6
    Investigative and Interpretive Journalism (JRL 42) ......................... .3
    Independent Study (JRL 81) .................................................. .3
    Publication Layout and Design (ART 73 pg. 134) .......................... .3
    Typography and Lettering (ART 74) ......................................... .2
    Business of Print Media (BA 70 pg. 167) ................................... .3

PLUS, ... FOR SPECIALIZATION IN:

Writing and Reporting OR Production
    Appropriate course to be determined by Department Advisor for .......... .6

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses,
   Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature
    Foreign Language
    Literature
    Philosophy

III. Social Sciences
    Economics
    History
    Political Science

IV. Behavioral Sciences
    Anthropology
    Psychology
    Sociology

V. Mathematics and Science
    Biological Science
    Mathematics and Computer Science
    Physical Science

ELECTIVES—Sufficient to meet required total of ................................. 64 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.
† Consultation with the Department Advisor is required.
**This program is within the English Department.
A.A.S. MARKETING MANAGEMENT**
Total credits: 68
Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
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<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
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<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
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</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

DEPARTMENT REQUIREMENTS†
† Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Accounting I and II (ACC 11-12 pg. 163)</td>
<td>8 credits</td>
</tr>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>3</td>
</tr>
<tr>
<td>Business Law (BA 12)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Marketing (BA 14)</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Marketing Management (MM 31 pg. 170)</td>
<td>3</td>
</tr>
<tr>
<td>Salesmanship (MM 33)</td>
<td>3</td>
</tr>
<tr>
<td>Fashion Buying and Merchandising (MM 34)</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Information Analysis (MM 35)</td>
<td>4</td>
</tr>
<tr>
<td>Data Processing for Retailers (MM 51) OR, Introduction to Computer Concepts (SA 60)</td>
<td>3</td>
</tr>
<tr>
<td>Field Experience (MM 92)</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Economics (ECO 12 pg. 168)</td>
<td>3</td>
</tr>
</tbody>
</table>

SUPERMARKET MANAGEMENT CONCENTRATION†
† Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Accounting I and II (ACC 11-12 pg. 163)</td>
<td>8 credits</td>
</tr>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Food Marketing (FM 11 pg. 173)</td>
<td>3</td>
</tr>
<tr>
<td>Elements of Food Retailing (FM 12)</td>
<td>3</td>
</tr>
<tr>
<td>Supermarket Operation and Management (FM 13, 14)</td>
<td>6</td>
</tr>
<tr>
<td>Supermarket Personnel Performance Management (FM 15)</td>
<td>3</td>
</tr>
<tr>
<td>Supermarket Sales Production (FM 16)</td>
<td>3</td>
</tr>
<tr>
<td>Salesmanship (MM 33 pg. 170)</td>
<td>3</td>
</tr>
<tr>
<td>Field Experience (MM 92)</td>
<td>3</td>
</tr>
<tr>
<td>Data Processing for Retailers (MM 51) OR, Introduction to Computer Concepts (BA 60)</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Economics (ECO 12 pg. 168)</td>
<td>3</td>
</tr>
</tbody>
</table>
GROUP REQUIREMENTS
Course selections, from groups I through IV, must be from at least three different groups.
All credits required from groups I, II, III & IV must be in Basic Courses.

I. Performing and Visual Arts
(Excluded from this group are Art and Music Studio courses,
Theatre Production and Technique courses)
   Art
   Music
   Speech
   Theatre Arts

II. Language and Literature
   Foreign Language
   Literature
   Philosophy

III. Social Sciences
   Economics
   [NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III]
   History
   Political Science

IV. Behavioral Sciences
   Anthropology
   Psychology
   Sociology

V. Mathematics and Science
   Biological Science
   Mathematics and Computer Science
   Physical Science

ELECTIVES—Sufficient to meet required total of ........................................... 68 credits

†Consultation with the Department Advisor is required.
**These programs are within the Business Department.
A.A.S. MEDICAL RECORD TECHNOLOGY**

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) ........................................... 0 credits
- ENG C1 (if required) .......................................................... 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ..... 4
- ENG 22. ............................................................................. 4
- HPE 12 .................................................................................. 3
- Corrective Speech (if required) .............................................. 0
- MAT M1 & M2 or MAT R2 proficiency .................................... 0

DEPARTMENT REQUIREMENTS† (course descriptions pg. 283)

- Medical Record Technology I, II, III, IV, (MRT 11, 13, 14, 17) .................. 12 credits
- Medical Terminology (MRT 12) .................................................... 3
- Pathophysiology (MRT 15) ......................................................... 3
- Coding (MRT 16) ........................................................................ 3
- Medical Information Processing (MRT 16) ....................................... 3
- Internship I and II, (MRT 91, 92) ................................................. 6
- Human Anatomy and Physiology I and II (BIO 11, 12 pg. 153) ............... 8
- Elementary Keyboarding (SEC II pg. 285) ........................................ 2
- Medical Machine Transcription (SEC 66) ........................................ 3

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
   - Foreign Language
   - Literature
   - Philosophy

III. Social Sciences
   - Economics
   - History
   - Political Science

IV. Behavioral Sciences
   - Anthropology
   - Psychology
   - Sociology

V. Mathematics and Science
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

ELECTIVES—Sufficient to meet required total of ........................................ 66 credits

Departmental requirements may be used to satisfy groups I-V requirements where applicable.

†Consultation with the Department Advisor is required.

**This program is within the Secretarial/Office Administration Department.
A.A.S. NURSING**
Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

ENG 03 &/or 04 (if required) ........................................ 0 credits
ENG C1 (if required) ...................................................... 0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) .... 4
ENG 22 ................................................................. 4
Corrective Speech (if required) ........................................ 0
MAT M1 & M2 or MAT R2 proficiency ................................ 0

Nursing Department Requirements (course description pg. 257) ....................

Students in the Pre-Nursing Sequence must complete the five semester-sequences as specified below.‡

First Semester
Applied Physical Sciences for Allied Health Careers (SCI 25 pag. 277) ....... 3 credits
General Psychology (PSY 11 pg. 141) .................................... 3
Human Anatomy and Physiology (BIO 11 pg. 153) ................................ 4
English (ENG 12 or ENG C2 pg. 177) ..................................... 4

Second Semester
Human Anatomy and Physiology II (BIO 12) .................................... 4
Human Growth and Development (PSY 32) .................................... 3
Drug Calculations in Nursing (NUR 17) ....................................... 1
Fundamentals of Nursing (NUR 18) .......................................... 7

Third Semester
Microbiology in Health and Disease (BIO 51) .................................... 4
Nursing the III Adult I (NUR 21) ............................................ 9

Fourth Semester
Varieties of Expression (ENG 22) ............................................ 4
Nursing the Emotionally Ill (NUR 20) ...................................... 4
Nursing the III Adult II (NUR 22) ........................................... 5

Fifth Semester
Introduction to Sociology (SOC 31 pg. 143) .................................... 3
Family-Centered Maternity Nursing (NUR 19) .................................. 4
Nursing of Children (NUR 23) ............................................. 5
Issues in Nursing (NUR 24) .................................................. 1

Students requiring remediation based upon College placement test scores may be required to take any or all of the following prior to taking the Pre-Nursing Sequence.

Preparatory Biology (BIO 10)
Remedial Math (M1 and M2, or MAT R2)
English Skills (ENG 03, 04, or C1)
Those students (not more than 5% of each class) who complete the degree in two years will take the semester - sequences in the following order.

First Semester

- Applied Physical Sciences for Allied Health Careers (SCI 25 pg. 277) ..... 3 credits
- General Psychology (PSY II pg. 141) 
- Human Anatomy and Physiology I (BIO II pg. 153) 
- Drug Calculations in Nursing (NUR 17) 
- Fundamentals of Nursing (NUR 18).

Winter or Summer Module△

- Human Anatomy and Physiology II (BIO 12) 

Second Semester

- Microbiology in Health and Disease (BIO 51) 
- English (ENG 12 or ENG C2 pg. 177) 
- Nursing the III Adult I (NUR 21).

Third Semester

- Human Growth and Development (PSY 32 pg. 141) 
- Introduction to Sociology (SOC 31 pg. 143) 
- Nursing the Emotionally Ill, (NUR 20) 
- Nursing the Ill Adult II (NUR 22).

Fourth Semester

- Varieties of Expression (ENG 22) 
- Family-Centered Maternity Nursing (NUR 19) 
- Nursing of Children (NUR 23) 
- Issues in Nursing (NUR 24).

△ Students may elect to take required courses other than nursing courses during the Winter and Summer Modules.

‡Consultation with the Department Advisor is required.

**This program is within the Nursing Department.
A.A.S. PERSONNEL MANAGEMENT and LABOR RELATIONS**

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

DEPARTMENT REQUIREMENTS‡

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Accounting I and II (ACC 11-12 pg. 163)</td>
<td>8</td>
</tr>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>3</td>
</tr>
<tr>
<td>Business Law (BA 12)</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Administration (BA 31)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Computer Concepts (BA 60)</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Economics (ECO 12 pg. 168)</td>
<td>3</td>
</tr>
<tr>
<td>Industrial and Organizational Psychology (PLM 20 pg. 172)</td>
<td>3</td>
</tr>
<tr>
<td>Labor Economics (PLM 21)</td>
<td>3</td>
</tr>
<tr>
<td>Labor Law and Collective Bargaining (PLM 22)</td>
<td>3</td>
</tr>
<tr>
<td>Personnel: Selection, Development and Evaluation (PLM 23)</td>
<td>3</td>
</tr>
<tr>
<td>Field Experience (PLM 92)</td>
<td>3</td>
</tr>
</tbody>
</table>

GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   | Art                                          | 4 credits |
   | Music                                        |          |
   | Speech                                       |          |
   | Theatre Arts                                 |          |

II. Language and Literature
   | Foreign Language                             |          |
   | Literature                                   |          |
   | Philosophy                                   |          |

III. Social Sciences
   | Economics                                    | 12 credits |
   | [NOTE: ECO 12 and 14 MAY NOT BE USED to satisfy Group III] |
   | History                                      |          |
   | Political Science                            |          |

IV. Behavioral Sciences
   | Anthropology                                 |          |
   | Psychology                                   |          |
   | Sociology                                    |          |

V. Mathematics and Science
   | Biological Science                           | 4 credits |
   | Mathematics and Computer Science             |          |
   | Physical Science                             |          |

ELECTIVES—Sufficient to meet required total of 65 credits

‡Consultation with the Department Advisor is required.

**This program is within the Business Department.
A.A.S. SECRETARIAL/OFFICE ADMINISTRATION**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*
(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

Total credits: 64

ENG 03 &/or 04 (if required) ......................................................... 0 credits
ENG C1 (if required) ................................................................. 0
ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) 4
ENG 22 ................................................................. 4
HPE 12 ................................................................. 3
Corrective Speech (if required) ..................................................... 0
MAT M1 & M2 or MAT R2 proficiency ........................................... 0

DEPARTMENT REQUIREMENTS‡ (course descriptions pg. 285)

All Majors must take:
Elementary Keyboarding (SEC 11) ........................................ 2 credits
Intermediate Keyboarding (SEC 12) ........................................ 2
Elementary Shorthand (SEC 13, 14, 15) .................................. 2
Intermediate Shorthand (SEC 16, 17, 18) .................................. 3
Basic Dictation (SEC 19) ......................................................... 2
Advanced Shorthand and Transcription (SEC 31) ...................... 3
Advanced Keyboarding (SEC 33) .............................................. 2
Business Communications (SEC 37) ......................................... 3
Field Experience (SEC 92) ....................................................... 3

PLUS, ...FOR CONCENTRATIONS IN:

Executive
Advanced Stenography and Transcription II (SEC 32) .................... 4 credits
Secretarial Practice (SEC 34) ................................................... 3

Legal
Secretarial Practice (SEC 34) ................................................... 3 credits
Legal Shorthand and Procedures (SEC 51) ............................. 3
Legal Shorthand and Transcription (SEC 52) ............................. 4

Medical
Biology (4 credit Lab course pg. 153) ...................................... 4 credits
Medical Secretary Practice (SEC 67, 68) .............................. 4
Medical Dictation and Terminology (SEC 69, 70) ..................... 7

School
Advanced Stenography and Transcription II (SEC 32) .................... 4 credits
Secretarial Practice (SEC 34) ................................................... 3
School Secretary I and II (SEC 53, 54) .................................. 4
School Records and Accounts (SEC 55) .................................. 2
WORD/INFORMATION PROCESSING CONCENTRATION

*Basic Word/Information Processing (SEC 21) .................................................... 3 credits
*Advanced Word/Information Processing (SEC 22) .................................................. 3
*Machine Transcription (SEC 23) ........................................................................ 3
Field Experience (SEC 92) ................................................................................... 3

Recommended
Data Processing for Program Majors (CP 29 pg. 233) ........................................... 4
Office Systems and Procedures (SEC 24) ................................................................. 3
Office Information Processing Applications (SEC 25) ............................................. 3

*May be taken in lieu of Elementary, Intermediate and Advanced Shorthand courses.
*Not required of students in this concentration.

GROUP REQUIREMENTS
Course selections, from groups I through IV, must be from at least three different groups
All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
(Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
  Art
  Music
  Speech
  Theatre Arts

II. Language and Literature
  Foreign Language
  Literature
  Philosophy

III. Social Sciences
  Economics
  History
  Political Science

IV. Behavioral Sciences
  Anthropology
  Psychology
  Sociology

V. Mathematics and Science
  Biological Science
  Mathematics and Computer Science
  Physical Science

ELECTIVES—Sufficient to meet required total of ...................................................... 64 credits
  Elementary keyboarding and shorthand required of students who do not meet Department requirements.
  Intermediate keyboarding and shorthand may be waived for students who meet Department requirements.

Departmental requirements may be used to satisfy groups I-V requirements, where applicable.
†Consultation with the Department Advisor is required.
**These programs are within the Secretarial/Office Administrative Department.
A.A.S. SPORTS, FITNESS and RECREATION LEADERSHIP**

Total credits: 64

Requirements for Matriculants

COLLEGE REQUIREMENTS*

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

- ENG 03 &/or 04 (if required) .................................................. 0 credits
- ENG C1 (if required) ................................................................. 0
- ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt) ...... 4
- ENG 22 ................................................................................. 4
- HPE 12 ......................................................................................... 3
- Corrective Speech (if required) ..................................................... 0
- MAT M1 & M2 or MAT R2 proficiency ......................................... 0

DEPARTMENT REQUIREMENTS† (course descriptions pg. 213)

- Introduction to Recreation (REC 11) ........................................... 3 credits
- Recreation Leadership Principles (REC 12) .................................. 3
- Organization of a Recreation Program (REC 32) ......................... 3
- Field Experience in Recreation Leadership I (REC 91) ............... 3
- General Psychology (PSY 11 pg. 141) ........................................ 3
- Introduction to Sociology (SOC 31 pg. 143) ............................... 3
- Spanish for Students in Career Programs (SPA 40 pg. 197) ......... 3
  (Students with at least 1 year of Foreign Language background are exempt)

Additional courses as recommended by Program Director

PLUS, ... FOR CONCENTRATIONS IN:

Sports, Fitness
- Commercial and Industrial Recreation (REC 37) ....................... 3 credits
- Development of Fundamental Sports Skills (REC 46)† ................... 3
- Business Management and Organization (BA 11 pg. 166) .......... 3
- Principles of Marketing (BA 14) .............................................. 3

Therapeutic Recreation
- Recreation for Special Populations (REC 31) ............................ 3 credits
- Methods and Materials in Arts and Crafts (REC 34) ................... 3
- Recreation for the Aging and Mentally III (REC 35) .................. 3
- Field Experience in Recreation Leadership II (REC 92) ............... 3
GROUP REQUIREMENTS

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
(Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
Art
Music
Speech
Theatre Arts

II. Language and Literature
Foreign Language
Literature
Philosophy

12 credits

III. Social Sciences
Economics
History
Political Science

IV. Behavioral Sciences
Anthropology
Psychology
Sociology

4 credits

V. Mathematics and Science
Biological Science
Mathematics and Computer Science
Physical Science

ELECTIVES—Sufficient to meet required total of ......................................................... 64 credits

(Specific electives must be discussed in advance with the Department Advisor.)

Departmental requirements may be used to satisfy groups I-V requirements, where applicable.

*Consultation with the Department Advisor is required.

**These programs are within the Health, Physical Education and Recreation Department.
A.A.S. TRAVEL and TOURISM**

Requirements for Matriculants

**Total credits: 64**

**COLLEGE REQUIREMENTS**

(*Successful completion of the CUNY Freshman Skills Assessment Test with passing scores on the Reading, Writing, and Mathematics Placement Examinations, or remedial courses may be required in these subjects.)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 03 &amp;/or 04 (if required)</td>
<td>0 credits</td>
</tr>
<tr>
<td>ENG C1 (if required)</td>
<td>0</td>
</tr>
<tr>
<td>ENG C2 or ENG 12 (based on CUNY Test scores, students may be exempt)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 22</td>
<td>4</td>
</tr>
<tr>
<td>HPE 12</td>
<td>3</td>
</tr>
<tr>
<td>Corrective Speech (if required)</td>
<td>0</td>
</tr>
<tr>
<td>MAT M1 &amp; M2 or MAT R2 proficiency</td>
<td>0</td>
</tr>
</tbody>
</table>

**DEPARTMENT REQUIREMENTS†** (Course descriptions pg. 309)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Travel and Tourism (TAT 1)</td>
<td>3 credits</td>
</tr>
<tr>
<td>The Travel Industry I and II (TAT 2, 3)</td>
<td>6</td>
</tr>
<tr>
<td>Computer Reservations Systems (TAT 4)</td>
<td>3</td>
</tr>
<tr>
<td>The Travel Agent and Wholesaler (TAT 11, 12)</td>
<td>3</td>
</tr>
<tr>
<td>The Hospitality Industry (TAT 21)</td>
<td>3</td>
</tr>
<tr>
<td>Transportation (TAT 31)</td>
<td>3</td>
</tr>
<tr>
<td>Internship (TAT 92)</td>
<td>3</td>
</tr>
<tr>
<td>Financial Planning for Business (ACC 50 pg. 164)</td>
<td>4</td>
</tr>
<tr>
<td>Business Management and Organization (BA 11 pg. 166)</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Marketing (BA 14)</td>
<td>3</td>
</tr>
</tbody>
</table>

**GROUP REQUIREMENTS**

Course selections, from groups I through IV, must be from at least three different groups

All credits required from groups I, II, III & IV must be in Basic Courses

I. Performing and Visual Arts
   (Excluded from this group are Art and Music Studio courses, Theatre Production and Technique courses)
   - Art
   - Music
   - Speech
   - Theatre Arts

II. Language and Literature
   - Foreign Language
   - Literature
   - Philosophy

III. Social Sciences
   - Economics
   - History
   - Political Science

IV. Behavioral Sciences
   - Anthropology
   - Psychology
   - Sociology

V. Mathematics and Science
   - Biological Science
   - Mathematics and Computer Science
   - Physical Science

**ELECTIVES—Sufficient to meet required total of... 64 credits**

Departmental requirements may be used to satisfy groups I-V requirements as applicable.

† Consultation with the Department Advisor is required.

**This program is within the Travel and Tourism Department.**
ART DEPARTMENT
Room S-155   ext. 5718

Jack L. Bolen, Professor
Peter E. Hanssen, Associate Professor
Michel Kanter, Assistant Professor
Peter Malone, College Laboratory Technician
Anthony Martin, Professor
Thomas I. Nonn, Professor and Chairman
Anthony Padavano, Assistant Professor
Maurice Poirier, Associate Professor
Michael Z. SherKer, Professor
Frederic Thursz, Professor
Lilly K. Wei, Senior College Laboratory Technician
+ ART 31  THE VISUAL EXPERIENCE
3 crs. 3 hrs.
An introduction to the plastic arts, past and present. Students express their personal and societal attitudes about nature, environment, and art itself.

+ ART 33  SURVEY of ART HISTORY:
from ANCIENT to RENAISSANCE ART
Fall
3 crs. 3 hrs.
This historical view of Western art is designed to survey, in chronological sequence, the evolution of style and form in the major arts—from pre-history through the Renaissance.
Required of Art Majors in first semester. See Department Advisor.

+ ART 34  SURVEY of ART HISTORY:
from RENAISSANCE to 19th CENTURY ART
Spring
3 crs. 3 hrs.
The study of Western art, from the Renaissance to the mid-nineteenth century, noting changes and growth in style and form, is continued.

+ ART 35  MODERN ART I
Fall
3 crs. 3 hrs.
Students are introduced to the early development of Modern Art. Study provides insight into the aesthetic climate in late nineteenth century France and traces the emergence of various styles and artists through the first decades of the twentieth century. Personal research and visits to New York City museums are integral components of the course.

+ ART 36  MODERN ART II
Spring
3 crs. 3 hrs.
International and American trends in painting, sculpture and architecture during the second part of the twentieth century, leading to current directions in the visual arts, are explored. The interrelation­ship of art and contemporary culture is discussed in slide lectures supplemented by personal re­search and visits to New York City art museums and galleries.

+ ART 37  AFRICAN and PRIMITIVE ART
3 crs. 3 hrs.
The structural and stylistic forms of African art are studied, as is the art of other notable primitive cultures, with emphasis placed on the cultural basis for those forms.

+ ART 38  RENAISSANCE ART
3 crs. 3 hrs.
The history of the development of art from the Gothic to the Humanist movement is studied. The Renaissance is integrated into the course content with an analysis of the new concepts of nature, history and man in Italy.

+ Basic Course
ART 51  PHOTOGRAPHY I  
3 crs. 4 hrs.  
An introductory course to the rudimentary ideas and techniques of photography. Camera, film, development process and artistic possibilities realized with the photographic print are considered.

ART 52  PHOTOGRAPHY II  
3 crs. 4 hrs.  
During this introduction to “Professionalism in Photography” course, students are taught to understand the place photography has in our society and how to realize one’s potential through photography in that society. Problems deal with an analysis of professional standards and how to mold personal work to attain those standards.  
Prerequisite: ART 51

ART 53  PHOTOJOURNALISM  
3 crs. 4 hrs.  
Photojournalism covers the dual techniques involved with photography and documentary storytelling. The course encompasses use of written and photographic skills with journalism, can be used by itself as art, or in conjunction with commercial art.  
Prerequisite: ART 51

ART 55  DESIGN I  
3 crs. 4 hrs.  
This course supplies the groundwork necessary to all Studio courses as the principles of design are introduced. Using basic materials and techniques, the study of line, value, color, shape, and texture in two-dimensional composition, is included.  
Required of Art Majors in first semester. See Department Advisor.

ART 56  DESIGN II  
3 crs. 4 hrs.  
Color theory and applications in two- and three-dimensional composition. The study of concepts in three-dimensional design includes problems of volume and space.  
Prerequisite: ART 55

ART 57  DRAWING I  
3 crs. 4 hrs.  
Students are introduced to the basic concepts of drawing. In order to cultivate the ability to see, create form, and enjoy visual experiences, students draw from still life and live models.  
Required of Art Majors in first semester. See Department Advisor.

ART 58  DRAWING II  
3 crs. 4 hrs.  
In this continued study of various drawing media, students use the figure model to explore traditional and experimental drawing techniques.  
Prerequisite: ART 57 or permission of the Department

Basic Course
+ ART 59  PAINTING I
3 crs. 4 hrs.
A studio course in oil and acrylic painting which serves as an aesthetic foundation for solutions to expressive problems of representational and abstract form, color and space.

ART 60  PAINTING II
4 crs. 6 hrs.
This continuation of ART 59 gives students an opportunity for advanced work in painting, self-expression and creativity.
Prerequisite: ART 59 or permission of the Department

+ ART 61  SCULPTURE I
3 crs. 4 hrs.
During study and work in a studio setting, emphasis is placed on the techniques and aesthetics of modern sculptural concepts.

ART 62  SCULPTURE II
4 crs. 6 hrs.
Advanced students in the field of creative sculpture are able to explore new techniques including welding and casting.
Prerequisite: ART 61 or permission of the Department

+ ART 63  CERAMICS I (BEGINNING CERAMICS)
3 crs. 4 hrs.
Students are introduced to problems in ceramic design, materials and techniques. Emphasis is on the use of the potter's wheel, high-fire ware production, glazing and firing.

ART 64  CERAMICS II (INTERMEDIATE CERAMICS)
3 crs. 4 hrs.
Students are involved with solutions to the intermediate problems in ceramic design. Emphasis is on further use of the potter's wheel, high-fire ware production, glazing and firing of intricate designs and pieces.
Prerequisite: ART 63

ART 65  MIXED MEDIA—MULTI-MEDIA OPEN STUDIO
3 crs. 4 hrs.
This course enables students to make use of combinations of drawing, painting and sculptural techniques, new materials, light, sound and phonetic processes.

ART 66  PRINTMAKING I
3 crs. 4 hrs.
A studio course introducing techniques of intaglio and relief printmaking. Students learn to expand upon drawing experiences by refining visual expression into terms of the original print.
Prerequisite: ART 55, or 57, or permission of the Department

ART 67  PRINTMAKING II
3 crs. 4 hrs.
A continuation of intaglio and relief printmaking which allows students to explore the use of multi-color printing, and the time needed for edition printing.
Prerequisite: Art 66

+ Basic Course
+ ART 68  ILLUSTRATION I
3 crs. 4 hrs.
Introduction to basic concepts and skills of drawing and painting for illustration. Acquiring various techniques appropriate to communication formats. Analyzing thematic material for visual exposition.

+ ART 70 JEWELRY I
3 crs. 4 hrs.
Introduction to the design and construction of contemporary jewelry. Students receive directed experience in using materials, tools, chemical processes and necessary technology.

ART 71 JEWELRY II
3 crs. 4 hrs.
During this continuation of jewelry making, students concentrate on a specialized area, and further development of skills in specific areas of interest.

+ ART 73 PUBLICATION LAYOUT and DESIGN
3 crs. 4 hrs.
A practical course in layout design for publications emphasizing newspapers, magazines, newsletters and pamphlets. Students strive for the greatest artistic and practical effect obtainable from applying the principles of design.

+ ART 74 TYPOGRAPHY and LETTERING
3 crs. 4 hrs.
A practical course toward understanding the effect of typography on design. Emphasis is on type specification for display advertising, books, publications, brochures, etc. The actual designing of new letters and alphabets is included.

+ ART 75 INTRODUCTION to GRAPHIC DESIGN and ADVERTISING
3 crs. 3 hrs.
This introductory course focusing on the conceptual aspects of problem solving in the areas of Graphic Design and Advertising. The class will be geared toward creating a portfolio on a professional level.

+ ART 76 TECHNICAL DRAWING
2 crs. 5 hrs.
Technical drawing for engineering students. Theory of orthographic projection; freehand sketching and instrument drawing; spatial analysis, visualization and interpretation; auxiliary and sectional views and conventional practices; axonometric drawings; graphical mathematics; basic dimensioning.

Required of Engineering Science Majors (see page 87)

+ Basic Course
ART 77  ART OF SPAIN

3 hrs. 3 hrs.

An introduction to the art and architecture of Spain, demonstrating the diversity of the Iberian artistic heritage which spans millenia, from the Paleolithic caves to Picasso, emphasizing its integration of many cultural forms. The cities of Madrid, Burgos Cuenca, Escorial, Toledo, Avila, Segovia, Salamanca and La Granja will be visited. Students will become familiar with examples of Roman and Islamic architecture; Spanish interpretations of Romanesque churches and Gothic cathedrals; and the paintings of Bosch, El Greco, Rubens, Titian, the great Spanish painters Velazquez and Goya as well as other masterpieces. Special attention will be given to the famous collections of Philip II and Philip IV, housed at Escorial and in the Prado in Madrid, one of the world’s great museums.

ART 78  ART OF FRANCE

3 hrs. 3 hrs.

An introduction primarily to the art and architecture of France from the Early Medieval period to the Modern era. Students will visit a variety of architectural monuments ranging from Romanesque churches to the Arc de Triomphe in Paris. They will visit local museums where paintings and sculptures of the various historical periods can be studied. Of particular significance among the cities to be visited will be Toulouse, Carcassonne, Montpellier Albi, Moissac, Nimes. The itinerary includes the natural scenic beauty of the Midi. In Paris special attention will be given to the Louvre Museum and its unique collection of masterpieces.

ART 79  ART OF ITALY

3 hrs. 3 hrs.

An introduction to the art and architecture of Italy, touching upon the treasures dating from ancient Pompei and Herculaneum through the Early and High Renaissance to the modern era. The transitions from epoch to epoch, style to style, and the relatedness among them will be emphasized. Students will visit the cities and regions around Milan, Venice, Florence, Pisa and Rome with short excursions to Naples (Pompeii and Herculaneum) and San Gimignano. Special emphasis will be placed on examples of Renaissance and Baroque works and the connections between the two.

ART 81  INDEPENDENT STUDY

1-3 hrs. 1-3 hrs.

Independent study of Art is developed individually between student and faculty member and must be approved by the Department.

ART 82

1-3 hrs. 1-3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

A.S. Degree
FINE ARTS
Requirements—Page 90
BEHAVIORAL SCIENCES and
HUMAN SERVICES DEPARTMENT
Room D-309B ext. 5630

Louis Altschul, Professor
Leslie Arberman, Assistant Professor
John Barlow, Professor
Elinor Barr, Associate Professor
Myron I. Breder, Professor
William Burger, Associate Professor
Geraldine Chapey, Professor
Edwin Cooperman, Associate Professor
Judith Danoff, Associate Professor
   Director, Early Childhood Education/Child Care Program
Alline C. DeVore, Associate Professor
Connie Goldfarb, Associate Professor
Richard M. Graf, Professor
Benjamin Pacheco, Associate Professor
Paul Schmolling, Associate Professor
Marvin I. Shapiro, Assistant Professor
Laurence Simon, Professor
Philip Stander, Professor and Chairman
Vimla P. Vadhan, Associate Professor
Merrill Youkeles, Professor
   Director, Mental Health and Human Services Program
PSY 24  PSYCHOLOGICAL DISORDERS in YOUNG CHILDREN
(also listed as ECE 24)  3 hrs. 3 hrs.
Students learn about psychological disorders in young children and the practices required to deal with them in early childhood settings. Included are the problems and needs of gifted children, children who are mentally retarded or minimally brain-damaged, deaf, blind, orthopedic or speech handicapped. Causes, diagnostic, therapeutic and educational procedures and teaching methods are reviewed for each category based upon principles learned in introductory psychology courses. 
Prerequisite: PSY 11 or permission of the Department.

EDU 25  THE EMOTIONALLY DISTURBED and NEUROLOGICALLY IMPAIRED CHILD: ETIOLOGY, CHARACTERISTICS, and ANALYSIS of LEARNING NEEDS  3 hrs. 3 hrs.
Knowledge and understanding of causes, characteristics, and learning needs of emotionally disturbed and neurologically impaired school children is provided. Emphasis is on the educational needs and problems of these children, methods of identifying and diagnosing them, and the possibilities for treatment and intervention, in a variety of educational settings. 
Prerequisite: PSY 24 or permission of the Department

EDU 26  METHODS of TEACHING the EMOTIONALLY DISTURBED and NEUROLOGICALLY IMPAIRED CHILD BASED on INDIVIDUAL NEEDS  3 hrs. 3 hrs.
Methods of teaching in programs for the emotionally disturbed and neurologically impaired child are explained. How existing materials may be modified and how new original materials and techniques can be developed will be investigated. Principles of behavior management will be discussed in the context of curriculum planning and teaching methodology. Emphasis will be placed on the implementation of teaching strategies based upon individual assessment of learning needs. The use of resources to ensure the least restrictive environment will be considered. A hands-on approach will be used to develop materials. 
Prerequisite: PSY 24 or permission of the Department

EDU 27  SEMINAR in ADMINISTRATION and SUPERVISION of SPECIAL EDUCATION PROGRAMS  3 hrs. 3 hrs.
This colloquium course provides information relating to the administration and supervision of Special Education programs in the New York City Public School. Guest lecturers discuss specific aspects of Special Education programs in the area of their expertise.
Prerequisite: PSY 24 or permission of the Department

EDU 32  HUMAN GROWTH and DEVELOPMENT
(also listed as PSY 32)  3 hrs. 3 hrs.
Focus is on human development from infancy through childhood, adolescence and adulthood. Intellectual growth, personal and social adjustment, the relationship between physical and mental development and typical problems in various stages of the life-cycle are considered. 
Prerequisite: PSY 11
EDU 33 EDUCATION in MODERN SOCIETY
3 crs. 3 hrs.
Education is studied in relation to contemporary society. Cultural forces and influences as well as institutions which help shape education are analyzed in the light of resulting issues and challenges. The various roles of the school, its personnel and community are related to accepted theories and current practices.

EDU 37 HISTORICAL DEVELOPMENT of EDUCATION in the UNITED STATES
3 crs. 3 hrs.
The history, growth and development of education in the United States from colonial times to the present is traced. Emphasis is on the manner in which institutions respond to the changing social, political and economic currents of the times. The role of education as a major factor in the development of the American character is stressed.

EDU 40 ORIENTATION for STUDENTS with SPECIAL BACKGROUNDS
1 cr. 1 hr.
To familiarize students with American institutions and society, especially as they exist in New York City, the college community, interethnic relations, services such as consumer information, recreational activities, and the cultural life of New York City are studied. Guest speakers address some sessions.

EDU 81 INDEPENDENT STUDY
1–3 crs. 1–3 hrs.
Independent study of Education is developed individually between student and faculty member and must be approved by the Department.

EDU 82
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

*For A.A.S. Degree Programs Course Descriptions see Early Childhood Education Program—Page 112; Education Associate Program—Page 113.
PSYCHOLOGY

+ PSY 11 GENERAL PSYCHOLOGY

A basic course during which students are introduced to the nature of psychology, its fields and divisions, including individual differences, learning, motivation, perception, and personality.

PSY 12 PRINCIPLES of PARAPSYCHOLOGY

This general course introduces students to the interdisciplinary nature of parapsychology, its fields and sub-divisions, such as telepathy, precognition, psychokinesis and clairvoyance. Current theoretical and experimental research will be reviewed.

Prerequisite: PSY 11

PSY 14 EXPERIMENTAL ANALYSIS of BEHAVIOR

A laboratory course dealing with the experimental analysis of human and animal behavior. Practical applications and ethical implications of the scientific study of man are included.

Prerequisite: PSY 11

PSY 15 PSYCHOLOGY of PERSONAL ADJUSTMENT

The course focuses on the application of psychological principles to problems of personal and social adjustment. Workshop activities such as discussion groups, role-playing and self-awareness exercises are stressed.

Prerequisite: PSY 11

PSY 24 PSYCHOLOGICAL DISORDERS in YOUNG CHILDREN

(Also listed as ECE 24)

Students learn about psychological disorders in young children and the practices required to deal with them in early childhood settings. Included are the problems and needs of gifted children, children who are mentally retarded, or minimally brain-damaged, deaf, blind, orthopedic or speech handicapped. Causes, diagnostic, therapeutic and educational procedures and teaching methods are reviewed for each category based upon principles learned in introductory psychology courses.

Prerequisite: PSY 11,

(PSY 32, ECE 21, 91, or permission of the Department for ECE Program Majors only)

PSY 32 HUMAN GROWTH and DEVELOPMENT

(Also listed as EDU 32)

Focus is on human development from infancy through childhood, adolescence, and adulthood. Intellectual growth, personal and social adjustment, the relationship between physical and mental development, and typical problems in various stages of the life-cycle are considered.

Prerequisite: PSY 11

PSY 33 SOCIAL PSYCHOLOGY

Basic concepts and selected research findings in social psychology are examined. Emphasis is placed on the process of communication, group interaction, leadership, interpersonal perception, attitude and opinion formation.

Prerequisite: PSY 11
PSY 34  PSYCHOLOGY of PERSONALITY
3 crs. 3 hrs.
Various personality theories are examined in order to demonstrate the diverse ways of dealing with basic personality problems.
Prerequisite: PSY 11

PSY 35  EDUCATIONAL PSYCHOLOGY
3 crs. 3 hrs.
Current scientific theory and research relating to formal learning environments are considered. Areas studied include: process of human learning; concept-formation; language affecting acquisition and retention; new approaches to motivate and direct learning; new methods of organizing and transmitting information and knowledge.
Prerequisite: PSY 11

PSY 36  PSYCHOLOGY of BEHAVIOR PATHOLOGY
3 crs. 3 hrs.
Students examine the concepts of normality and abnormality, and review significant theoretical contributions to personality disorganization. Historical factors and current trends in the field of Mental Health are reviewed. Causes of behavioral disorders are discussed in terms of the impact of social, cultural, genetic and other factors. A survey of treatment methods is included.
Prerequisite: PSY 11

PSY 37  PSYCHOLOGY of WOMEN
3 crs. 3 hrs.
Study of psychological factors specifically related to women, including the traditional models of femininity in such areas as social, occupational, and sex roles. The approach of the course is analytical, beginning with denotative and connotative definitions of terms, analyzing traditional and new female models and identities and some of the problems these models present in personality integration. Some recent psychological research on women is reviewed. Personal experiences of male and female students are used to help support, or refute, theories presented.
Prerequisite: PSY 11

PSY 38  PSYCHOLOGICAL, BEHAVIORAL and PHYSICAL DISORDERS of the AGED
3 crs. 3 hrs.
The psychological, behavioral and physical disorders of the aged are examined. Various theoretical positions and review of preventive and treatment modalities will be studied.
Prerequisite: PSY 11

PSY 52  INDUSTRIAL and ORGANIZATIONAL PSYCHOLOGY
3 crs. 3 hrs.
(also listed as PLM 20)
Course draws upon psychological and sociological principles relevant to the work environment of an organization. Concepts such as motivation, leadership, attitudes, testing and test discrimination, moral and organization climate, mental health and growth in the work world, and the problems surrounding selection decisions are examined. Students experience some aspects of applied research during the term.
Prerequisite: PSY 11

PSY 81  INDEPENDENT STUDY
1–3 crs. 1–3 hrs.
Independent study of Psychology is developed individually between student and faculty member and must be approved by the Department.

PSY 82
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
SOCILOGY

+ SOC 31 INTRODUCTION to SOCIOLOGY (3 crs. 3 hrs.)
In this systematic study of the social dimensions of human existence, primary stress is on social structure and culture as governing factors in the lives of individuals. Students consider the basic concepts of sociology, major theoretical positions and findings. The course is designed to meet the needs of those students who want an introduction to the field as well as for those who wish to undertake further study.

