Eugenio María de Hostos Community College
of The City University of New York

Sponsored by the Board of Higher Education of the City of New York under the Program of the State University of New York

1972-73
# Table of Contents

College Calendar ................................................................................................... 3  
Hostos Community College: An Innovative Educational Resource .................. 7  
Hostos Goals ......................................................................................................... 7  
The Hostos Approach to Education .................................................................... 8  
Eugenio María de Hostos (1839-1903) ............................................................. 10  
Degree Programs ................................................................................................ 10  
Student Services .................................................................................................. 11  
  Office of Admissions ...................................................................................... 11  
  Admission to the College .......................................................................... 11  
  Goal of the College as it Affects Admission Policies ............................. 12  
  Application Procedures .............................................................................. 13  
  Advanced Standing Admission .................................................................. 15  
  Fees and Tuition .......................................................................................... 16  
  Records .......................................................................................................... 19  
  Requests for Permits to Attend Another College ................................... 20  
How to Transfer to Another College .............................................................. 20  
Application for Leave of Absence ................................................................. 20  
Readmission ....................................................................................................... 21  
Reinstatement ................................................................................................... 21  
Change of Curriculum ..................................................................................... 21  
Application for Graduation .......................................................................... 21  
Counseling ........................................................................................................ 21  
Student Health Services ............................................................................ 23  
Financial Aid ..................................................................................................... 24  
Academic Standing ............................................................................................ 24  
Attendance ......................................................................................................... 25  
Statement on Public Order ............................................................................ 25  
Educational Media Services .......................................................................... 29  
The Testing Center .......................................................................................... 29  
The Library ........................................................................................................ 29  
The Division of Arts and Sciences .................................................................. 31  
Requirements for Associate in Arts (A.A.) and Associate in Science (A.S.) Degrees ........................................................................................................... 33  
Behavioral Sciences ......................................................................................... 34  
Biology ............................................................................................................. 35  
Black Studies .................................................................................................... 37  
English ............................................................................................................... 40  
Mathematics .................................................................................................... 44  
Modern Languages .......................................................................................... 49  
  French .......................................................................................................... 50  
  Spanish ........................................................................................................ 51  
  Swahili ......................................................................................................... 53  
Physical Education/Athletics ........................................................................ 53  
Physical Sciences ............................................................................................. 58  
  Chemistry .................................................................................................... 58  
  Physics ........................................................................................................ 63  
Puerto Rican Studies ....................................................................................... 64
Social Sciences .............................................................. 66
Visual and Performing Arts ........................................ 68
The Division of Health Sciences ................................. 77
Health Core .................................................................. 78
Dental Hygiene .............................................................. 80
Early Childhood Education ........................................ 83
Medical Laboratory Technology ................................. 87
Medical Secretarial Science ........................................ 89
Nursing ........................................................................ 100
Radiologic Technology ............................................... 104
Map of the City University of New York .................. 110
The City University of New York ............................... 111
The State University of New York ............................. 113
Hostos Community College Officers of Administration 114
Department Chairmen, Program Directors .............. 116
Faculty and Staff .......................................................... 117
COLLEGE CALENDAR*

1972-73 Academic Year

September 4 - Monday
Labor Day (holiday — no classes).

September 5-8 — Tuesday-Friday
Registration for cycles I and II.
Orientation, testing, and payment of fees and/or tuition
for first half of academic year.

September 9 — Saturday
Rosh Hashanah (holiday — no classes).

September 11 — Monday
First day of classes, cycle I.

September 18 — Monday
Yom Kippur (holiday — no classes).

October 9 — Monday
Columbus Day (holiday — no classes).

October 10 — Tuesday
Conversion day — follow Monday class schedules (does not
apply to clinicals).

October 23 — Monday
Veterans Day (holiday — no classes).

October 25 — Wednesday
Conversion day — follow Monday class schedule (does not
apply to clinicals).

October 30-31, November 1-3 — Monday-Friday
Module completion, independent study/tutorial period.
Program changes for cycle II (classes in session).

November 6 — Monday
First day of classes, cycle II.

November 7 — Tuesday
Election Day (holiday — no classes).

*This calendar is subject to changes and/or modifications as are deemed necessary to guarantee the achievement of the educational mission of Hostos Community College.
November 19 — Sunday
Puerto Rico’s Discovery Day.

November 23-24 — Thursday-Friday
Thanksgiving recess (no classes).