SOC 32 URBAN SOCIOLOGY (3 crs. 3 hrs.)
Students are given an overview of the metropolis in order to better understand the effects of urbanization. The inherent contradictions in urban living are reviewed in terms of the multiplicity of problems that currently challenge the city.
Pre requisite: SOC 31

SOC 33 SOCIAL PROBLEMS: INSTITUTIONS in CRISIS (3 crs. 3 hrs.)
The social ills currently facing American society are investigated. Areas of analysis include the major conflicts and social changes in community institutions. Each problem is approached as a crisis facing a particular institution. Appropriate changes in policy are suggested as the solutions needed to resolve the problems.
Pre requisite: SOC 31

SOC 34 URBAN ANTHROPOLOGICAL and SOCIOLOGICAL FIELDWORK: OBSERVATION and ETHNOGRAPHY (3 crs. 4 hrs.)
An introduction to observational field work in anthropology and sociology. As students acquire basic anthropological and sociological concepts, become familiar with procedures followed in conducting observational ethnographic studies, they select a social situation for study and then conduct field work as "participant-observers." Step-by-step instructor guidance is included in analysis of the group and completion of the field work project. Students may select non-human primates for field study.
Pre requisite: SOC 31 or SOC 37

SOC 35 SOCIOLOGY of the FAMILY (3 crs. 3 hrs.)
The sociology of the family is reviewed. Study areas include: definitions; pattern variations; developmental theories; specialized functions and their effect on socialization, courtship, marriage, divorce and the life cycle.
Pre requisite: SOC 31

SOC 36 MINORITY GROUPS in the UNITED STATES (3 crs. 3 hrs.)
Selected minority groups in American society are studied. Among the topics discussed are: nature of prejudice and discrimination; social meaning of minority, annihilation, assimilation, competition, conflict, exploitation; social and cultural change, past and present trends and developments.
Pre requisite: SOC 31

+ Basic Course
+ SOC 37 INTRODUCTION to ANTHROPOLOGY 3 crs. 3 hrs.

The aim of the course is to approach a variety of aspects of the human condition, such as evolution, the diversity of primitive societies, and to compare the relationship of anthropological concepts with our knowledge of our own civilization and its history.

SOC 40 ISRAELI SOCIETY 3 crs. 3 hrs.

An integrated exposition and analysis of the dominant social, political and economic aspects of Israeli society is provided. Students gain understanding of the dynamics of the component elements of that society, and insight into the ideas and goals of its people.

Prerequisite: SOC 31 or 37

SOC 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.

Independent study of Sociology is developed individually between student and faculty member and must be approved by the Department.

SOC 82 1–3 crs. 1–3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

HUM 11 CULTURE as CONTEXT 3 crs. 3 hrs.

A study of those features of contemporary society which make up its cultural context. Political, social, and artistic institutions will be examined to understand their effect upon the average citizen. Special attention will be paid to the institutions and processes which operate within New York City.

Corequisite: ENG CR
EARLY CHILDHOOD EDUCATION/
CHILD CARE PROGRAM

Due to the special nature of the Early Childhood Education/Child Care Program, students are evaluated at the conclusion of each semester to determine whether it is advisable for them to continue in the Program. Students enrolled in the Program must submit report of a Tuberculin Skin Test (which has to be updated every year thereafter), and any other pertinent information as required by outside school agencies.

+ MH 20 INTERDISCIPLINARY APPROACH to HUMAN SERVICES 3 crs. 3 hrs.

The effects of society, culture and institutions on the developmental needs of children are studied. Students investigate past and present solutions in the context of society's conflicting and changing values and goals. They visit and evaluate schools and related institutions.

For ECE Majors or permission of the Program Director

ECE 21 CURRICULUM in EDUCATION 3 crs. 3 hrs.

The objectives of the program in education are considered, including the selection, guidance and evaluation of learning experiences. Specific emphasis is placed on methods and materials in language arts and story-telling.

Prerequisite: MH 20

ECE 22 ART WORKSHOP for STUDENTS in EDUCATION 2 crs. 2 hrs.

A variety of art media are explored so that students can understand the principles, methods, planning and classroom organization necessary to achieve the curricular and behavioral objectives of programs in education.

Prerequisites: ECE 21, 91 or permission of the Program Director

ECE 23 MUSIC and MOVEMENT WORKSHOP for STUDENTS in EDUCATION 2 crs. 2 hrs.

Students explore musical literature, methods and techniques for utilizing music and dance in order to achieve the curricular and behavioral objectives of programs in education.

Prerequisites: ECE 22, 92 or permission of the Program Director

ECE 24 PSYCHOLOGICAL DISORDERS in YOUNG CHILDREN 3 crs. 3 hrs.

(also listed as PSY 24)

Students learn about psychological disorders in young children and the practices required to deal with them in early childhood settings. Included are the problems and needs of gifted children, children who are mentally retarded, or minimally brain-damaged, deaf, blind, orthopedic or speech handicapped. Causes, diagnostic, therapeutic and educational procedures and teaching methods are reviewed for each category based upon principles learned in introductory psychology courses.

Prerequisites: ECE 21, 91, PSY 32 or permission of the Program Director

+ Basic Course
ECE 28  TECHNIQUES in MATH, SCIENCE and SOCIAL STUDIES TEACHING
for EARLY CHILDHOOD EDUCATION
2 crs. 2 hrs.
This course provides knowledge and understanding of the methods of teaching pre-mathematics, science, and social studies in early childhood classrooms. Hands-on methods that permit young children to learn through discovery are given special emphasis, as well as the theoretical underpinnings of these methods.
Pre or corequisites: PSY 11, PSY 32 and/or permission of the Program Director

ECE 81  INDEPENDENT STUDY
1–3 crs. 1–3 hrs.
Independent study of Early Childhood Education is developed individually between student and faculty member and must be approved by the Department.

FIELD COURSES

ECE 91  SUPERVISED INSTRUCTIONAL EXPERIENCE in EDUCATION I
3 crs. 6 hrs.
Students are assigned to work with children in a specific education center such as a Day Care Center, Nursery School, Kindergarten, School for Exceptional Children or Residential Institution. During the course, students concentrate on objective observations of child behavior in order to help develop skills in understanding children and their learning needs.
For ECE Majors only.
Prerequisite: MH 20
Corequisite: ECE 21

ECE 92  SUPERVISED INSTRUCTIONAL EXPERIENCE in EDUCATION II
3 crs. 6 hrs.
Students assume an assigned measure of responsibility and work directly with children in the selected agency. Careful planning for the formulation and the development of suitable children's programs guide students toward a professional role.
For ECE Majors only.
Prerequisites: ECE 91, 21
Corequisite: ECE 22

ECE 93  SUPERVISED INSTRUCTIONAL EXPERIENCE in EDUCATION III
3 crs. 6 hrs.
In this advanced course, students in the program are assigned increasing responsibility within the limits of the agency structure. Leadership of group activities is included.
For ECE Majors only.
Prerequisites: ECE 92, 22
Corequisite: ECE 23

A.A.S. Degree
EARLY CHILDHOOD EDUCATION/CHILD CARE
Requirements—Page 112
EDU 25 THE EMOTIONALLY DISTURBED and NEUROLOGICALLY IMPAIRED CHILD: ETIOLOGY, CHARACTERISTICS, and ANALYSIS of LEARNING NEEDS

3 crs. 3 hrs.

Knowledge and understanding of the causes, characteristics, and learning needs of emotionally disturbed and neurologically impaired school children is provided. Emphasis is on the educational needs and problems of these children, methods of identifying and diagnosing them, and the possibilities for treatment and intervention, in a variety of educational settings.

Prerequisite: PSY 24 or permission of the Department.

EDU 26 METHODS of TEACHING the EMOTIONALLY DISTURBED and NEUROLOGICALLY IMPAIRED CHILD BASED on INDIVIDUAL NEEDS

3 crs. 3 hrs.

Methods of teaching in programs for the emotionally disturbed and neurologically impaired child are explored. How existing materials may be modified and how new original materials and techniques can be developed will be investigated. Principles of behavior management will be discussed in the context of curriculum planning and teaching methodology. Emphasis will be placed on the implementation of teaching strategies based upon individual assessment of learning needs. The use of resources to ensure the least restrictive environment will be considered. A hands-on approach will be used to develop materials.

Prerequisite: PSY 24 or permission of the Department.

EDU 27 SEMINAR IN ADMINISTRATION and SUPERVISION of SPECIAL EDUCATION PROGRAMS

3 crs. 3 hrs.

This colloquium course provides information relating to the administration and supervision of Special Education programs in the New York City public schools. Guest lecturers discuss specific aspects of Special Education programs in the area of their expertise.

Prerequisite: PSY 24 or permission of the Department.

EDU 29 SCIENCE for ELEMENTARY SCHOOL TEACHERS

4 crs. 4 hrs.

Designed as a "Science Information" and "Methods-of-Teaching Science" course for Elementary School teachers. Participants explore Physical and Biological Science concepts to enhance their own learnings of these subjects. In alternate sessions they explore methods of adapting these concepts to children in the elementary schools. Stress will be on the development of scientific processes and integration of Science into the curriculum.

+ EDU 33 EDUCATION in MODERN SOCIETY

3 crs. 3 hrs.

Education is studied in relation to contemporary society. Cultural forces and influences as well as institutions which help shape education are analyzed in the light of resulting issues and challenges. The various roles of the school, its personnel and the community are related to accepted theories and current practices.
EDU 34  SEMINAR and PRACTICUM in EDUCATION and BEHAVIORAL SCIENCES  
4 crs. 12 hrs.

The role of the paraprofessional in education is examined. Selected aspects of educational foundations, sociology and child psychology provide a base from which the paraprofessional's relationships to students, peers, teachers and supervisors are studied. Ten hours of field work a week is required.

For Education Associate Program Majors only.

Prerequisites: EDU 33, PSY 11

EDU 35  SEMINAR and PRACTICUM in EDUCATION and COMMUNICATION SKILLS  
4 crs. 12 hrs.

Students explore the nature of task-oriented and pupil-oriented activities in relation to communication skills. They learn how to help pupils improve and develop special written and spoken communication skills. Ten hours of field work is required.

For Education Associate Program Majors only.

Prerequisites: EDU 34, 2 semesters of English

EDU 36  SEMINAR and PRACTICUM in EDUCATION and ART FORMS  
4 crs. 12 hrs.

Students are assisted to develop understanding of the functions of art activities for the young child. The goal is to encourage a child's creative thinking by including art and music into the youngster's world. Ten hours of field work a week is required.

For Education Associate Program Majors only.

Prerequisites: EDU 35, MUS 31, ART 31

MAT 9  UNDERSTANDING MATHEMATICS  
4 crs. 4 hrs.

Primarily designed for Education Associate Program Majors (see page 242)

A.A.S. Degree
EDUCATION ASSOCIATE
Requirements—Page 113

+ Basic Course
MENTAL HEALTH and HUMAN SERVICES
formerly COMMUNITY MENTAL HEALTH ASSISTANT PROGRAM

The program is designed for students who wish to pursue careers in such human services fields as: rehabilitation, social work, psychology, special education, counseling and mental health. The emphasis is on learning ways of helping people lead satisfying productive lives, and/or preventing the onset of serious emotional or psychological problems.

+ MH 11 INTRODUCTION to HUMAN SERVICES 3 crs. 3 hrs.
Students are introduced to the nature and scope of human services in America today. A variety of human services, settings and programs are examined. Career options, including those in occupational therapy, social work, psychology, art and dance therapy, counseling, mental health and gerontology will be described. Prevention efforts and the effects of social policies on the provision of needed services will be discussed. The development of the human services movement will be examined in the light of changing societal values.

MH 30 HUMAN SERVICES ORGANIZATIONS 3 crs. 3 hrs.
This course covers the development, functions, and purposes of human services organizations. Different types of human services organizations are described with emphasis on the duties and roles of workers and supervisors. The effects of the policies, practices, and pressures of the agency upon the worker will be explored.
For Mental Health Majors or permission of Program Director.
Prerequisite: MH 11

MH 31 PRINCIPLES of INTERVIEWING and GROUP LEADERSHIP 3 crs. 3 hrs.
The basic principles of gathering information through the use of interviewing techniques are examined. The nature of group formation, function and leadership, and how they relate to one another will be analyzed. Emphasis is placed upon providing preventative and therapeutic service to the mentally ill. Role playing and classroom practice sessions are structured as part of the course.
For Mental Health Majors or permission of Program Director.
Prerequisite: MH 11
Corequisite: MH 96

MH 34 ACTIVITIES THERAPY 3 crs. 3 hrs.
Theories and Principles of using activities as a preventive and/or a therapeutic tool are examined. Learning selected basic skills and their use will be emphasized, demonstrated, discussed and practiced in the classroom.
For Mental Health Majors or permission of Program Director.
Prerequisite: MH 11

+ MH 35 INTRODUCTION to GERONTOLOGY 3 crs. 4 hrs.
Issues and problems pertaining to aging and the aged are explored. The aging process and roles of the older adult in our society are examined and analyzed. Emphasis is placed on learning methods for the prevention and treatment of mental illness in older people.
Open to all students.
MH 36 THEORIES and PRINCIPLES of PSYCHOTHERAPY 3 crs. 3 hrs.
The array of treatment modalities for the emotionally disturbed are surveyed. Theory, methods and historical background of individual and group therapies are reviewed. Special treatment approaches for out-patients, transitional facilities, and treatment of behavior problems in the school setting are discussed. Conditioning therapies, recent innovations in group therapy and self-help groups are reviewed.
For Mental Health Majors or permission of Program Director
Prerequisites: MH 11 and PSY 36

MH 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of Mental Health is developed individually between student and faculty member and must be approved by the Department.

FIELD COURSES

MH 96 SUPERVISED INSTRUCTIONAL EXPERIENCE in MENTAL HEALTH I 3 crs. 6 hrs.
Under faculty supervision, students are assigned to work in a Mental Health Agency where the focus is on preventive and therapeutic measures.
For Mental Health Majors or permission of Program Director.
Prerequisite: MH 11
Corequisite: MH 31

MH 97 SUPERVISED INSTRUCTIONAL EXPERIENCE in MENTAL HEALTH II 3 crs. 6 hrs.
In this advanced course students are assigned to work with patients afflicted with a variety of emotional disorders. The student's responsibilities for patients are carried out under faculty supervision.
For Mental Health Majors or permission of Program Director.
Prerequisites: MH 11, 96

A.S. Degree
MENTAL HEALTH and HUMAN SERVICES
Requirements—Page 93
Isaiah A. Benathen, Associate Professor
Carol Biermann, Associate Professor
James C. Goetz, Assistant Professor
Baila G. Gulkowitz, Senior College Laboratory Technician
I. Ronald Hecht, Associate Professor
Miriam Kittrell, Professor
Barbara Ladman, College Laboratory Technician
Peter A. Lanzetta, Professor
Vincent R. Liguori, Professor
Theodore C. Markus, Assistant Professor
Joseph N. Muzio, Professor and Chairman
Nancy Pennavage, Assistant Professor
Peter Pilchman, Professor
Marion T. Saccardi, Senior College Laboratory Technician
Gary B. Sarinsky, Assistant Professor
Dorothy Schweitzer, Assistant Professor;
    Director, Pre-Physical Therapy Program
Charles W. West, Associate Professor
Arthur N. Zeitlin, Lecturer
**BIOLOGY**

- **BIO 10  PREPARATORY BIOLOGY**

  0 crs. 4 hrs.
  (4 equated crs.)
  Designed for Biology Majors or Allied Health Science students who have had insufficient, or no, previous biology course instruction and therefore require background preparation before enrolling in advanced biology courses. Students are introduced to fundamental concepts in biology and related physical and chemical processes through demonstrations, “hands-on” experiences, readings, discussions and presentations. Various basic skills and procedures related to biological laboratory practices are introduced and practiced. Students are encouraged to obtain assistance in the college’s reading skills programs.

  *Enrollment is limited to recommended students based on science background and placement examination scores. Does not count toward fulfillment of the science requirement for any degree. Students who are assigned to MAT M1 or ENG 03 are required to successfully complete BIO 10 before enrolling in BIO 11 or BIO 13.

- **BIO 11, 12  HUMAN ANATOMY and PHYSIOLOGY I and II**

  4 crs. 6 hrs.
  (each semester)
  This two-semester, one year course of study in human anatomy and physiology examines the complementary relationships between structure and function. Emphasis is on the action and the integration of organs and organ systems in the maintenance of normal functioning of the whole organism. Dissections and other laboratory experiences are integrated with course content.

  Recommended for students pursuing careers in allied health fields, physical education, or those interested in knowing more about their own bodies as part of a life-time preparation for taking responsibility for one’s own well-being.

  Prerequisites: BIO 11 for BIO 12; Placement at MAT R2, ENG 04 level or better or, successful completion of MAT 01 or BIO 10 or permission of the Department.

- **BIO 13, 14  GENERAL BIOLOGY I and II**

  4 crs. 6 hrs.
  (each semester)
  A one year, two-semester course designed for students planning to major in the biological sciences, or preparing for a pre-professional program. Classroom and laboratory sessions focus on classical biological topics as they apply to all life. Special consideration is given to recent scientific findings, and how they advance our understanding of the classical concepts. The interaction of environmental and biological forces to produce life will also be considered.

  Prerequisites: BIO 13 for BIO 14; Placement at MAT R2, ENG 04 level or better or, successful completion of MAT 01 or BIO 10 or permission of the Department.

  Corequisite: CHM 11 for BIO 14

**BIO 21  COMPARATIVE ANATOMY**

*Fall*

4 crs. 6 hrs.

The course focuses is on the form, structure, classification and adaptive modifications of vertebrates, animals with backbones. Through detailed dissections, representative vertebrates, the dogfish and the cat, are studied. The vertebrates’ major body systems are compared, the relationships between form and function are considered, and the use of certain structures in specific environments are discussed.

Prerequisite: BIO 14 or permission of the Department
BIO 22  EMBRYOLOGY

Spring

4 crs. 6 hrs.

The course focus is on the embryonic development of various organisms including the frog (amphibian), chick (aves), pig and human (mammal). The related processes of reproduction, fertilization, implantation and embryonic support systems are considered. Through microscopic studies, students are able to understand the vital stages of development and the dynamic activities of formation. Various research techniques used in embryological studies are introduced. Current research findings are interwoven with the more established body of knowledge of this subject. As examples of embryonic disturbances some pathologies are included.
Prerequisite: BIO 14 or permission of the Department

+ BIO 28  BIOLOGY of WOMEN

3 crs. 3 hrs.

Study of those aspects of biology that are unique to women. Understanding of normal function is augmented by consideration of frequently encountered female disorders. Opportunity is provided for discussion and exploration of the myths and mysteries that have given rise to the "feminine mystique." Through increased awareness and understanding, students will be better able to increase the potential and the contributions a woman can make to her family and to society. Open to all students in partial fulfillment of their science requirement.

+ BIO 29  BIOLOGICAL RHYTHMS and INTERNAL CLOCKS

Spring

3 crs. 3 hrs.

Some of the major physiological processes occurring in animals and plants according to daily, tidal, seasonal and annual rhythms and cycles are considered. These processes, which occur with periodic regularity, are vital for individuals and the species, and are directly related to the organisms evolution. Examples of rhythmic activities that will be studied are: cosmic rhythms; mating and reproduction; hormone production and control systems; sleep/wakefulness cycles; rhythms of growth; energy and health; disease onsets; illness. Emphasis will be on human rhythms and internal biological clock mechanisms. The effects of such modifications as jet travel, shift work, stress, space travel, and environmental seasons will be considered. Open to all students in partial fulfillment of their science requirement.

+ BIO 35  INTRODUCTORY HORTICULTURE

3 crs. 3 hrs.

This non-laboratory course emphasizes the structure, growth and cultivation of horticultural plants and the physical and biological environmental factors which affect them. Practical applications, including soil improvement techniques, plant identification, gardening and landscaping are emphasized where appropriate. Open to all students in partial fulfillment of their science requirement.

+ BIO 37  HUMAN GENETICS

3 crs. 3 hrs.

A one-semester course which introduces the principles of genetics with applications to human beings. The different systems by which characteristics are inherited and representative human hereditary problems are studied. The roles of heredity and environment will be explored. Where appropriate, an historical approach to genetics research will be considered. Focus is on chromosomal disturbances and diseases. Students are also introduced to the basic concepts of population genetics. Open to all students in partial fulfillment of their science requirement.

+ Basic Course
BIO 40 INTRODUCTORY FOOD SCIENCE  3 crs. 3 hrs.
An introductory course dealing with constituent properties of foods; methods of food preservation; the major food groups; (including their handling and processing); current problems such as chemical additions, and world feeding needs. The interrelationships between chemical and physical properties, processing, and food quality are stressed.
Prerequisite: Non-science majors must obtain permission of the Department

BIO 48 FOOD MICROBIOLOGY  3 crs. 3 hrs.
Designed for students majoring in the biological sciences, in food sciences, in nutrition or related course programs, this elective course may also be chosen by non-science majors to fulfill their science requirement. Specific food-borne micro-organisms, and diagnostic methods to identify their presence and their appropriate scientific control are considered.
Prerequisite: Biology course or permission of the Department

BIO 50 GENERAL MICROBIOLOGY  4 crs. 6 hrs.
Spring
This lecture and laboratory course includes: study of the methods of pure culture techniques; growth of micro-organisms; morphological and physiological characteristics of micro-organisms; microbial biochemistry; microbial genetics. Special attention is given to water, food and dairy microbiology.
Prerequisites: BIO 14, CHM 11
Recommended: CHM 12

BIO 51 MICROBIOLOGY in HEALTH and DISEASE  4 crs. 6 hrs.
A classroom and laboratory course involving study of the principles and practices of microbiology; pure culture techniques; micro-organisms and their environments; physical and chemical factors affecting growth, immunology, epidemiology; and the relationship between man and the microbiological world.
Suggested primarily for students in the allied health sciences
Prerequisites: BIO 12, SCI 25

BIO 52 MARINE BIOLOGY  4 crs. 6 hrs.
Summer
During laboratory and classroom sessions students study the interrelationships between various environmental factors (physical, chemical and biological) and the distribution and physiology of selected marine organisms. Special attention is given to ecological techniques and taxonomic methods. Field trips are undertaken to supplement laboratory work.
Prerequisites: BIO 14, CHM 11 or permission of the Department

BIO 53 TERRESTRIAL ECOLOGY  4 crs. 6 hrs.
Summer or Fall
A study of: concepts and principles relating to the structure and function of populations, communities, and ecosystems; energy flow, biogeochemical cycling, community structure, population growth and population interactions, disturbed and undisturbed ecosystems. Designed for science majors, the course includes lectures, films, field trips, discussion, research project and report.
Prerequisites: Biology course with permission of the Department
BIO 54  BIOLOGY of GREEN PLANTS  
Winter  
4 crs. 6 hrs.  
Students are exposed to the basic concepts of green plant biology with particular emphasis on their structure, growth and physiology. Laboratory experiences emphasize the growth and study of live specimens. Greenhouse and field projects are integrated into course activities.  
Prerequisite: BIO 14 or one semester of college biology with permission of the Department  

BIO 55  BIOLOGY of the INVERTEBRATES  
Fall  
4 crs. 6 hrs.  
An introductory survey course, involving lectures and laboratories for students who intend to continue in the biological sciences or choose it as their sophomore-level science elective. Various invertebrate phyla are studied with particular reference to their physiology and their interrelationships. Representative forms will be examined and dissected. Various experiments will be performed on particular organisms. Fundamental biological concepts will be stressed.  
Prerequisite: BIO 13 or SCI 33  

+ BIO 56  UNDERSTANDING ENVIRONMENTAL POLLUTION  
Fall  
3 crs. 3 hrs.  
Living organisms—plant and animal—whose environments are constantly being altered and whose continued existence is threatened because of man’s developing technologies are studied. Course theme demonstrates how those chief requirements of living systems—water, oxygen and nutrients—have been affected by specific organic, inorganic and radioactive waste materials resulting in population decline through intrusion upon tissues, organs and organ systems. Open to all students in partial fulfillment of their science requirement.  

BIO 58  BASIC PRINCIPLES of MOLECULAR BIOLOGY  
4 crs. 6 hrs.  
The course, on the structure and function of cells at the biochemical level, begins with a systematic study of the chemistry of carbohydrates, lipids, proteins and nucleic acids. Integration of cell structure and function with the chemistry of the biomolecules previously studied and introduces the study of enzymes and their co-factors follow. The major metabolic pathways for energy production, to carry out life processes, are considered as an introduction to the enzyme catalyzed reactions and the enzymes synthesis regulation. Laboratory experiments require students to master a wide variety of commonly used laboratory techniques and to effectively present data from these procedures.  
Prerequisites: BIO 14, CHM 12  

BIO 63  LIMNOLOGY  
Summer  
4 crs. 6 hrs.  
Limnology is the science of inland waters dealing with the physical, chemical and biological characteristics of streams, lakes, and their watersheds. During lectures, in laboratories and in field work, students study the organisms as well as the processes whereby matter and energy are transformed within a lake, pond, river, or stream.  
Prerequisites: Course in Biology and permission of the Department  

+ Basic Course
BIO 71 BIOLOGICAL PHOTOGRAPHY
Spring
3 crs. 4 hrs.
Basic principles underlying the architecture of living organisms, from the microscopic to the macroscopic levels are outlined and studied in depth. Photography is used as an investigative tool for the study of living structure. Emphasis is placed on the unique ways in which photography has been an important scientific tool in the past, and on the ever expanding new photographic techniques currently in use. Students are given ample time for experimentation with the major photographic variables—lighting, filter, films—which revealed aspects of living motion structure and function only previously suspected.
Prerequisite: Biological Science course or permission of the Department

BIO 81 INDEPENDENT STUDY
1–3 crs. 1–3 hrs.
Independent study of Biology is developed individually between student and faculty member and must be approved by the Department.

BIO 82
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
SCI 31 HISTORY and PHILOSOPHY of PHYSICAL SCIENCE  
2 crs. 2 hrs.  
For complete course description refer to Department of Physical Sciences (page 277)

SCI 32 HISTORY and PHILOSOPHY of BIOLOGICAL SCIENCE  
2 crs. 2 hrs.  
A survey of the origin and scientific development of mankind from the emergence of the human species to modern times. Major scientific and technological developments are studied within the context of human culture and philosophical ideas. Presented from a biological point of view, the course draws on other disciplines as they have major impact on how humans view themselves and their impact on scientific efforts. Open to all students in partial fulfillment of their science requirement.

SCI 33 INTRODUCTION to MODERN CONCEPTS of BIOLOGY  
4 crs. 5 hrs.  
Designed for non-science and liberal arts majors and those who plan to transfer to senior colleges. This course focuses on major biological topics and principles, with special emphasis on how biology influences human issues and problems. Through lectures, discussions and hands-on laboratory experiences, students gain insight into past, present and future aspects of life on earth. Major topics considered include: genetics, ecology, evolution, and cell biology. Open to all students in partial fulfillment of their science requirement.

SCI 42 FIELD BIOLOGY  
3 crs. 3 hrs.  
To make biology available and relevant for liberal arts students who wish to increase their understanding of biology although their career choices are focused on other disciplines, the course explains biological topics relating to the human condition that are of interest to all. Students are expected to bring matters of concern to the attention of the class for study and discussion, and will be encouraged to question the myths and fallacies often associated with the human condition. Open to all students in partial fulfillment of their science requirement.

SCI 43 FIELD BIOLOGY  
Spring and Summer  
4 crs. 5 hrs.  
Designed for liberal arts students, teachers and recreation instructors this course offers an opportunity to study living organisms in their environments. Each week a portion of the class is devoted to an illustrated lecture on a specific world biome vividly illustrating plant and animal interrelationships. Field trips involve an interdisciplinary approach: fauna, geology and human involvement in each ecosystem visited. Studies are undertaken of ponds, streams, seashore, marsh and various forest types. 
Prerequisite: A science course or permission of the Department.
+ **SCI 50** PEOPLE and the ENVIRONMENT—BIOLOGICAL EMPHASIS

*Fall*

2 crs. 2 hrs.

A general education course to help students recognize mankind’s interdependence with the environment and to instill individual—and mankind’s—responsibility for environmental quality. The biological sciences are emphasized, and deal with such topics as pollution control, the ecological balance in nature and the growth and control of human populations.

+ **SCI 51** PEOPLE and the ENVIRONMENT—CHEMISTRY EMPHASIS

See Department of Physical Sciences—page 279

+ **SCI 70** THE SCIENCE of NUTRITION

3 crs. 3 hrs.

Increased food processing and additional chemical substances in food, makes it important for students to understand the basic ideas of modern nutrition for their own well being. This interdisciplinary course, is taught jointly by the Biological Sciences and Physical Sciences Departments. Such concepts as biochemical individuality as related to nutrition for optimum health are integrated with surveys of carbohydrate, protein and fat metabolism. The role of vitamins and minerals in metabolic processes, and their still-controversial role in orthomolecular nutrition, is examined. Other topics such as food selection, diet during pregnancy and infancy, special diets during illness, and the safety of the food supply, are discussed. Students are asked to analyze their own diet. Open to all students in partial fulfillment of their science requirement.

+ **SCI 1** ISSUES and ADVENTURES in SCIENCE

3 crs. 3 hrs.

The most recent and important discoveries in the biological and physical sciences are presented, observed, discussed, and experimented with, to acquaint students with the world around them. Brain research, studies of aging, disease, fertility, immunity, and the origin of life are explored. Human studies are emphasized in relation to man’s place in the universe, his explorations into himself, and his technological achievements.  
Prerequisite: Enrollment in the “College Now” Program

+ Basic Course
Richard Adelson, Associate Professor
Susan Aranoff, Assistant Professor
Renato Bellu, Assistant Professor
Joseph H. Berliner, Associate Professor
George Buchman, Assistant Professor
John Dydo, Associate Professor
Jay Gelbein, Associate Professor
Leonard Goldman, Senior College Laboratory Technician
Gene Goldstein, Associate Professor
Joseph Guardino, Assistant Professor
Morton Hirsch, Associate Professor
Nat Hirschfeld, Assistant Professor
Joseph Karasyk, Associate Professor
Melvin L. Levine, Professor and Chairman
Consolacion Magdangal, Assistant Professor
Edward Martin, Associate Professor
Fredric Mayerson, Assistant Professor
Irene Mittlemark, Assistant Professor
Andre Montero, Associate Professor
Jacqueline Scerbinski, Lecturer
David Singer, Assistant Professor
Sheila Teitelbaum, Senior College Laboratory Technician
Richard Vagge, Associate Professor
Gerald van de Vorst, Assistant Professor
Walter Weintraub, Professor
Edward Wiener, Professor
David Zwibel, Assistant Professor
ACCOUNTING

**ACC 11  FUNDAMENTALS of ACCOUNTING I**

This first half of a year's course introduces the accounting cycle and the fundamental concepts and techniques of accounting for business transactions. Areas of concentration include: business records, journals and ledgers, theory of debit and credit, analysis of business transactions, adjusting and closing entries, worksheets, preparation of financial statements, payroll preparation, taxation, the computer and accounting. *Supplemental Laboratory work is required.*

**ACC 12  FUNDAMENTALS of ACCOUNTING II**

The second semester of this two-semester course covers partnership, corporation and manufacturing financial transactions (including accounting for long-term debt), financial statement analysis and introduction to cost accounting with emphasis on the use of accounting data and analysis for managerial decision-making. *Supplemental Laboratory work is required.*

Prerequisite: ACC 11
Corequisite: ACC 41—for Accounting Majors only

**ACC 21  INTERMEDIATE ACCOUNTING I**

The worksheet, a fundamental tool of the accountant, is reviewed and underlying accounting principles, concepts and conventions, are applied to the corporate organization. Areas of course concentration include: inventory valuation, analysis of working capital, source and application of working capital funds, installment sales, consignments, and other relevant material. Emphasis is placed on pronouncements of the American Institute of Certified Public Accountants (AICPA). Accounting Principles Board (APB), the new Financial Accounting Standards Board (FASB), and their impact on business management, decision-making and financial statement reporting.

Prerequisite: ACC 12

**ACC 22  INTERMEDIATE ACCOUNTING II**

Course concentrates on tangible, intangible, fixed and other non-current assets, home and branch office accounting. As an integral part of the course, discussions and illustrations of the impact of recent accounting developments on financial statements and business management are continued. Accounting Principles Board and Financial Accounting Standards Board pronouncements are given intensive study.

Prerequisite: ACC 21

**ACC 31  COST ACCOUNTING I**

Detailed study of the techniques and methods of cost accounting. Areas of concentration include: cost concepts and analysis of costs; material control; accounting for labor; nature and application of manufacturing overhead (including factory overhead variance analysis); job order cost systems; process cost systems; direct costing.

Prerequisite: ACC 12

**ACC 32  COST ACCOUNTING II**

The use of cost accounting principles and practices in managerial planning and control with emphasis on the decision-making role of management. The course includes: study of product pricing and production efficiency with the aim of maximizing profits; standard cost systems (including analysis of variances using the 2 variance, 3 variance and 4 variance methods); joint products and by-products costs; profit-volume analysis; capital budgeting, and break-even analysis.

Prerequisite: ACC 31

+ Basic Course
+ ACC 41  FEDERAL TAXATION  
4 crs. 4 hrs.
Students study the current Federal income tax law regulations including: 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 actual governmental forms is required.  
Corequisite: ACC 12—for Accounting Majors only

ACC 42  ADVANCED FEDERAL TAXATION  
Fall  
3 crs. 3 hrs.
Primarily concerned with the federal taxation of business (individual proprietors, partnerships and corporations), this course is based on the fundamentals of federal taxation mastered in ACC 41 Federal Taxation. In addition, the areas of gift and estate taxation are surveyed.  
Prerequisites: ACC 12 and 41

ACC 43  NEW YORK TAXES  
Spring  
3 crs. 3 hrs.
The prevailing New York State and New York City income and business tax laws and regulations are studied. Preparation of individual and business tax returns is required.  
Required for “Taxation Concentration” A.A.S. Accounting Degree Students.  
Highly recommended for ALL A.A.S. Accounting Degree Students.  
Prerequisite: ACC 41

+ ACC 50  FINANCIAL ASPECTS of DECISION MAKING  
4 crs. 4 hrs.
This course integrates a financial analysis perspective with the business decision-making process. The double-entry system, Recording of Business transactions and the Interpretation of Financial Statements represents the financial segment, Cash Management, Federal Income Taxes and Measures of Profitability reflect the Management role of Accounting.  
Not open to Accounting, Business Administration, Data Processing, Fashion Merchandising, Marketing Management or Personnel and Labor Relations Majors.  
Not transferable to any four year college.

ACC 81  INDEPENDENT STUDY  
1–3 crs. 1–3 hrs.
Independent study of Accounting is developed individually between student and faculty member and must be approved by the Department.

ACC 82  
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
BANKING

+ BKG 14 MONEY AND BANKING*
(Also listed as ECO 14)

3 crs. 3 hrs.

The nature and functions of money, monetary systems and monetary standards are studied. Detailed analysis of the organization, policies, and operation of our public and private financial institutions, commercial banking, investment banking, central banking, and other financial intermediaries is included. The relationships of money and banking to economic activity is also considered.

Prerequisite: ECO 12

*This course DOES NOT meet the Group III requirement for students majoring in Accounting, Business Administration, Fashion Merchandising, Marketing Management or Personnel Management and Labor Relations.

+ Basic Course
BUSINESS ADMINISTRATION

+ BA 11 BUSINESS MANAGEMENT and ORGANIZATION 3 crs. 3 hrs.
The business firm, in terms of its environment and functional requirements is studied. Problems of planning and the structure of decision-making for policy and action are analyzed. The strategy and behavior of organizations: flow of authority; delegation and communication are reviewed. The focus is on managerial functions, and the leadership role in an integrated framework of principles and concepts.

+ BA 12 BUSINESS LAW I 3 crs. 3 hrs.
The American legal system: the problems and consideration of the essential principles of the laws of business contracts and their relationship to typical business situations. Appropriate New York State legal cases and recent decisions are studied.

BA 13 BUSINESS LAW II 3 crs. 3 hrs.
The legal principles of agency, partnership and corporations are considered. Legal problems rising out of the corporate and non-corporate forms of organizations as well as consideration of the rights, duties and obligations of employment and other special contractual and business relationships are analyzed.
Prerequisite: BA 12

BA 14 PRINCIPLES of MARKETING 3 crs. 3 hrs.
To enable consideration of marketing strategy from a customer's point of view, the course deals with principles and practices of the distribution process. Study areas include: product pricing, promotion, distribution channels, market research, governmental regulations.
Prerequisite: BA 11

BA 31 PERSONNEL ADMINISTRATION 3 crs. 3 hrs.
Examination of methods and procedures used by business management in the selection, development, maintenance, and utilization of an efficient work force is conducted. Areas of study include: personal relations, job evaluation, wage and salary administration, sources of labor supply, interviewing and counseling, training, testing, transfers, promotions, and union relations.
Prerequisite: BA 11

+ BA 33 BUSINESS COMMUNICATIONS 3 crs. 3 hrs.
Detailed attention is given to the principles of writing effective business communications, including letters, reports, memoranda, directives. Emphasis is on organization, language, personal relations and the application of business psychology in writing.

BA 35 SALES MANAGEMENT 3 crs. 3 hrs.
The field of sales management will be analyzed as a major area of marketing. Focus is on the major responsibilities of a sales manager in managing a sales force and/or in the maintenance of relationships with independent middlemen. The functions of planning and administering the company's personnel, selling operations, as well as other marketing campaigns, are considered. Participation in, and sometimes joint responsibility for making decisions on the product line, pricing, physical distribution, marketing channels, promotion, and brand management are discussed. Examination of the sales managers job, duties, and responsibilities, are made with an application of the management approach.
Prerequisite: MM 33

BA 52 ADVERTISING: THEORY and PRACTICE 3 crs. 3 hrs.
Advertising, its methods and its role in business is studied. Students are introduced to the areas of media, copy, research, layout, production, direct mail, and campaign strategy.
Prerequisite: BA 14

+ Basic Course
BA 60  INTRODUCTION to COMPUTER CONCEPTS  3 crs. 4 hrs.
This course develops understanding and appreciation of commercial data processing. Through use of major programming languages, practical experience is gained in many areas, including accounting, general business, economics, the humanities and science. NOT open to Data Processing Majors nor to students who completed DP 21 or 22.

BA 61  MICROCOMPUTER APPLICATIONS in BUSINESS  3 crs. 3 hrs.
Microcomputers have changed the way managers evaluate data, make decisions, and communicate. This lab-oriented course extends the business student's knowledge of the "Big Four" business applications: Electronic Spreadsheets; Data Management; Word Processing; Graphics. Concentrating on actual business software, students learn conceptual and operational skills necessary to successfully compete in the modern microcomputer business environment.
Prerequisite: BA 60 or equivalent

BA 70  BUSINESS of PRINT MEDIA  3 crs. 3 hrs.
General principles and practices of the business management function in the newspaper industry are identified and analyzed with specific emphasis on the importance of planning, organizing, supervising, directing, and controlling. Working definitions are developed within the context of prevailing theoretical models and practical applications for use in the business setting. Students will be provided necessary information to learn about and perform the publishing of a newspaper through an understanding of its operations, functions and services. Open only to Journalism and Print Media Majors who have NOT taken BA 11.

BA 81  INDEPENDENT STUDY  1–3 crs. 1–3 hrs.
Independent study of Business Administration is developed individually between student and faculty member and must be approved by the Department.

BA 82  1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

BA 10  BUSINESS ADMINISTRATION: Introduction to Business  3 crs. 3 hrs.
An introduction to the dynamic world of the business environment. Students are introduced to the business organization, from the sole proprietor (entrepreneur) to the corporate entity. The four functions of management (planning, organizing, leading and controlling) and the four elements of the marketing mix (product, price, promotion and distribution) are explored. Practical applications of management and marketing skills in small business, as well as in large corporations, are studied. Additional topics covered include the profit motive as a key feature in the American free enterprise system, legal aspects of operating a business, and the role of computers in business.
Prerequisite: Enrollment in the "College Now" Program.

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+ Basic Course
ECONOMICS

+ ECO 12  FUNDAMENTALS of ECONOMICS*  3 crs. 3 hrs.
Study of the nature and methods of economics including: the economizing problem, American capitalism, national goals, and the basic principles of money and banking. Detailed analysis of supply and demand, the mechanics of prices in different market structures, national income and employment theory, monetary and fiscal policy is included. Problems of economic growth and stability are also considered.

+ ECO 14  MONEY and BANKING*  (also listed as BKG 14)  3 crs. 3 hrs.
The nature and functions of money, monetary systems and monetary standards are studied. Detailed analysis of the organization, policies, and operation of our public and private financial institutions, commercial banking, investment banking, central banking and other financial intermediaries is included. The relationships of money and banking to economic activity is also considered.
Prerequisite: ECO 12
*ECO 12 and ECO 14 DO NOT meet the Group III requirements for students majoring in Accounting, Business Administration, Fashion Merchandising, Marketing Management or Personnel Management and Labor Relations.

+ ECO 24  CONSUMER ECONOMICS  2 crs. 2 hrs.
The process of consumer choice is examined. Topics studied include marginal utility, budget restraint, supply and demand, consumer patterns of buying behavior, money, advertising and consumer protection.

ECO 82  1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
+ **INS 31 PRINCIPLES and PRACTICE of INSURANCE I**  
*Fall*  
4 crs. 4 hrs.  
Insurance contracts for fire, automobile, casualty, fidelity and surety, and burglary are analyzed as students survey insurance laws, risks insured against exclusions and endorsements, types of carriers, claims adjustments and allied subjects.

+ **INS 32 PRINCIPLES and PRACTICE of INSURANCE II**  
*Spring*  
4 crs. 4 hrs.  
Various insurance contracts including: inland and ocean marine, public liability and negligence, workers’ compensation, accident and health, and miscellaneous lines of coverage are studied. The duties and responsibilities of agents and brokers are analyzed.  
*Prerequisite:* INS 31

**INS 35 RISK and INSURANCE MANAGEMENT**  
3 crs. 3 hrs.  
Risk and insurance management concepts—objectives of risk management—decision making process—methods of risk control and financing—types of insurers—insurance marketing, underwriting and claims administration, are taught.

**INS 37 LIFE, ACCIDENT and HEALTH INSURANCE**  
3 crs. 3 hrs.  
Various types of insurance (life, accident, health), and related area concepts and techniques as well as a variety of plans, cost factors, and types of companies are studied. Governmental insurance and regulations are examined. The way to program coverages and how to enter the profession at all levels (insurer, agent, broker, consultant, corporate) are considered.

**INS 81 INDEPENDENT STUDY**  
1–3 crs. 1–3 hrs.  
Independent study of Insurance is developed individually between student and faculty member and must be approved by the Department.

**INS 82**  
1–3 crs. 1–3 hrs.  
This course is of topical and pilot nature and is designed to meet the immediate needs and interests of various students populations. It is offered for a maximum of two semesters.
MARKETING MANAGEMENT

+ MM 31 ELEMENTS of MARKETING MANAGEMENT  
3 crs. 3 hrs.

Students are introduced to management techniques considered essential to the planning, organization, control and operation of retail establishments. The fundamentals underlying modern merchandising practices, recent developments in trading area analysis, shopping centers, consumer relations, warehousing, transportation, stock control, and data processing are examined. Retail case studies and field trips are included.

+ MM 33 SALESMAHSHIP  
3 crs. 3 hrs.

Principles of selling based on modern marketing concepts are taught. Consumer needs and desires combined with company objectives; contributions of the behavioral sciences to the study of consumer behavior and buying patterns; organization and control of the wholesale, industrial, and retail sales force are considered.

MM 34 FASHION BUYING and MERCHANDISING  
3 crs. 3 hrs.

The course includes basic merchandising principles for stores or potential retailers to understand the principles of good merchandise planning and decision making. Students acquire the ability to adjust to continually changing conditions in the retailing environment. Topics include; stock planning, market evaluation, fashion forecasting and pricing.

Prerequisite: MM 31

MM 35 MERCHANDISING INFORMATION ANALYSIS  
4 crs. 4 hrs.

Fashion fabrics and non-textile merchandise information, including their identification, characteristics, merits, limitations and care are considered in this lecture and laboratory course. Detailed study is made of natural and man-made fibers, types of yarns, construction, finishes, coloring of fabrics, and sales. A survey of leather, rubber, plastic, paint, papers, furs, jewelry, cosmetics, soaps, synthetic detergents, and other non-textile products is included.

Prerequisite: MM 31

MM 36 VISUAL MERCHANDISE and DISPLAY  
3 crs. 4 hrs.

Students are given basic understanding of how visual merchandising communicates merchandise information to customers and encourages people to buy. The purpose, value, and methods of display as a part of sales promotion and how it fits into the total marketing picture is explained. Included is the designing and building of interior window and point-of-purchase merchandise displays.

Prerequisite: MM 31

MM 38 INTRODUCTION to FASHION MARKETING  
3 crs. 3 hrs.

An introduction to the fashion industry. Students develop an understanding of many different types of career opportunities in the world of fashion; economic and social factors which influenced its history and growth; producers, retailers, and specialized agencies involved in the production and distribution of fashion commodities—their characteristics, activities and relationships; consumer power and the marketing concept as it affects products and practices in the fashion business.
MM 39  FASHION SALES PROMOTION 3 crs. 3 hrs.
Course topics include: fashion activities that promote and stimulate the sale of fashion goods; practical experience in the preparation of special events; sales promotions and publicity similar to those initiated by apparel manufacturers, wholesalers and retailers; criteria to analyze and evaluate these activities.
Prerequisite: MM 38

+ MM 51  DATA PROCESSING for RETAILERS 3 crs. 3 hrs.
Electronic data processing as an aid to retail management is studied. The course includes recording of data at point-of-sale, back-office data recording, inventory control, automatic ordering of staples, perpetual open-to-buy, fashion forecasting, merchandising by classification, sales trends, warehousing, accounts receivable and payable.
For Fashion Merchandising and Marketing Management Majors only.

MM 81  INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of Marketing Management is developed individually between student and faculty member and must be approved by the Department.

MM 82 1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

MM 92  FIELD EXPERIENCE-MARKETING MANAGEMENT 3 crs. 9 hrs.
Eight hours per week of supervised field experience in marketing management, plus one hour a week devoted to seminar discussion of relevant field experience, is required in this course.
For Fashion Merchandising and Marketing Management seniors only.

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MARKETING MANAGEMENT
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+ Basic Course
PERSONNEL MANAGEMENT and LABOR RELATIONS

PLM 20  INDUSTRIAL and ORGANIZATIONAL PSYCHOLOGY
(also listed as PSY 52)

Course draws upon psychological and sociological principles relevant to the work environment of an organization. Concepts such as motivation, leadership, attitudes, testing and test discrimination, moral and organization climate, mental health and growth in the work world, and the problems surrounding selection decisions are examined. Students experience some aspects of applied research during the term.
Prerequisite: PSY 11

PLM 21  LABOR ECONOMICS

3 hrs.

Human choices and their effect on labor markets are examined. The major topics studied include: wages, jobs, employment, and their compatibility with other economic goals such as price stability, growth in productivity and industrial peace.
Pre or Corequisites: BA 31, ECO 12

PLM 22  LABOR LAW and COLLECTIVE BARGAINING

3 hrs.

The nature of the development and other essential aspects of collective bargaining. Major trends in labor legislation and their effect on the functioning of labor negotiations are studied. The practice of collective bargaining in the United States, with examination of the negotiation process, is an important part of the course.
Pre or Corequisites: BA 12, BA 31

PLM 23  PERSONNEL: SELECTION, DEVELOPMENT and EVALUATION

3 hrs.

Focus of this course is on the design, implementation and evaluation of personnel programs in the procurement, development and utilization of human resources. Emphasis is on job analysis, job requirements, recruitment, selection, training and compensation.
Pre or Corequisites: BA 31, PLM 20

PLM 92  FIELD EXPERIENCE: PERSONNEL and LABOR MANAGEMENT

3 hrs.

Supervised field experience in personnel and labor management environments, plus weekly classroom discussions of relevant field experiences.
Pre or Corequisites: BA 31; PLM 20, 21, 22, 23
For Personal Management and Labor Relations seniors only.

A.A.S. Degree

PERSONNEL MANAGEMENT

and

LABOR RELATIONS

Requirements—Page 123
SUPERMARKET MANAGEMENT
and FOOD MARKETING

A concentration of Marketing Management
(See Department representatives for degree requirements)

+ FM 11 INTRODUCTION to FOOD MARKETING 3 crs. 3 hrs.
An overview of the marketing process with special application to the food industry. Students learn that marketing services and utilities add value to food products as they proceed along the channels of distribution from farm and ranch, to processors, to middlemen, to consumers. Added values, costs and anticipated profits, supply and demand factors become an integral part of the pricing mechanism. Introduced to the marketing functions performed by farmers, ranchers, processors and middlemen, students become aware that the entire food industry is geared to servicing the needs of the consumer.

+ FM 12 ELEMENTS of FOOD RETAILING 3 crs. 3 hrs.
This course embodies the elements of retailing which helped the supermarket achieve its present dominance of the retail food industry. The supermarket concept is applied to all product categories and all types of food stores, including the convenience store, the discount store and the superette. Ways to obtain buying advantages; balance pricing to achieve a desired margin; increase sales volume and turnover; stock and display goods, and how to reorder are included.

+ FM 13 SUPERMARKET OPERATION 3 crs. 3 hrs.
Students learn about the operation of a supermarket by its major departments: meats, dairy, baked goods, frozen foods, produce, grocery, non-foods and the front end. Concepts presented in "Elements of Food Retailing" are applied to individual departments and product classes. Future department managers, acquire necessary "know-how" needed to profitably operate each department.  
Prerequisite: FM 12

+ FM 14 SUPERMARKET MANAGEMENT 3 crs. 3 hrs.
A persistent challenge, confronting the supermarket operator today, is the ever narrowing profit margin. In this course, future store managers: analyze financial and operations reports; answer questions on why the reports are needed, what the reports include, how the ratio is computed, how to interpret and use the data; analyze data; recommend corrective action, make short- and long-term plans; learn to use information as a management tool; solve related case problems. Satisfactory completion of this course is usually required for promotion to store and field managerial positions.

+ FM 15 SUPERMARKET PERSONNEL PERFORMANCE MANAGEMENT 3 crs. 3 hrs.
Designed to prepare managers to improve personnel performance among new and old employees, the course objectives are: improve employee productivity as an integral part of the management role, institute procedural controls for minimum performance standards, maintain an effective customer relations program and store image, build employee morale and productivity to reduce turnover and increase sales and profits.

+ FM 16 SUPERMARKET SALES PRODUCTION 3 crs. 3 hrs.
The object of this course is to teach that the responsibility of attracting and holding customers is on all employees: store president, advertising manager, store manager, and checkout clerks. Included are: the determination of the how, when, where, why and what, for urban store sales promotions; how to attract customers with effective advertising, sales promotion, displays, public relations and services; planning, implementing, and evaluating sales promotions.

+ Basic Course
Isidor Aptebach, Assistant Professor
Bonne August, Assistant Professor
Marcia Babbitt, Lecturer
Melvyn Baron, Lecturer
Alfred Borrello, Professor
Jocelyn A. Camp, Professor
Dominick Caruso, Professor
Isabella Caruso, Assistant Professor
Nora Chase, Assistant Professor
Rosalind M. Depas, Professor
Jeptha A. Evans, Assistant Professor
Clara J. Freeman, Lecturer
Morton L. Fuhr, Professor;
   Director, English Skills Center
Linda Holman, Assistant Professor
Despoina Ikaris, Professor
Louise Jaffe, Associate Professor
David M. Keller, Professor
Ernece Kelly, Assistant Professor
Milton A. Levy, Assistant Professor
John B. Manbeck, Associate Professor
Inez A. Martinez, Associate Professor
Oscar Miller, Assistant Professor
Howard Nimchinsky, Professor
G. Curtis Olsen, Associate Professor
Susan O’Malley, Associate Professor
John R. Price, Associate Professor
Eva H. Richter, Assistant Professor
Lewis M. Schwartz, Professor
Denis Sivak, Assistant Professor
Eleanor R. Spitzer, Assistant Professor
Jack H. Taub, Lecturer
Robert R. Viscount, Assistant Professor
Ronald E. Walcott, Lecturer
Stephen S. Weidenborner, Professor and Chairman
Jack S. Wolkenfeld, Professor
Zev Zahavy, Professor
FRESHMAN ENGLISH PROGRAM

The City University of New York mandates that students pass the CUNY Reading Assessment Test and the CUNY Writing Assessment Test in order to advance from the sophomore to the junior year.

Kingsborough's approach to remediation emphasizes a full grounding in the reading, writing, and study skills that students need to cope successfully with their academic and career training programs. Such skills, appropriately taught at various levels, also improve student potential for passing the mandatory CUNY Tests. Students may fulfill their remediation requirements by passing the remedial/remedial courses required of them through initial placement. CUNY retests are offered as supplementary components of ENG 04, ENG C1, and ENG C2 and, in some circumstances, are used to help determine student progress.

READING

In order to transfer from KCC into the junior year of a CUNY senior college, KCC students are required to meet the passing score on the CUNY Reading Assessment Test. KCC offers courses in remedial reading, ENG 03 and ENG 04, to help students overcome reading deficiencies and to prepare them for college-level reading assignments.

The remedial reading requirement is deferred for one semester for students who, on entrance to the college score slightly below the CUNY cut-off score. At the end of one semester, these students are retested. If they still have not achieved the passing score, they are required to take ENG 04. Students whose reading requirement is officially deferred may take the introductory English writing courses (ENG C1, ENG C2, or ENG 12). However, students will not be permitted to take ENG 22 until they have passed the CUNY Reading Test or ENG 04.

Students placed in remedial reading may complete their freshman English requirement and graduate from the College after they pass ENG 04. The concentrated instruction and practice in the full range of reading skills offered by this course should also lead to improved performance on the CUNY Reading Assessment Test.

WRITING

Students are placed in the introductory writing courses on the basis of the score achieved on the CUNY Writing Assessment Test. If the controlling score is 4, the proper English course is ENG 12. If the controlling score is 3, the required course is ENG C2 (the compensatory equivalent of ENG 12). The required course which follows both ENG 12 and ENG C2 is ENG 22. If the controlling score is 2 or 1, the required course is ENG C1 (a non-credit writing course). Students scoring 1 may be placed in ENG CR, a developmental reading and writing skills course with an individualized approach.

Only those students who, on entrance to the College, score 5 or 6 on the CUNY Writing Assessment Test and pass the CUNY Reading Assessment Test at the Kingsborough cut-off score, are exempt from ENG 12. They need to take only ENG 22 to complete the Freshman English requirement.

Kingsborough's Freshman English requirement is either 4 or 8 credits. Students who are exempt from ENG 12 take ENG 22 for 4 credits. All other students need to take 8 credits of required English courses.

Prerequisite: ENG 12, or ENG C2 for all English courses numbered 30–78.

Corequisite: ENG 22 for ENG 49.
ENGLISH

☐ ENG CR DEVELOPMENTAL LANGUAGE SKILLS
0 crs. 6 hrs.
(6 equated crs.)
A preliminary course in reading, writing, and academic survival skills for students whose scores fall substantially below CUNY passing grades. Emphasis is on individual assessment and development of skills in a workshop setting, with additional support services. Small group sessions are required. For students who have scored one (1) on the CUNY Writing Assessment Test. Corequisite: HUM 11 see page 144

☐ ENG W CORRECTIVE WRITING SKILLS*
0 crs. 2 hrs.
(2 equated crs.)
An elective course for students who scored 3–3 on the CUNY Writing Assessment Test. Offering intensive instruction in grammar, syntax, and usage, this course is designed to help students eliminate persistent errors in composition in order to enable them to pass the CUNY Writing Assessment Test. ENG W may be repeated once, but may not be taken more than once in a 12-week semester. Students who pass ENG W before taking their first Freshman English course will be able to enroll in ENG 12, provided their CUNY Reading Test scores are satisfactory. Students who take ENG W along with ENG C2 and pass both courses will go on to take ENG 22.

☐ ENG C2 FRESHMAN ENGLISH SKILLS*
4 crs. 5 hrs.
(1 equated cr.)
This reading and writing skills introductory course emphasizes organization of paragraphs and essays and develops understanding of how language functions in communication of facts, ideas, and attitudes. One hour per week is devoted to eliminating problems with basic elements of writing. Required of students who have scored 3–3 on the CUNY Writing Assessment Test. Students who are required to take ENG 03 or ENG 04 may not take ENG C2 until the reading requirement has been met or officially deferred.

☐ ENG 03 BASIC READING SKILLS*
0 crs. 3 hrs.
(3 equated crs.)
Designed to help students improve skills in reading through guided instruction and intensive practice in basic vocabulary, comprehension, and study skills. Required of students who fail to attain the equivalent of the 8.5 grade level on the CUNY Reading Assessment Test.

☐ ENG 04 ANALYTICAL READING*
0 crs. 4 hrs.
(4 equated crs.)
To help students improve reading proficiency through guided instruction and intensive practice in basic and specialized vocabulary, comprehension, and study skills development. Students are required to read and analyze specially selected interdisciplinary materials, both in and out of class, to help them prepare for the required readings in their regular academic courses. Required of students who fail to attain the CUNY mandated passing score on the CUNY Reading Assessment Test but have either scored above the ENG 03 level or have passed ENG 03. Students who pass ENG 04 are permitted to complete the Freshman English and the CUNY Writing Assessment test requirement (including ENG 22).

*One hour a week is devoted to individualized and small group instruction in the appropriate Skills Center.
ENG 12  FRESHMAN ENGLISH

An introductory course in reading and writing skills emphasizing organization in paragraphs and essays and an understanding of how language functions in communication of facts, ideas, and attitudes. After passing ENG 12 students must take ENG 22.

Required of students who scored 4-4 on the CUNY Writing Assessment Test, either on entrance or at the end of ENG C1. Students who are required to take ENG 03 or ENG 04 may not take ENG 12 until the requirement has been met or officially deferred. Students who pass ENG 04 are permitted to complete the freshman English and the CUNY Writing Assessment Test requirement, including ENG 22. Students who on entrance, score at least 5-5 on the CUNY Writing Assessment Test and pass the CUNY Reading Test, are not required to take ENG 12 and need only ENG 22 to fulfill the KCC Freshman English requirement.

ENG 15 through 17

Designed for students in the Bilingual Studies Program. See page 183 for course descriptions.

ENG 22  VARIETIES of EXPRESSION

An intensive study of the various types of writing that students encounter in college. ENG 22 is a reading and writing skills course, using readings drawn from various subject areas as the basis for writing assignments and class discussions. These readings are organized around a unifying theme. Writing assignments during the semester build to increasingly greater length and complexity, and include a research paper.

Prerequisites: ENG C2 or ENG 12, and a passing grade on the CUNY Writing Assessment Test and either on the CUNY Reading Test (KCC cut-off), or in ENG 04. Students who are exempt from ENG 12 on admission to the College may take ENG 22.

ENG 30  INTRODUCTION to LITERATURE

3 crs. 3 hrs.

Designed for students who wish a general introduction to literature. Literary genres in their cultural context, literary terms and major movements in literature.

Prerequisite: ENG 12 or ENG C2

ENG 31  CLASSICAL and BIBLICAL LITERATURE

3 crs. 3 hrs.

Readings in classic Western literature, including the Bible, Homer, Greek dramatists, Plato, Aristotle and Virgil. Appropriate writing assignments.

Prerequisite: ENG 12 or ENG C2

ENG 32  WORLD LITERATURE

3 crs. 3 hrs.

Readings, primarily from the time of Dante to the 19th century. Writers include Cervantes, Voltaire, Goethe, Flaubert, Balzac, and Zola. Appropriate writing assignments.

Prerequisite: ENG 12 or ENG C2

ENG 35  MODERN CONTINENTAL LITERATURE

3 crs. 3 hrs.

Study of significant European literary works from the 19th century to the present. Course deals with authors such as Ibsen, Chekhov, Kafka, Hesse, Gide, and Camus. Appropriate writing assignments.

Prerequisite: ENG 12 or ENG C2

Basic Course
+ ENG 40 SHORT FICTION—THE SHORT STORY and NOVELLETE 3 crs. 3 hrs.
Examples of American and British short fiction is contrasted with other selected works, including such writers as Poe, Gogol, Hemingway, Salinger, Ellison and Oates. Comparative analysis is made of short and long narrative fiction, theme, and language. Focus is on the unique position of the short story in literature.
Prerequisite: ENG 12 or ENG C2

+ ENG 41 THE NOVEL 3 crs. 3 hrs.
Introduction to the novel, including analysis of its components and themes, and study of its historical development. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 42 POETRY 3 crs. 3 hrs.
Introduction to poetry including the different styles, forms, and themes, with attention given to their purpose and effect. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 43 DRAMA 3 crs. 3 hrs.
An analysis of dramatic structure and a study of plays representing major dramatic styles. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 44 THE TRAGIC VISION 3 crs. 3 hrs.
Tragic literature, from ancient times until the present day is studied in an attempt to understand the patterns and changing concepts in various literary genres. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 45 THE COMIC SPIRIT 3 crs. 3 hrs.
Comedy in prose and verse, its meaning, uses, and techniques is investigated. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 46 SATIRE 3 crs. 3 hrs.
A study of satire—the art of ridiculing human weaknesses as exhibited in their social and political activities. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

ENG 49 SCIENCE FICTION 3 crs. 3 hrs.
A study of significant themes in some contemporary works in this genre: An attempt is made to discover non-traditional meanings of reality while at the same time relating science fiction to the literary tradition: The meanings of such terms as "universal" and "humanistic" are examined and a special kind of reader response elicited from science fiction is analyzed.
Prerequisite: ENG 12 or ENG C2

+ Basic Course
ENG 54  ADVANCED COMPOSITION 3 crs. 3 hrs.
This advanced course offers students the opportunity to achieve the precision, sophistication, and logical rigor associated with sound and mature written expression. Analysis and writing of extended essays based upon traditional, contemporary, and experimental rhetorical modes, is emphasized.
Prerequisite: ENG 22
Course does NOT satisfy Group II “Literature” requirement.

ENG 56  CREATIVE WRITING: FICTION 3 crs. 3 hrs.
Instruction and practice in the forms and types of fiction. Analysis of peer writing on a workshop basis with a view toward assisting students develop mastery of the form of fiction that is best suited for them.
Prerequisite: ENG 12 or ENG C2
Course does NOT satisfy Group II “Literature” requirement.

ENG 57  CREATIVE WRITING: POETRY 3 crs. 3 hrs.
Instruction and practice in writing traditional and new forms of poetry
Prerequisite: ENG 12 or ENG C2
Course does NOT satisfy Group II “Literature requirement.

ENG 61  SEMINAR: THE HISTORY of LITERARY THEMES 3 crs. 3 hrs.
An intensive study of how significant ideas and themes are transmitted in literature. Each semester one major theme is chosen for examination. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

ENG 63  SHAKESPEARE 3 crs. 3 hrs.
A survey of Shakespeare’s work, emphasizing his plays, and including some consideration of his non-dramatic verse. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

ENG 65  LITERATURE and FILM 3 crs. 3 hrs.
Study of novels, plays, screenplays and the films that are made from them. Emphasis is on the different aesthetic problems facing the writer and the filmmaker. Time is scheduled for film viewing. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

ENG 67  WOMEN in LITERATURE 3 crs. 3 hrs.
The treatment of women in various genres and eras. Consideration is given to women as writers, using sociological, psychological, mythic, and formal literary critical methods.
Prerequisite: ENG 12 or ENG C2

ENG 68  GOTHIC and HORROR FICTION 3 crs. 3 hrs.
This study of major works of horror fiction, includes short stories, novels, and some narrative poetry, dealing primarily with the evocation of horror. Attempts are made to trace a narrative pattern common to much horror fiction. Analysis of gothic trappings and such psychosexual creatures as vampires and werewolves, as they appear in literature is included. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ Basic Course
+ ENG 71  ENGLISH LITERATURE: MEDIEVAL to NEO-CLASSICAL  3 hrs. 3 crs.
Readings in selected major works of English literature from Chaucer to Swift. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 72  ENGLISH LITERATURE: ROMANTIC to EDWARDIAN  3 hrs. 3 crs.
A study of significant works from the time of Swift up to World War I. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 73  AMERICAN LITERATURE: PURITANISM to ROMANTICISM  3 hrs. 3 crs.
Readings in selected major works of American literature from colonial writers to Whitman. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 74  AMERICAN LITERATURE: THE AGE of REALISM  3 hrs. 3 crs.
Readings in selected major works of American literature from the time of Mark Twain up to World War I. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 75  MODERN BRITISH and AMERICAN LITERATURE  3 hrs. 3 crs.
A study of English and American poetry, fiction, and drama from World War I to the present. Includes Yeats, T.S. Eliot, Lawrence, Faulkner, Ellison. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 77  THE ROOTS of BLACK LITERATURE  3 hrs. 3 crs.
Analysis of black literature in the United States and study of its history and development to 1950. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

+ ENG 78  CONTEMPORARY BLACK LITERATURE  3 hrs. 3 crs.
Analysis of black literature in the United States and study of its development from 1950 to the present. Appropriate writing assignments.
Prerequisite: ENG 12 or ENG C2

ENG 81  INDEPENDENT STUDY  1-3 hrs. 1-3 crs.
Independent study of English is developed individually between student and faculty member and must be approved by the Department.

ENG 82  1-3 hrs. 1-3 crs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ Basic Course
English Courses open only to students who are non-native speakers of English. Students are placed into the following English as a Second Language (ESL) Courses on the basis of their performance on English skills proficiency tests.

☐ ESL 03 BASIC READING SKILLS for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE* 0 hrs. 3 hrs. (3 equated hrs.)

A course designed to help speakers of other languages improve their reading skills through guided instruction and intensive practice in basic vocabulary, comprehension, and study skills. ESL 03 is usually offered together with ESL 08.

☐ ESL 04 ANALYTICAL READING for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE* 0 hrs. 4 hrs. (4 equated hrs.)

Designed to help speakers of other languages improve reading proficiency through guided instruction and intensive practice in basic and specialized vocabulary, comprehension, and study skills development. To help prepare them for the required readings in their regular academic courses, students are required to read and analyze specially selected interdisciplinary materials, both in and out of class.

Required of students who fail to attain the CUNY mandated passing score on the CUNY Reading Assessment Test but have either scored above the ESL 03 level or have passed ESL 03.

☐ ESL 06 BEGINNING DEVELOPMENTAL ENGLISH LANGUAGE SKILLS for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE 0 hrs. 9 hrs. (9 equated hrs.)

Designed for students who have very limited English Language skills proficiency. The course focuses on all four language skills; listening, speaking, reading and writing. Appropriate teaching materials and ESL methodology are used in intensive units of study.

☐ ESL 07 BASIC LANGUAGE SKILLS for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE 0 hrs. 10 hrs. (10 equated hrs.)

A one-semester course for non-native English speakers who demonstrate, on a battery of diagnostic tests, that they are not fluent in the use of the language. The course consists of various activities designed to improve English language communication skills, emphasizing correctness in structure, grammar, and vocabulary. Small group activities reinforce the skills introduced in the classroom and allow intensive, individualized practice under supervision.

☐ ESL 08 READING and WRITING SKILLS IMPROVEMENT for STUDENTS LEARNING ENGLISH as a SECOND LANGUAGE 0 hrs. 6 hrs. (6 equated hrs.)

A one-semester course for non-native English speakers who demonstrate on a battery of diagnostic tests that they are not fluent readers or writers of the language. The course consists of various activities designed to improve those English language skills, emphasizing correctness in structure, grammar, and vocabulary. Small group activities reinforce the skills being introduced in the classroom and allow intensive, individualized practice under supervision.

☐ ESL C1 BASIC WRITING SKILLS* 0 hrs. 5 hrs. (5 equated hrs.)

An introductory course in writing skills which deals with the basic elements of sentences, paragraphs, and essays. The course also continues the development and refinement of college-level reading skills.

Required of students who have scored below 3 on the CUNY Writing Assessment Test, irrespective of score on the CUNY Reading Test.

*Studies are supplemented each week by required English Skills Center instruction.

☐ Remedial Course
English Courses open only to students in the Bilingual Studies Program. Students are placed into the following English as a Second Language (ESL) Courses on the basis of their performance on a series of English skills proficiency tests.

- **ESL 15** ENGLISH I for STUDENTS whose NATIVE LANGUAGE is SPANISH  
  2 crs. 12 hrs.  
  (10 equated crs.)  
  Intensive work on the basic structures and grammar of English with development of elementary reading and writing skills. Small group sessions are required.

- **ESL 16** ENGLISH II for STUDENTS whose NATIVE LANGUAGE is SPANISH  
  2 crs. 10 hrs.  
  (8 equated crs.)  
  A course in intermediate English grammar and structure with increasing emphasis on reading and writing skills. Small group sessions are required.

- **ESL 17** ENGLISH III for STUDENTS whose NATIVE LANGUAGE is SPANISH  
  2 crs. 8 hrs.  
  (6 equated crs.)  
  Provides intensive practice in advanced reading and writing skills. Small group sessions are required.

- **SPE 23** SPEECH for FOREIGN-SPEAKING STUDENTS  
  3 crs. 3 hrs.  
  For course description see page 300

- **SPE 28** LANGUAGE and SPEECH for ESL STUDENTS  
  3 crs. 3 hrs.  
  For course description see page 300

**ENG BW: FOUNDATIONS for COLLEGE-LEVEL WRITING**  
0 crs. 4 hrs.  
Students develop their ability to write in a logical and coherent style. Emphasis is placed on how to prepare well organized material that says what you want it to say.  
Prerequisite: Enrollment in “College Now” Program

**ENG ER: FOUNDATIONS for COLLEGE-LEVEL READING**  
0 crs. 4 hrs.  
This course helps students increase their ability to read, to outline, to summarize and to draw conclusions from their readings.  
Prerequisite: Enrollment in “College Now” Program.
JOURNALISM

+ JRL 31  BASIC JOURNALISM  
(Formerly ENG 50)  
3 crs. 3 hrs.  
An introductory course dealing with the history of journalism, writing leads, rewrites, reporting hard news stories, covering beats, copy preparation, research, operation of a campus newspaper, special interests. May not be taken by students who completed ENG 50 and ENG 52.  
Prerequisite: ENG C2  
Pre or Corequisite: ENG 12

JRL 32  ADVANCED JOURNALISM  
(Formerly ENG 52)  
3 crs. 3 hrs.  
This advanced course deals with further study of newspaper techniques: advanced research, in-depth coverage, interviews, sidebars, profiles, basic reviews, writing styles, headlines and typefaces, copy reading and proofreading, editorials, freedom of the press, legalities.  
Prerequisite: JRL 31

JRL 41  COMMUNITY JOURNALISM  
3 crs. 3 hrs.  
A practical course designed to focus on matters of local concern: community standards, problems, economics, political influences and pressures. Students learn the techniques of covering local stories.  
Prerequisite: JRL 31

JRL 42  INVESTIGATIVE and INTERPRETIVE JOURNALISM  
3 crs. 3 hrs.  
The focus is on developing techniques of interviews, research and analysis. Students select an issue to investigate and then prepare one or more major stories researching and interpreting the information.  
Prerequisite: JRL 31

JRL 43  THE CRITICAL REVIEW  
3 crs. 3 hrs.  
Journalistic criticism of the arts including: literature, film, theater, architecture, art and related fields. Students read and analyze examples of criticism and write original critiques.  
Prerequisite: JRL 31

JRL 44  FEATURE and MAGAZINE WRITING  
3 crs. 3 hrs.  
The techniques of writing feature news stories that require understanding basic news writing combined with the ability to utilize the creative approach contained in human interest stories are taught.  
Prerequisite: JRL 31

+ Basic Course
JRL 71  PRINT MEDIA PRODUCTION 2 crs. 4 hrs.

A practical course on the techniques of producing a newspaper, literary magazine or yearbook. Students are required to participate in workshops in two or more departments and handle materials at several stages of the publication. At the end of the course, students will have portfolios for presentation to potential employers.

Prerequisite: JRL 31 or permission of the Department

JRL 81  INDEPENDENT STUDY 1–3 crs. 1–3 hrs.

Independent study of Journalism is developed individually between student and faculty member and must be approved by the Department.

JRL 92  JOURNALISM INTERNSHIP 3 crs. 9 hrs.

Students will be placed on community newspapers or in community-relations offices for practical work in the operations of a community publication.

Prerequisite: JRL 41
**FRENCH**

+ **FR 1  ELEMENTARY FRENCH I**
  4 crs. 4 hrs.
  The first semester of a one year course designed for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis is on correct pronunciation through intensive oral practice, use of the language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ **FR 2  ELEMENTARY FRENCH II**
  4 crs. 4 hrs.
  In this continuation of FR 1, students receive further development of their language skills, comprehension, speaking, reading and writing.  
  *Prerequisite: FR 1 or acceptable Language Placement Examination score*

+ **FR 3  INTERMEDIATE FRENCH I**
  3 crs. 3 hrs.
  Progressive development of language skills, based on the foundations established in elementary French. Grammar review is supplemented by readings of modern French literature.  
  *Prerequisite: FR 2 or acceptable Language Placement Examination score*

+ **FR 4  INTERMEDIATE FRENCH II**
  3 crs. 3 hrs.
  In this continuation of FR 3, advanced grammar, composition and reading of modern French authors are stressed.  
  *Prerequisite: FR 3 or acceptable Language Placement Examination score*

+ **FR 17  INTENSIVE REVIEW of FRENCH GRAMMAR**
  3 crs. 4 hrs.  
  (4 equated crs.)
  Designed for students who have had three or more years of high school French but have not studied the language for a substantial period of time.  
  *Prerequisite: Acceptable Language Placement Examination score*

+ **FR 18  READINGS in MODERN FRENCH**
  3 crs. 3 hrs.
  The emphasis in this course is on rapid reading, composition and discussion in French. Readings include contemporary short stories, essays, poetry, newspaper and magazine articles and reviews.  
  *Prerequisite: FR 4 or equivalent or acceptable Language Placement Examination.*

+ **FR 22  FRENCH CONVERSATION**
  3 crs. 3 hrs.
  Practice in conversational patterns and basic vocabulary leading to fluency in everyday situations. Open to all students.  
  *Prerequisite: FR 1 or acceptable Language Placement Examination score*

+ **FR 30  FRENCH MASTERPIECES in TRANSLATION I**
  3 crs. 3 hrs.
  Designed for non-French speaking students, the course stresses the important novels, poetry and plays of 19th century French literature. The works of Balzac, Stendhal, Flaubert, as well as the Romantic and Symbolist poets are read and discussed in English.

**FR 31  FRENCH MASTERPIECES in TRANSLATION II**
  3 crs. 3 hrs.
  For non-French speaking students, the course focuses on the major novelists, essayists, dramatists and poets of the 20th century. The works of Gide, Proust, Malraux, Celine, Cocteau, Apollinaire, Ionesco, Sartre, Camus, Robbe-Grillet, and Beckett, among others, are read and discussed in English.

+ Basic Course
FR 51 SURVEY of FRENCH LITERATURE
3 crs. 3 hrs.
French literature from selected writings of representative authors from the Middle Ages through the 18th century is studied. Instruction in this course is entirely in French.
Prerequisite: FR 4 or permission of the Department

FR 53 FRENCH LITERATURE of the 20TH CENTURY
3 crs. 3 hrs.
A survey course of 20th century literature with particular focus on the major poets, playwrights and novelists. Conducted entirely in French on an advanced level, it includes explanation of the text, composition and discussion.
Prerequisite: FR 4 or permission of the Department

FR 55 HISTORY and CIVILIZATION of FRANCE
3 crs. 3 hrs.
A chronological study of major French historical trends and developments up to the present time. Political, literary and artistic movements highlighting important individuals, ideas and periods are examined. Selected texts representative of each period are read.
Prerequisite: FR 4 or equivalent

FR 56 ADVANCED FRENCH GRAMMAR and COMPOSITION
3 crs. 3 hrs.
This course is for students who wish further French language study at an advanced level through analysis of grammar, reading and composition. Emphasis is on developing written linguistic ability.
Prerequisite: FR 4 or equivalent

FR 57 HAITIAN CULTURE and CIVILIZATION
3 crs. 3 hrs.
A chronological study of major trends and developments in Haitian culture and civilization from Columbus to the present. Political, literary and artistic movements will be discussed; significant historical and intellectual figures will be highlighted and various areas of Haiti will be explored. Class will be taught in English.

FR 71 BLACK FRENCH LITERATURE I
3 crs. 3 hrs.
This study of the first period of Black French Literature (Period of Assimilation—1804—1920) and the second period (Period of Negritude—1920—1959), includes analysis of both periods, especially the major works of Dr. Price-Mars, Carl Brouard, Jacques Roumain, Leon Damas, Leon Laleau, Aime Cesaire, Paul Niger, Guy Tirolien, Leopold Sedar Senghor, Frantz Fanon.
Prerequisite: FR 4 or equivalent

FR 72 BLACK FRENCH LITERATURE II
3 crs. 3 hrs.
A study of the contemporary period devoted to the analysis of the major works of gifted black French writers of West Indies, Africa, such as Rene Depestre, Camara Laye, Bernard Dadie, Jacques S. Alexis and Mongo Beti.
Prerequisite: FR 4 or 71 or equivalent

FR 81 INDEPENDENT STUDY
1–3 crs. 1–3 hrs.
Independent study of French is developed individually between student and faculty member and must be approved by the Department.