December 23, 1972-January 1, 1973 — Saturday-Monday
Christmas recess (no classes).

January 2-5 — Tuesday-Friday
Module completion, independent study/tutorial period
(classes in session).

January 8-12 — Monday-Friday
Registration for cycles III and IV. Orientation and testing for entering
students. Payment of fees and/or tuition for second half of academic year.

January 11 — Thursday
Eugenio María de Hostos’ Birthday (observances of day to be announced).

January 13 — Saturday
Deadline for completion of cycle I-II modules that are prerequisites to
modules selected for cycle III-IV.

January 15 — Monday
First day of classes, cycle III
Human Rights Day — Martin Luther King’s Birthday
(observances of day to be announced).

February 19 — Monday
Washington’s Birthday (holiday — no classes).

February 20 — Tuesday
Conversion day — follow Monday class schedules (does not
apply to clinicals).

March 5-9 — Monday-Friday
Module completion, independent study/tutorial period.
Program changes for cycle IV (classes in session).

March 10 — Saturday
Deadline for completion of cycle III modules that are prerequisites
for cycle IV modules.

March 12 — Monday
First day of classes, cycle IV.

April 19-April 29th — Thursday-Sunday
Spring recess, Easter holidays (no classes).
May 14-18 — Monday-Friday
Module completion, independent study/tutorial period (classes in session).

May 28 — Monday
Memorial Day (holiday — no classes).

June 11 — Monday
Graduation

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle I</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>37</td>
</tr>
<tr>
<td>Cycle II</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>Cycle III</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>Cycle IV</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>30</td>
<td>32</td>
<td>32</td>
<td>31</td>
<td>155</td>
</tr>
</tbody>
</table>
HOSTOS COMMUNITY COLLEGE: 
AN INNOVATIVE EDUCATIONAL RESOURCE

Founded in 1968, Eugenio María de Hostos Community College officially opened its doors in September 1970 to a charter class of 623 students. A community college of the City University of New York (CUNY), Hostos is named for famed Puerto Rican educator and writer Eugenio María de Hostos, making it the first institution of higher education in the continental United States so honoring a Puerto Rican. Hostos is the first of the CUNY colleges to be deliberately placed in an economically depressed community—the South Bronx—and given the specific responsibility of serving the needs of that inner-city community. Hostos is the only college in the CUNY family which has as its goal to provide a systems approach to learning in which instruction is organized to allow each student the freedom to learn as much as possible in his own way and at his own pace within specified minimum requirements.

Hostos Community College offers not only a wide choice of programs in the arts and sciences, but career-oriented programs in the health sciences, an area in which there exists a critical manpower shortage and increasing career opportunities and mobility.

All residents of New York City who are high school graduates or the equivalent are eligible for enrollment at Hostos, which, like other units of the City University, is tuition-free.

Hostos Community College has been authorized by the New York State Board of Regents to award associate degrees in arts and science and applied science as well as appropriate diplomas and certificates.

The college is a Correspondent for Accreditation by the Middle States Association of Colleges and Secondary Schools.

The college is a member of the American Association of Junior Colleges.

HOSTOS GOALS

In keeping with the Board of Higher Education's mandates for Hostos, goals identified by the college and currently under development include the following:

Diagnostic and Developmental Skills Program

Recognizing the necessity of properly placing students in the developing curriculum, the goal is to obtain the human and material resources necessary to diagnose and accurately prescribe for entry-level-skill courses in English, mathematics, and Spanish.

Systems Learning Approach

Based on the knowledge that not everyone learns in the same fashion or at

*In the health sciences, requirements for certification impose additional restrictions on the time required to complete programs.
the same speed, the systems approach—the Hostos approach to instruction—is continually being developed and refined to more effectively help students find the programs, learning techniques, and rates of progress which best suit their individual needs. This self-paced method of learning is designed to be supported by a variety of educational media services, including slides, transparencies, films and audio- and videotapes, as well as computer-assisted instruction. The availability of these resources will be determined by the financial support provided for the college.

Bilingual Education
Recognizing the many advantages of developing excellence in both English and Spanish, it is the college's goal to enable the student to begin at once receiving instruction in his or her primary language while taking intensive instruction in a second language. This plan allows students at Hostos to attain a level of fluency in a second language where instruction may be completed in either Spanish or English.