FR 82 1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

ART 78 ART OF FRANCE
For course description see page 135

+ Basic Course
GERMAN

+ **GER 1 ELEMENTARY GERMAN I**  
  4 crs. 4 hrs.  
The first semester of a one year course, designed for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis is on correct pronunciation through intensive oral practice, use of the language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ **GER 2 ELEMENTARY GERMAN II**  
  4 crs. 4 hrs.  
In this continuation of GER 1, students receive further development of their language skills, comprehension, speaking, reading and writing.  
*Prerequisite: GER 1 or acceptable Language Placement Examination score.*

+ **GER 22 GERMAN CONVERSATION**  
  2 crs. 2 hrs.  
Practice in conversational patterns and basic vocabulary leading to fluency in everyday situation. Open to all students.  
*Prerequisite: GER 1 or acceptable Language Placement Examination score*

**GER 51 SURVEY OF GERMAN LITERATURE**  
3 crs. 3 hrs.  
German literature with selected writings of representative authors is studied. An analysis of literary values and movements is included. Instruction in this course is entirely in German.  
*Prerequisite: Permission of the Department.*

**GER 81 INDEPENDENT STUDY**  
1–3 crs. 1–3 hrs.  
Independent study of German is developed individually between student and faculty member and must be approved by the Department.

**GER 82**  
1–3 crs. 1–3 hrs.  
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ Basic Course
HEBREW

+ HEB 1 ELEMENTARY HEBREW 1  
4 crs. 4 hrs.
The first semester of a one year course designed for students with no previous training in the language, or as indicated by the Language Placement Examination score. Emphasis is on correct pronunciation through intensive oral practice, use of language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ HEB 2 ELEMENTARY HEBREW II  
4 crs. 4 hrs.
In this continuation of HEB 1, students receive further development of their language skills, comprehension, speaking, reading, and writing.
Prerequisite: HEB 1 or permission of the Department

+ HEB 3 INTERMEDIATE HEBREW I  
3 crs. 3 hrs.
Progressive development of language skills, based on the foundations established in elementary Hebrew. Grammar review is supplemented by readings of modern Hebrew literature.
Prerequisite: HEB 2 or acceptable Language Placement Examination score.

HEB 4 INTERMEDIATE HEBREW II  
3 crs. 3 hrs.
In this continuation of HEB 3, advanced grammar, composition and readings of modern Hebrew literature are stressed.
Prerequisite: HEB 3 or acceptable Language Placement Examination score.

+ HEB 30 HEBREW LITERATURE in TRANSLATION I  
3 crs. 3 hrs.
Designed for non-Hebrew speaking students, the course stresses reading and analysis of Hebrew classics in cultural and historical context. All readings and discussions are in English.

+ HEB 31 HEBREW LITERATURE in TRANSLATION II  
3 crs. 3 hrs.
Designed for non-Hebrew speaking students, course consideration is on the emergence of Hebraic writers in the modern world. Emphasis is on the main literary personalities and their major contributions. All readings and discussions are in English.

HEB 51 SURVEY of HEBREW LITERATURE  
3 crs. 3 hrs.
This survey of modern Hebrew literature from selected writings of representative authors includes an analysis of Hebraic values as reflected in their writing. Instruction in this course is entirely in Hebrew.
Prerequisite: HEB 4 or equivalent

HEB 53 HEBRAIC LITERARY MASTERPIECES  
3 crs. 3 hrs.
The works of two great authors of Hebrew fiction are studied in their historical and cultural context in this comprehensive course.
Prerequisite: HEB 4 or equivalent.

+ Basic Course
HEB 54  READINGS in HEBRAIC THOUGHT  
3 crs. 3 hrs.
The Hebrew writings of a medieval and a modern Jewish thinker are given intensive study. Emphasis is on the linguistic and ideological aspects of these writings.
Prerequisite: HEB 4 or equivalent

HEB 56  THE HEBREW BIBLE  
3 crs. 3 hrs.
Selections from the prose and poetry of the Old Testament in Hebrew are studied in this course. Emphasis is on language, culture and the unique Hebraic values contained in these selections
Prerequisite: HEB 4 or equivalent

HEB 81  INDEPENDENT STUDY  
1–3 crs. 1–3 hrs.
Independent study of Hebrew is developed individually between student and faculty member and must be approved by the Department.

HEB 82  
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
ITALIAN

+ **IT 1  ELEMENTARY ITALIAN I**  
4 crs. 4 hrs.

The first semester of a one year course designed for students with no previous training in the language, or, as indicated by the Language Placement Examination score. Emphasis is on correct pronunciation through intensive oral practice, use of the language laboratory and audio-visual materials acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ **IT 2  ELEMENTARY ITALIAN II**  
4 crs. 4 hrs.

In this continuation of IT 1 students receive further development of their language skills, comprehension, speaking, reading and writing.

*Prerequisite: IT 1, or two years of high school Italian, or acceptable Language Placement Examination score.*

+ **IT 3  INTERMEDIATE ITALIAN I**  
3 crs. 3 hrs.

Progressive development of language skills, based on the foundations established in elementary Italian. Grammar review is supplemented by readings of modern Italian literature.

*Prerequisite: IT 2, or three years of high school Italian, or acceptable Language Placement Examination score.*

**IT 4  INTERMEDIATE ITALIAN II**  
3 crs. 3 hrs.

Progressive development of language skills, advanced grammar, composition and reading of modern Italian authors are stressed.

*Prerequisite: IT 3, or acceptable Language Placement Examination score.*

**IT 18  READINGS in MODERN ITALIAN**  
3 crs. 3 hrs.

Readings selected from contemporary short stories, novels, plays, magazine and newspaper articles, theater and cinema reviews. The emphasis is on rapid reading, composition and discussion in Italian.

*Prerequisite: IT 4 or equivalent.*

+ **IT 22  ITALIAN CONVERSATION**  
3 crs. 3 hrs.

Practice in conversation on an elementary level. Emphasis on the vocabulary and idioms of everyday usage.

*Prerequisite: IT 1 or equivalent.*

+ **IT 30  LITERATURE in TRANSLATION**  
3 crs. 3 hrs.

Designed for non-Italian speaking students, the course includes reading and analysis of representative works of Italian literature in their cultural and historical context. Reading and discussion is in English.

*Prerequisite: ENG 12.*

+ Basic Course
IT 51 SURVEY of ITALIAN LITERATURE
3 crs. 3 hrs.
A survey of Italian literature. Selected writings of representative authors from Renaissance to the twentieth century. Course is conducted in Italian.
Prerequisite: IT 4 or permission of the Department.

IT 52 ITALIAN LITERATURE of the RENAISSANCE
3 crs. 3 hrs.
Principal Italian authors of the Renaissance and their relation to the intellectual currents of the time. Contributions of the Italian Renaissance to Western civilization in the fields of literature, art, politics, science and education. Course conducted in Italian.
Prerequisite: IT 4 or permission of the Department.

IT 53 LIFE and WORKS OF DANTE ALIGHIERI
3 crs. 3 hrs.
Selected readings from La Vita Nuova and La Divina Commedia, are studied within the social, political and cultural context of Dante's time. Course conducted in Italian.
Prerequisite: IT 4 or permission of the Department.

IT 54 READINGS in the TWENTIETH CENTURY ITALIAN NOVEL
3 crs. 3 hrs.
Selected passages of novels from contemporary representative Italian authors. Class discussion is supplemented by lectures on the cultural and literary backgrounds of the authors. Course conducted in Italian.
Prerequisite: IT 4 or permission of the Department.

IT 70 ITALIAN CINEMA
3 crs. 3 hrs.
The history of Italian Cinema from the silent era and Facist period to the present, with emphasis on postwar neorealism and the major directors of the sixties and seventies. Films in Italian with English subtitles. Course conducted in English.
Prerequisite: ENG 12 or ENG C2 see page 177

IT 81 INDEPENDENT STUDY
1-3 crs. 1-3 hrs.
Independent study of Italian is developed individually between student and faculty member and must be approved by the Department.

IT 82
1-3 crs. 1-3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

ART 79 ART OF ITALY
3 crs. 3 hrs.
For course description see page 135
SPANISH

+ SPA 1 ELEMENTARY SPANISH I

The first semester of a one year course designed for students with no previous training in the language, or as indicated by the Language Placement Examination score. Emphasis is on correct pronunciation through intensive oral practice, use of language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

+ SPA 2 ELEMENTARY SPANISH II

In this continuation of SPA I, students receive further development of their language skills, comprehension, speaking, reading and writing.
Prerequisite: SPA 1 or two years of high school Spanish, or acceptable Language Placement Examination score.

+ SPA 3 INTERMEDIATE SPANISH

Progressive development of language skills, based on the foundations established in elementary Spanish. Grammar review is supplemented by readings of modern Spanish literature.
Prerequisite: SPA 2 or three years of high school Spanish, or acceptable Language Placement Examination score.

SPA 4 READINGS in HISPANIC LITERATURE

Progressive development of language skills, advanced grammar and composition through selected readings in Hispanic literature.
Prerequisite: SPA 3 or acceptable Language Placement Examination score.

SPA 16 SPANISH PHONETICS

A systematic study of the sound system and patterns of intonation. The organized development of vocabulary and idiomatic expressions are included. The course aims to improve pronunciation, the ability to understand the spoken language, and use it with fluency.
Prerequisites: SPA 4 or native conversational ability and acceptable Language Placement Examination score.

+ SPA 17 INTENSIVE REVIEW of SPANISH GRAMMAR

This course is designed for students who have had three or more years of high school Spanish but have not studied the language for a substantial period of time, or for Spanish native speakers with limited formal training in the language.
Prerequisite: Acceptable Language Placement Examination score.

+ SPA 18 PROPER MODELS of SPANISH GRAMMAR and CONVERSATION for NATIVE SPEAKERS

Designed for Spanish-speaking students, this course places stress on improvement of reading and writing skills.
Prerequisites: Native conversational ability and permission of the Department.
+ SPA 22  ELEMENTARY SPANISH CONVERSATION 3 crs. 3 hrs.
A course stressing basic conversational skills for students who wish to use the Spanish language to communicate with Spanish-speaking people.
Prerequisite: SPA 2 or three years of high school Spanish or permission of the Department.

+ SPA 31  READINGS in SPANISH—AMERICAN LITERATURE in TRANSLATION 3 crs. 3 hrs.
Designed for students who wish to explore the high points of Spanish American literature. This course is taught in English. Open to all students.

SPA 32  READINGS in PUERTO RICAN HISTORY and LITERATURE 3 crs. 3 hrs.
Designed for all students who would like to gain insight into Puerto Rican literature and culture. Depending on Spanish proficiency, students may register in either the English or Spanish sections.
Prerequisite: SPA 4 or equivalent or permission of the Department.

+ SPA 33  INTERMEDIATE SPANISH CONVERSATION 3 crs. 3 hrs.
Designed to give students intensive practice in spoken Spanish. This course is intended for students who wish to use the Spanish language to communicate with Spanish speaking people, and with other students of Spanish in familiar day to day situations.
Prerequisite: SPA 2, 22 or permission of the Department.

SPA 34  SPANISH AMERICA: ITS CULTURE, ART and MUSIC 3 crs. 3 hrs.
A presentation of the outstanding facets of Spanish American culture. Students in this course examine all important historic, political, literary and artistic movements. Important individuals, ideas and periods are highlighted. Grammar, literature and composition are emphasized through reading selected representative authors and works of each period. Course is taught in both Spanish and English.
Prerequisite: SPA 4 or 18 or permission of the Department.

SPA 36  SPANISH SYNTAX and COMPOSITION 3 crs. 3 hrs.
Designed to improve and reinforce the student's skills. Orthography, vocabulary, syntax, analytical writing and stylistics are stressed.
Prerequisite: SPA 18 or acceptable Language Placement Examination score

+ SPA 40  SPANISH for STUDENTS in CAREER PROGRAMS 3 crs. 3 hrs.
An introduction to the fundamentals of Spanish language specifically prepared for Education Associate, Early Childhood Education, Nursing, Sports, Fitness and Recreation students. This course is not intended for native Spanish speakers.
Prerequisite: Permission of Major Program Advisor

SPA 44  ADVANCED SPANISH CONVERSATION 3 crs. 3 hrs.
Designed for students who wish to speak fluently and correctly in current idiom. Intensive practice and group discussions on general and cultural topics. Through the study of selected short fiction, brief plays and journalistic materials from well known authors, this course helps students enlarge their vocabulary, their knowledge of native idiomatic expressions, and their literary concepts.
Prerequisite: SPA 3 or 33 or permission of the Department.
SPA 47  SPANISH BUSINESS WRITING I*  3 hrs. 3 hrs.
The first course in a two-semester sequence for students in the Bilingual Secretary track (see page ). Designed to reinforce and improve writing skills stressing the mastering of orthography, and the development of an ample commercial and business vocabulary. Preparation, composition, transcription and editing of various samples of business letters and documents is included. Course will be conducted in Spanish.
Open to students in the Bilingual Program only.
Prerequisite: SPA 36 or acceptable Language Placement Examination Score
*NOTE: To receive credit for SPA 47, students must complete SPA 48

SPA 48  SPANISH BUSINESS WRITING II  3 hrs. 3 hrs.
The second half of a two-semester sequence for students in the Bilingual Secretary track. The course will be conducted in Spanish and is required for students who wish to receive credit for SPA 47.
Open to students in the Bilingual Program only.
Prerequisite: SPA 47

SPA 51  SURVEY of SPANISH LITERATURE  3 hrs. 3 hrs.
An advanced course for students who successfully completed SPA 4 or the equivalent. Selected writings of representative authors, with analysis of literary values, are studied. Instruction is entirely in Spanish.
Prerequisite: SPA 4 or equivalent or permission of the Department

SPA 52  THE LITERATURE of the GENERATION of 1898 and THEREAFTER  3 hrs. 3 hrs.
The literature of the period from the Generation of 1898 to 1925, including the works of Garcia Lorca, Unamuno, Jimenez, and Ganivet, with emphasis on specific full-length works.
Prerequisite: SPA 4 or equivalent

SPA 53  SPANISH AMERICAN LITERATURE  3 hrs. 3 hrs.
A survey of the significant literary production of Spanish America from colonial beginnings to the present day, with special attention given to the major authors of the 20th century. The course is conducted in Spanish.
Prerequisite: SPA 4 or equivalent or permission of the Department.

SPA 54  ADVANCED SPANISH GRAMMAR  3 hrs. 3 hrs.
The course concentrates upon the development of skill and facility in Spanish grammar, composition and oral communication.
Prerequisite: SPA 4 or equivalent or permission of the Department.
SPA 55  HISTORY and CIVILIZATION of SPAIN  3 crs. 3 hrs.
A chronological study of major Spanish historical trends and developments up to the present time. Political, literary and artistic movements highlighting important individuals, ideas and periods are examined as selected texts representative of each period are read. This course is taught in both Spanish and English.
Prerequisite: SPA 4 or equivalent

SPA 57  SPANISH LITERATURE SINCE the CIVIL WAR  3 crs. 3 hrs.
This course will present the main developments in Spanish literature since the outbreak of the Civil War in 1936 to date and will concentrate on developing the major thematic concerns of Spain's chief novelists, essayists and poets with special emphasis on Spain's New Wave writers who emerged after 1950. This course is taught in both Spanish and English.
Prerequisite: SPA 4 or equivalent or permission of the Department.

SPA 70  SPANISH CINEMA  3 crs. 3 hrs.
A thorough study of the best films and film scripts in the Spanish cinema. This course is taught in English with a view toward developing an appreciation of the history, art and aesthetics of the Spanish cinema and increasing Spanish language experience. Open to all students

SPA 71  PUERTO RICAN FOLKLORE  3 crs. 3 hrs.
A study of the folkloric compositions of the people of Puerto Rico in all forms—from literary, musical, superstitions, etc; their sources and formation as influenced by all three cultural groups in Puerto Rican history: Indian, Spanish, and Black, and how they influence the Puerto Rican of today. This course is taught in both Spanish and English.
Prerequisites: SPA 4 or equivalent; passing of Placement Examination to be administered.

SPA 81  INDEPENDENT STUDY  1–3 crs. 1–3 hrs.
Independent study of Spanish is developed individually between student and faculty member and must be approved by the Department.

SPA 82  1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

ART 77  ART OF SPAIN  3 crs. 3 hrs.
For course description see page 135.
YIDDISH

YID 1 ELEMENTARY YIDDISH I

The first semester of a one year course designed for students with no previous training in the language, or as indicated by the Language Placement Examination score. Emphasis is on correct pronunciation through intensive oral practice, use of language laboratory and audio-visual materials, acquisition of basic vocabulary and the elements of grammar for conversation, comprehension, reading and writing.

YID 2 ELEMENTARY YIDDISH II

In this continuation of YID 1, students receive further development of their language skills, comprehension, speaking, reading, and writing.

Prerequisite: YID 1 or permission of the Department.

LIT 1 INTERNATIONAL PERSPECTIVES in LITERATURE

In English translations selected works of French, Spanish and Italian literature are studied. Emphasis is on national traditions, cultures and linguistic heritage. Special attention is given to questions of language and style of the original text. Course is taught by three instructors. Four weeks are devoted to each of the literature areas. Entire course is conducted in English.

Prerequisite: ENG 12

LIT 2 LITERATURE of the HOLOCAUST

A study of literary responses to the Nazi Holocaust. Readings are selected from a variety of genres including diaries, memoirs, eye-witness testimonies, novels, plays and poetry. Emphasis is placed on the interpretation of a major historical event from both human and artistic points of view. Aspects of the Holocaust to be examined are: the roles of the victim, perpetrator, bystander and witness; life in the ghetto; the concentration camp experiences; resistance; post-war survival and world reaction. Films and visits by survivors will supplement the readings.

Prerequisite: ENG 12

Basic Course
HEALTH, PHYSICAL EDUCATION and RECREATION DEPARTMENT
Room G-201 ext. 5696

Pat Amedure, College Laboratory Technician
Lee Ciardiello, Lecturer
Catherine A. Dachtera, Senior College Laboratory Technician
Helen P. Gerardi, Professor
Ronald Gerwin, Professor
Barbara Ginsberg, Professor;
   Director, "My Turn" Program
Arlene Glassman, Assistant Professor
Rachelle Goldsmith, Professor
   Assistant Director, "College Now" Program
Stanley J. Gross, Assistant Professor
Sherry H. Harris, Assistant Professor
Patricia Hazlewood, Lecturer
   Director, Community Health Program
Richard Kamen, Assistant Professor
Richard Kaye, Associate Professor
Edward Nober, Assistant Professor
Judith A. Perez, Assistant Professor
Angelica Petrides, Professor
Lester Rhoads, Professor
   Director, Sports, Fitness and Recreation Program
Samuel Schereck, Professor and Chairman
Louis Shor, Assistant Professor
Nikola Zlatar, Assistant Professor
HEALTH EDUCATION

+ **HPE 12 FOUNDATIONS of HEALTH and PHYSICAL EDUCATION*** 3 crs. 3 hrs.

This fundamental course, covering a broad spectrum of health related topics seeks to make students aware of the causes of mental and physical illnesses and their prevention, and demonstrates how one's life style, perceptions, and decisions affects health. Guidelines and criteria are presented to determine good mental, emotional, and physical health. Opportunities for personal assessment will be provided.

*HPE 12 REQUIRED OF ALL students except student majoring in Nursing (see page 69) and in Vessel Operations (see page 115).

+ **HE 20 CARDIOPULMONARY RESUSCITATION** 1 cr. 1 hr.

Skills required to perform cardiopulmonary resuscitation (external cardiac massage and mouth-to-mouth resuscitation) are taught. Students successfully completing the course receive American Red Cross certificates.

+ **HE 31 ENVIRONMENTAL PUBLIC HEALTH** 3 crs. 3 hrs.

Public health operations in urban society are reviewed including: epidemiology, radiation hazards, waste disposal, water supply protection and treatment, pesticide control, air pollution, consumer protection, swimming facilities protection, food sanitation, safety, accident prevention.

+ **HE 32 PRINCIPLES of PUBLIC HEALTH** 3 crs. 3 hrs.

This overview of public health services includes: organization and nature of public health programs, public health laws, patterns of medical care, health career opportunities, methods of public health education and communication techniques in working with the public.

+ **HE 33 STRESS MANAGEMENT** 2 crs. 2 hrs.

Designed to help students understand and cope more effectively with stress in their daily lives. Course topics include: the causes, components and consequences of stress; how to measure stress; strategies/techniques to control stress.

+ **HE 35 FIRST AID and PERSONAL SAFETY** 2 crs. 2 hrs.

Principles for first aid and personal safety are dealt with in terms of theory and practice of first aid procedures. Qualified students receive American Red Cross Certification. This course fulfills the safety and first aid requirement for those contemplating a teaching career.

+ **HE 36 MARINE SAFETY and FIRST AID*** 3 crs. 4 hrs.

Provides the knowledge and skills necessary to meet emergency medical situations and implement appropriate safety measures in a marine environment. Completion of this course can qualify students for American Red Cross Certification in cardiopulmonary resuscitation and first aid.

*Required of Vessel Operations Majors (see page 115)

Prerequisite: Intermediate Swimming certificate or ability to perform skills in the Intermediate course and permission of the Department
+ HE 40 DRUGS, the INDIVIDUAL and SOCIETY 3 hrs.
This course is intended to provide students with the opportunity to gain a deeper perspective into the psychology of the dependent personality, reasons for drug use, misuse, abuse, and possible solutions.

+ HE 52 HUMAN SEXUALITY 3 hrs.
Up-to-date information on the biological basis of sex, sexual behavior, sexual problems and sex therapy, and the social aspects of sexuality in an atmosphere that is conducive to free expression and inquiry.

HE 82 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ SCI 70 THE SCIENCE of NUTRITION 3 hrs.
For course description see page 159 or 279
PHYSICAL EDUCATION

Course Information

All Physical Education courses include the fundamental development of specifically related rules and history, skills and techniques, strategy and game experience. Fitness and lifetime carry-over values are inherent within course content. No credit will be given for repeating a course previously passed. Students should not ordinarily carry more than one Physical Education course per semester.

Medical Clearance

Neither the College nor the Department assumes any responsibility for students' participation in physical education or in athletics. Students, faculty and staff participate at their own risk. All Physical Education, athletic and recreation participants are strongly advised to have a medical check-up before participating in physical activities, and to follow the advice of their own physicians. Medical report forms are available in the Health Services Office—Room A-108.

Co-educational Activities

All the following courses meet for 2 hours a week and earn 1 credit each semester.

+ **PEC 2 WALK, JOG, RUN**
  Introduces students to the principles and practices for assessing and improving cardiovascular fitness.

+ **PEC 4 WEIGHT TRAINING**
  The study of weight training techniques provide students with an opportunity to increase muscle strength and endurance in relation to various sports activities and to improve physical appearance.

+ **PEC 5 BODY BUILDING**
  Designed to increase students' knowledge and appreciation of the physical attributes involved in body building. Course covers beginning, intermediate and advanced training techniques to increase muscular strength, muscular endurance and flexibility, and to improve physical appearance as desired by the student.

+ **PEC 11 BEGINNING TENNIS**
  Students learn basic tennis skills and develop an appreciation for tennis as a lifetime sport. They are exposed to the forehand and backhand drives, Beginner's Serve, service return, net volley, examine the rules of the singles and doubles game and gain an understanding of the integration of the fundamental techniques and basic strategies within the game of Tennis. (Students must supply their own rackets and tennis balls).

+ **PEC 12 INTERMEDIATE TENNIS**
  To increase proficiency in tennis through the introduction to intermediate tennis skills, students are exposed to the lob, mid-court volley, flat and slice serves and ball spin. To further development of a well-rounded tennis game, emphasis is placed on student's use of offensive strategy in competition. (Students must supply their own rackets and tennis balls). 
  Prerequisite: **PEC 11 or permission of the Department**

+ **PEC 14 ARCHERY**
  For students who wish to learn the competitive and recreational aspects of archery. Emphasis will be placed on skill development and safety.

+ **PEC 15 BADMINTON**
  Provides basic badminton skills necessary for play plus knowledge of the rules of the game and offensive and defensive strategy.
+ PEC 17 BASIC VOLLEYBALL
Volleyball is introduced on a beginner-intermediate level of play. Team play uses male/female players on the court at the same time. Course covers rules, basic individual skills, offensive/defensive systems, considerations for team coordination, training, conditioning and prevention of injury as well as evaluation of performance.

+ PEC 18 FENCING
An introduction to the history, skills, and theory necessary for effective participation and appreciation of fencing. Emphasis is placed upon body mobility and weapon control as they relate to effective performance in competition.

+ PEC 19 AEROBIC DANCE
Aerobic Dance is a fitness program that combines vigorous calisthenic exercises with dance steps to music for improved cardiovascular endurance, muscle toning and flexibility.

+ PEC 20 BEGINNER'S BALLET
An introductory course which presents principles and techniques of this traditional art form; includes exercises and movement combinations which will develop body alignment; endurance, strength, and fluidity of movement.

+ PEC 21 JAZZ DANCE
Introduction to basic jazz techniques includes a step-by-step breakdown and explanation of percussive movements and combinations of movements based on the forms which lead to various styles.

+ PEC 22 SOCIAL, FOLK and SQUARE DANCE
This course should be taken for pleasure, for exercise benefits typical of dancing, and as preparation for participation in dance as an on-going, lifetime recreational activity. As the dances are learned, steps and patterns, rhythms, movements and music are introduced.

+ PEC 23 BOWLING
For students who want to learn the basic skills which lead to optimum bowling performance and pleasure. Although instruction for beginners will be emphasized, the experienced bowler will get helpful hints to correct faults, and generally improve game for competitive bowling. (Costs for activity must be paid by student).

+ PEC 24 SKIING
The basic concepts of skiing are presented: cross country, downhill, ski equipment purchase and maintenance, costs of skiing, conditioning exercises and places to ski. The course includes a ski trip to a local ski area. (Costs for activity must be paid by student).

+ PEC 25 TAI Chi CHUAN
The Short Form (Yang Style) of Tai Chi Chuan—a slow, precise, non-strenuous rhythmical movement pattern will be presented for the purpose of exercise, meditation, and self-defense. Appropriate for all ages.

+ PEC 26 GOLF
Golf is a popular leisure time participation sport. Emphasis is on mechanics of movement involved in the performance of basic fundamental skills which are broken down to the following skills: Basic Swing, Short and long Irons, Woods, and Putting.

+ Basic Course
PEC 27 BEGINNING KARATE and SELF-DEFENSE
An introduction to formal Karate and practical self-defense techniques. Areas covered include history and background of Karate, fundamental stances, blocks, punches, kicks, conditioning, safety, methods of avoidance and personal self-defense movements. Students are exposed to oriental tradition (Karate costumes, respect and Buddhist philosophy).

PEC 28 INTERMEDIATE KARATE and SELF-DEFENSE
To increase knowledge and appreciation gained in PEC 27, this course covers advanced stances, blocks, punches, kicks, conditioning, stretching exercises, advanced self-defense techniques, semi and pre-arranged and free style fighting technique, as well as an introduction into form competition.
Prerequisite: PEC 27

PEC 29 INTRODUCTION to HATHA YOGA
A survey of the principles and practices of Hatha Yoga for beginners. Each lesson includes slow motion stretching, deep breathing, and relaxation.

PEC 30 SWIMMING for NON-SWIMMERS AND BEGINNERS
Students learn the basic skills needed to swim properly. Special attention is given to non-swimmers who learn in shallow water. At the end of the course students will be able to jump or dive into the water, swim in a prone position and on the back.

PEC 31 ADVANCED LIFESAVING
Students learn the skills necessary to effect water rescues, and supervise swimmers in a safe environment. At the conclusion of the course, students will be able to pass both a written examination and a skills test.
Prerequisite: Swimming skills equivalent to Red Cross Swimmer Course.

PEC 32 WATER SAFETY INSTRUCTOR
Students learn the skills necessary to enable them to teach swimming and water safety courses as offered by the Red Cross. At the conclusion of the course, students will be able to pass both a written examination and a skills test.
Prerequisites: Valid Red Cross Advanced Lifesaving Certificate and either a Red Cross Swimmer Certificate or the ability to perform skills in the swimmer course.

PEC 33 SWIMMING for FITNESS
Students are given an opportunity to improve cardiovascular fitness. Emphasis is on swimming efficiently and on swimming long distances.
Prerequisite: PEC 41 or Deep-Water Swimming Skill

PEC 34 FUNDAMENTALS of CANOEING and KAYAKING
Skills that permit students to safely paddle the canoe and/or kayak on lakes and slow-moving rivers. Emphasis is on skills and safety afloat.
Prerequisite: Swimming proficiency at the American Red Cross Intermediate level.
PEC 35  SNORKELING and SCUBA DIVING TECHNIQUES
With explicit step-by-step instructions students are guided to proficiency in snorkeling and scuba diving. Special emphasis is placed on safety.
Prerequisite: Swimming proficiency at the American Red Cross Swimmer level.

PEC 36  SAILING
Students learn skills enabling them to sail aboard the most common sailing vessels. Included are techniques such as: leaving a mooring, coming about, jibbing, and mooring. Safety Skills afloat are stressed.

PEC 36  SAILBOARDING
A certified course in handling a sailboard (windsurfer). Sailing, theory, safety and physical conditioning, tacking, jibbing, and self-rescue techniques are taught. Certificate awarded upon completion.

PEC 37  INTERMEDIATE SAILING
Students will learn more advanced techniques of sailing which include basic navigation and racing skills.
Prerequisite: PEC 36

PEC 38  MODERN DANCE TECHNIQUES
Introductory course which presents the fundamental principles of various schools of modern dance. It includes an analysis of movement, conditioning techniques, and basic combinations.

PEC 39  MODERN DANCE COMPOSITION
Ideas and movement forms are introduced. Systematic creativity through improvisation studies, formal compositions, and critical appraisal is presented through experimentations with time, space, rhythm and correlations to art, poetry and music.

PEC 40  PHYSICAL EDUCATION for MATURE ADULTS
For individuals who have not exercised in years and would like to start again. Topics include how to get started and what to do.

PEC 41  INTERMEDIATE SWIMMING
The elements of good swimming and a variety of skills are taught. Students practice parts of strokes as well as whole stroking movements.
Prerequisite: Students must be able to swim safely in deep water.

PEC 42  SQUARE DANCE
A one semester foundation program designed for learning the basic program of American Square Dancing as specified by CALLERLAB and the International Association of Square Dance Callers.

PEC 59  DANCE PRODUCTION
In addition to participating in workshops, choreography and performance, students give time and effort in technical theatre production and publicity to enhance their primary focus. Students can earn up to a total of four credits (one each semester) for successful contribution in a particular area of the dance production.

PEC 82
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
Men's Activities

The following courses meet for 2 hours a week and earn 1 credit each semester.

+ PEM 2 BASEBALL
  Spring
  Students are given an opportunity to develop individual and team techniques involved in the game of "College Baseball". Conditioning, sportsmanship, team play, an appreciation of the game and its rules, and other benefits.

+ PEM 3 TOUCH FOOTBALL
  Fall
  Students are exposed to the history, rules and regulations of football. Individual and team skills and strategies are stressed.

+ PEM 5 BASKETBALL TECHNIQUES
  In depth teaching of various aspects of basketball including: basic skills, drills used to practice these skills, individual and team responsibilities in man-to-man and zone defenses, offenses against man-to-man and zone defenses, coaching techniques and basketball strategy.

+ PEM 6 SOFTBALL
  Spring
  Development of individual and team skills required to successfully compete in this very popular sport is emphasized. Concomitant values to be derived include conditioning, appreciation of team play and sportsmanship, knowledge of history and rules.

+ PEM 7 SOCCER TECHNIQUES
  Fall
  Soccer is currently the fastest growing team sport in the country and can be played by both sexes and all ages. The course emphasizes technical development, tactical understanding and overall appreciation of the world's popular sport.

+ PEM 19 BEGINNING GYMNASTICS
  Offers an opportunity to engage in basic elements of gymnastic activity. Inherent fitness components include the areas of strength, stamina, coordination, agility, and flexibility. Skills on the mat, parallel bars, high bar, side horse, trampoline, buck, vaulting box, long horse and rings are covered.

PEM 82

1–3 crs. 1–3 hrs.

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
Women's Activities

The following courses meet for 2 hours a week and earn 1 credit each semester.

+ **PEW 1 SLIMNASTICS**
  Each student is guided to self-appraisal of the present status of her body shape, body function and ability to relax. A variety of exercise programs are introduced to help attain desired goals for improving or maintaining a positive self-image.

+ **PEW 2 BASKETBALL**
  Students learn about Basketball, develop individual skills required to participate successfully and learn strategies necessary for team play.

+ **PEW 6 SOFTBALL**
  Throwing, catching, batting and running skills are developed so the game of softball can be played with enjoyment and satisfaction. Strategies of play and rules of the game are emphasized.

+ **PEW 7 POWER VOLLEYBALL**
  Introduction to the techniques of a highly skilled game of volleyball called power volleyball. Course content covers the history, rules, scoring and terminology of the game, general conditioning, individual volleyball skills, team play elements, and specific offense and defense tactics.

+ **PEW 10 BEGINNING GYMNASICS**
  The basic elements of gymnastic activity are taught for the development of the total body. This includes strength, flexibility, balance, grace, poise, coordination, agility, timing, control, and stamina. Skills on the balance beam, trampoline, uneven parallel bars, side vaulting horse, the mats, and floor exercise are covered.
COMMUNITY HEALTH

+ COH 11  INTRODUCTION TO COMMUNITY HEALTH SERVICES  3 crs. 3 hrs.
The organization, history and development of the American Health Care Delivery System is examined. Emphasis is on the purpose of current health services: Prevention or Treatment.

+ COH 12  CRITICAL ISSUES in COMMUNITY HEALTH  3 crs. 3 hrs.
Students are given an opportunity to explore the ethical, social, legal and scientific issues underlying contemporary health problems. Emphasis is on helping students evaluate and relate basic health facts and concepts to contemporary critical health issues.

+ COH 13  EPIDEMIOLOGY  3 crs. 3 hrs.
Introduction to the factors which determine the occurrence of disease in populations. Emphasis is on applying basic principles to the prevention of disease and promotion of health at institution and community levels.
Prerequisite: MAT 20

A.S. Degree
Community Health
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+ Basic Course
SPORTS, FITNESS and RECREATION LEADERSHIP

+ REC 11 INTRODUCTION to RECREATION 3 crs. 3 hrs.
This introductory course to the historical and philosophical foundations of recreation and leisure includes the study of institutions providing recreation services, and the socio-economic factors which influence the growth and development of recreation. For Program Majors only.

REC 12 PRINCIPLES of SPORTS, FITNESS and RECREATION LEADERSHIP 3 crs. 3 hrs.
The importance of obtaining knowledge of human dynamics, leadership abilities and related techniques of teaching recreational skills are stressed. Personnel practices, policies and supervision techniques are presented. Pre or Corequisite: REC 11.

+ REC 13 SOCIAL RECREATION 3 crs. 3 hrs.
Students are taught how to conduct, plan and program social recreation activities in camps, centers, clubs, institutions and playgrounds. Under supervision, individual leadership abilities are developed and performance is evaluated.

+ REC 14 OUTDOOR RECREATION 2 crs. 2 hrs.
Trends in outdoor recreation are traced as the place of the recreation leader in outdoor programs, the scope and extent of programs in conservation, camping, aquatics and nature are considered. A weekend camping trip is required.

+ REC 15 SUMMER CAMP LEADERSHIP 2 crs. 2 hrs.
To prepare students as future camp counselors, basic camping philosophy is examined including camping objectives, problems in the camping field. Opportunity to acquire skills and leadership essential in camp life is provided. A weekend camping trip is required.

REC 16 METHODS and MATERIALS for TEACHING FOLK and SQUARE DANCE 2 crs. 2 hrs.
Students become familiar with basic dance movements, dance positions, dance etiquette, dance terminology, and learn how to teach and direct folk and square dances in various forms. For Program Majors only.

REC 31 RECREATION for SPECIAL POPULATIONS 3 crs. 3 hrs.
The philosophy and history of therapeutic recreation is studied. Class discussions consider areas of disability, physical development, psychological and emotional problems and social adjustment. Attitudes toward the disabled are examined and attempts are made to rectify those found on myth and misinformation. Students are taught medical terms, the role of therapeutic recreation as part of the rehabilitation team's efforts, how to plan recreation programs to fit the needs and capabilities of specific disabilities. Two off-campus class trips to therapeutic agencies are required. Prerequisite: REC 12.
The underlying principles for effective recreation programming are presented. Overview of the operation of recreation facilities, including budget, public relations, records, reports, equipment and evaluation is included.

For Program Majors only.
Prerequisites: REC 12, 31, 91

**REC 33** SKILLS in ARTS and CRAFTS  
2 crs. 2 hrs.
Opportunities to learn skills with various materials and to teach the use of clay, paper, paint, yarn, wire, soap and wood. Emphasis is on encouraging creativity and providing enjoyment for all ages and special groups.

**REC 34** METHODS and MATERIALS in ARTS and CRAFTS  
3 crs. 3 hrs.
Students develop maximum skill levels in arts and crafts projects. Recreational values inherent in different programs are emphasized and stress is placed on the different techniques necessary for proper presentation of arts and crafts programs to groups of different ages and physical abilities. Students learn different methods of teaching the developed skills to such special groups.

For Program Majors only.

**REC 35** RECREATION for the AGING and MENTALLY ILL  
3 crs. 3 hrs.
Course deals with two special populations—the aging and the mentally ill. In the area of the aging, the course examines biological, psychological, and sociological aspects of aging. Through this study, students gain understanding of the aging process and the problems affecting the aged, and become aware of the recreational and leisure needs of the aged. Mental illness is a complex form of human disorder. The course approaches mental health in the framework of personal adjustment, personality integration, personal maturity and growth and social involvement. Through guidelines developed in the course students are able to prepare recreation analysis, develop leadership techniques and plan recreation programs for the mentally ill.

For Program Majors only.
Prerequisite: REC 31.

**REC 37** COMMERCIAL and INDUSTRIAL RECREATION  
3 crs. 3 hrs.
Trends, programs and special skills involved in commercial and industrial recreation settings. Course focuses on the history, development, administrative patterns and programs in these two areas.
Prerequisite: REC 12.

**REC 40** SPORT and AMERICAN SOCIETY  
3 crs. 3 hrs.
Students become acquainted with the development of selected sports in America and of the numerous controversial contemporary issues in sport.

**REC 45** ADVANCED ARTS and CRAFTS  
2 crs. 2 hrs.
Students are introduced to advanced arts and crafts skills including macrame, enameling, weaving, stained glass and silk screen printing.
Pre or Co-requisite: REC 33 or 34

**REC 82**  
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ Basic Course
FIELD COURSES

REC 91  FIELD EXPERIENCE in SPORTS, FITNESS and RECREATION I

3 crs. 6 hrs.