Community Education
A vital college priority, the goal of providing community education is being pursued so that the college may become a continuing resource for community development. Programs in English as a second language, cultural and ethnic studies, and courses of study offering career mobility to adult workers, particularly those in the allied health fields, provide vital contributions to the community's strength, renewal, and potential.

THE HOSTOS APPROACH TO EDUCATION

Hostos Community College admits both recent high school graduates and those who have not attended classes for a long time. The primary educational goal at Hostos Community College is to develop programs which will give each student the opportunity to progress at his own rate through learning experiences which are tailored to his own needs, interests, learning style, and available time. These programs will allow each student the opportunity to learn as much as possible independently of the progress of other students.

Instruction at Hostos Community College proceeds in the following manner:

1 — At the beginning of each instructional unit, a student is given a list of performance objectives to guide his learning. These objectives tell the student what he must know or be able to do at the completion of the unit.

2 — For each objective, a variety of materials and procedures will be developed and made available to each student so that he may select those
most suitable to his needs. As part of the learning experience, the student may select from among the following:

- **Tutorials.** A student can meet individually with an instructor or a tutor at mutually convenient times.

- **Seminars.** Departments will schedule seminars in which difficult topics will be reviewed and discussed. It is assumed that the student has already studied the topic and that he will bring his questions and observations to the seminar for discussion.

- **Audio-tapes.** Tapes are available in many modules for use by the students. The tapes contain lecture summaries or practice exercises.

- **Films, film strips, video-tapes.** These learning aids are available for many modules. They are recommended to students as an excellent way of improving skills.

- **Independent reading.** Reading lists will be keyed to the list of objectives. Students are encouraged to proceed individually using the Hostos Community College library.

- **Programmed texts.** Programmed texts provide instruction in small steps and in addition require the student to accomplish short tasks along with his reading. Many students find it easier to study a programmed text rather than a standard text. Programmed texts in selected subject areas are available in the Hostos library.

- **Computer-assisted instruction (CAI) and closed-circuit television (CCTV).** During the 1972-73 academic year, Hostos Community College will begin to develop these educational technologies for instructional use. The college has acquired a computer with 20 terminals as well as television equipment capable of producing CCTV programs.

3 — When a student demonstrates his mastery of the objectives in ways prescribed by the instructor (such as passing a test, completing an assignment, or demonstrating a skill), he has completed the unit. If a student has already accomplished these objectives in previous school or work experiences, he can get credit by demonstrating his mastery of them. Demonstrated ability by a student to achieve the objectives of a module is reported to the registrar's office by the instructor and the specified credit (CR) is entered in the student's record. For reporting purposes, the symbol "I" is used to indicate that the student is progressing toward completion of the performance objectives in a module, but at his own rate. Withdrawal (W) indicates that a student informed the instructor that he does not plan to complete the module, or that the student did not make any effort to demonstrate ability to perform objectives during a cycle.

Although formal in-classroom instruction for most modules will be scheduled for one cycle, students who have not completed all the objectives of the module will be able to continue their learning experiences in the ways described earlier in item number 2.

4 — At Hostos, related performance objectives are grouped together into small units of instruction called milestones. Groups of related milestones
make up *modules*, the unit of instruction for which students register and receive credit.

A sequence of modules form a course—for example, general chemistry, general biology, algebra, or geometry.

For convenience, the academic year—exclusive of Summer—is divided into four cycles. Cycles I and II form the Fall semester, and cycles III and IV form the Spring semester. At Hostos Community College, the module is equal to the group of skills that the student is required to master, while the cycle, a period of seven or eight weeks, is the time unit.

**EUGENIO MARIA DE HOSTOS (1839-1903)**

Puerto Rican educator, writer, and patriot, Eugenio María de Hostos was born in the island village of Rio Cañas. He attended elementary school in San Juan, and studied education and law in Spain at the Institute of Higher Education in Bilbao and the University of Madrid. He joined fellow students in efforts to liberalize Spain’s colonial rule of Cuba and Puerto Rico and to abolish African slavery. In 1869, he left Madrid for New York City, where he joined other exiles in the Cuban Revolutionary Junta, working for the liberation of Cuba and Puerto Rico. Three years later, Hostos traveled to Latin America to recruit support for the liberation movement. In Peru, he protested the exploitation of Chinese immigrants. In Chile, he championed the opening of educational opportunities for women. In Argentina, he campaigned widely for the construction of the first trans-Andean railroad.