Students are assigned to supervised field work in a variety of community recreation agency settings. The course includes one hour seminar, student field reports and class discussions of these experiences.
For Program Majors only.
Prerequisites: REC 11, 12, 13, 16, 34.

REC 92  FIELD EXPERIENCE in SPORTS, FITNESS and RECREATION II

3 crs. 6 hrs.

Advanced field experience involving increased student participation in the work of the assigned recreation agencies, assignment to a second type of agency for varied experience, and includes one hour seminar.
For Program Majors only.
Prerequisite: REC 91
Patrick J. Abbazia, Professor
Betty Caroli, Professor
Norman Hanover, Assistant Professor
Robert A. Hecht, Professor
Sidney Helfant, Professor
Alphonse Homha, Assistant Professor
Thomas Kessner, Professor
Bernard Klein, Professor and Chairman
William Klubach, Professor
Francis Kraljic Curran, Associate Professor
Richard J. Nachtsheim, Assistant Professor
Mitchell Okum, Associate Professor
Arnold E. Perlmutter, Assistant Professor
Stuart Suss, Professor;
Director, "College Now" Program
Morton Wagman, Professor
During this history of the American people from colonial times to the Civil War, the topics discussed include: the birth and development of American society, the American Revolution, the rise of the common man, the conquest of the frontier, slavery and the Old South.

A history of the American people from the Civil War to the present. Discussion includes: reuniting the country after the Civil War, the role of the Black in American society, the growth of American business, immigration, the rise of the United States as a world power, and American Society in the 20th century.

The foundations of American civilization from its European origins to the French and Indian Wars are traced. The expansion of Europe, the Indian's struggle for survival, the origins of American Slavery and the roots of prejudice, the Puritan impact on American culture, and the structure and basis of American politics are covered.

America, from the age of Jackson to Reconstruction, the growth of a national society, reform movements, the problem of slavery and race, sectionalism and nationalism, the Civil War and the triumph of American capitalism.

The changing pattern of immigration from the 17th century to the present. The motives and ambitions of the immigrant, (background, role in American society, and contributions to American life) are discussed.

Development of sports, fads, and folklore in America including additional significant aspects of American Society from the colonial era to the present.

Movement of the American frontier from colonial times to the 20th century. Discussion includes the impact of the frontier on the settler, the confrontation between the Indian and the settler, and the settler's efforts to tame the American wilderness. Also covered are the cotton and cattle kingdoms, the problem of law and order in the West, and the continuing legacy of the frontier in American society and culture.

The history of the American Indian from the time of Columbus to the present. Indian culture and its place in Indian history, Indian-white conflict, and Indian problems in contemporary American society are examined.
+ HIS 50 THE BLACK in AMERICAN HISTORY
3 crs. 3 hrs.
A study of Black Americans within the context of American civilization. Their role in the growth of the nation is examined with the aim of understanding their contributions, their problems and the attitudes of all Americans, black and white, on the issue of race.

+ HIS 55 HISTORY of ITALIAN AMERICANS
3 crs. 3 hrs.
The circumstances of Italian immigration to the United States from the colonial period to the present are examined. The Italians' contributions to American culture, their treatment in American literature, and the changes they experienced in their own lives, as a result of living in the United States, will be considered.

HIS 58 AMERICAN REVOLUTION and the EARLY NATIONAL PERIOD, 1763 to 1828
3 crs. 3 hrs.
The unique nature of American colonial society is described, and seeks to explore the forces that led to the American Revolution. The process of nation building, the problems facing an underdeveloped country, the birth of the two party system, and the struggle for national sovereignty is included.

+ HIS 59 MODERN AMERICA, 1920 to PRESENT
3 crs. 3 hrs.
Development of the United States from 1920 to the present. The course considers the Jazz Age, the Great Depression, the New Deal, World War II, the Cold War, the Civil Rights Revolution, and the protest movements of the 1960's.

+ HIS 60 HISTORY of AMERICAN THOUGHT
3 crs. 3 hrs.
Development of American thought from the colonial period to the present is traced. The ideas and values which influenced and directed American society are examined.

+ HIS 62 HISTORY of NEW YORK CITY
3 crs. 3 hrs.
The history of the City of New York from its founding to the present day. The course covers New York City's development touching such aspects of its history as its: origin as a Dutch trading post; position in colonial culture and society; role in the American Revolution and the founding of the American Republic; growth as a great commercial, transportation, manufacturing, and banking center; citizens' attitude toward slavery and race relations; importance as the center of immigration; growth and expansion into neighboring communities; and its problems and difficulties as a modern megalopolis in the 20th century.

+ HIS 68 WOMEN in AMERICAN HISTORY
3 crs. 3 hrs.
Examination of the status of women in the United States from colonial times to the present, the European precedents for the treatment of American women, the attempts to alter women's opportunities and rights, and the nature of reform movements in America.

HIS 69 AMERICAN JEWISH HISTORY
3 crs. 3 hrs.
A study of Jews within the context of American History, with emphasis on the settlement of America as part of the Diasporic experience. The historical causes for the unique aspects of American Judaism, economic and geographical mobility, the Jewish labor movement, the radical intellectuals of the '30's, and contemporary issues are considered.
WORLD HISTORY

+ HIS 31 EUROPE from NAPOLEON to HITLER, 1789 to 1945
  3 hrs. 3 hrs.
A social, cultural, political, and economic approach to the development of European civilization from the French Revolution to the 20th century. Emphasis is on industrialism, nationalism, imperialism, world wars, and totalitarianism.

+ HIS 32 MODERN CHINA
  3 hrs. 3 hrs.
The reshaping of China and its revolutionary role in the modern world will be examined during this course.

+ HIS 33 AFRICA: PAST and PRESENT
  3 hrs. 3 hrs.
The historical development of Africa with emphasis placed on the cultural interchange, colonialism and the nationalist revolts, new governments and the problem of modernization, conflicts of interest of the great powers, and 20th-century nationalistic rivalries.

HIS 34 MILITARY HISTORY
  3 hrs. 3 hrs.
Study of modern military history with emphasis on the strategic, tactical, and technological factors relating to warfare. Topics include classic warfare, the age of limited war, modern nationalism and total war, modern guerrilla and contemporary warfare.

HIS 35 UTOPIAN DREAMERS and the WESTERN WORLDS
  3 hrs. 3 hrs.
Examination of Utopian thinkers and thought as a significant expression of Western culture. The major works in the Utopian tradition and the historical backgrounds in which they were produced are considered.

+ HIS 36 EUROPE in the TWENTIETH CENTURY
  3 hrs. 3 hrs.
Study of the transformation of European society in the 20th century. Emphasis is on political, military, economic and cultural factors as well as on social and technological changes which gave the 20th century its unique character.

+ HIS 37 THE MIDDLE EAST from WORLD WAR I to the PRESENT
  3 hrs. 3 hrs.
Analysis of the major political, social, religious, economic and cultural developments in the Near East. Emphasis is on the attempts of Islamic society to adjust to the Western way of life, the rise of nationalism, recent developments such as the emergence of the State of Israel and the role of oil in world diplomacy.

HIS 38 REVOLUTION and POLITICAL PROTEST in AFRICA, 1860 to PRESENT
  3 hrs. 3 hrs.
Examination of the historical causes for political protest and revolution in sub-Saharan Africa as well as the prospects of non-violent political change. Emphasis will be on the anti-colonial reactions, insurrections and the role of the military in shaping African society.

+ Basic Course
HIS 42  THE CARIBBEAN, 1492 to the PRESENT  
3 hrs.
The development of the Caribbean Islands from 1492 to the present. Topics include pre-Columbian cultures. European colonization and rivalries, slavery, and the development of modern Caribbean culture.

HIS 43  THE HISTORY of the PUERTO RICAN IMMIGRANT  
3 hrs.
The history of Puerto Rico from pre-Columbian times to the modern era. Particular focus will be on the nature of Puerto Rican immigration to the mainland, the reasons behind it, the development of Puerto Rican Communities in North American urban centers, and the migration back to Puerto Rico.

HIS 44  THE NAZI HOLOCAUST  
3 hrs.
Examination of the rise of Nazism and its legislative, political, and destructive machinery; the internal life of the Jew in the Ghettos and Concentration Camps; the Jewish Councils and Resistance movements; the attitude of the “Free World,” the Allies, the Church; negotiations for rescue; the scope of the Final Solution, and the literature of the holocaust.

HIS 51  THE ANCIENT WORLD  
3 hrs.
Origins of civilization and the emergence of the great cultures of the Near East is traced. The religious, social, economic, and political ideas and institutions of Egypt, Mesopotamia, the Hebrews, Greece, and Rome, which shaped Western civilization are included.

HIS 52  WESTERN CIVILIZATION from the MIDDLE AGES to the 18th CENTURY  
3 hrs.
The main themes of Western civilization from the Middle Ages to the 18th century. Topics covered include the nature of medieval society, the birth of modern capitalism, the expansion of Europe, the Renaissance, the religious revolution of the 16th century, the emergence of modern science, and the Age of Reason.

HIS 53  RUSSIAN HISTORY from 1860 to the PRESENT  
3 hrs.
Course deals with reform and revolution in Russia and the establishment of the Soviet régime. Analysis and evaluation of the U.S.S.R. under its several leaders is included.

HIS 56  WITCHCRAFT—AN HISTORICAL STUDY  
3 hrs.
The history of witchcraft from its beginning in the ancient Near East to the great witch-hunts of early modern Europe and America and its decline in the age of skepticism, the 17th and 18th centuries.

HIS 57  LATIN AMERICAN HISTORY  
3 hrs.
The development of Latin America from colonial times to the present. Emphasis is on such topics as the intermingling of cultures, ideas, and the formation of a Latin American civilization.

+ Basic Course
+ HIS 64 MODERN JEWISH HISTORY 3 crs. 3 hrs.
History of the Jewish people from the mid-17th century to the present. Topics covered are the Messianic and Hassidic movements, enlightenment, emancipation and assimilation, the rise of new religious forms, the great migrations, nationalism, anti-semitism, the growth of Hebrew and Yiddish literature, the emergence of Zionism and the establishment of the State of Israel.

HIS 65 MODERN RADICAL MOVEMENTS in WESTERN CIVILIZATION 3 crs. 3 hrs.
The ideological basis of industrialism, laissez-faire, doctrines of reform and transformation, as well as the co-related movements in the 19th and 20th centuries are examined. Emergence of post-democratic totalitarianism in Russia, Italy, and Germany, contemporary expressions of Socialism, Marxism-Leninism, and revisionist views of liberalism and democracy are traced.

+ HIS 67 JEWISH HISTORY from POST-BIBLICAL TIMES to the ENLIGHTENMENT 3 crs. 3 hrs.
High points of Jewish development from the Babylonian exile to the mid-17th century. The role of the exile, Ezra and Nehemiah, the political, social and religious developments during the Second Commonwealth, the Talmud and its influence, the relationship with Christianity and Islam, and the communal institutions developed in the various parts of the Diaspora.

+ HIS 70 HISTORICAL GEOGRAPHY 3 crs. 3 hrs.
Students become familiar with geographic sources, their interpretation and evaluation. The development of student's geographical sense to gain greater insight and understanding in learning history, or any other liberal arts discipline. The course includes a survey of the history, methodology and various theoretical approaches to geography. It also emphasizes and gives practical training in the skills of map reading, interpretation and library organization and utilization.

HIS 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of History is developed individually between student and faculty member and must be approved by the Department.

HIS 82 1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
PHILOSOPHY

+ PHI 71 HISTORY of PHILOSOPHY: THE CLASSICAL PHILOSOPHERS 3 crs. 3 hrs.
Development of philosophical thought and its influence on modern man with emphasis on classical Greece, India, and China. Attention will focus on the works of Plato, Aristotle, Confucius, Lao Tsu.

+ PHI 72 HISTORY of PHILOSOPHY: THE MODERN PHILOSOPHERS 3 crs. 3 hrs.
Study of philosophical thought from the Renaissance to the present with emphasis on Cartesian thought, natural religion, skepticism, idealism and existentialism. Attention will be given to works of Descartes, Spinoza, Hume, Nietzsche, Kierkegaard.

PHI 73 LOGIC: THEORIES of ARGUMENTATION 3 crs. 3 hrs.
Introduction to the basic theories of argumentation in their evolution from Plato and Aristotle to contemporary theories. Principles of logic, scientific method, and their application.

PHI 74 ETHICS: A STUDY of ETHICAL PROBLEMS 3 crs. 3 hrs.
Ethical and moral theories from the Greek philosophers to the present. Problems which are constant in human history will be examined against the background of various classical and modern writers.

PHI 75 AESTHETICS: THEORIES of the BEAUTIFUL 3 crs. 3 hrs.
A study of the aesthetic experience in the philosophies of Plato, Aristotle, Schopenhauer, Nietzsche and Kierkegaard. Examination of the criteria of the theories of beauty with reference to art, literature and music.

PHI 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of Philosophy is developed individually between student and faculty member and must be approved by the Department.

PHI 82 1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

+ Basic Course
POLITICAL SCIENCE

+ POL 50 CLASH of POLITICAL IDEAS: INTRODUCTION to POLITICAL THEORY
Examination of selected major political philosophers from Plato to Machiavelli, from Locke and Rousseau to Hegel and Marx. What are the bases for political leadership, political obligation, majority rule and minority rights?

+ POL 51 AMERICAN GOVERNMENT and POLITICS
Introduction to the structure of the national government and the way it operates. Topics include discussion of our democratic system, the three branches of government (executive, legislative and judicial), political parties, pressure groups, and current legislation.

+ POL 52 COMPARATIVE GOVERNMENT
Analysis of the major types of political systems in selected foreign countries. Course includes study of the role of ideology, economics, elite groups, political institutions, comparison of Western and non-Western systems, with emphasis on Britain, France, Germany, Italy, the Soviet Union and selected African, Asian, and Latin American countries.

+ POL 53 STATE and LOCAL GOVERNMENTS and POLITICS
The role of state and local governments in the American Political system is emphasized. Special attention is given to New York State, New York City and representative urban problems. Governmental structure is presented as the permanent yet changing framework within which urban-centered political action takes place.

+ POL 54 THE AMERICAN PRESIDENCY
Description and analysis of the Presidency as a post-World War II political institution. An historical introduction to the role of the President, the growth of the Presidency from 1789 to the present, and the factors currently affecting presidential elections, and presidential powers.

+ POL 55 PUBLIC OPINION
Mass media's impact on the political process and the public's impact through the polling technique. Following an introduction to the area of public opinion and propaganda, the contribution of the mass media and polling are discussed. The linkages of public opinion, decision-making, political socialization and the problem of political analysis are highlighted.

+ POL 56 URBAN COMMUNITY RELATIONS
The course is concerned with looking at the inclusive political nature of our society; analyzing the concerns of the man on the street as he relates to government; and studying the ways in which the community initiates political action and responds to policies and services received from the government. Urban Community Politics grow from the ethnic, racial, religious, economic and geographic neighborhoods. Majority-minority groups increasingly function as political blocs within and outside of political party lines. The average citizen, seeking social and economic goals through political activity, is more concerned about public services than political structures.
POL 57 THE POLITICS of ECONOMICS: INTRODUCTION to POLITICAL ECONOMY 3 crs. 3 hrs.

Political economy within a social, political and historical context is introduced. The major focus is on the problems of recession, inflation and resource insufficiency. "Getting and spending" and their concomitant politico-economic costs and benefits are dealt with in discussions and readings which are institutionally oriented rather than theoretically contrived. Special attention is focused on existing and emerging public agencies and their constituencies, and on the nature of policy making and administration.

POL 58 WORK EXPERIENCE SEMINAR 3 crs. 2 hrs. plus work experience

The work seminar combines work experience in political/social/governmental activity with study of the structural and functional role of selected offices in our political system. Emphasis on the theoretical understanding of the role of public officials/agencies serves as the basis for class reports. Work experience must total a minimum of 90 hours.

Prerequisites: POL 51, 53, 56, 61 or permission of the Department

POL 59 INTERNATIONAL RELATIONS 3 crs. 3 hrs.

Analysis of the role of America in international relations with emphasis placed on sovereignty, state power, colonialism, imperialism, nationalism and ideologies. The role of international organizations and law, collective security and regionalism in the maintenance of international order is included.

POL 61 PRINCIPLES of PUBLIC ADMINISTRATION and PUBLIC AGENCIES 3 crs. 3 hrs.

Examination of the practice of American public administration with emphasis on the role of the bureaucracy in the American political system. The course includes a study of the political environment of public-sector administrative units, and the process of policy-making and policy implementation in the American political context. The policy-making function of administrators and their relationships with other factors in the political process will be scrutinized.

Prerequisite: POL 51 or 53, or permission of the Department

POL 63 INTRODUCTION to CRIMINAL JUSTICE 3 crs. 3 hrs.

This introduction to the criminal justice system in the United States, includes the study of crime and the three elements which comprise the criminal justice system: the police, the courts and corrections. In addition to analysis of each of these elements, attention is given to the civil liberties issues which involve the procedural due process rights of persons accused of crime.

POL 65 CIVIL RIGHTS and LIBERTIES 3 crs. 3 hrs.

The central American heritage issues of freedom and equality of opportunity are considered. The development of freedom of speech, press, religion, and guarantees of assembly and petition are among the areas discussed. Civil rights, women's rights, and affirmative action are among the current issues considered.
POL 81  INDEPENDENT STUDY  
1–3 crs. 1–3 hrs.
Independent Study of Political Science is developed individually between student and faculty member and must be approved by the Department.

POL 82  
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

BSS 1  BEHAVIORAL and SOCIAL SCIENCE:  
THE INDIVIDUAL & HIS/HER WORLD  
3 crs. 3 hrs.
This course uses the concepts and methodologies of sociology, psychology, economics, political science and history to help students understand issues of current significance.  
Prerequisite: Enrollment in “College Now” Program.
MATHEMATICS and COMPUTER SCIENCE DEPARTMENT
Room F-309B     ext. 5931

Jack Arnow, Assistant Professor
gordon Bassen, Assistant Professor
daniel t. davis, Assistant Professor
Bernard Eisenberg, Professor
Harold S. Engelson, Professor
Joseph Feit, Associate Professor
Ronald Forman, Assistant Professor
Samuel Gale, Professor and Chairman
Philip J. Greenberg, Professor
Director, Instructional Computing
Daniel Grimaldi, Assistant Professor
Louise Grinstein, Professor
William E. Heierman, Lecturer
Moses Karman, Assistant Professor
Rachel B. Lieff, Assistant Professor
Charles H. Metz, Professor
Max Mlynarski, Associate Professor
Dianna Oratz, Associate Professor
Stanley Rabinowitz, Associate Professor
Julius I. Rosenthal, Assistant Professor
Richard Staum, Professor
Marvin Yanofsky, Assistant Professor
Rina J. Yarmish, Associate Professor
COMPUTER PROGRAMMING

COMPUTER PROGRAMMING courses are offered as electives to all students.

+ CP 11 INTRODUCTION to COMPUTERS and COMPUTER APPLICATIONS 4 crs. 4 hrs.
A computer literacy course that introduces such topics as: uses of computers in society; components of a computer system; input/output devices; flowcharting and programming in BASIC; a brief introduction to other programming languages. Computer Applications covered include word processing, spreadsheets, graphics, and database management systems. An overview of computer concepts and information processing, as an area of general knowledge for the informed individual is presented. How the computer can be used as a tool at home and at work is demonstrated.
Data Processing Majors WILL NOT receive credit for this course.
Prerequisite: Passing score on CUNY Mathematics Examination Test.

CP 28 MICROCOMPUTER APPLICATIONS in EDUCATION 4 crs. 4 hrs.
An introduction to computers through software teaching, mathematics and the sciences, as well as the elements of the language LOGO. Participants develop their own skills and explore methods of presenting these concepts to children.
Prerequisites: Intermediate Algebra, MAT 03 or permission of the Department

+ CP 29 INTRODUCTION to COMPUTER PROGRAMMING for SECRETARIAL/OFFICE ADMINISTRATION STUDENTS 4 crs. 4 hrs.
An introduction to programming in the BASIC language with more emphasis placed on string and character manipulation and less on mathematical programming. Students receive hands-on experience using IBM microcomputer. Disk operations and proper use of a printer for producing hard copy will also be emphasized.
Open to Secretarial Word/Information Processing Majors only.
Prerequisite: Elementary Algebra or MAT R2, or score of 25 or higher on Math Placement Examination.

+ CP 30 INTRODUCTION to BASIC 4 crs. 4 hrs.
BASIC is a general-purpose computer language used in both conversational mode and time-sharing computer centers. It is a simple and natural language requiring a minimum of programming skills, yet bringing about an appreciation of the power of a computer. In this "hands-on" course, with direct interaction between students and the computer, problems in mathematics, the sciences and the social sciences are explored to awaken and augment student interest in the problem areas of today's civilization.
Prerequisite: MAT 03 or equivalent

CP 31 BASIC II 4 crs. 4 hrs.
A second course in computer programming using the language BASIC. Topics covered include arrays, matrix manipulation, introduction to file and data management. Both sequential and direct access files with various applications will be emphasized. Additional topics will include computer graphics and games.
Prerequisites: CP30 and MAT 03 or equivalent
+ **CP 35  INTRODUCTION to APL**

APL is a powerful computer language developed in the early 1960's for application to math and science. Since then its capability has broadened to include applications in Business, Computer Assisted Instruction, text analysis and statistical analysis. Students have "hands-on" experience at APL terminals for programming practice and assignments.

*Prerequisite: MAT 03 or equivalent.*

+ **CP 51  PROGRAMMING in FORTRAN**

An introduction to programming including flow-charting using the FORTRAN program language. Both business and scientific applications will be considered. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center.

*Prerequisite: MAT 03 or equivalent.*

+ **CP 52  INTRODUCTION to COBOL PROGRAMMING**

An introduction to programming in COBOL (Common Business Oriented Language). Typical business applications will be considered. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center. This course is recommended as an elective for students who wish to learn how to program a computer using a language which is oriented to the solution of business problems.

Students who completed DP 31 will NOT receive credit for this course.

*Prerequisite: MAT 01, or Elementary Algebra, or MAT R2.*

+ **CP 53  PL/1 PROGRAMMING**

A detailed study of PL/1 programming. Both business and scientific applications will be considered. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center.

Recommended as an elective for Computer Science and Data Processing Majors.

*Prerequisites: Familiarity with at least one programming language and MAT 03 or equivalent.*

+ **CP 54  INTRODUCTION to PASCAL**

In this introduction to programming in Pascal, students will write and run several scientific and commercial programs. This course also serves as a preparation for other high-level languages. Recommended as an elective for Data Processing Majors.

*Prerequisites: Familiarity with at least one programming language and MAT 03 or equivalent.*

+ Basic Course
COMPUTER SCIENCE

+ CS 12 INTRODUCTION to COMPUTING with PASCAL 4 crs. 4 hrs.
The course deals with algorithms, programs, data representation, debugging and verification of programs. Numeric and non-numeric programming applications include searching and sorting algorithms, function and procedures, and number theory problems. Programming is done in the PASCAL language and structured program design is stressed.
Pre or Co-requisite: MAT 15

CS 14 COMPUTERS and ASSEMBLER LANGUAGE PROGRAMMING 5 crs. 5 hrs.
Computer structure, machine language and assembler language programming. Digital representation of data; addressing techniques; macro, machine and assembler instruction sets. Emphasis on computing techniques for numerical applications will be supplemented by several computer projects. Programs written by students will be run on the remote job entry communication network connected to the University Computer Center.
Prerequisite: CS 12 or 13

CS 35 DISCRETE STRUCTURES 5 crs. 5 hrs.
Sets, Matrices, Relations, and Digraphs, Functions, Order Relations and Structures, Trees and Languages, Semi-groups and Groups, Finite-State Machines and Languages.
Prerequisite: CS 14
Corequisite: MAT 16

CS 37 PROGRAM DESIGN and ANALYSIS 4 crs. 4 hrs.
An introduction to data structures using PASCAL. Topics include: structures, arrays, stream files, stacks, recursive processes, recursive procedures and elementary simulation techniques.
Required for Computer Science Majors.
Prerequisite: CS 35

CS 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of Computer Science is developed individually between student and faculty member and must be approved by the Department.

CS 82 1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

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COMPUTER SCIENCE
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+ Basic Course
DATA PROCESSING

DATA PROCESSING courses do not satisfy Group V requirements.

+ DP 11  INTRODUCTION to DATA PROCESSING  
4 hrs.

Detailed introduction to the concepts, structure, and operation of electronic data processing systems including such topics as: components of a computer system; input/output devices; principles of arithmetical operation, decimal, binary and hexadecimal; coding representations of information in computers; flowcharting and coding of problems; machine language and assembler language programming; a brief introduction to procedure-oriented languages such as BASIC and COBOL. An introduction to IBM assembler language programming.

Not open to students who are required to take MAT 1

Prerequisite: MAT 01 or Elementary Algebra.

DP 12  ASSEMBLER LANGUAGE PROGRAMMING  
5 hrs.

Detailed study of assembler language programming. Typical business applications will be considered. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center.

Prerequisite: DP 11

DP 13  ADVANCED ASSEMBLER LANGUAGE PROGRAMMING  
4 hrs.

Detailed study of advanced assembler language programming techniques and sophisticated applications. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center.

Prerequisite: DP 12

DP 31  COBOL PROGRAMMING  
5 hrs.

Detailed study of structured COBOL programming. Typical business applications will be considered. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center.

Prerequisite: DP 12

DP 32  ADVANCED COBOL PROGRAMMING  
4 hrs.

Magnetic tape and disk programming in COBOL. A thorough introduction to operating systems including such topics as: system control and system service programs such as the Supervisor, Job Control, and the Linkage Editor; interaction of the control program and the problem program within the systems environment; Job Control Language; program libraries; channels and interrupts; data management and I/OCS; Sequential Access Method; Indexed Sequential Access Method; Direct Access Method; utility programs; multiprogramming considerations; introduction to virtual storage; Paging; Virtual Storage Access Method.

Prerequisites: DP 12 and 31

+ Basic Course
DP 41 RPG PROGRAMMING

A detailed study of RPG (Report Program Generator). This language enables students to write programs which will produce a wide variety of business reports. Programs written by the students will be run on the remote job entry communication network connected to the University Computer Center.
Prerequisite: DP 12 or 31

+ DP 54 MICROCOMPUTER APPLICATIONS I

4 crs. 4 hrs.
An introduction to microcomputer applications used in a data processing environment. Topics include microcomputer hardware, microcomputer operating systems, word processing systems, and electronic spreadsheets.
Prerequisite: DP 11 or BA 60 or grade of "C" or better in CP 11

DP 55 MICROCOMPUTER APPLICATIONS II

4 crs. 4 hrs.
Microcomputer applications used in a data processing environment. A detailed introduction to database management systems, and integrated software systems and packages.
Prerequisite: DP 54

DP 56 MICROCOMPUTER APPLICATIONS III

4 crs. 4 hrs.
Microcomputer applications used in a data processing environment. Topics include microcomputer operating systems, graphics, microcomputer architecture and hardware, telecommunications, connecting personal computers via a local area network, and other selected topics.
Prerequisite: DP 54

DP 61 SYSTEMS ANALYSIS

3 crs. 3 hrs.
Course introduces the tools and methods used by management to develop systems for computer applications. Topics covered are: system investigation, input design, output design, file design, documentation, system testing, system implementation, hardware and software.
Prerequisite: DP 12 or 31 or 55

DP 63 DATABASE PROCESSING

4 crs. 4 hrs.
An introduction to the concepts and structures necessary to design and implement a Database Management System (DBMS) using FOCUS, a Fourth Generation computer language. Students prepare reports, describe external files, describe and maintain FOCUS files. Batch and online processing will be done. Interactive programming techniques, and the design of user friendly screen formats will be highlighted. Students work in a mainframe CMS environment and learn basic VM/CMS commands. The editor, XEDIT, will be used.
Prerequisite: DP 31

+ Basic Course
DP 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of Data Processing is developed individually between student and faculty member and must be approved by the Department.

DP 82 1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

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DATA PROCESSING
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MATHEMATICS

- MAT M1 BASIC MATHEMATICS
  0 crs. 4 hrs. (4 equated crs.)
  A course in arithmetic which stresses quantification and manipulative skills as well as applications for students who are deficient in that subject.
  NOTE: Students may attempt the CUNY Mathematics Skills Examination at the end of the term. A student who passes this course, but does not pass the CUNY Examination, then takes MAT M2.
  Required of all students who score 14 or less on the Mathematics Examination.

- MAT M2 ALGEBRA
  0 crs. 4 hrs. (4 equated crs.)
  An introductory algebra course for students who have completed MAT M1 but have not passed the CUNY Mathematics Skills Examination. The course stresses solution of elementary algebraic equations, word problems and applications.

- MAT R2 INTRODUCTORY MATHEMATICS
  0 crs. 5 hrs. (5 equated crs.)
  An introductory algebra course for students whose skills do not meet the CUNY Examination standards. The course stresses elementary solution of algebraic equations, word problems and applications.
  NOTE: Required of all students who score between 15 and 19 on the mathematics portion of the CUNY Mathematics Skills Examination. During their first semester Freshmen who scored between 21 and 24 on the mathematics test should use the Tutoring services, and the skills material in the Media Center and the Math Skills Center, to upgrade their skills.

- MAT 01 ELEMENTARY ALGEBRA
  0 crs. 4 hrs. (4 equated crs.)
  A comprehensive treatment of the topics outlined for the Ninth Year course by the University of the State of New York, and some topics in geometry.
  Not open to students who have taken MAT 05 or equivalent.

- MAT 03 ELEVENTH YEAR MATHEMATICS
  0 crs. 4 hrs. (4 equated crs.)
  Same course as Eleventh Year Mathematics in high school.
  Prerequisite: MAT 01, R2, M2 or Elementary Algebra

+ MAT 3 BUSINESS and CONSUMER MATHEMATICS
  3 crs. 3 hrs.
  Course topics include: credit cards; automobile, life, health and property insurance; compound interest; savings plans; mortgages; checkbook records; taxes and income tax forms. Recommended for all non-transfer students.
  Not open to students who have taken MAT 03 or equivalent.
  Prerequisite: Competence in Mathematics Placement Examination.

+ Basic Course

□ Remedial Course
MAT 6 MATHEMATICS OF FINANCE

This course provides mathematical concepts readily applicable to business situations. Topics include: logarithms, progressions, simple and compound interest, equations of equivalence, nominal and effect rates, simple annuities, ordinary general annuities, amortization, depreciation, sinking funds, stocks and bonds, introduction to life insurance and graphic presentation of data.

Prerequisite: MAT 03 or equivalent

MAT 7 PRINCIPLES OF MATHEMATICS

A basic course in mathematical discovery during which student participation is emphasized in the development and investigation of topics such as: number sequences, calculating devices, extrapolation, mathematical mosaics and curves, probability and topology.

Not open to students who have taken a mathematics course number 11 or higher or Intermediate Algebra or MAT 03.

Prerequisite: MAT 01, R2, or Ninth Year Mathematics.

MAT 9 UNDERSTANDING MATHEMATICS: A PRACTICAL APPROACH

Course primarily designed for Education Associate Program students. Mathematics laboratory equipment is used to gain insight into basic mathematics concepts and principles which are further developed through formal discussions and the completion of a required term project.

Prerequisite: MAT 01 or R2.

MAT 10 COLLEGE TRIGONOMETRY

This course includes functions, graphing techniques, angle measurement, functions of right angles, linear interpolation, inverse functions, laws of Sines and Cosines, circular functions, formulas, identities, waves and conditional equations.

Open to students who have had intermediate algebra, but not trigonometry. It can be taken with, or before, MAT 14. Taken with MAT 14, will adequately prepare the student for MAT 15.

MAT 11 FINITE MATHEMATICS

Course includes analysis of polls, linear programming by graph, introduction to probability, games and game theory, Markov chains, growth and decay problems, savings plans, annuities, amortization and other problems in the mathematics of management, such as PERT, simulation and forecasting. Calculators and/or minicomputers are used to do calculations. Designed as an elective for liberal arts or business students interested in some practical problems solved by mathematics.

Prerequisite: MAT 03 or equivalent.

MAT 12 CONCEPTS OF MODERN MATHEMATICS I

Students are introduced to the spirit of mathematical investigation and mathematical logic. Topics include the prime numbers, the Fundamental Theorem of Arithmetic, the rational and irrational numbers, tiling, congruence and number bases. Students may take MAT 12 and/or MAT 13 during the same or different semesters in either order.

Prerequisite: MAT 03 or equivalent.

Basic Course
MAT 13 SURVEY of MATHEMATICS and COMPUTER CONCEPTS

4 crs. 4 hrs.
Designed to introduce A.A. and A.A.S. students to several branches of mathematics, topics include probability and statistics, computer programming, logic, the real number system, and linear programming. Students may take MAT 12 and/or MAT 13 during the same or different semesters in either order.
Prerequisite: MAT 03 or equivalent or "A" grade in MAT 7

MAT 14 ANALYTIC GEOMETRY and PRE-CALCULUS MATHEMATICS

4 crs. 4 hrs.
This pre-calculus course stresses real numbers, fields, open sentences, functions and relations, and serves as an introduction to analytic geometry and to probability. Recommended for students planning to continue with calculus and/or mathematics electives. Not open to students who completed Advanced Algebra or MATH 12A in high school.
Prerequisite: MAT 03 or equivalent

MAT 15 CALCULUS I

4 crs. 4 hrs.
This is the first part of a three-semester integrated course in the elements of coordinate geometry, differential and integral calculus, with applications. Emphasis is on algebraic functions of a single variable. Among topics to be covered are the derivative, differentiation formulas, and application to geometry, physics and maximization. Not open to students who completed at least one term of calculus in high school.
Prerequisites: Advanced Algebra, 12th yr. high school math or MAT 14, PLUS passing grade on 11th yr. Regent's Math Exam or MAT 10

MAT 16 CALCULUS II

4 crs. 4 hrs.
A continuation of MAT 15, with the emphasis placed on transcendental functions, special methods of integration, and hyperbolic functions.
Prerequisite: One term of high school calculus or MAT 15

MAT 20 ELEMENTS of STATISTICS

3 crs. 3 hrs.
Students are introduced to probability and statistics including tabulation and graphing of distributions, central and dispersion tendencies, comparison techniques, correlations and predictive techniques. Instruction and practice in the use of desk calculators and the basic language. Recommended for students planning careers in economics, education, psychology, sociology, data processing and environmental technology.
Prerequisites: Intermediate Algebra, MAT 03

MAT 21 CALCULUS III

4 crs. 4 hrs.
This continuation of MAT 16 places emphasis on partial differentiation, polar coordinates, multiple integration, solid geometry, vectors, and hyperbolic functions.
Prerequisite: MAT 16 with "C" grade or better
+ MAT 23  HISTORY of MATHEMATICS  
4 crs. 4 hrs.
An introduction to the history of mathematics from Babylonian and Egyptian civilizations to the present time. Course emphasis is on mathematics as a cultural force in the development of Western civilization.
Recommended for prospective teachers of junior high school and secondary school mathematics.
Prerequisite: MAT 11 or higher

MAT 24  INTRODUCTION to the THEORY OF NUMBERS  
3 crs. 3 hrs.
This course covers the classical number theory, and such related topics as divisibility, congruences, quadratic residues, continued fractions, Diophantine equations, prime and perfect numbers.
Prerequisite: MAT 11 or higher

MAT 55  DIFFERENTIAL EQUATIONS  
3 crs. 4 hrs.
This course delves into the solution of ordinary linear differential equations, operational techniques, solution by series, numerical solutions, Laplace transforms, and applications in engineering and the sciences.
Prerequisite: MAT 16 with "C" grade or better

MAT 56  LINEAR ALGEBRA  
3 crs. 4 hrs.
Course consists of a study of vector spaces, matrix algebra transformation, and vector analysis.
Prerequisite: MAT 15 with "C" grade or better

MAT 81  INDEPENDENT STUDY  
1–3 crs. 1–3 hrs.
Independent study of Mathematics is developed individually between student and faculty member and must be approved by the Department.

MAT 82  
1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

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MATHEMATICS
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+ Basic Course
MUSIC DEPARTMENT
Room T-8206  ext. 5528

Monroe Couper, Assistant Professor
Marta Ghezzo, Associate Professor
Charles Jacobs, Distinguished Professor
Simeon Loring, Professor and Chairman
David Maslanka, Associate Professor
William B. McKinney, Professor
Edward Rohrlich, College Laboratory Technician
MUSIC

+ MUS 21 INTRODUCTION to JAZZ
3 crs. 3 hrs.
An historical approach to the jazz idiom through readings and guided listening. Topics include: the roots of jazz music, New Orleans jazz, Chicago style, Kansas City style, swing, bebop, new wave, and progressive jazz.

+ MUS 22 MUSIC of the TWENTIETH CENTURY
3 crs. 3 hrs.
Introduction to the varied sounds of the world of twentieth-century music. The major emphasis of the course is on the major musical achievements of the century by European and American composers, including Igor Stravinsky, Bela Bartok, Arnold Schonberg, George Gershwin, Leonard Bernstein, Aaron Copland and John Cage.

MUS 23 INTRODUCTION to SONGWRITING
3 crs. 3 hrs.
This practical introduction to song composition is designed for the beginner. It deals with music notation, melody writing, chord choice, song forms, setting words to music, making scores and lead sheets.
Prerequisite: ENG C2 or ENG 12 and permission of the Department

+ MUS 27 MUSIC of the WORLD'S PEOPLES
3 crs. 3 hrs.
A listening survey of the folk and ethnic music of various peoples of the world. Songs and dances of love, war, the harvest. Chanting, drumming evocations. Included are the instruments and languages and their relationships to musical characteristics plus geographical, sociological and historical themes as they are reflected in the music.

+ MUS 30 RUDIMENTS of THEORY
3 crs. 3 hrs.
A first course in music theory for students who have no previous musical training, but are interested in acquiring basic skills in music reading, writing, and performance. Topics include: note reading and writing in treble and bass clef, major and minor scales, intervals and chords.

+ MUS 31 THE MUSICAL EXPERIENCE
3 crs. 3 hrs.
The development of perceptive awareness of music through guided listening. Materials and forms of music and their use in musical literature are studied.

MUS 91 CHORUS*
1 cr. 3 hrs.

MUS 92 BAND*
1 cr. 3 hrs.
Concert Band; Stage Band; Guitar Ensemble or Percussion Ensemble.

MUS 93 ORCHESTRA*
1 cr. 3 hrs.

*One of these Performing groups MUST be taken EACH semester.
Students may enroll for more than one of the above performing groups. However, credit is allowed for only one activity.

+ Basic Course
COURSES for MUSIC MAJORS

Courses listed for Music Majors may be open to other students with Department permission.

+ MUS 1  BASIC SKILLS: THEORY
  Review of basic skills in Music Theory and Ear Training. 1 cr. 2 hrs.

+ MUS 2  BASIC SKILLS: PIANO I
  Beginning piano course for music majors. 1 cr. 1 hr.

+ MUS 3  BASIC SKILLS: PIANO II
  Second piano course in this sequence for music majors. 1 cr. 1 hr.
  Prerequisite: MUS 2
  MUS 1, 2, and 3 required of Music majors who have not demonstrated competency in these areas

MUS 32  THEORY of MUSIC I
  Introduction to traditional harmony: formation of chords, chord functions, triads in root position. 3 crs. 3 hrs.
  Beginning analysis. Basic exercises in composition and copywork.
  Prerequisite: MUS 1 or permission of Department.
  Corequisite: MUS 36

MUS 33  THEORY of MUSIC II
  Continuation of MUS 32: voice leading, inversions, phrase structure and cadences. Appropriate exercises in analysis, composition and copywork. 3 crs. 3 hrs.
  Prerequisite: MUS 32
  Corequisite: MUS 37

MUS 34  THEORY of MUSIC III
  Continuation of MUS 33: principles of harmonic progression, harmonization, non-harmonic tones. Appropriate exercises in analysis, composition and copywork. 3 crs. hrs.
  Prerequisite MUS 33
  Corequisite: MUS 38

MUS 35  THEORY of MUSIC IV
  Continuation of MUS 34: seventh chords, secondary dominants, borrowed chords; beginning modulation. Appropriate exercises in analysis, composition and copywork. 3 crs. 3 hrs.
  Prerequisite: MUS 34
  Corequisite: MUS 39

+ Basic Course
MUS 36 · EAR TRAINING I

2 crs. 2 hrs.
plus supplementary laboratory assignment

Fundamentals of notation, rhythms, key signatures, tempo and dynamics, are studied with practice in elementary sight-singing and dictation. Course enables students to sing melodies at sight and to develop hearing perception.

Prerequisite: MUS 1 or permission of the Department
Corequisite: MUS 32

MUS 37 · EAR TRAINING II

2 crs. 2 hrs.
plus supplementary laboratory assignment

During this continuation of MUS 36 students are involved in sight-singing and dictation of melodies, rhythm, harmony, major and minor modes, intervals and chords, and rhythmic patterns.

Prerequisite: MUS 36

MUS 38 · EAR TRAINING III

2 crs. 2 hrs.
plus supplementary laboratory assignments

Continuation of MUS 37 during which sound recognition and sight-singing is applied to the principles of theory. Analysis of melodic construction and harmonization, study of form in music, regular and irregular rhythms are included.

Prerequisite: MUS 37

MUS 39 · EAR TRAINING IV

2 crs. 2 hrs.
plus supplementary laboratory assignments

Continuation of MUS 38, includes advanced study and application of ear-training learned in previous classes.

Prerequisite: MUS 38

+ MUS 51 · MUSIC LITERATURE I

3 crs. 3 hrs.

Analytical study of cadences and phrase structures, utilizing monophonic and homophonic examples. Formal analysis of chorales, piano miniatures and art songs in simple (binary and ternary) forms, and other types of music (keyboard preludes and fantasias). Several kinds of variation and compositions in rondo form are examined. Symphonic works are utilized and the suite is studied as a complete form.

MUS 52 · MUSIC LITERATURE II

3 crs. 3 hrs.

This advanced course includes analysis of various types of canons, inventions and motets, the fugue and sonata form as applied in literature for the keyboard, chamber combinations, and symphony orchestra, and the extension of rondo and figure forms to the Baroque concerto. Simpler concertos by Corelli, Vivaldi, and Bach are studied, as well as relatively uncomplicated keyboard, chamber and symphonic works by Haydn, Mozart, Beethoven, and Schubert. Fugues from Bach’s “Well-Tempered Clavier” and “Art of the Fugue” are examined.

Prerequisite: MUS 51

+ Basic Course

250
MUS 60, 61, 62, 63 PERFORMANCE and PRACTICE

4 crs. 3 hrs.
plus private instruction

A four-semester sequence during which students are given a private lesson each week and are required to participate in Orchestra, Chorus, or Band. Acceptance into the course is based on an audition to demonstrate student readiness to begin on the literature of the first semester. (Guidelines regarding minimum preparation are available from the Music Department.) At the end of each semester students perform before a jury. Students who fail this examination may not continue the course sequence. Under special circumstances, petition for a new audition will be considered. Courses in the sequences described may not be repeated.

MUS 81 INDEPENDENT STUDY

1–3 crs. 1–3 hrs.

Independent study of Music is developed individually between student and faculty member and must be approved by the Department.

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HUM 1 HUMANITIES: FREEDOM & CONTROL: CULTURE in the 20th CENTURY

3 crs. 3 hrs.

Course explores literature, drama, art, and music in today’s world. Attempts are made to place 20th century developments into an historical context and illustrate the continuity of culture. Prerequisite: Enrollment in “College Now” Program.
The following courses are open to students in the CUNY BA program in Music ONLY.

+ **MUS 4  PIANO I**  
  1 cr. 1 hr.  
  Beginning course for music majors in the CUNY BA program.

**MUS 5  PIANO II**  
  1 cr. 1 hr.  
  The second course in this sequence for music majors in the CUNY BA program.  
  Prerequisite: MUS 4

+ **MUS 12  HARMONY I**  
  3 crs. 3 hrs.  
  Prerequisite: MUS 1, or equivalent, or permission of the Department  
  Corequisite: MUS 16

**MUS 13  HARMONY II**  
  3 crs. 3 hrs.  
  Prerequisite: MUS 12  
  Corequisite: MUS 17

**MUS 14  CHROMATIC HARMONY I and COUNTERPOINT I**  
  3 crs. 3 hrs.  
  Continuation of MUS 13: seventh chords; chromatic harmony including secondary dominants, borrowed chords and augmented-sixth chords; beginning modulation. Introduction to 18th-century counterpoint. Appropriate analysis, composition and copywork.  
  Prerequisite: MUS 13  
  Corequisite: MUS 18

**MUS 15  CHROMATIC HARMONY II and COUNTERPOINT II**  
  3 crs. 3 hrs.  
  Continuation of MUS 14: chromatic harmony including Neapolitan sixth and diminished seventh chords, altered mediantds, ninth, eleventh and thirteenth chords; further studies in modulation. 18th-century counterpoint: studies in small binary forms and two-part inventions. Appropriate analysis, composition and copywork.  
  Prerequisite: MUS 14  
  Corequisite: MUS 19

+ Basic Course
MUS 16  EAR TRAINING I
2 crs. 2 hrs.  
plus supplemental laboratory assignment

Training for aesthetic aural perception of music. Concentration on recreating (through sight-singing) and identification (through dictation) of diatonic melodies in major and minor using common simple and compound meters and rhythmic patterns. Musicianship, as well as accuracy, will be stressed.
Corequisite: MUS 12

MUS 17  EAR TRAINING II
2 crs. 2 hrs.  
plus supplemental laboratory assignment

Continuation of MUS 16. New topics include modulation, chromaticism, modes, and contemporary syncopation. Dictation of harmonic progressions will include all diatonic harmonies in major and minor.
Prerequisite: MUS 16  
Corequisite: MUS 13

MUS 18  EAR TRAINING III
2 crs. 2 hrs.  
plus supplemental laboratory assignment

Continuation of MUS 17. New topics include advanced chromatic usage in melody and harmony. Complex rhythmic problems, and the recognition of intervals without tonal orientation. Four-part chorale dictation will be introduced through two-part dictation, progressing through four-part dictation of primary triads.
Prerequisite: MUS 17  
Corequisite: MUS 14

MUS 19  EAR TRAINING IV
2 crs. 2 hrs.  
plus supplemental laboratory assignment

Continuation of MUS 18. Increasingly complex rhythmic and chromatic problems, leading to metrically ambiguous atonal melodies. Four-part chorale dictation will conclude with complete settings of Bach chorales.
Prerequisite: MUS 18  
Corequisite: MUS 15

MUS 65, 66, 67, 68  PERFORMANCE and PRACTICE
4 crs. 3 hrs.  
plus private instruction

A four-semester sequence during which students are given a private lesson each week and are required to participate in Orchestra, Chorus, or Band. Acceptance into the course is based on an audition to demonstrate the students' readiness to begin work on the literature of the first semester. At the end of each semester students perform before a jury. Students who fail this examination may not continue the course sequence. Under special circumstances, petition for a new audition will be considered. Courses in the sequences described may not be repeated.
Halice K. Beckett, Assistant Professor
Robert Callahan, Assistant Professor
Catherine Carr, Associate Professor and Chairperson
Pamela Clark, Instructor
Laura DiCapua, Senior College Laboratory Technician, Adjunct Lecturer
Frances Essex, Instructor
Valerie Gill, Assistant Professor
Barbara Gurski, Professor
Gloria P. Hartman, Assistant Professor
Louise James, Associate Professor
Bella Kanturek, Associate Professor
Joann Lavin, Assistant Professor
Sylvia F. Martin, Professor
Marjorie McDonough, Instructor
Monica Murray, Assistant Professor
Theresa M. Rodin, Assistant Professor
Delores Shrimpton, Assistant Professor
Delores Washington, Associate Professor
NURSING

To matriculate for the Nursing A.A.S. degree, students MUST first complete the Pre-Nursing Program at the College. No student will be permitted to enter the Nursing Program from any but the Pre-Nursing sequence. No entry directly into the Nursing Program will be permitted except as indicated below.

Students who successfully complete the Pre-Nursing sequence, (a pre-nursing concentration within a special Liberal Arts program) may then formally file for a change of curriculum into the Nursing Program to work toward the A.A.S. degree. They will be admitted into the program based on their index and on space availability.

On completion of 25 credits attempted at Kingsborough, students who fail to meet the transfer requirements into Nursing will be required to complete the requirements for the Liberal Arts (A.A.) Degree or, to file application to transfer to another degree program. Exception to this rule can be made only by the appropriate appeals committee.

Students who are admitted to the Nursing Program must comply with the following:

A. Complete the Pre-Nursing sequence of four courses: ENG 12, ENG C2, or ENG 22 (if exempted from ENG 12); PSY 11; BIO 11; SCI 25;

B. Complete these four courses with either a 2.5 grade point average or 2 B's (one of which must be in SCI 25 or BIO 11) and 2 C's;

C. Students who repeat courses in the Pre-Nursing sequence, due to unsatisfactory initial grades, must achieve an index of 2.5 based on ALL COURSES taken in this sequence;

D. All grades received for courses taken in the Pre-Nursing sequence, either at Kingsborough or at other colleges, will be included in determining the Pre-Nursing index. All grades for these courses will be included, whether or not transfer credit is granted;

E. Satisfactory score on the National League for Nursing Pre-admission Test.

Based on their College placement test scores, students must complete any required remediation prior to completion of the four courses in the Pre-Nursing sequence (A above).

Passing scores on the CUNY Reading, Writing, and Mathematics Placement Examinations are required.

Up to 5% of the students who are admitted to the Nursing Program may be allowed directly into the first Nursing course and can thus complete the program in four semesters. These students are selected on the basis of their high school admission average, CUNY Placement Scores and Nursing Department approval.

Change of curriculum forms are available in the Registrar's Office (A-101). Completed forms must be filed in the Nursing Office (T-4122) during the Fall or Spring semester in which students expect to complete the pre-nursing sequence.

Pre-Nursing index will be evaluated as follows: courses taken during the Summer Module will be evaluated for the following Spring Semester; courses taken during the Winter Module will be evaluated for the following Fall Semester.

Students accepted into the Nursing Program who are Licensed Practical Nurses may receive credit for NUR 18 (Fundamentals of Nursing) by passing the State Education Department College Proficiency Examination in "Fundamentals" with a score of 55 or better.

Credit for NUR 17 (Drug Calculations in Nursing), may be obtained by passing a Department of Nursing examination with a score of 70% or better.

Information is available in the Nursing Office (T-4122)
Retention Criteria
Criteria for retention in the Program mandates that students must:

a. receive no more than two grades under “C” in any pre or corequisites; no more than one grade under “C” in the Sciences; no more than one grade under “C” in Psychology and Sociology;
b. earn a minimum final grade of “C” in every Nursing course;
c. repeat any Nursing course for which a “D” or “F” grade was received;
d. receive no more than two grades under “C” in any required Nursing course;
e. any course presented by the Nursing Department may be repeated only once.

As of Fall 1983, Nursing students who enter NUR 17 and 18 for the first time MUST complete the Nursing Program within four years from the date of entry into core nursing courses. (Students who risk not completing the program within four years will be encouraged to seek academic counseling. Students who do not complete the program in four years may appeal to the appropriate college committee.)

As of Fall, 1983 any student who has not attended nursing courses for two or more consecutive years cannot be readmitted into the Nursing Program unless qualifying examinations have been passed in sequential order in the courses previously completed. In accordance with the retention criteria of the Nursing Department, qualifying examinations can be repeated only once.

Drug Calculation Policy
NUR 17, “Drug Calculations in Nursing” is a corequisite of NUR 18 and a prerequisite to all other nursing courses. Throughout the rest of the program, drug calculation skills will be tested each semester.

Beginning with the second semester (NUR 21) promotion to the next semester requires a “C” or better in the nursing course(s) a passing grade of 80% in the Drug Calculations Test given during that semester.

A student who receives a “C” or better in the nursing course(s) but who does not pass the Drug Calculations Test will receive credit for the course(s) but will not be allowed to register for further nursing courses or to graduate until a Drug Calculations Test for that semester has been passed.

In the second semester (NUR 21) and third semester (NUR 20 and NUR 22) students who have failed the first test will be offered a retest, (a total of two opportunities to pass a test during the semester). In the fourth semester (NUR 19 and NUR 23) one test will be offered in NUR 23.

A student who fails both tests in a semester, or a fourth semester course, will be offered a final test in the winter or summer module immediately following that semester.

Failure to pass the final test will result in the student's dismissal from the Nursing Program.

Malpractice Insurance—Health Clearance
Students entering nursing courses in which there are laboratory experiences in hospitals are required to have malpractice insurance, and health clearance prior to registration.

Information is available in the Nursing Office (T-4122) and/or in the College Health Services Office (A-108).

Legal Limitations for State Licensure
Requirements for licensure as a registered nurse in New York State include having attained the age of eighteen years or more, the successful completion of the A.A.S. Program in Nursing, passing the National Council Licensing Examination and being of good moral character. The Office of Professional Discipline investigates all applicants with prior criminal conviction (s) and/or pending criminal charges (felony or misdemeanor). Following its investigation, a determination will be made as to the applicant's eligibility for licensure.
Nursing Courses Must Be Taken in the Following EXACT Sequence:

+ **NUR 17 DRUG CALCULATIONS in NURSING** 1 cr. 1 hr.
  Required for Nursing students, this course provides opportunities to acquire knowledge in computing medical dosages.
  Prerequisites: MAT M1, M2 and MAT R2 if necessary
  Corequisite: NUR 18 or equivalent

+ **NUR 18 FUNDAMENTALS of NURSING** 7 crs. 13 hrs.
  Introduction to the knowledge, skills, and understanding which are basic to nursing. The dependent and independent functions of the nurse are explored. During lecture and laboratory sessions, selected facts, principles and concepts, derived from the biological and behavioral sciences, are applied to common elements of nursing care. Laboratory sessions may be held on campus or off campus, in hospitals or other health agencies.
  Pre or Corequisites: BIO 11, 12; PSY 11; SCI 25; ENG 12 or C2, or 22 if exempted from ENG 12
  Corequisite: NUR 17

**NUR 21 NURSING the ILL ADULT I** 9 crs. 16 hrs.
  Presents methods of nursing during illnesses which are major health problems to society. Nursing intervention, based on physiological and psychological needs of adult patients, is studied. Opportunities are provided in classroom and laboratory, to adapt and combine the nursing skills needed when caring for patients with health problems such as: infectious processes, accidents, respiratory, cardio-pulmonary, nutrition and elimination disorders. Laboratory sessions may be off campus in hospitals or other health agencies.
  Prerequisites: NUR 17, 18
  Pre or Corequisite: BIO 51

**NUR 20 NURSING the EMOTIONALLY ILL** 4 crs. 14 hrs.
  (one-half semester)
  Students are introduced to the nursing intricacies of emotionally ill individuals. Major topics are organized to show how emotional illness affects the needs of the individual and the family. Lecture-discussions are used in the classroom and laboratory to relate concepts and principles of psychodynamics to the behavior of these patients. Laboratory sessions may be off campus in hospitals or other health agencies.
  Prerequisite: NUR 21
  Corequisite: PSY 32
  Recommended: SOC 31; ENG 22.

+ Basic Course
NUR 22  NURSING the ILL ADULT II

5 crs. 17 hrs.  
(one-half semester)

This lecture-laboratory continuation of NUR 21 presents the concepts of illness upon which nursing intervention is based. Topics are organized to demonstrate how illness affects the needs of individuals, families and society. Selected major adult health problems discussed, are those of interference with normal cellular growth and with mobility. Emphasis is on concepts of long-term illness and rehabilitation. Laboratory sessions may be off campus in hospitals or other health agencies.

Prerequisite: NUR 21
Pre or Corequisite: PSY 32
Recommended: SOC 31; ENG 22.

NUR 19  FAMILY-CENTERED MATERNITY NURSING

4 crs. 14 hrs.  
(one-half semester)

Students are introduced to family-centered maternity nursing. Lecture and laboratory sessions present facts, principles and concepts relevant to the care of individuals and families during the reproductive years of the life-cycle. Laboratory sessions may be off campus in hospitals or other health agencies.

Prerequisites: NUR 20, 22.
Pre or Corequisite: SOC 31

NUR 23  NURSING of CHILDREN

5 crs. 17 hrs.  
(one-half semester)

The special nursing skills necessary for children within a family that is afflicted with illnesses that are major health problems to society are taught. Topics are organized to show how the needs of children, from infancy through adolescence, are affected by illness. Laboratory sessions may be off campus in hospitals or other health agencies.

Prerequisites: NUR 20, 22.
Pre or Corequisite: SOC 31

NUR 24  ISSUES in NURSING

1 cr. 1 hr.

A survey of the role of the beginning nurse practitioner as an individual and as a member of the nursing profession. Selected major facts in the history of American nursing are discussed. Emphasis is placed upon legal aspects, issues and trends in nursing.

Open to fourth semester nursing students only.
Corequisite: NUR 19, 23.
Electives

+ NUR 41 EMERGENCY HEALTH CARE

Students are introduced to existing and potential environmental hazards; to the planning and implementation of precautions in daily living; the basic structure and function of the healthy heart and circulatory system; the techniques of taking the vital signs, techniques of basic life support for cardiopulmonary emergencies. The course is designed to increase students' knowledge of environmental hazards, and increase skills in identifying, preventing, and taking appropriate action(s).

+ NUR 42 PARENTING

The attitudes and functions of the American family during the childbearing and child-rearing years are explained. Discussions relate to those areas of parenting that assist in developing approaches to satisfactory family life.

+ NUR 43 PERSPECTIVES on DEATH and DYING

The primary focus of this course is to examine the dynamics of death and dying for the purpose of understanding one's own feelings and attitudes so that meaningful assistance may be given to the dying individual and the family. The ethical/moral and legal problems arising from such controversial issues as advanced medical treatment, strategies, abortion, suicide and euthanasia are explored.

Prerequisites: PSY 11 and SOC 31

NUR 44 DIET in HEALTH and ILLNESS

Course considers the nature of food and fluid intake in healthy and in ill individuals. Cultural differences, age variables, and dietary modifications are examined.

Co or Prerequisite: BIO 11

NUR 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

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NURSING

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+ Basic Course
CHEMISTRY

CHM 01 PREVIEW of GENERAL CHEMISTRY

Combined lecture and workshop course introduces students to chemical nomenclature, symbolism, structure of atoms and molecules, simple chemical reactions and basic stoichiometry. As needed, mathematics for these topics and solution of simple verbal problems, will be taught. Critical reading of chemistry texts are encouraged. Each student receives intensive help with weak areas.
Corequisite: MAT 03 or equivalent

CHM 11 GENERAL CHEMISTRY I

In this two-semester classroom and laboratory course, the first term introduces students to chemical equations, stoichiometry, chemical nomenclature, atomic structure, periodic properties, bonding, (especially of carbon compounds), the gaseous, liquid and solid states, phase changes, electrolytes, and the properties of selected elements in relation to environmental problems.
Prerequisites: MAT 03 or equivalent, CHM 01 or competence on Department Placement Examination.

CHM 12 GENERAL CHEMISTRY II

The second term continues with study of chemical kinetics, equilibrium, acids, bases, and salts, weak electrolytes and pH, solubility, thermochemistry, electrochemistry, and transition metal chemistry. Laboratory experiments give students a feeling for the classical and modern methods of chemistry.
Prerequisite: CHM 11

CHM 13 GENERAL CHEMISTRY LABORATORY

This laboratory course was designed to meet the needs of respiration therapy students who have successfully completed the equivalent of one year of General Chemistry Theory at the Metropolitan Hospital School of Respiration Therapy and need the laboratory component. Upon successful completion of this course, credit will be granted for CHM 11–12.
Open only to students in the Metropolitan Hospital Respiration Therapy Program.

CHM 31 ORGANIC CHEMISTRY I

Introduction to modern concepts of organic chemistry. These include structure and bonding, reaction mechanisms, stereochemistry, nomenclature and synthesis. The main focus is on the relationship between structure and reactivity of the functional groups representing the principal classes of organic compounds. Laboratory covers the fundamental operations of organic chemistry including determination of physical properties, experimental reactions and procedures and basic instrumenta-
Prerequisite: CHM 12

CHM 32 ORGANIC CHEMISTRY II

Continuation of the study of structure and reactivity of organic compounds. Topics include structure and bonding, nomenclature, synthesis, stereochemistry and reaction mechanisms of the important functional groups of organic compounds. Laboratory consists of basic processes of organic chemistry including: advanced instrumental methods, study of functional groups and derivatives and qualitative organic analysis. Select students may be introduced to research methods.
Prerequisite: CHM 31
CHM 40  FOOD ANALYSIS  3 crs. 5 hrs.
To acquaint students with chemical tests used by food analysts, emphasis is placed on understanding and use of good analytical techniques, including gravimetric, volumetric and spectrophotometric methods. Procedures for screening, and for routine quality control, plus the official tests for fats, proteins, carbohydrates, and selected minor nutrients are introduced. For Food Science Concentraents and other interested students.
Prerequisite: CHM 12

CHM 81  INDEPENDENT STUDY  1–3 crs. 1–3 hrs.
Independent study of Chemistry is developed individually between student and faculty member and must be approved by the Department.

CHM 82  1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
+ **HE 36  MARINE SAFETY and FIRST AID**

Provide knowledge and skills necessary to meet emergency medical situations and to implement appropriate safety measures in a marine environment. Completion of course can qualify students for American Red Cross certification in cardiopulmonary resuscitation and first aid. Required of Vessel Operations Majors.

+ **FMT 09  BOAT OPERATIONS and TRAINING**

An introductory vessel course. Topics include: historical boating perspective; the importance of New York Harbor; boating terms; seamanship; boat construction; vessel maintenance; navigation and recreational sail and power boating. Students learn about career opportunities in the recreational boating field.

+ **FMT 10  TOPICS in FISHERIES and MARINE TECHNOLOGY**

An overview of the commercial fishing and recreational boating industries. Topics include: the 2-mile limit law and its impact; survey of fishing gear; vessel orientation; fishing at sea; fish as food; seafood business management including marketing and distribution; seafood retailing; marina design and operations; the charter and party boat industry.

+ **FMT 11  AMERICAN FISHING INDUSTRY**

History and socio-cultural traditions of the commercial fishing industry. The industry in the United States is examined in the context of international and federal fisheries law, world activity in harvesting, marketing and environmental constraints.

+ **FMT 12  COMMERCIAL FISHERIES SCIENCE**

A biological and oceanographic background to commercial fisheries. Concepts are presented to understand the life cycles, abundance, distribution and behavior patterns of marine species. Identification, nomenclature of finfish and shellfish are emphasized. Fishery resource management, aquaculture and marine pollution are introduced.

+ **FMT 13  INTRODUCTION to SEAFOOD**

Introduction to the biological, chemical and nutritional aspects of seafood which includes basic elements of seafood bacteriology, public health concerns and factors that affect quality. Laboratory exercises involve chemical, microbiological, physical and sensory analysis in evaluating seafood.

+ **FMT 20  SEAFOOD BUSINESS MANAGEMENT**

Detailed examination of: the seafood industry; trade systems for sales; processing operations; transportation; the market distribution system. International marketing procedures, supply and demand, price structures, policy making and regulatory agencies that affect business operations are covered. Prerequisite: BA 11

+ **FMT 21  SEAFOOD PROCESSING**

Introduction to seafood processing focusing on a detailed review of how to handle and process fresh and frozen fish and shellfish. The relationship of handling to quality will be emphasized. Prerequisites: FMT 12, 13
FMT 22  SEAFOOD PRODUCTION LABORATORY
Practical experience in the principles and techniques of traditional and advanced seafood processing methods. Actual plant operations are performed.
Prerequisite: FMT 21

FMT 23  SEAFOOD RETAILING
An overview of seafood sales and marketing techniques. Emphasis is on product ordering and handling, facility design, sanitation, merchandising, regulations, retail business skills and sales promotion.
Prerequisites: BA 14, FMT 20

FMT 30  SEAMANSHIP
The principles and practice of seamanship, including nautical terminology, introduction to vessels, vessel handling, deck equipment, Rules of the Road, marlinspike seamanship and meteorology.

+ FMT 31  NAVIGATION
Introduction to navigation emphasizing nautical charts, the compass, piloting, tides and currents, position determination, aids to navigation and marine electronics.
Prerequisite: Placement at Math R2 level or above.

+ FMT 32  VESSEL BUSINESS MANAGEMENT
Course deals with the business and management aspects of operating a fishing vessel and fishing fleet.

FMT 33  VESSEL TECHNOLOGY I
During application of seamanship theory and fundamentals to vessel operations, students undertake vessel handling, piloting, all phases of applied engineering technology, operate rigging and deck machinery.
Prerequisites: HE 36, FMT 30

FMT 34  VESSEL TECHNOLOGY II
Practical experience in commercial fishing trip planning, working the fishing grounds, handling the catch with concern for quality, and evaluating the productivity of a fishing vessel.
Prerequisites: FMT 31, 33, 36

+ FMT 35  DIESEL TECHNOLOGY
Introduction to diesel engine principles, construction, operation, testing, maintenance and overhaul. The basics of marine diesel engine designs and their accompanying fuel, exhaust, cooling, lubricating and starting systems are presented.
Prerequisite: Passing score on CUNY Mathematics Assessment Test

+ FMT 36  COMMERCIAL FISHING METHODS
The principal forms of commercial fishing gear and methods are presented. Factors influencing the choice of fishing gear for a particular species are considered. Trawling gear and techniques, seine operations, gillnetting, long-lining, trap fishing and dredge fisheries are reviewed and their respective fishing gear demonstrated.

+ Basic Course
+ **FMT 37 A U X I L I A R Y  S Y S T E M S**

3 crs. 5 hrs.

The basic hydraulic and refrigeration principles, system components and common shipboard system design are presented. Installation, applications, operation, maintenance and troubleshooting of vessel hydraulic and refrigeration systems are covered.

Prerequisite: Passing score on CUNY Mathematics Assessment Test

+ **FMT 38 E L E C T R I C A L  S Y S T E M S  a n d  M A R I N E  E L E C T R O N I C S**

3 crs. 4 hrs.

Electrical theory as it applies to marine vessels and fishing. Types of electrical circuits, batteries, system design, installation, operation, maintenance, and repair of electrical systems and electronic equipment are covered.

Prerequisite: Passing score on CUNY Mathematics Assessment Test.

+ **FMT 39  V E S S E L  M A I N T E N A N C E**

3 crs. 5 hrs.

Basic skills required for maintaining and repairing wooden, fiberglass and steel vessels are developed. Emphasis is on hulls, fluid and propulsion systems, rigging and welding.

**FMT 40  S E A F O O D  B U S I N E S S  I S S U E S  A N D  T R E N D S**

3 crs. 3 hrs.

The course ties together the key concepts learned in the other fisheries and seafood courses and focuses on current issues and trends in the industry. Guest lecturers from industry, academia and government augment class instruction and discussions. A research project on an important fishery or seafood problem or trend is undertaken. Successful individuals and companies are profiled.

Recommended: Course should be taken in last semester

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**A.A.S. Degree**

**FISHERIES and MARINE TECHNOLOGY**

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+ Basic Course
**GEOLOGY**

+ **GEO 31  METEOROLOGY**
  3 crs. 3 hrs.
  Introduction to the fundamental physical and chemical structure of the atmosphere. Topics covered deal with weather, climate, meteorological instrumentation, and air pollution.

+ **GEO 32  PHYSICAL OCEANOGRAPHY**
  3 crs. 3 hrs.
  Factors that have a major influence on the physical and chemical structure of the oceans are considered. Topics covered deal with tides, waves, currents, oceanographic instrumentation and coastal oceanography.

+ **GEO 33  PHYSICAL GEOLOGY**
  4 crs. 5 hrs.
  Physical geology is a study of the nature of the Earth and its processes. Topics covered include: mineral and rock classification; analysis of the agents of weathering and erosion; dynamics of the Earth's crust as manifest in mountain building, volcanos and earthquakes. Recent data concerning the geology of other planets: field and laboratory techniques of the geologist is reviewed.

+ **GEO 35  HISTORICAL GEOLOGY**
  3 crs. 3 hrs.
  Presentation of the history of the geological development and changes of the planet Earth through the course of geological time as revealed by rock and fossil records.

+ **GEO 37  PHYSICAL GEOGRAPHY**
  3 crs. 3 hrs.
  Course features the climatic and geological systems of the Earth, and the impact of these processes upon mankind's economic and demographic development. Contemporary ecological problems receive comprehensive description and analysis. To broaden students' acquaintance with geographical literature, outside readings are assigned.

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+ Basic Course
PHY 11 GENERAL PHYSICS I

5 crs. 6 hrs.
The first term of a non-calculus two-semester college lecture and laboratory course in classical and modern physics. Recommended for students in liberal arts, pre-medical, pre-dental, pre-pharmacy, pre-optometry and allied health. Topics include study of mechanics, heat, hydrostatics and hydrodynamics, harmonic motion and waves. In the accompanying laboratory, physical principles are demonstrated and students are given "hands on" laboratory experience.
Prerequisite: MAT 03 or equivalent.

PHY 12 GENERAL PHYSICS II

5 crs. 6 hrs.
The second term of General Physics. Topics covered include sound, electricity, magnetism, atomic and nuclear physics and optics.
Laboratory sessions are included.
Prerequisite: PHY 11

PHY 13 ADVANCED GENERAL PHYSICS I

5 crs. 6 hrs.
The first term of a calculus two-semester college lecture and laboratory course in classical and modern physics. Recommended for students in science and engineering. Pre-medical and allied health students who desire a more comprehensive treatment than what is given in PHY 11 should consider taking this course. During laboratory sessions physical principles are demonstrated and students are given "hands on" laboratory experience.
Corequisite: MAT 15.

PHY 14 ADVANCED GENERAL PHYSICS II

5 crs. 6 hrs.
The second term of Advanced General Physics. Topics include sound, electricity, magnetism, atomic and nuclear physics and optics.
Laboratory sessions are included.
Prerequisite: PHY 13
Corequisite: MAT 16

PHY 21 MODERN PHYSICS

4 crs. 5 hrs.
This up-to-date course in atomic and nuclear physics is recommended for science, engineering and certain allied health students. It includes kinetic theory, the failure of classical physics, wave mechanics, special relativity, radioactivity, nuclear reactions, fission, fusion and nuclear energy and its economic and ecological impact. Laboratory sessions give students an opportunity to do experiments in some above areas.
Prerequisite: PHY 12 or 14

PHY 22 INTRODUCTION to ELECTRICAL ENGINEERING

3 crs. 3 hrs.
A first course in electrical engineering. Topics covered include; circuit elements and their voltage-current relations; Kirchhoff's laws; elementary circuit analysis; continuous and discrete signals; differential and difference equations; first order systems. Required of all students majoring in engineering science with a concentration in electrical engineering.
Prerequisites: MAT 21, MAT 56, CP 51, PHY 14.
PHY 23 INTRODUCTION to ENGINEERING THERMODYNAMICS

A first course in engineering thermodynamics. Topics covered include: Zeroth Law and absolute temperature; work, heat, First Law and applications; Second Law, Carnot theorems, entropy, thermodynamic state variables and functions, reversibility, irreversibility, and availability functions: Ideal gas mixtures, mixtures of vapors and gas, humidity calculations.

Required of all students majoring in engineering science with a concentration in mechanical, civil or chemical engineering.

Prerequisites: CHM 12, PHY 14

PHY 29 BASIC ELECTRONICS

Lecture and laboratory work in the fundamentals of AC and DC circuits, vacuum tubes, transistors, circuit design and electronic instrumentation are included.

Prerequisite: A college level laboratory physics course or permission of the Department

+ PHY 30 PHYSICS for EVERYDAY LIVING

Especially designed for liberal arts and career students desiring an up-to-date narrative of developments in physics. Such non-traditional topics as space travel, atomic energy and the atomic bomb, ecological problems and the computer covered.

+ PHY 31 ELECTRONICS for COMMUNICATION I

This is the first course of a three term sequence. Topics include: atomic structure, simple DC circuits, Ohm's Law, resistors, Watt's Law, meters, motors, batteries, inductance, capacitance, series circuits, parallel circuits, AC circuits, resonance and FCC rules and regulations. The central theme of the course is the passive electronic components and their use. The laboratory gives practical experience in these topics.

Fulfills Group V requirements for Radio Broadcast Majors.

Prerequisites: Elementary Algebra, MAT 03 or MAT R2

+ PHY 32 ELECTRONICS for COMMUNICATION II

The second course of a three term sequence. Topics include: tubes, transistors, common transistor amplifiers, power sources, audio frequency amplifiers, radio frequency amplifiers, oscillators, test and measuring equipment, integrated circuits, and digital fundamentals. The central theme of the course is the simple active electronic components and their use in circuits. The laboratory gives practical experience in these topics.

Fulfills Group V requirements for Radio Broadcast Majors.

Prerequisite: PHY 31 or permission of the Department

PHY 33 ELECTRONICS for COMMUNICATION III

During this third course of a three term sequence, topics include: advanced AC and DC circuits, the fundamentals of AM, FM, and television systems, transmitters, antennas, and coaxial lines. Preparation is made for the General Class FCC License Exam. The central theme of the course is broadcast systems. The laboratory gives practical experience in these topics.

Fulfills Group V requirements for Radio Broadcast Majors.

Prerequisite: PHY 32 or permission of the Department

+ Basic Course
PHY 35  INTRODUCTION to ASTRONOMY

3 crs. 3 hrs.

Introduction to the concepts and methods of astronomical science. In systematic fashion, the course covers the early theories of the universe, astronomical instruments, the solar system and its members, the stars, galaxies, recently discovered objects, and concludes with a study of modern cosmological ideas. Students who wish to add the laboratory part of this course should take ASTRONOMY LABORATORY, SCI 41, 1 cr. 2 hrs. This course, when taken at the same time, would be the equivalent of a 4 credit lab course.

Prerequisite: 11th year Math or MAT 03 or permission of the Department
SCIENCE

+ SCI 21 PHYSICAL SCIENCE I  
2 crs. 2 hrs.
This first part of a college-level two-semester sequence in Physical Science covers astronomy, mechanics, electricity and magnetism. It may be taken with SCI 38, a two-hour laboratory course for a total of 3 credits.

SCI 22 PHYSICAL SCIENCE II  
2 crs. 2 hrs.
The second semester of the college-level Physical Science course covers light, atomic structure, chemistry, meteorology and geology. It may be taken with SCI 39, a two-hour laboratory course for a total of 3 credits.
Prerequisite: SCI 21 or permission of the Department

+ SCI 25 APPLIED PHYSICAL SCIENCES for ALLIED HEALTH CAREERS  
3 crs. 5 hrs.
This lecture and laboratory course surveys selected topics in chemistry and physics that have a direct bearing on the health services. Topics include: mechanics, electricity, optics, atomic energy, radioactivity, atomic structure, chemical bonding, chemical equations, behavior of gases, respiration and oxygen therapy, properties of liquids and solutions including hydrostatics and hydrodynamics, acids and bases, plus an introduction to organic and biochemistry.
Prerequisites: CUNY test placement beyond the level of mathematics M1 or equivalent and ENG 04 or equivalent or satisfactory completion of BIO 10 or permission of the Department.

+ SCI 29 SCIENCE for ELEMENTARY SCHOOL TEACHERS  
4 crs. 4 hrs.
Designed as both a Science-Information and a Methods-of-Teaching Science course for Elementary School teachers. Participants explore Physical and Biological Science concepts to enhance their own mastery of these subjects. In alternate sessions, methods of adapting these concepts to children in the elementary schools are explored. Stress will be on development of scientific processes and on integration of science into the curriculum.

+ SCI 31 HISTORY and PHILOSOPHY of PHYSICAL SCIENCE  
2 crs. 2 hrs.
A modern science course emphasizing historical, philosophical and political viewpoints. It begins with the work of the ancients in astronomy, then the revolution in science during the Renaissance is discussed with emphasis on the works of Copernicus, Galileo and Newton. The course continues with discussion of the rise of modern physics and chemistry, including nuclear energy and space travel.

+ SCI 32 HISTORY and PHILOSOPHY of BIOLOGICAL SCIENCE  
2 crs. 2 hrs.
For complete course description refer to Department of Biological Sciences (page 158).

+ Basic Course
+ SCI 34 INTRODUCTION to MODERN CHEMISTRY 4 crs. 5 hrs.
A one-semester, non-mathematical survey course focusing on the role of chemistry in society. Chemical principles are woven into the study of current topics such as drugs, plastics, energy production and air pollution. Laboratory work illustrates these principles. Recommended for Liberal Arts and Career students.

+ SCI 35 INTRODUCTION to MODERN PHYSICS 4 crs. 5 hrs.
A one-semester lecture and laboratory college-level survey course in classical and modern physics. Areas covered encompass such topics as mechanics, heat, wave motion, electricity, optics, atomic and nuclear physics. Recommended for Liberal Arts and Career students.

+ SCI 36 INTRODUCTION to EARTH SCIENCE 4 crs. 5 hrs.
Emphasis is on the earth's environment, meteorology, geology, astronomy, and oceanography. Field trips and laboratory work are included. Recommended for Liberal Arts and Career students.