The government of Chile established a school for Hostos to implement his advanced concepts of education, and under his leadership, Liceo Miguel Luis Amunátegui became one of the foremost educational centers in Latin America.

When Puerto Rico fell from Spanish rule, Hostos returned to work once again for the island’s independence. In 1898 he left for the Dominican Republic where he was appointed Director of the Central College and Inspector General of Public Education.

He is the author of such distinguished works as *General Law of Public Education, History of Teaching, Comments on the Science of Teaching,* and *Reform in Law Instruction.*

**DEGREE PROGRAMS**

Hostos Community College offers the associate in arts (A.A.) and associate in science (A.S.) degree programs, which prepare a student for transfer with junior status to a four-year college upon graduation from Hostos, and the associate in applied science (A.A.S.) degree program, which prepares a student for a specific career.

Candidates for the A.A. degree study the arts and sciences. These include the behavioral sciences, biology, Black studies, English, mathematics,
modern languages (French, Spanish, Swahili), physical education/athletics, the physical sciences (chemistry and physics), Puerto Rican studies, the social sciences, and the visual and performing arts.

Candidates for the A.S. degree follow programs which closely parallel the A.A. degree program, but which provide greater concentration in the mathematics or science areas in which they plan to major. In addition, there is no foreign language requirement for the A.S. degree.

Candidates for the A.A.S. degree follow programs in which there is concentration in the applied field. The professional fields in which programs are offered currently include dental hygiene, early childhood education, medical laboratory technology, medical secretarial science, nursing, and radiologic technology.

In keeping with the regulations of the Commissioner of Education of the State of New York, a minimum of 30 credits of the total required in any of the degree programs must be completed at Hostos Community College.

Entering freshmen who are veterans of United States military service should note that beginning September 1972 they will be required to fulfill the physical education requirement for all degree programs which include it. Prior to September 1972 physical education was waived as a requirement for graduation for all veterans.

STUDENT SERVICES

OFFICE OF ADMISSIONS

Admission to the College

The admissions program of the college is administered by the office of the registrar and admission services. Inquiries regarding admission should be directed to the following address:

Office of the Registrar and Admission Services
Hostos Community College
City University of New York
475 Grand Concourse
Bronx, New York 10451
Telephone: (212) 993-8000, ext. 309-13

Persons wishing to make inquiries in person may visit the registrar’s office Monday through Friday from 9:00 a.m. to 5:00 p.m. (during the Summer from 9:00 a.m. to 4:00 p.m.). The registrar’s office is located in room 236, 475 Grand Concourse (at 149th Street), Bronx, New York 10451.

An applicant for admission to the college may be approved for one of the college’s programs if he fulfills the basic admission requirements and follows the procedures established for admission.

High School Diploma

A diploma from an accredited high school is required for admission to the college. A high school certificate is not an acceptable substitute for the
12 Office of Admissions/Goal of the College

diploma. A New York State Equivalency Diploma and General Education Development Examination may be substituted. A USAFI diploma must be converted to a New York State Equivalency Diploma.

Residence

A resident of New York City who is admitted to Hostos as a matriculated student does not pay tuition. However, the residency of a student under 21 years of age is determined by the legal residency of his parents or legal guardian.

The tuition charges for nonresidents of New York City admitted to the college are determined by the place of legal residency, with the exception of New York State residents admitted to the nursing program, who attend tuition-free. (See Fees and Tuition.)

The New York State Education Law (Section 630, Paragraph 4) defines a New York State resident as "a person who has resided in New York State for a period of at least one year and in the county for a period of at least six months, both immediately preceding the date of such person's registration in a community college."

All New York State residents who live outside New York City and plan to register at Hostos Community College are required to secure a blank affidavit and certificate of residency from the office of the registrar and admission services. The affidavit is to be completed and filed with the fiscal officer of the county of residency. The fiscal officer will complete the certificate of residency, which should be returned to the bursar before registration. A certificate of residency is valid for only one year from the date of issuance. New York State residents who live outside New York City and fail to submit a valid certificate of residency will be required to pay full tuition according to the schedule established for nonresidents.

Health

All students, regardless of their status, must submit, as part of their application, a medical examination report on the form provided by the college. In addition, students admitted to programs in the health sciences will be required to submit evidence of additional medical examinations before they will be eligible to participate in the clinical training aspects of their programs. These students should report to the office of the college physician (room 201) immediately upon being notified of the date of their initial registration so that they can receive specific instructions regarding the additional medical requirements.