+ SCI 37 CHEMISTRY and the ENVIRONMENT 4 crs. 5 hrs.
Through lectures and outside reading, students learn many aspects of air and water pollution, food additives, and lead poisoning of children. The emphasis is on chemical understanding, and basic principles. Attention is given to medical, social, and governmental aspects. Laboratory work is coordinated with lectures. Recommended for Liberal Arts and Career students.

+ SCI 38–39 PHYSICAL SCIENCE LABORATORY 1 cr. 2 hrs.
(each semester)
Promotes understanding of activities of physicists, chemists, and earth scientists, for students desiring a basic laboratory course in science. Important principles of physical sciences will be illustrated.

+ SCI 41 ASTRONOMY LABORATORY 1 cr. 2 hrs.
During this laboratory course, astronomical instruments, telescopes, transit spectroscopes, and cameras are used to solve selected problems. Evening observations will be made of the sky using the naked eye, binoculars, and telescopes. Can be taken with PHY 35—Introduction to Astronomy
+ SCI 50  PEOPLE and the ENVIRONMENT—BIOLOGICAL EMPHASIS  
2 crs. 2 hrs.
For complete course description refer to Department of Biological Sciences (page 159)

+ SCI 51  PEOPLE and the ENVIRONMENT—CHEMISTRY EMPHASIS  
2 crs. 2 hrs.
From a chemical point of view, course assesses what is known of the environment and how to conserve it. Actions designed to expand that knowledge and its use are examined. Important contemporary problems of energy consumption and related pollution problems, waste disposal, and recycling are considered.
Note: This is a Basic Course. It does NOT require any prerequisite.

+ SCI 70  THE SCIENCE of NUTRITION  
3 crs. 3 hrs.
Increased food processing and addition of chemical substances in foods make it important for students to understand the basic ideas of modern nutrition for their own well-being. This interdisciplinary course is taught jointly by the Biological Sciences and Physical Sciences Departments. Such concepts as biochemical individuality as related to nutrition for optimum health are integrated with surveys of carbohydrate, protein and fat metabolism. The role of vitamins and minerals in metabolic processes and their still-controversial role in orthomolecular nutrition is examined. Other topics, such as food selection, diet during pregnancy and infancy, special diets during illness, and the safety of the food supply, are discussed. Students are asked to analyze their own diet.
Open to all students.
SECRETARIAL/OFFICE ADMINISTRATION
DEPARTMENT
Room T-4202  ext. 5655

Bobby L. Baldwin, Associate Professor
Catherine S. Barry, Professor
Mary Ann Cavallo, College Laboratory Technician
Donald Donin, Associate Professor
Lyla Garfield, Assistant Professor
David C. Henry, Professor
Burton Krancer, College Laboratory Technician
Isabelle A. Krey, Professor and Chairperson
Florence Maloney, Assistant Professor
Gloria M. McDonnell, Associate Professor
Beatrice Pampillonio, College Laboratory Technician
Naomi Platt, Professor
Frances Mostel Poggioli, Professor
William C. Yenna, Assistant Professor
MEDICAL RECORD TECHNOLOGY

Courses are open to Program Majors ONLY

+ MRT 11  MEDICAL RECORD TECHNOLOGY I  3 crs. 4 hrs.
Introduction to the automated medical record department with emphasis on its structural and functional components. The roles and responsibilities of the RRA and the ART will be discussed as they relate to the department and the hospital. The medical record will be examined with respect to content, analysis and structure, adequacy for meeting established requirements, legal implications and as a source document for health planning and research.

+ MRT 12  MEDICAL TERMINOLOGY  3 crs. 3 hrs.
Construction of medical terms using prefixes, suffixes, and root words are introduced. Emphasis is on the meaning and use of terms relating to anatomical structures, diseases and functions of the body.

MRT 13  MEDICAL RECORD TECHNOLOGY II  3 crs. 4 hrs.
Continuation of Medical Record theory. History and practices of coding principles, conventions, abbreviations and annotations used in the International Classification of Diseases (9th Revision, Clinical Modification ICD-9CM); and Diagnostic Related Groups (DRG). Study of vital and public health statistics, utilized by medical record personnel is included.
Prerequisites: MRT 11, 12

MRT 14  MEDICAL RECORD TECHNOLOGY III  3 crs. 4 hrs.
The roles of accrediting and licensing agencies, including PRO, JCAH, AOA, state health departments, and the relationship between DRG’S, utilization review quality assurance programs and hospital reimbursement. Concepts and principles of law as they relate to the medical record profession are introduced.
Prerequisite: MRT 13
Corequisite: MRT 91

MRT 15  PATHOPHYSIOLOGY  3 crs. 3 hrs.
Study of disease processes, including their nature, cause, diagnosis, treatment and management. Focus on terminology related to pathology, symptomatology (objective/subjective), diagnosis and prognosis will be continued.
Prerequisites: BIO 11, 12, MRT 12

MRT 16  CODING  3 crs. 4 hrs.
In-depth study of ICD-9-CM coding principles with their DRG implications. Highlights of critical areas in the Annotated ICD-9-CM, which help identify the DRG concerns, will be stressed.
Prerequisites: MRT 13, BIO 11

MRT 17  MEDICAL RECORD TECHNOLOGY IV  3 crs. 3 hrs.
Introduction to the principles of management with specific application to the medical record department in acute and non-acute care facilities. Basic skills in the areas of planning, organizing, controlling and actuating in their work environment are taught.
Prerequisite: MRT 14

+ Basic Course
MRT 18 MEDICAL INFORMATION PROCESSING
3 crs. 4 hrs.
The use of computers in a medical record setting, including problem solving, database management and information management. Application of microcomputers as a management tool in delivering medical record services will be emphasized.
Prerequisites: MRT 14, 16: Passing grade on the CUNY Mathematics Examination or permission of the Department.

SEC 66 MEDICAL MACHINE TRANSCRIPTION
3 crs. 3 hrs.
REQUIRED OF ALL MEDICAL RECORD TECHNOLOGY MAJORS. (course description pg 290)

MRT 91 INTERNSHIP I
3 crs. 9 hrs.
A semester of one clinical visit per week for an eight hour day plus an additional hour per week devoted to seminar discussion of the clinical experience. Students apply knowledge and skills in areas such as storage and retrieval of medical records, coding of records, transcription, quality assurance, health statistics and legal aspects of records.
Prerequisite: MRT 13
Corequisites: MRT 14, 16

MRT 92 INTERNSHIP II
3 crs. 9 hrs.
A semester of one clinical visit per week for an eight hour day plus an additional hour per week devoted to seminar discussion of the clinical experience. Students apply knowledge and skills learned during the program with special emphasis on management functions.
Prerequisites: MRT 13, 14, 16
Corequisites: MRT 17, 18

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A.A.S. Degree

MEDICAL RECORD TECHNOLOGY

Requirements—Page 120

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SECRETARIAL/OFFICE ADMINISTRATION

+ **SEC 11  ELEMENTARY KEYBOARDING**  2 crs. 4 hrs.

Basic skills in keyboarding are developed and applied to the formatting of simple business and personal letters, tabulations, and manuscripts.

**SEC 12  INTERMEDIATE KEYBOARDING**  2 crs. 4 hrs.

Keyboarding speed and control is stressed. Beginning production skill in keying business forms, including letters, tabulated materials, business reports, and manuscripts with emphasis on business standards, is developed. (With approval, students who have satisfactorily completed the equivalent of this course may be exempt).

*Prerequisite: SEC 11 or equivalent*

+ **SEC 13  ELEMENTARY SHORTHAND (PITMAN)**  2 crs. 3 hrs.

The basics of Pitman Shorthand theory and pretranscription training are presented. Understanding Pitman theory is reinforced by practice in reading and writing contextual materials. The elements of transcription are gradually introduced. Proper English usage and correct grammatical form are integral parts of learning Pitman theory.

For students with no prior shorthand knowledge and students with less than one year of instructions in Pitman theory.

+ **SEC 14  ELEMENTARY CENTURY 21 SHORTHAND**  2 crs. 3 hrs.

The basics of Century 21 Shorthand theory and pretranscription training are presented. Understanding Century 21 theory is reinforced by practice in reading and writing contextual materials. The elements of transcription are gradually introduced. Proper English usage and correct grammatical form are integral parts of learning Century 21 theory.

For students with no prior shorthand knowledge and students with less than one year of instruction in Century 21 theory.

+ **SEC 15  ELEMENTARY SHORTHAND (GREGG)**  2 crs. 3 hrs.

The basics of Gregg Shorthand theory and pretranscription training are presented. Understanding Gregg theory is reinforced by practice in reading and writing contextual materials. The elements of transcription are gradually introduced. Proper English usage and correct grammatical form are integral parts of learning Gregg theory.

For students with no prior shorthand knowledge and students with less than one year of instruction in Gregg theory.
SEC 16 INTERMEDIATE SHORTHAND (PITMAN) 3 crs. 4 hrs.
Continued development of Pitman Shorterhand language skills and continued pretranscription training. Emphasis is on taking dictation at sustained speeds and reading shorthand fluently. (With approval, students who satisfactorily completed the equivalent of this course may be exempted.)
Prerequisites: SEC 13 or equivalent and SEC 19 or equivalent
Corequisite: SEC 12

SEC 17 INTERMEDIATE CENTURY 21 SHORTHAND 3 crs. 4 hrs.
Continued development of Century 21 Shorthand language skills and continued pretranscription training. Emphasis is on taking dictation at sustained speeds and reading shorthand fluently. (With approval, students who satisfactorily completed the equivalent of this course may be exempted.)
Prerequisites: SEC 14 or equivalent and SEC 19 or equivalent
Corequisite: SEC 12

SEC 18 INTERMEDIATE SHORTHAND (GREGG) 3 crs. 4 hrs.
Continued development of Gregg Shorthand language skills and continued pretranscription training. Emphasis is on taking dictation at sustained speeds and reading shorthand fluently. (With approval, students who satisfactorily completed the equivalent of this course may be exempted.)
Prerequisites: SEC 15 or equivalent and SEC 19 or equivalent
Corequisite: SEC 12

+ SEC 19 BASIC DICTATION (GREGG, PITMAN, CENTURY 21) 2 crs. 3 hrs.
Dictation of short business letters is stressed. All dictation materials are previewed. Shorthand theory is reviewed through homework and laboratory assignments.
Required for all Program Majors
Prerequisite: SEC 13 or 14, or 15, or permission of the Department

+ SEC 21 BASIC WORD/INFORMATION PROCESSING 3 crs. 4 hrs.
Study of modern word/information processing concepts in the organization, operation, and control of office functions. Special emphasis is given to the secretary's dual role as an administrative assistant and/or as a correspondence secretary. The keyboarding of letters, memorandas, and tables on electronic word processing equipment are stressed. Basic word processing terminology will be introduced.
Prerequisite: SEC 11 or equivalent
Corequisites: SEC 12, 37

+ SEC 22 ADVANCED WORD/INFORMATION PROCESSING 3 crs. 4 hrs.
Study of the applied use of word/information processing procedures and equipment in a simulated word processing environment. The total work flow of office communications will be covered from input through output. The keyboarding on electronic word processing equipment of tables, reports, letters, and form letters with variable information are stressed.
Prerequisite: SEC 21
Corequisites: SEC 33
SEC 23  MACHINE TRANSCRIPTION
3 crs. 4 hrs.
The transfer of recorded dictation into a usable or mailable format. Recorded dictation consists of memoranda, letters, manuscripts, business reports, and other communications. Students use dictating equipment in composition of letters, memoranda, and business reports. Associated language-arts skills including punctuation, spelling, capitalization, word usage, proofreading, and editing are stressed.
Prerequisites: SEC 12, 37
Corequisite: SEC 21

SEC 24  OFFICE SYSTEMS and PROCEDURES
3 crs. 3 hrs.
The systems and procedures of the electronic office for the executive secretary and word processing specialist. Course includes planning and organizing office operations, developing good leadership and human relations in the office, and controlling office operations. Theory, concepts, and practices relating to office systems and procedures, employee performance, output and job satisfaction are stressed.
Prerequisite: SEC 31
Corequisite: 92

SEC 25  OFFICE INFORMATION PROCESSING APPLICATIONS
3 crs. 4 hrs.
Knowledges, skills and understandings of the use of integrated software in the electronic office. Electronic spreadsheets, database management, word processing, graphics, and telecommunications are applied to office information processing.
Prerequisite: SEC 22

SEC 27  LEGAL ASSISTING I
3 crs. 3 hrs.
Students are prepared to function as a non-lawyer assistant under the direction and supervision of a lawyer. The basic curriculum necessary to every legal assistant—introduction to law and the legal profession; the legal system, its sources of law and the methodology of legal research; law office management; litigation and trial management is covered.

SEC 28  LEGAL ASSISTING II
3 crs. 3 hrs.
Specialized training is provided for the legal assistant in the procedural aspects of Surrogate Court practice.
Prerequisite: SEC 27

SEC 29  LEGAL ASSISTING III: MATRIMONIAL and FAMILY LAW SPECIALIZATION
3 crs. 3 hrs.
Stress is on preparing students for specialized training as a non-lawyer assistant, while working under the direction and supervision of an attorney, in the procedural aspects of Supreme Court and Family Court practice. The procedural aspects to be stressed include: divorce, uncontested and contested; separation; child custody; alimony and support payments; annulment; separation agreements, and orders of protection.
Prerequisite: SEC 27
SEC 31 ADVANCED SHORTHAND and TRANSCRIPTION I

Students' shorthand skills are intensified with development of the ability to take dictation at rates of 80 to 100 words per minute for sustained periods. Transcription techniques to meet office standards in the production of mailable transcripts are developed.

Prerequisites: SEC 12 and 16, 17 or 18 or equivalent
Corequisites: SEC 33, 37

SEC 32 ADVANCED SHORTHAND and TRANSCRIPTION II

Speed dictation for sustained periods is increased to 100 to 120 wpm. Transcription skills to meet office production standards of the executive secretary are attained.

Prerequisites: SEC 31, 33 and 37

SEC 33 ADVANCED KEYBOARDING

Student mastery of keyboarding skills and formatting techniques. Course includes formatting business communications, directives, business reports, and statistical data. Emphasis is on the executive secretary.

Prerequisite: SEC 12 or equivalent or permission of the Department

SEC 34 SECRETARIAL PRACTICE

A broadly-based, comprehensive course which simulates on-the-job secretarial duties concerning correspondence responsibilities, use of transmittal service, records management, receptionist and telephone techniques, travel procedures, financial and legal duties, preparing business reports, use of machine transcribers, and word processing equipment. Attention to fostering good human relations office and developing attitudes and traits of the successful executive secretary are stressed.

Open to Program Majors only.

Prerequisites: SEC 31, 33, 37

SEC 35 EXPERT KEYBOARDING

Enables students to achieve expert levels in keyboarding and formatting of business letters, inter-office memoranda, directives, and manuscripts. Business standards are maintained in simulated office situations.

Prerequisite: SEC 33

SEC 37 BUSINESS COMMUNICATIONS

Detailed attention is given to the principles of writing effective business communications, including letters, reports, memoranda, directives. Emphasis is on organization, language arts, human relations and the application of business psychology in writing.

Open to Program Majors only.

Prerequisite: ENG 03, SEC 11 or equivalent

SEC 41 INTERMEDIATE KEYBOARDING: INTENSIVE

Develops the skill attainment levels of SEC 11 and SEC 12, for students with educational and/or experiential background of 30 wpm for five minutes with a 3 percent error limitation. Each student is evaluated by the instructor, and individual prescriptions prepared to eliminate the gaps in knowledge and understanding and/or inadequacies in skills. Individual prescriptions include completion of special skills projects in secretarial laboratories, development of mailability standards, and tutorial instruction.

Prerequisite: Permission of the Department
SEC 42 INTERMEDIATE SHORTHAND (PITMAN): INTENSIVE  
4 crs. 4 hrs.
Develops the skill attainment levels of SEC 13, and SEC 16, for students with educational and/or experiential background that includes the complete theory of Pitman Shorthand and the ability to take dictation at 60 wpm for two minutes with 95 percent accuracy. Each student is evaluated by the instructor to measure understanding of the principles of Pitman Shorthand, and dictation and transcription skills. Individual prescriptions include the use of tapes for development of shorthand principles, and the ability to take dictation, the completion of transcription projects in the secretarial laboratory, and tutorial instruction.
Prerequisite: Permission of the Department.

SEC 43 INTERMEDIATE CENTURY 21 SHORTHAND: INTENSIVE  
4 crs. 4 hrs.
Develops the skill attainment levels of SEC 14, and SEC 17, for students with educational and/or experiential background that includes the complete theory of Century 21 Shorthand and the ability to take dictation at 60 wpm for two minutes with 95 percent accuracy. Each student is evaluated by the instructor to measure understanding of the principles of Century 21 Shorthand and dictation and transcription skills. Individual prescriptions include the use of tapes for development of shorthand principles and of the ability to take dictation, the completion of transcription projects in the secretarial laboratory, and tutorial instruction.
Prerequisite: Permission of the Department.

SEC 44 INTERMEDIATE SHORTHAND (GREGG): INTENSIVE  
4 crs. 4 hrs.
Develops the skill attainment levels of SEC 15, and SEC 18, for students with educational and/or experiential background that includes the complete theory of Gregg Shorthand and the ability to take dictation at 60 wpm for two minutes with 95 percent accuracy. Each student is evaluated by the instructor to measure understanding of the principles of Gregg Shorthand and the level of dictation and transcription skills. Individual prescriptions include the use of tapes for development of shorthand principles and of the ability to take dictation, the completion of transcription projects in the secretarial laboratory, and tutorial instruction.
Prerequisite: Permission of the Department.

SEC 45 ADVANCED SHORTHAND and TRANSCRIPTION I: INTENSIVE  
4 crs. 4 hrs.
An intensive program to develop dictation speeds of 60 to 100 wpm, review principles of stenography, re-enforce patterns of writing at high speeds, introduce and develop transcription skills and meet the performance objectives for SEC 16, 17 or 18 and SEC 31. Each student is evaluated by the instructor. Gaps in learning and understanding that do not reflect the standards of the executive secretary are corrected through individual prescriptions that include the use of the tapes in the Secretarial Resource Center and Media Center, transcription projects in the secretarial laboratory, and tutorial services.
Prerequisite: Permission of the Department.

SEC 46 ADVANCED KEYBOARDING: INTENSIVE  
4 crs. 4 hrs.
Develops the skill attainment and the production levels of SEC 12, and SEC 33, for students with educational and/or experiential background of 40 wpm for five minutes with 2.5 percent error limitation. The instructor evaluates each student and provides individual prescriptions that include specialized projects, use of the secretarial laboratory for skill building, and use of tutorial services.
Prerequisite: Permission of the Department.
SEC 51 ELEMENTARY LEGAL SHORTHAND and PROCEDURES
3 crs. 4 hrs.
Development of a comprehensive legal shorthand vocabulary through dictation and transcription of legal materials. Skill is developed in taking dictation of 80 to 100 wpm and in transcribing nonlitigation forms and communications including letters, contracts, proxies, wills, bonds, releases, and legal documents involving the settlement of estates, land, and real estate sales, leases, mortgages, partnerships and incorporation procedures.
Open to Program (Legal) Majors only.
Prerequisites: SEC 12 and 16, 17 or 18 or equivalent
Corequisites: SEC 31, 33 and 37

SEC 52 ADVANCED LEGAL SHORTHAND and TRANSCRIPTION
4 crs. 6 hrs.
Rapid dictation of 100 to 120 wpm of litigation materials, continued legal vocabulary development and accurate transcription according to legal office standards. Structure of the courts and their relationship to one another, typical civil and criminal proceedings from initiation to enforcement of judgment, various documents used in litigation and responsibilities of the legal secretary are included.
Open to Program (Legal) Majors only.
Prerequisites: SEC 31, 51
Corequisite: SEC 34, 92

+ SEC 53-54 THE SCHOOL SECRETARY
2 crs. 2 hrs. (each semester)
In this two-semester course, consideration is given to the educational principles relating to the school secretary’s work, with emphasis on the organization of school systems, particularly that of New York City.
Open to Program (School) Majors only.

+ SEC 55 SCHOOL RECORDS and ACCOUNTS
2 crs. 2 hrs.
Students are introduced to the activities and responsibilities of the school secretary, including the preparation of a variety of reports usually completed in the school office; records of school personnel, accounts, textbooks and supplies.
Open to Program (School) Majors only.

SEC 66 MEDICAL MACHINE TRANSCRIPTION
3 crs. 3 hrs.
Students who plan to be medical transcribers are trained to transfer recorded medical dictation into a usable or mailable format. Recorded dictation consists of material to be transcribed as medical reports (autopsy, consultation, operative, pathology, surgical, x-ray reports, discharge summaries; medical histories; physical examinations, etc.) as letters, speeches, white papers or journal articles. Transcription takes place on a personal computer.
Prerequisites: SEC 11, MRT 12 Open to Medical Record Technology majors only. (See page 283)

SEC 67 BEGINNING MEDICAL SECRETARY PRACTICE
2 crs. 3 hrs.
Introduction to the medical office responsibilities of a medical secretary, includes analysis of medical care plans and their respective forms, development of skill in the use of office machines, medical filing techniques and procedures.
Open to Program (Medical) Majors only.
Prerequisites: SEC 12 and 16, 17 or 18
Corequisites: SEC 31, 33 and 69

+ Basic Course
SEC 68 ADVANCED MEDICAL SECRETARY PRACTICE

The duties and responsibilities of a medical secretary includes: telephone techniques, meeting patients, preparation of case histories, medical records management, ethics, business aspects of a medical practice, financial records, insurance forms, organization and administration of a medical office. The development of skills in the use of dictating and transcribing machines, and word processing equipment are stressed.
Open to Program (Medical) Majors only.
Prerequisites: SEC 31, 33, 67, 69
Corequisite: SEC 70

SEC 69 ELEMENTARY MEDICAL DICTATION and TERMINOLOGY

A comprehensive study of medical terminology, including shorthand outlines, spelling, pronunciation and definitions in the areas of: cardiology, thoracic medicine, dermatology, ear, nose, throat, urology, endocrinology, mental health. Medical dictation at rates of 80 to 100 words per minute and transcription ability are developed.
Open to Program (Medical) Majors only.
Prerequisites: SEC 12 and 16, 17 or 18
Corequisites: SEC 31, 33, 37, 67

SEC 70 ADVANCED MEDICAL DICTATION and TRANSCRIPTION

Stress is on continued development of medical shorthand vocabulary in the areas of: gynecology, obstetrics, pediatrics, gastroenterology, chemotherapy, orthopedics, neurology, and medical abbreviations. Included are high-speed drills in dictation and transcription, development of skill in taking dictation of 100 to 120 wpm, accurate transcription of case histories, letters, hospital records, medical journal articles, and medical reports.
Open to Program (Medical) Majors only.
Prerequisites: SEC 31, 33, 37, 67, 69
Corequisite: SEC 68

SEC 81 INDEPENDENT STUDY

Independent study of Secretarial/Office Administration is developed individually between student and faculty member and must be approved by the Department.

SEC 82

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
SEC 92a  FIELD EXPERIENCE—EXECUTIVE  
Eight hours per week of supervised work experience in business offices in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.  
Prerequisites: SEC 31, 33 and 37  
Corequisites: SEC 32 and 34  

SEC 92b  FIELD EXPERIENCE—LEGAL  
Eight hours per week of supervised work experience in law firms in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.  
Prerequisites: SEC 31, 33, 37 and 51  
Corequisites: SEC 34 and 52  

SEC 92c  FIELD EXPERIENCE—SCHOOL  
Eight hours per week of supervised work experience in schools in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.  
Prerequisites: SEC 31, 33, 37 and 53  
Corequisites: SEC 32, 34, 54, 55  

SEC 92d  FIELD EXPERIENCE—MEDICAL  
Eight hours per week of supervised work experience in medical environments in the community, and one hour a week of classroom discussion of the on-the-job experience are course requirements.  
Prerequisites: SEC 31, 33, 37, 67, 69  
Corequisites: SEC 68 and 70  

SEC 92e  FIELD EXPERIENCE—WORD/INFORMATION PROCESSING  
Actual experience in using word/information processing machines to complete projects in business offices is stressed in this course. Each student works a minimum of 100 hours as a word/information processing operator in business. Students attend lectures and seminars at the College to develop insight into the personnel and management problems of the electronic office.  
Prerequisites: SEC 31, 33, 37 and 21  
Corequisite: SEC 22 and 23  

A.A.S. Degree  
SECRETARIAL/OFFICE ADMINISTRATION Requirements—Page 124
BILINGUAL SECRETARY

Students in the Bilingual Program who are concentrating in Secretarial/Office Administration must fulfill:

1. COLLEGE REQUIREMENTS
   ENG 17, 04 (if needed) C1 or C2, 22 (page 169)
   MAT M1 and M2 or R2 (if needed) (page 214)
   HPE 12 (page 197)

2. COURSE REQUIREMENTS† (course descriptions page 285)

<table>
<thead>
<tr>
<th>Course</th>
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<th>Hrs</th>
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<tr>
<td>Keyboarding-Elementary &amp; Intermediate (SEC 11-12)</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Shorthand-Elementary &amp; Intermediate (SEC 15-18)</td>
<td>7</td>
<td>8</td>
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<td>Basic Dictation (SEC 19)</td>
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<tr>
<td>Shorthand and Transcription-Advanced I &amp; II (SEC 31–32)</td>
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<td>Advanced Keyboarding (SEC 33)</td>
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<td>Secretarial Practice (SEC 34)</td>
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<td>Business Communications (SEC 37)</td>
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<td>Field Experience (SEC 92)</td>
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<tr>
<td>Intensive Review of Spanish Grammar (SPA 17 page 196)</td>
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<td>4</td>
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<tr>
<td>Proper Models of Spanish Grammar and Conversation for Native Speakers (if needed) (SPA 18)</td>
<td>3</td>
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<td>Spanish Syntax and Composition (SPA 36)</td>
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<tr>
<td>Spanish Business Writing I &amp; II (SPA 47-48)</td>
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<tr>
<td>Listening and Speaking Skills (SPE 11 page 299)</td>
<td>3</td>
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<td>Effective Public Speaking (SPE 21)</td>
<td>3</td>
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<tr>
<td>Voice and Articulation (SPE 29)</td>
<td>3</td>
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<tr>
<td>Principles of Mathematics (MAT 7 page 242) OR Introduction to Modern Concepts of Biology (SCI 33 page 158)</td>
<td>4</td>
<td>4–5</td>
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<tr>
<td>The Caribbean: 1492 to Present (HIS 42 page 222) OR Introduction to Sociology (SOC 31 page 143)</td>
<td>3</td>
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3. ELECTIVES—Sufficient to meet required total of ........................................ 64 credits

†Students selecting specializations such as Legal, School, Medical or Executive/Word Processing secretary will do so on completion of SEC 31. Selection is to be made AFTER consultation with Department Advisor.
SPEECH and THEATRE DEPARTMENT
Room E-309B    ext. 5591

Sheldon I. Aptekar, Professor
Mortimer Becker, Professor and Chairman
Dorothy A. Beckmann, Associate Professor
Stephen Castellano, College Laboratory Technician
Mary V. Crowley, Professor
Andrew H. Drummond, Professor
Cliff Hesse, Assistant Professor
Gerald Rothman, Senior College Laboratory Technician
Greg D. Sutton, College Laboratory Technician
Terry Trilling, Associate Professor
# MASS COMMUNICATIONS

<table>
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<th>Course Code</th>
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<tr>
<td>MCB 34</td>
<td>SALES and ADVERTISING—RADIO and TELEVISION</td>
<td>3 crs.</td>
<td>3 hrs.</td>
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<td></td>
<td>Prepares students to plan and write advertising copy; to write and make radio and television commercials; to design and market an advertising campaign; and to understand the ethics, propaganda, budget and copyright laws as they apply to advertising.</td>
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<td>MCB 35</td>
<td>INTRODUCTION to BROADCASTING</td>
<td>3 crs.</td>
<td>3 hrs.</td>
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<td>Comprehensive study of the historical development, social philosophy and technology of radio and television investigation of ratings, program production and scheduling.</td>
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<tr>
<td>MCB 36</td>
<td>ANNOUNCING—RADIO and TELEVISION</td>
<td>3 crs.</td>
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<td>An introduction to the techniques of broadcasting, the theory underlying use of the equipment employed and the practical aspects of their proper use. Correct voice production procedures for announcing, methods of sight reading and oral reading are taught.</td>
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<td>Prerequisite: SPE 31 or permission of the Department.</td>
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<td>MCB 37</td>
<td>BROADCAST JOURNALISM</td>
<td>3 crs.</td>
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<td>Understanding the role of radio and television in reporting and shaping the news and the differences between these media and the press. Reporting, writing and editing newscasts with practical experience in working against a deadline.</td>
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<td>MCB 38</td>
<td>BROADCAST MANAGEMENT</td>
<td>3 crs.</td>
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<td>The decision-making roles in contemporary broadcast operations; emphasizing traffic flow, governmental requirements, ethics, community needs, inter-media relationships, and responsive programming.</td>
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<td>Prerequisite: MCB 35</td>
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<td>MCB 39</td>
<td>STUDIO OPERATIONS and PRODUCTION TECHNIQUES</td>
<td>3 crs.</td>
<td>3 hrs.</td>
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<td></td>
<td>All Studio processes and equipment necessary for the reproduction of sound. Including work and sound theory, acoustics, microphones, editing and all types of control units and special effects units.</td>
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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>MCB 41</td>
<td>INTRODUCTION to TELEVISION</td>
<td>3 crs.</td>
<td>3 hrs.</td>
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<td></td>
<td>Intensive analysis of the experience of television viewing through a survey of its individual components and their logic. Television planning and coordination; set and lighting design; camera placement; lenses and angles; video control.</td>
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<th>Course Code</th>
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<tr>
<td>MCB 44</td>
<td>SPORTSWRITING and PRODUCING</td>
<td>3 crs.</td>
<td>3 hrs.</td>
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<td></td>
<td>Practicum in the unique Journalistic area of sports presentation including reporting, writing, performing and producing various sporting events. Covers the job of the sports specialist in radio and television news programs. Heavy emphasis on interviewing techniques.</td>
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<td>Prerequisite: MCB 37</td>
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</table>

+ Basic Course
+ MCB 59 RADIO STATION OPERATIONS 1 cr. 6 hrs.*
The many facets of day-to-day operations in a broadcast environment; airing of news and music, network feeds, community interviews, scheduling, writing, and editing.
*Class meets once per week; other five hours arranged.

MCB 81 INDEPENDENT STUDY 1–3 crs. 1–3 hrs.
Independent study of Mass Communications is developed individually between student and faculty member and must be approved by the Department.

MCF 37 FILM GENRE 3 crs. 3 hrs.
The mass medium of film and its ability to reflect and influence a wide variety of sociological and psychological events, and trends, as seen through a particular genre. The genre will change each semester (i.e., film noir, animation, the documentary, western).
MCF 40: Recommended—Not required.

+ MCF 40 FILM: THE CREATIVE MEDIUM 3 crs. 3 hrs.
To recognize the film medium as a creative art, the historical, social, psychological and aesthetic elements of selected films are studied as illustrations of this creative force.

+ MCM 30 MASS MEDIA 3 crs. 3 hrs.
Analysis of mass media to discover the way information is perceived and influences behavior. Extensive use is made of films, tapes, recordings and video tapes to examine the message systems employed by individuals, groups, institutions and politics. Focus is on radio, television, newspapers, magazines, film and advertising.

+ MCM 42 COMMUNICATIONS DEVELOPMENT and APPLICATIONS 3 crs. 3 hrs.
Communication from Caveman to Cronkite: Examination of the origins of human communication and technologies in order to apply this knowledge to everyday business and personal life. Body language, color, art, music and architecture as communication media are considered.

A.A.S. Degree
BROADCASTING TECHNOLOGY and MANAGEMENT
Requirements—Page 107

+ Basic Course
SPEECH

+ SPE 11 LISTENING and SPEAKING SKILLS 3 crs. 3 hrs.
To help strengthen oral language abilities and improve listening proficiency, students are made aware of the nature of their language, focusing on vocabulary enrichment, word pronunciation, attention to grammar, and verbal self-expression. Listening as a skill with emphasis on techniques of note-taking is taught.

+ SPE 12 INTRAPERSONAL/INTERPERSONAL COMMUNICATION 3 crs. 3 hrs.
The communicator's development of self-concepts and the ability to understand and project a comfortable and confident self-image is explored. Methods to improve and use this knowledge when interacting and communicating with other individuals and with groups.

+ SPE 14 COMMUNICATION SKILLS for PRESCHOOL and ELEMENTARY SCHOOL TEACHERS 3 crs. 3 hrs.
Through assignments that include research, brief written reports, oral presentation and class critiques, students develop skills in classroom presentations of written materials such as short stories, poetry, and essays for children. Skills in listening to student feedback as the children express their ideas concerning what has been read to them are developed.

+ SPE 15 SPEECH ARTS for PRE and ELEMENTARY SCHOOL GRADERS 3 crs. 3 hrs.
Methods and materials for teaching speech arts in nursery and elementary schools. Students learn to understand and work with children on such activities as dramatic play, pantomime, creative dramatics, puppetry, storytelling, reading aloud, choral speaking, group discussions and talks.

+ SPE 16 SPEECH PROBLEMS of CHILDREN 3 crs. 3 hrs.
Study of children's normal speech and language development. Future speech majors, classroom teachers, child care workers and parents learn to diagnose and help remediate children's major speech and language disorders.

□ SPE 20 PERSONAL IMPROVEMENT in COMMUNICATION 0 crs. 3 hrs.
(3 equated credits)
Correction provided to overcome problems in the articulation of sounds, pronunciation of words, voice production, stress and rhythm in connected speech. To eliminate regional accents, standard American speech is emphasized. The underlying theory of proper voice production and speech formation is discussed.

+ SPE 21 EFFECTIVE PUBLIC SPEAKING 3 crs. 3 hrs.
The basic elements for clear and effective public speaking with practice and study in skills such as organizing and outlining speeches, developing ideas, using audio-visual materials for clarification and amplification of ideas. Techniques of extempore and impromptu speaking and methods of delivery are examined and practiced. All basic elements are brought together through the presentation of several speeches.
+ **SPE 22** THE ART of CONVICTION and PERSUASION  
3 crs. 3 hrs.

The practical applications of the art of discourse in all aspects of human activities: law, politics, literature and science. Course aims to make students aware that every form of human endeavor must be persuasively and convincingly presented to a community of reasonable beings.  
*Prerequisite: SPE 21 or permission of the Department*

+ **SPE 23** SPEECH for FOREIGN-SPEAKING STUDENTS  
3 crs. 3 hrs.

To speak English more effectively students study the formation of word pronunciation, and the correct stress and rhythm in phrases and sentences. Practice in conversation, reading aloud and informal speech is included.

+ **SPE 24** CAREER COMMUNICATION  
3 crs. 3 hrs.

To prepare students in the communication skills used most frequently in the professions, business and industry, speaking logically and expressing ideas creatively is emphasized. Theories of interpersonal communication are presented and practice in such speaking situations as job interviews, small group presentations, business meetings, conferences and platform speaking. Clear and acceptable speech is developed.

**SPE 25** GROUP DISCUSSION  
3 crs. 3 hrs.

Principles and techniques of group interaction. Conference leadership and participation skills are learned through reading, discussion, practice observation and evaluation of group discussions. Focus is on how learned concepts may be applied to educational, social and business situations.

**SPE 27** ORAL INTERPRETATION  
3 crs. 3 hrs.

Students learn to recreate and communicate what writers and poets say in various types of literature. Through guided preparation, analysis, presentation and evaluation of individual readings of materials ranging from simple reports to poetry, practical skill and enjoyment in reading aloud is developed. Recommended to Theatre Arts and Radio Broadcasting students.

**SPE 28** LANGUAGE and SPEECH for ESL STUDENTS  
3 crs. 3 hrs.

To extend speaking and comprehension abilities of ESL students. Those admitted to this course must have a fair ability in the English language, and must be intelligible to the average listener. Emphasis is on: oral production of English language grammar, elimination of articulatory, stress, and intonation errors; spoken production and comprehension of expanded English vocabulary, and American colloquialisms. Opportunities for practice to improve and further develop spoken English through the use of taped recordings.  
*Prerequisite: SPE 23 or, permission of the Department.*  
For descriptions of ESL English courses, see page 182

+ **SPE 29** VOICE and ARTICULATION  
3 crs. 3 hrs.

For students with acceptable speech who wish to study the theory of voice production and the proper formation of the sounds of speech as typified by American standard usage, the mechanics of pitch, volume and quality are studied. Study of phonetic symbols is provided. Assistance is given to overcome minor speech and voice problems most commonly found in the New York City area.

+ Basic Course
**SPE 30 DEVELOPMENT of VOICE**

To develop voice quality, students learn the theory of voice production including: physiology of vocal production studied as a prelude to understanding the mechanics of pitch, resonance, projection and quality; breathing and relaxation (for speech as supports for good tone production) totality of the expressive voice. Practice provided to overcome voice problems and develop proper articulation.

**SPE 31 DEVELOPMENT of ARTICULATION**

Correct articulation of the sounds of speech, proper pronunciation, the elimination of regionalism and the development of speech patterns to enhance verbal communication skills and eliminate vocal production faults.

**SPE 81 INDEPENDENT STUDY**

Independent study of Speech is developed individually between student and faculty member and must be approved by the Department.

**SPE 82**

This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.
THEATRE ARTS

+ Th.A 50  INTRODUCTION to THEATRE ARTS  
3 crs. 3 hrs.

The various elements which compose theatre from classical to modern times, are studied both as art forms and as parts of an integrated whole. The cultural role, as well as the business of theatre, is considered as an institution in society. Films, slides, projects, and guest lecturers are involved to help comprehend the nature of theatre art. Students are required to participate in technical aspects of a current major theatre production, or the equivalent.

Required of Theatre Arts Majors.
Recommended for non-Theatre Arts Majors in the Liberal and Fine Arts, and in Business.

+ Th.A 51  PLAY ANALYSIS  
3 crs. 3 hrs.

Through consideration of a number of outstanding plays in theatrical history, and the study of various productions given these plays, students gain understanding of the plays and appreciation of the production problems involved. Relevance of the plays to the contemporary stage are discussed during the course.

+ Th.A 52  ACTING I  
4 crs. 4 hrs.

The basic techniques of sensory awareness, memory, improvisation, character study and role preparation with emphasis on the works of Constantin Stanislavsky. Special projects include presentations and rehearsal techniques for scene study.

Th.A 53  ACTING II  
4 crs. 4 hrs.

Continuation of Th.A 52, this advanced classroom and laboratory course furthers sensory awareness, memory and character study for the preparation of a role. Basic vocal and body techniques are employed to explore the psychophysical actions, objectives and superobjectives of characters. Acting theories are studied and practiced in laboratory situations.

Prerequisite: Th.A 52 or permission of the Department.

+ Th.A 54  LABORATORY/WORKSHOP  
1 cr. 3 hrs.

Under faculty supervision students present workshop productions in areas of theatre that require the use of theatrical materials in an experimental manner, unusual theatrical spaces, masks, puppets, experimental approaches to classic dramas and children's theatre. Public performances involving student directors and stage designers are given.

Th.A 55  STAGECRAFT  
3 crs. 4 hrs.

Through discussion and demonstration, students learn the various elements of production, including theatre organization, stage managing, scenery construction and painting. Each student is required to participate in the major school productions.

Prerequisite: Th.A 50 (may be waived by the Department)

Th.A 56  BASIC LIGHTING  
3 crs. 3 hrs.

The field of lighting, the principles of electricity and light and how they relate to designing lights. Technical implementation of lighting designs are studied and applied in laboratory conditions and in actual productions. Students are required to make in-depth studies of lighting particular plays and participating in at least one college production.

Prerequisite: Th.A. 55
Th.A 57  PUPPETRY  
3 crs. 3 hrs.  
Appreciation of puppets and puppetry, their history, production and manipulation. Students apply techniques of building and using puppets as effective theatre.

Th.A 59  PLAY PRODUCTION  
1 cr. 6 hrs.  
Performance, technical theatre production, box office management and stage management. Student participation can earn up to a total of four credits (one each semester) for successful contribution to a production. Required of all Theatre Arts Majors.

Th.A 60  FUNDAMENTALS of COSTUME DESIGN  
3 crs. 3 hrs.  
Lectures and demonstrations on the basic craft of costume construction and design. In the costume shop, students learn shop layout, machinery, and materials which compose the costume design. Laboratory sessions in this craft are required in connection with regularly scheduled theatre productions.  
Prerequisite: Th.A 50

Th.A 61  MAKEUP for the STAGE  
3 crs. 3 hrs.  
Design and application of stage make-up, principles for designing make-up and the actual applications of corrective and three dimensional make-up for production work. Students are trained in this subject through lecture-demonstrations, laboratory situations, and actual production work. Each student is expected to participate in the complete process of designing, applying and maintaining make-up during a production.  
Prerequisite: Th.A 50

Th.A 62  ACTING III  
3 crs. 3 hrs.  
Acting in pre-modern drama with detailed analysis of the acting styles of selected Classic, Elizabethan, Neo-Classic, Restoration and Romantic drama. Study of language and movement in historical periods, is supplemented by practice in laboratory situations. Class enrollment is limited.  
Prerequisite: Th.A 53 (may be waived by the Department)

Th.A 63  BASIC SOUND TECHNOLOGY  
3 crs. 3 hrs.  
Basic principles, equipment, operation of sound equipment and the proper methods for using tape recorders, microphones, and amplifiers, in relation to designed productions. Analysis of equipment and methods of operation are studied and applied in class, laboratory and in actual production.  
Prerequisite: Th.A 50, or MCB 35, or permission of the Department

Th.A 65  SCENIC DESIGN  
3 crs. 3 hrs.  
Techniques and development of scenic designs based on a sound and thorough knowledge of the theatre. The designer's procedure and method of working are studied in laboratory and in actual production.  
Prerequisite: Th.A 55 (may be waived by the Department)

+ Basic Course
Th.A 66  DIRECTING: THE FUNDAMENTALS  3 crs. 4 hrs.
The principles of play interpretation, the directorial concept, and methods of focusing audience’s attention on dramatic values by synthesizing character, language, idea and plot with exciting design and purpose.
Prerequisites: Th.A 50 and permission of the Department

+ Th.A 67  AMERICAN MUSICAL THEATRE  3 crs. 3 hrs.
The development of the Broadway musical theatre from European operetta and American jazz backgrounds to the present day. Emphasis is on the musical and theatrical traditions of this form as well on the changing styles in music, staging, and production values.

+ Th.A 68  HISTORY of the THEATRE  3 crs. 3 hrs.
The history of the theatre from its primitive origins to modern times, includes study of historical documents, contemporary writings, slides of theatre architecture, costumes, scenic designs and related artifacts.

+ Th.A 69  STREET THEATRE  4 crs. 4 hrs.
A study of, and involvement in, elements which compose street theatre. Students participate in exercises which help create ensemble acting, adaptation of materials to fit the street, writing and composing music and dance for a particular production.
Recommended Prerequisites: Th.A 50, 51, 52 or 53

Th.A 81  INDEPENDENT STUDY  1–3 crs. 1–3 hrs.
Independent study of Theatre Arts is developed individually between student and faculty member and must be approved by the Department.

Th.A 82  1–3 crs. 1–3 hrs.
This course is of a topical and pilot nature and is designed to meet the immediate needs and interests of various student populations. It is offered for a maximum of two semesters.

A.S. Degree
THEATRE ARTS
Requirements—Page 98
TRAVEL and TOURISM DEPARTMENT
Room E-219  ext. 5143

Anthony Bove, Assistant Professor
Sheldon Friedland, Professor and Chairman
Helene Orenstein, Lecturer
Stuart Schulman, Assistant Professor
Barbara Steffen-Richard, Assistant Professor
+ TAT 1 INTRODUCTION to TRAVEL and TOURISM
3 crs. 3 hrs.
Overview of the many and varied organizations and agencies that make up the travel and tourism industry, their roles and interrelationships. Topics include transportation, lodgings, restaurants, wholesale and retail operations, attractions, government owned parks and facilities, trade organizations, and governmental agencies.

+ TAT 2 THE TRAVEL INDUSTRY I
3 crs. 3 hrs.
Two of the major components of the Travel and Tourism Industry: Hotel/Hospitality and Retailing (Retail Travel Agent). Topics covered in the Hotel/Hospitality area include hotels, motels, resorts, alternative accommodations and related professions. Topics covered in the Retailing area include travel agency organization, operations, administration, personnel and sales.

TAT 3 THE TRAVEL INDUSTRY II
3 crs. 3 hrs.
Transportation and Wholesaling, two other major components of the travel and tourism industry. Topics covered in the Transportation area include regulation and deregulation, fare structure, charters, administration and marketing. Topics covered in the Wholesaling area include services, tour packaging and legal aspects.

Prerequisite: TAT 2

TAT 4 COMPUTER RESERVATIONS SYSTEM
3 crs. 4 hrs.
Intensive study of the TWA PARS computer reservations system. Students receive continuous hands-on experience in learning how to access the computer to make bookings for airlines, hotels, rental cars, trains and cruises.

Prerequisite: TAT 11

TAT 11 THE TRAVEL AGENT and WHOLESALER I
3 crs. 3 hrs.
To understand the operation and management of a travel agency, emphasis is on development skills and practical experiences in ticketing and the use of domestic and international reference guides. Special attention is given to financial responsibility as it pertains to travel agency operation and management structure.

Prerequisite: TAT 2

TAT 12 THE TRAVEL AGENT and WHOLESALER II
3 crs. 3 hrs.
The role of governmental and quasi-governmental bodies as they affect the operation and financial status of travel retailers and wholesalers. Introduced to the use of computer systems, students become familiar with governmental regulations and financial sales reports.

Prerequisite: TAT 11

+ Basic Course
TAT 21 THE HOSPITALITY INDUSTRY I
3 hrs.
Operation and management of hospitality enterprises with emphasis placed on the application of management principles and financial operations as they exist in hotels, motels, restaurants, and resorts.
Prerequisite: TAT 2

TAT 31 TRANSPORTATION I
3 hrs.
Detailed analysis of the regulatory environment, pricing structure, marketing and sales considerations as they interact with economic and social factors in both passenger and cargo transportation. All modes of surface and air transportation are discussed.
Prerequisite: TAT 2

TAT 92 FIELD EXPERIENCE in TRAVEL and TOURISM
9 hrs.
(8 hrs. in field plus 1 hr. on-campus seminar)
To integrate theory and practice by applying acquired skills in an actual work environment, eight hours per week of supervised field experience in Travel and Tourism plus one hour a week of seminar discussion of relevant topics on campus.
Prerequisite: TAT 12

A.A.S. Degree
TRAVEL AND TOURISM
Requirements—Page 128
The Library and Media Center is the major learning resource facility at the college. Students and faculty are provided with a rich variety of materials to support the curriculum, meet information needs, assist in study, in research, in stimulating cultural development, satisfying special interests and academic curiosity. Professional librarians offer reference service and individual teaching assistance for students, produce and distribute a library handbook and a twice yearly newsletter "Op Cit" for faculty, administration and staff, and are available to promote the full utilization of all library resources.

The Library's high-quality collection includes more than 112,000 carefully selected books, over 470 current periodicals, magazines and journals, more than 11,000 bound periodicals and over 8,725 microfilms. Additional resources include 10,000 pamphlets, government documents, career briefs, and special collections of maps and college catalogs.

In the Media Center are a variety of non-print materials and media services. Among the materials available are motion pictures, audio and video tapes, slides, filmstrips, phonograph records and dictation discs. The Center maintains an audio studio for taped lessons, programs for playback and remedial use. Media reference service is available throughout the academic year. A "Learning Lab" provides audio playback facilities for faculty and students on a "walk-in" basis.

Media Center is in the Library, Room L-118, ext. 5074.
Topical exhibits, original works of art and spectacular views of the campus and its surrounding waters enhance the 8 story Robert J. Kibbee Library.
Gene J. Flanagan, Dean
S. William Katz, Executive Assistant to the Dean
Robert Schipa, Director, Programs
Franceska Smith, Director, Program Development
Janet Birnkrant, Assistant Director, Adult Programs
Charles Hines, Director, “Diploma Now”
CONTINUING EDUCATION

As part of the College's mission to extend educational opportunity to area residents, Continuing Education offers courses and programs on a not-for-credit basis. The College recognizes that changes in educational, cultural, and economic conditions prompt people to re-define their personal goals and to seek learning opportunities that will help them achieve their new goals. Accordingly, Continuing Education courses and programs are designed to enhance the academic skills and job skills and enrich the daily lives of lifelong learners.

Career Advancement Courses

Tailored to the needs of adults re-entering the job market or seeking to update or upgrade skills for current jobs, career advancement courses build skills in data processing, typing and shorthand, and supervision and management. Career planning is facilitated by courses which introduce the adult learner to fields such as real estate and travel and which overview career alternatives.

Certificate Programs

Carefully designed sequences of courses comprise the certificate programs. Offered on a non-credit basis, exempt from liberal arts distribution requirements, and of considerably shorter durations than degree programs at the College, the Continuing Education certificate programs nevertheless require commitment to a sustained and rigorous course of study. They are designed for adults seeking entry level employment in such positions as bookkeeper, administrative assistant, and paralegal.

High School Equivalency

Preparation for the G.E.D. examinations includes a diagnostic/prescriptive workup, practice in test-taking, instruction in content areas, writing skills development, and counseling for both career development and college admission. For adults not yet ready for high school completion, basic education courses are provided.

English as a Second Language

Diagnostic testing and counseling precede placement in appropriate-level instruction for adults whose first language is not English. Instructional levels range from survival skills for those with no command of English to advancement skills for employees in fields such as health care or business who wish to "polish" their English language skills.

Liberal Arts

A variety of liberal arts courses serves adults who wish to explore their current interests in the humanities, politics, psychology, foreign languages and other areas. Adults also register in short-term liberal arts courses to sample the experience of formal instruction in established disciplines, deciding whether they wish to enroll in the College's credit-based courses and degree programs.
S.A.T. Preparation Program

This Saturday morning program for high school students offers instruction, drill, and simulated testing in verbal, math, and test-wiseness skills in preparation for college entrance examinations. Counseling is also included: advisement is provided on college selection, the application process, and financial assistance and scholarship programs.

Other preparation activities offered by Continuing Education include a course for junior high school students taking the Specialized High School and Cooperative Entrance examinations.

College for Kids

This Saturday morning program for pre-teens, ages 7 through 12, offers a combination of academic and active classes. Most classes are small and all instructors are dedicated and highly qualified so that youngsters enjoy these enrichment activities not ordinarily provided in the public schools. Courses may include but are not limited to: foreign languages, creative writing, “hands-on” instruction in arts, crafts, and musical instruments, fishing, photography, as well as swimming, tennis, gymnastics, dance, self-defense, and soccer.

Contract Courses: Privately and Publicly Supported

Continuing Education also offers courses and services for specialized target populations and program providers. Funded programs may serve, for example, adult learners in need of vocational counseling, literacy and English language instruction, and job training; these are offered under the aegis of the College and various public agencies, both state and national.

Continuing Education also designs and provides courses for the employees of local business and industry and municipal agencies in furtherance of the College's mandate to contribute to the development of the workforce of its service area.

DIPLOMA NOW

Offered at public high schools in the College's service area. By providing preparation for the GED examination and for vocational and college counseling, Diploma Now offers alternatives to students whose basic skills are good but who have fallen behind in their progress toward high school graduation and are at risk of dropping out of school. Graduates of Diploma Now attend the annual High School Equivalency Graduation ceremony at the College. Approximately one-fourth of the Diploma Now graduates subsequently enroll in credit and degree programs at Kingsborough.
FACULTY

Patrick J. Abbazia, Professor, History, Philosophy and Social Sciences
B.A., Brooklyn College; M.A., University of California; Ph.D., Columbia University

Michael Aboussaleman, Adjunct Lecturer, Health, Physical Education and Recreation
B.S. Brooklyn College

Raul Acero, Substitute Assistant Professor, Art
B.A., State University of New York at Fredonia; M.F.A., Ohio University

Anna Adams, Adjunct Lecturer, Business
B.S., The City College of New York; M.S., Long Island University

Richard Adelson, Associate Professor, Business
B.S., M.A., New York University

Elio Alba, Professor, Foreign Languages
B.A., Havana Institute, Cuba; M.A., Rutgers University; LL.D., University of Havana, Cuba; Ph.D., New York University

Anna Aliotta, Assistant to Director, Admission Information Center, Assistant to Higher Education Officer
B.A., Brooklyn College; M.S., College of Staten Island

Louis Altschul, Professor, Behavioral Sciences and Human Services
A.B., New York University; Ph.D., Adelphi University

Pat Amedure, College Laboratory Technician, Health, Physical Education and Recreation

Sheldon I. Aptekar, Professor, Speech and Theatre
B.A., Brooklyn College; M.A., Trinity University

Isidor Apterbach, Assistant Professor, English
B.A., Yeshiva University; M.A., M.Phil., Columbia University

Susan Aranoff, Assistant Professor, Business
B.A., Barnard College; Ph.D., Columbia University

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B.A., Brooklyn College; M.S., The City College of New York,
Certificate in Psychoanalysis, National Psychological Association for Psychoanalysis;
M.S.W., Wurzweiler School of Social Work, Yeshiva University

Frank Armada, Adjunct Assistant Professor, Foreign Languages
B.A., New York University; M.S., Brooklyn College; Ed.D, Teachers College, Columbia University

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Jack Arnow, Assistant Professor, Mathematics and Computer Science
B.S., Brooklyn College; M.A., Queens College

Jane Atlas, Higher Education Assistant, Computer Center
B.S., Brooklyn College

Bonne August, Assistant Professor, English
B.A., D'Youville College; M.A., Ph.D., New York University

Robert Axelrod, Adjunct Lecturer, Speech and Theatre
A.A., Kingsborough Community College; B.A., B.S., Brooklyn College;
M.A., The City College of New York
Marcia Babbitt, Lecturer, English
B.A., Temple University; M.A., State University of Iowa

Bobby L. Baldwin, Associate Professor, Secretarial/Office Administration
B.S., M.S., Prairie View A & M College

Linda Barley, Adjunct Associate Professor, Health, Physical Education and Recreation
B.S., St. Francis College; M.S., Hunter College; Ed. D. Teachers College, Columbia University

John Barlow, Professor, Behavioral Sciences and Human Services
A.B., Oberlin College; Ph.D., Duke University

Melvyn Baron, Lecturer, English
B.A., Kenyon College; M.A., Teachers College, Columbia University

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B.A., Brooklyn College; M.S., Bank St. College of Education; Ph.D., Union Graduate School

Catherine S. Barry, Professor, Secretarial/Office Administration
B.B.A., St. John's University; M.S., Hunter College; Ph.D., Fordham University

Elizabeth Basile, Adjunct Lecturer, Student Development
A.A., B.A., The College of Staten Island, M.S., St. John's University

Gordon Bassen, Assistant Professor, Mathematics and Computer Science
B.S., M.A., Brooklyn College

Sylviane Baumfleek, Adjunct Lecturer, English
B.A., Brooklyn College; M.A., Columbia University

Jan Baybusky, Assistant Personnel Officer, Higher Education Associate
B.S., Regents College Degree

Karen Beatty, Adjunct Lecturer, Student Development
B.A., M.A., Montclair State College; Ph.D., Union Graduate School

Laurence Becker, Adjunct Assistant Professor, Speech and Theatre
A.B., M.A., Brooklyn College

Mortimer Becker, Professor and Chairman, Speech and Theatre
B.A., Brooklyn College; M.A., Ed.D., Teachers College, Columbia University

Halice K. Beckett, Assistant Professor, Nursing
B.S., M.A., New York University; R.N., Bellevue Hospital, School of Nursing

Dorothy A. Beckmann, Associate Professor, Speech and Theatre
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Gerald Beldock, Adjunct Lecturer, Business
Certificate in Law, Long Island University
L.L.B., Brooklyn Law School

Cynthia Belis, Adjunct Lecturer, Secretarial/Office Administration
B.S., Bernard M. Baruch College; M.A., Hofstra University

Rita Bell, Adjunct Assistant Professor, Speech and Theatre
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Joseph Beller, Medical Officer, Adjunct Professor, Student Development
B.A., New York University; M.D., Middlesex Medical College

Renato Bellu, Assistant Professor, Business
A.A.S., Kingsborough Community College; B.S., Brooklyn College; M.B.A., Pace University; Ph.D., Union Graduate School

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Isaiah A. Benathen, Associate Professor, Biological Sciences
B.S., The City College of New York; M.S., Long Island University; Ph.D., The City University of New York

David J. Berger, Higher Education Officer, Computer Center
B.A., University of Colorado; M.B.A., Pace College

Joseph H. Berliner, Associate Professor, Business
B.S., Brooklyn College; J.D., New York University; M.B.A., Long Island University;
C.P.A., State of New York

Aaron Bernstein, Adjunct Lecturer, Business
B.S., United States Military Academy, West Point; L.L.B., Columbia Law School

Robert E. Berryman, Director, Personnel Services; Labor Relations Designee;
B.A., St. John's University; M.B.A., Baruch College

Carol Biermann, Associate Professor, Biological Sciences
B.A., M.A., Brooklyn College; Ed.D., Rutgers University

Janet Birnkrant, Assistant Director of Adult Programs, Assistant to Higher Education Officer
B.A., Brooklyn College; M.A., University of Illinois

Robert Bittar, Higher Education Associate, Computer Center
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</table>
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B.A., Bowdoin College; B.S., Columbia University; M.A., Teachers College, Columbia University

John O. H. Stigall, Professor, English
A.B., Dartmouth College; B.A., M.A., Magdalen College, Oxford University; LL.B., Georgetown University; M.A., University of Kansas City; M.A., Ph.D., University of Colorado

C. Frederick Stoerker, Professor, Social Sciences; Director, KIPS
A.A., St. Joseph Junior College of Missouri; S.T.B., Boston University; A.B., Baker University, Kansas; Ph.D., Missouri University
SCHOLASTIC AWARDS

Annual awards are given to graduating students who achieved academic excellence in their various disciplines, and to students who gave outstanding service to the college through student government and student activities. The Faculty Committee on Awards, a sub-committee of the Committee on Students, administers the Annual Awards Program.

An annual Valedictorian Award has been established by members of the Addes Family in loving memory of Fred F. Addes who attended Kingsborough Community College as a “My Turn” student.

An annual Scholastic Achievement Award in the field of Hebrew-Yiddish studies, has been established by the Milrod Family in loving memory of Louis Milrod, a 1972 Kingsborough Community College graduate who, in his 85th year completed his doctoral studies and earned the D.J.L. degree.

GIFTS and BEQUESTS

Kingsborough Community College is supported by student tuition and allocations from the City of New York and the State of New York. The limitations of these funds prevent the support of some valuable programs designed to stimulate, enrich and further the broad educational objectives of the college. Additional funds are needed to: provide awards, grants and loans to students; support educational programs and faculty development; sponsor research and publications; foster the cultural and social life of the college community.

The Kingsborough Community College Foundation Inc., a Not-for-Profit Corporation welcomes gifts, grants, awards and bequests from business, industry and public spirited citizens to support and expand these activities.

The Foundation Office is located at 2001 Oriental Blvd., Brooklyn, New York 11235.
NOTIFICATION OF POLICY

"Kingsborough Community College complies with the Federal Education Rights and Privacy Act of 1974. The full text of CUNY's Student Records Access Policy is posted for review in the Registrar's Office and in the Library."

Education Law Section 224-a

Students unable because of religious beliefs to attend classes on certain days.

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

2. Any student in an Institution of Higher Education who is unable, because of his 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 or any study or work requirements.

3. 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 religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he 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.

4. If classes, examinations, study or work requirements are held on Friday after four o'clock post meridian or on Saturday, similar or makeup 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.

5. In effectuating the provisions of this section, it shall be the duty of the faculty and of the administrative 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 availing himself of the provisions of this section.

6. 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 rights under this section.

7. As used in this section the term "Institution of Higher Education" shall mean schools under the control of the Board of Trustees of the State University of New York or of the Board of Trustees of The City University of New York or any Community College.
Rules and Regulations for the Maintenance of Public Order
(Henderson Rules)

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

Academic freedom and the sanctuary of the 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. Therefore, the following rules and regulations are in effect at Kingsborough Community College and will be administered in accordance with the requirements of the process as provided in the Bylaws of CUNY's Board of Trustees.

To enforce these rules and regulations the Bylaws of CUNY's Board provide that:

THE PRESIDENT, with respect to his educational unit, shall:

a. Have the affirmative responsibility of conserving and enhancing the education standards of the college and schools under his jurisdiction;
b. Be the advisor and executive agent to the Board and of his 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 any of its committees and the policies, programs and lawful resolutions of the several faculties;
c. Exercise general superintendence over the concerns, officers, employees and students of his education unit.
Rules

1. No member of the academic community shall intentionally obstruct and/or forcibly prevent others from the exercise of their rights, or interfere with the institution's educational process or facilities, or with the rights of those who wish to avail themselves of any of the institution's instructional, administrative, recreational, and community services.

2. 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.

3. 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 and/or supplies.

4. Theft from or damage to university/college premises is prohibited.

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

6. Action may be taken against any and all persons who have no legitimate reason for their presence on any campus within the 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 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.

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

8. No individual shall have in his 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 grounds of the college without the written authorization of such educational institution. Nor shall any individual have in his 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 college.

9. It is a violation of acceptable standards of conduct at the college, and it is prohibited for any individual, group or organization to engage in the practice of "hazing";

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

10. In accordance with the policy of The City University of New York, the College prohibits sexual harassment of employees or students.
Penalties

1. Any student engaging in any manner in conduct prohibited under substantive Rules 1-10 shall be subject to the following range of sanctions as hereafter defined in the attached Appendix: admonition, warning, censure, disciplinary probation, restitution, suspension, expulsion, ejection, and/or arrest by the civil authorities.

2. Any tenured or non-tenured faculty member, or tenured or non-tenured member of the administrative or custodial staff engaging in any manner in conduct prohibited under substantive Rules 1-10 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 CUNY Board), suspension with/without pay pending a hearing before an appropriate college authority, dismissal after a hearing, ejection and/or arrest by the civil authorities. In addition, in the case of a tenured faculty member, or tenured member of the administrative or custodial staff engaging in any manner in conduct prohibited under substantive Rules 1-10 shall be entitled to be treated in accordance with applicable provisions of the Education Law or Civil Service Law.

3. Any visitor, licensee, or invitee, engaging in any manner in conduct prohibited under substantive Rules 1-10 shall be subject to ejection, and/or arrest by the civil authorities.
Sanctions Defined

A. ADMONITION: An oral statement to the offender that University rules have been violated.

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

C. CENSURE: Written reprimand for violation of a 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.

D. 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.

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

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

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

H. COMPLAINT TO CIVIL AUTHORITIES.

I. EJECTION.

Adopted by the Board of The City University of New York, June 23, 1969, Calendar No. 3(b).

In addition to Henderson Rules, student conduct and discipline is governed by Article XV of the Bylaws of The City University of New York. Students are urged to familiarize themselves with the content of this Article. Copies of the Bylaws are available in the Library. They are printed in the Student Handbook as are the rules and regulations pertaining to Sexual Harassment.
HOLIDAYS and EMERGENCY COLLEGE CLOSING

Holidays on which the College is scheduled to be closed and no classes held, are listed in the Academic Calendar (pages 5-8).

In the event of Emergency College Closing, due to inclement weather or other factors over which the College has no control, students can get up-to-the-minute information by listening to the following radio stations for instructions.

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<td>WMCA</td>
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<td>WFAS</td>
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<tr>
<td>WLIB</td>
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WKRB-FM 90.9 (Kingsborough Station)

NOTE: Programs and requirements, tuition and fee schedules listed in the catalog, are necessarily subject to change at any time at the discretion of the administration and/or action by Kingsborough Community College, the CUNY Board of Trustees, The City University or State University of New York.
is a public institution composed of 9 senior colleges, 7 community colleges, a technical college, a law school, the Graduate School and University Center, and an affiliated medical school.

In 1847, New York City held a public referendum to find ways to meet the city’s growing need for free higher education. The result was the establishment of the Free Academy (now known as City College) and the birth of the University. In 1961, through an act of State legislation, seven municipal colleges operated by the Board of Higher Education became The City University of New York. CUNY has continued to expand until it reached its present prestigious position as the largest urban University in the nation. The University has continued to grow, has added larger, more modern, completely equipped institutions; increased facilities to serve more students; inaugurated evermore innovative far-reaching programs of study; recruited faculty and administrators of the highest caliber with outstanding qualifications and demonstrated interest; included research programs geared to meet urban needs; succeeded in its “Open Admissions” goals which guarantees every high school graduate the opportunity to pursue further education at a City University institution of higher learning.

To assist disadvantaged high school students to enter, and to remain in college, CUNY developed the largest university-sponsored programs in the nation, including the College Discovery Program; Operation SEEK (Search for Education, Elevation and Knowledge); Advanced Placement Programs and others plus overall collaborative programs with the New York City Board of Education. In addition, CUNY established or sponsored Urban Centers, which offer short-term vocational training and college-adapter courses and are operated under contract with the State University of New York.
THE CITY UNIVERSITY OF NEW YORK

BOARD OF TRUSTEES

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Martin J. Warmbrand, B.A., M.A., Secretary of the Board
David B. Rigney, B.A., LL.B., General Counsel
# THE CITY UNIVERSITY OF NEW YORK

## OFFICERS

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<tr>
<td>Laurence F. Mucciolo</td>
<td>Deputy Chancellor</td>
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<tr>
<td>Julius C. C. Edelstein</td>
<td>Senior Vice-Chancellor Emeritus</td>
</tr>
<tr>
<td>Carolyynn Reid-Wallace</td>
<td>Vice-Chancellor for Academic Affairs</td>
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<td>Ira Bloom</td>
<td>Vice-Chancellor for Faculty and Staff Relations</td>
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<tr>
<td>Joyce F. Brown</td>
<td>Acting Vice-Chancellor for Student Affairs and Special Programs</td>
</tr>
<tr>
<td>Donal E. Farley</td>
<td>Vice-Chancellor for Facilities Planning and Management</td>
</tr>
<tr>
<td>Jay Hershenson</td>
<td>Vice-Chancellor for University Relations</td>
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<tr>
<td>David B. Rigney</td>
<td>Vice-Chancellor for Legal Affairs</td>
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<td>Joseph F. Vivona</td>
<td>Vice-Chancellor for Budget and Finance</td>
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<tr>
<td>Richard M. Bossone</td>
<td>University Dean for Instructional Research</td>
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<td>Joyce F. Brown</td>
<td>University Dean for Urban Affairs</td>
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<tr>
<td>Barry Kaufman</td>
<td>University Dean for Institutional Research and Analysis</td>
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<td>Seymour P. Lachman</td>
<td>University Dean for Community Development</td>
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<tr>
<td>Marilyn Magner</td>
<td>University Dean for Faculty and Staff Relations</td>
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<tr>
<td>John J. McGarraghy</td>
<td>University Dean for Academic Affairs</td>
</tr>
<tr>
<td>Eleanor Pontes</td>
<td>University Dean for Student Affairs and Special Programs</td>
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<tr>
<td>Angelo B. Proto</td>
<td>University Dean for Student Services</td>
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<tr>
<td>Dave Fields</td>
<td>Special Counsel to the Chancellor</td>
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CITY UNIVERSITY SPECIAL PROGRAMS

Baccalaureate Degree Program

The CUNY Baccalaureate degree, awarded by the University, brings a flexible new approach to the concept of a liberal arts education. It gives a student maximum opportunity to take courses and work with faculty at other than the home college and permits the student to incorporate individual research, travel, work, community activities and other off-campus activities of educational value into an individually planned course of study. This program is open to students who have completed at least 15 credits at a CUNY college.

Information and applications are available from the campus coordinator (page 42) or from the Coordinator of the CUNY Baccalaureate Program, The Graduate School and University Center, 33 West 42nd Street, New York, New York 10036.

College Discovery

Students who meet certain requirements, particularly with regard to family income, may be eligible for admission to one of The City University's special programs. The Community College level program is called College Discovery. A “first-time admission” applicant, who may be qualified for this program, should complete the section on the admissions application form which pertains to Special Programs. Candidates are selected by a special, selective system. Those not chosen for the Special Programs are automatically considered for admission under regular admissions procedures (page 22).

Computer Facilities

The University Computer Center provides Kingsborough students, faculty, and staff access to a large-scale computing facility for academic and administrative purposes. Batch job processing and teleprocessing services are provided. All standard IBM languages, numerous mathematical, social science, and scientific application packages and comprehensive Database services are available. A portion of the computer is dedicated to a “free class” of job execution that does not require the establishment of a UCC allocation account. The teleprocessing systems include WYLBUR for text editing and remote job entry, CMS for instructional interactive usage, and APL for scientific use. Graphic hardware and software is also available to users. In conjunction with the KCC Computer Center, consulting, documentation, and educational services are provided.

Kingsborough students, faculty and staff have access to personal computing laboratories containing IBM and Apple computers. The College has a significant amount of programs available for instructional use on these computers.

The University Computer Center is located at 555 West 57 Street in Manhattan, but KCC's remote job entry stations and public terminals enable access from the campus. For more information, contact the UCC Coordinator of User Services (212) 977-8000, or the KCC Instructional Computing Center (718) 934-5645.
Foreign Students Program

All applicants who hold, or expect to obtain, temporary (non-immigrant) visas, should obtain the correct application form from the Foreign Students Office of The City University of New York Admissions Services, 875 Avenue of the Americas, New York, N.Y. 10001.

Super Citizens

New York State residents, 65 years of age and over, may attend CUNY colleges under a policy of the Board of Trustees. No tuition is charged to state residents, but a $25. registration fee is charged each semester. Some documentation of age and residency must be submitted.

Students are accepted on a matriculated or non-degree basis, depending upon previous educational experience and the availability of space at the College. Students wishing to apply as matriculated students should check the appropriate filing dates on pages 5-8.

The Office of Admission Services

The Office of Admission Services assists all prospective applicants who are interested in attending one of the colleges of The City University of New York. OAS, in conjunction with the University Application Processing Center (UAPC) processes all freshmen and advanced standing transfer applications and evaluates all foreign educational documents. The office is conveniently located at 101 West 31st Street in Manhattan and contains the following divisions:

The Information Center: Provides information on: CUNY Admissions Procedures, International Student Admissions, Financial Aid, CUNY Programs and GED information. The Center is open Monday through Thursday from 9:00 A.M.-6:00 P.M., and Friday from 9:00 A.M.-5:00 P.M. Phone: 212-947-4800.

School and Community Services: Disseminates pre-admissions information on CUNY to students and guidance counselors in all New York City High Schools and most of the large community agencies.

Computer Based Educational Opportunity Center (CBEOC): CBEOC is a federally funded program operating in conjunction with CUNY's Office of Admission Services. Its prime goal is to assist persons from low-income areas to enroll in a post-secondary educational program. Phone: 212-868-6200.

New York City Regional Center for Life Long Learning: Housed at the Office of Admission Services, the Center for Life Long Learning provides to interested applicants, guidance counselors and community agencies, information about post-secondary educational opportunities available in New York City.

In addition, OAS administers the College Level Examination Program (CLEP) and the Test of English as a Foreign Language (TOEFL). Other functions include the preparation of CUNY publications such as the Guide to Admissions and the CUNY Community Newsletters.
Colleges of The City University of New York

**Graduate Division**

THE GRADUATE SCHOOL AND UNIVERSITY CENTER, founded in 1961
Harold M. Proshansky, *President*

THE CUNY LAW SCHOOL AT QUEENS COLLEGE, founded in 1973
W. Hayward Burns, *Dean*

**Senior Colleges**

THE CITY COLLEGE, founded in 1847
Bernard W. Harleston, *President*

HUNTER COLLEGE, founded in 1870
Donna E. Shalala, *President*

BROOKLYN COLLEGE, founded in 1930
Robert L. Hess, *President*

QUEENS COLLEGE, founded in 1937
Shirley S. Kenny, *President*

NEW YORK CITY TECHNICAL COLLEGE, founded in 1946; affiliated with The City University in 1964
Ursula C. Schwerin, *President*

JOHN JAY COLLEGE OF CRIMINAL JUSTICE, founded in 1964
Gerald W. Lynch, *President*

YORK COLLEGE, founded in 1966
Milton G. Bassin, *President*

BERNARD M. BARUCH COLLEGE, founded in 1968
Joel Segall, *President*

HERBERT H. LEHMAN COLLEGE, founded in 1968
Leonard Lief, *President*

MEDGAR EVERS COLLEGE, founded in 1968
Leo A. Corbie, *Acting President*

THE COLLEGE OF STATEN ISLAND, founded in 1976
Edmond L. Volpe, *President*

**Community Colleges**

BRONX COMMUNITY COLLEGE, founded in 1957
Roscoe C. Brown Jr., *President*

QUEENSBOROUGH COMMUNITY COLLEGE, founded in 1958
Kurt R. Schmeller, *President*

KINGSBOROUGH COMMUNITY COLLEGE, founded in 1963
Leon M. Goldstein, *President*

BOROUGH OF MANHATTAN COMMUNITY COLLEGE, founded in 1963
Augusta S. Kappner, *President*

EUGENIO MARIA de HOSTOS COMMUNITY COLLEGE, founded in 1968
Isaura Santiago-Santiago, *President*

FIORELLO H. LA GUARDIA COMMUNITY COLLEGE, founded in 1968
Joseph Shenker, *President*

**Affiliated Institution**

MOUNT SINAI SCHOOL OF MEDICINE, affiliated with The City University in 1967
James F. Glenn, *President*
Axonometric view of the approved Marine and Academic Center. The building will be set on the southeastern quadrant of the campus. The Academic Center will include classrooms, laboratories, offices, conference and meeting rooms, dining room to serve over 500 students and a 300 seat theatre. The Center for Marine Development and Research will house laboratories to train students in Vessel Operations and Seafood Business Management, a small aquarium and exhibit space for sea and nautical industries.
TRAVEL DIRECTIONS TO KINGSBOROUGH

**SUBWAY**

**BMT**

**BRIGHTON LINE**
- D or QB Train
  - to Sheepshead Bay Station; B-49 Bus* or,
  - to Brighton Beach Station; B-1 Bus*

**SEA BEACH LINE**
- N Train to 86 Street Station; B-1 Bus*

**WEST END LINE**
- B Train to 25 Avenue Station; B-1 Bus*

**FOURTH AVENUE LINE**
- RR Train to 59 Street Station; change for Sea Beach N Train to 86 Street Station; B-1 Bus*

**IRT**

**LEXINGTON AVENUE LINE**
- Trains #4 or 5 to Atlantic Avenue Station; or, to Borough Hall Station; change to Brighton Line Train and Bus*

**SEVENTH AVENUE LINE**
- Trains #2 or 3 to Atlantic Avenue Station; or, to Borough Hall Station; change to Brighton Line Train and Bus*

**IND**

**SIXTH AVENUE LINE**
- D Train to Sheepshead Bay Station; B-49* or,
  - to Brighton Beach Station; B-1 Bus*
- F Train to Avenue X Station; B-1 Bus*

**EIGHTH AVENUE LINE**
- A Train to Franklin Avenue Station; Shuttle to Prospect Park Station; change to Brighton Line Train and Bus*

**BUS**

- B-1*, B-49*
- B-4, B-36 and B-68 connect with B-1*
- B-2, B-3, B-6, B-9, B-12, B-25, B-31, B-35, B-36, B-45
- B-47, B-48, and B-50 connect with B-49*

*Take these buses to the last stop. Walk straight along Oriental Boulevard directly into the College.*
CAR

From Manhattan

Belt Parkway eastbound to Coney Island Avenue—Exit 8. (Note: Exit 8 follows very closely upon Exit 7 and can easily be missed.) Watch for the directional signs leading to the campus. They point the way along the following route: Cross Coney Island Avenue and continue along Guider Avenue to the Stop sign. Turn right on East 12th Street for one block. Turn left on Neptune Avenue to the traffic light. Turn right at light on Cass Place and proceed until next traffic light. Turn right on West End Avenue. Turn left at traffic light to Oriental Boulevard which leads directly to the College.

From Queens and Nassau

Belt Parkway westbound to Coney Island Avenue—Exit 8. Watch for the directional signs leading to the Campus. They point the way along the following route: Turn right at exit to Voorhies Avenue. Turn right at first traffic light to Sheepshead Bay Road. At second traffic light turn right to Emmons Avenue. At first traffic light turn left to West End Avenue. Turn left at the second traffic light to Oriental Boulevard which leads directly to the College.
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Aerial view of Kingsborough Community College looking North. Facing the College's private beach (foreground) is the College Center with dining facilities, student lounges, WKRB the College FM Radio Station, general meeting rooms, etc. In the air-conditioned “Cluster Hall” (right) are classrooms, lecture rooms, workshops, faculty lounges Admissions Information Center, etc. The 8-story building (far right) houses the Library, the Media and the Computer Centers. The wedge-shaped Performing Arts Center faces the award-winning Physical Education Building in which are two gyms, Olympic-sized swimming pool, handball and tennis courts, dancing and calisthenics studios, etc. Separating the College from the Belt Parkway and Plum Beach (rear right) are the intermingled waters of Sheepshead and Jamaica Bays.