GOAL OF THE COLLEGE AS IT AFFECTS ADMISSION POLICIES

The Board of Higher Education of the City of New York has assigned Hostos Community College the special goal of providing direct services to the South Bronx community by offering unique educational opportunities
in the area of health care. In line with this special goal, the college's admission policy is designed to evaluate fairly and accurately the achievement and potential of underemployed and unemployed adults — particularly health care workers because of the college’s health care orientation — as well as recent high school graduates whose records may not fulfill traditional admission standards. Therefore, admission to Hostos is based not solely on high school performance, but also on the following objectives:

1 — To serve current and recent high school graduates, as well as former high school graduates, with special emphasis on the South Bronx community.
2 — To train persons in the health professions and upgrade those currently employed in the health fields.
3 — To provide degree programs, as well as a wide range of short-term educational programs, especially for the people of the South Bronx community.
4 — To recruit intensively among high school students in the South Bronx community and among disadvantaged groups throughout the city.
5 — To establish long-range programs in conjunction with local schools and community organizations that will actively encourage and assist students to apply to and attend college.

APPLICATION PROCEDURES

Securing an Application

The three application forms in use at the City University of New York (CUNY) are described below:

1 — The ‘‘regular application form’’ permits students to apply to as many as six regular college programs of CUNY on a single form. Even if the six are administered in six different units of the university, the student need file only one application.

2 — The ‘‘special programs application’’ is designed for use by those students seeking admission to the university through the SEEK or College Discovery Programs. All applications for special programs are administered by the Office of Admissions Services of the City University of New York. Hostos Community College does not have a SEEK Program; however, admission through College Discovery is offered to a limited number of students. It should be noted that those applicants not accommodated in these programs but who meet CUNY admission requirements will be automatically admitted to a regular community or senior college program.

3 — The ‘‘foreign student application’’ is intended for use by all students who have completed more than one year of secondary school training outside the United States. Applicants must submit with their applications
a notarized photostat of their secondary school credentials. If the secondary school records are in a language other than English, an officially notarized translation of the records is required.

The prospective applicant may secure the appropriate application form either from his high school or from:

The Office of Admission Services
The City University of New York
875 Avenue of the Americas
New York, New York 10001

In addition, the office of the registrar and admission services maintains a limited supply of all three application forms.

Where to Apply

The following applicants should complete either the regular or the special programs application form and return it directly to:

The University Application Processing Center
Box 148
Vanderveer Station
Brooklyn, New York 11210

1 – Students who are presently attending high school and wish to be admitted as matriculated students (lower freshmen) at Hostos. The applicant must have completed at least six semesters (11th year) of high school.

2 – Students who have earned an Equivalency Diploma and passed the General Education Development Examination.

3 – Students who have been graduated from high school and have never attended any institution of higher learning.

4 – Students who have had no more than one year of secondary schooling outside the United States.

The following applicants may apply directly to Hostos Community College:

1 – Students who have been graduated from high school and have attended any institution of higher learning. An applicant who has previously attended another college, university, nursing school, or professional school must report that fact in his application and have the institution submit an official transcript, including an official statement of the conditions of withdrawal, directly to the office of the registrar and admission services. Even if attendance at such a college was for a short period of time, and no grades were recorded, a certificate of honorable dismissal is required. (See Advanced Standing Admission.)

2 – Students holding a Puerto Rican Graduate Equivalency Diploma (G.E.D.). These applicants will have their applications considered on an individual basis.
Application Procedures/Advanced Standing Admission

Application Fee
All applications must be accompanied by checks or money orders for $10.00 made payable to the City University of New York.

Deadlines for Applications
All applications must be submitted by the following deadlines:
Lower freshman applications:
(including foreign students)
January 15 for the Fall half-academic-year
October 15 for the Spring half-academic-year

Advanced standing applications:
(transfer students)
March 15 for the Fall half-academic-year
November 15 for the Spring half-academic-year

All applications filed late will receive consideration only if time and availability in specific programs permit action.

Notification Dates
Applicants for Fall admission will be notified by mid-April; applicants for Spring by mid-December. Applicants who file late applications will receive notification of action to be taken as soon as practicable.

ADVANCED STANDING ADMISSION

A student seeking advanced standing admission must have his records evaluated by the college to determine his matriculation status and the remaining requirements for the degree. This evaluation will be completed only after the student has been admitted and has indicated his intention to attend Hostos. The college offers credit to transfer students for those courses completed at other accredited colleges and universities which are comparable to those offered at Hostos, provided that the grades received are satisfactory. Generally, a student will receive a maximum of 30 credits with advanced standing (transfer credit). In some cases, the student might receive waivers of requirements or prerequisites for the degree at Hostos (without college credit) based on college courses completed elsewhere. It is in the best interest of each Hostos student admitted to be placed at the level of development best suited for him. Personal counseling will be provided by department chairmen in each area to determine the precise point at which the student should enter the program.

Students admitted with advanced standing may take only the total number of credits, plus four, required for their degree without paying tuition.
FEES AND TUITION

The following student fees and tuition have been established in the guidelines developed by the Board of Higher Education. All fees and tuition listed in this catalog and in any registration material issued by Hostos Community College are subject to change by action of the Board of Higher Education without prior notice.

All students are required to report for payment of fees and tuition where applicable twice a year. The consolidated fee is usually collected in September for the Fall half-academic-year and in January for the Spring half-academic-year. Students who elect to attend a summer session will also be required to pay a consolidated fee, usually collected in late May or early June. All students must report for the collection of fees even if the cost of the fees is covered by financial aid.

Any student who has not paid the total fees and tuition by the time indicated will not be considered as registered and will not be admitted to classes.

Fees

1 — Consolidated Fee

The consolidated fee consists of the following:

General College Fee $20.00
Hostos Community College Association Fee 30.00
Total $50.00

The consolidated fee is a nonrefundable fee which must be paid by all students twice each year (September and February) to cover laboratory, library, registration, and bursar expenses, the cost of student activities, accident insurance, special health services, and graduation and convocation expenses.

2 — Special Fees

a Application Fee (nonrefundable) $10.00
All applicants for admission must pay a $10.00 application fee.

b Transcript Fee-Duplicate Bursar Receipt $2.00
The $2.00 fee for each transcript will be waived for transcripts sent to units of the City University and State University of New York.

c I.D. Card (duplicate) $2.00
Students are required to have their I.D. cards with them at all times. A charge of $2.00 is made for the issuance of a duplicate I.D. card by the registrar’s office.

d Miscellaneous Charges
In addition to those charges previously listed, there are other charges for overdue library books, replacement of keys and locks, and repair or replacement of any college equipment damaged or lost.
Other Expenses
In general, expenses other than tuition and fees for a full-time student are limited to the cost of books and supplies. This amounts to approximately $250.00 per year.

Special Program Expenses
Students enrolled in certain programs will be required to purchase special equipment and supplies. The following chart is an estimate of what will be required in health sciences programs:

<table>
<thead>
<tr>
<th></th>
<th>Nursing</th>
<th>Dental</th>
<th>Radiologic Technology</th>
<th>Medical Lab Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniforms</td>
<td>$32.00(2)</td>
<td>$64.00 (4)</td>
<td>$34.00(2)</td>
<td></td>
</tr>
<tr>
<td>Shoes</td>
<td>15.00</td>
<td>15.00</td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td>Lab Coats</td>
<td>13.00</td>
<td></td>
<td></td>
<td>$25.00</td>
</tr>
<tr>
<td>Name tags, patches, caps, scissors</td>
<td>10.00</td>
<td>2.00</td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td>Film markers</td>
<td></td>
<td></td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Notebook (technique)</td>
<td></td>
<td></td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Slide Ruler</td>
<td></td>
<td></td>
<td></td>
<td>5.00</td>
</tr>
<tr>
<td>Malpractice insurance</td>
<td>10.00</td>
<td></td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>$67.00</td>
<td>$94.00</td>
<td>$68.75</td>
<td>$30.00</td>
</tr>
</tbody>
</table>

Tuition
Matriculated Students — Full-time (12 credits)

1. Bona fide residents of New York City receive tuition free up to 3 credits above the degree requirement, except in the following cases:
   a. A student who has received one associate degree from any college of the City University either wholly or partially tuition-free — $275.00 / 12 or more credits per half-year
   b. A student who has commenced work on an associate degree and has changed his degree objective more than once — $275.00 / 12 or more credits per half-year

The first change of a degree objective, if made as the result of the college guidance procedures, will permit the student to take the remaining credits required for the new degree on a tuition-free basis.

C. A student exceeding by more than 3 credits the number of credits required for a degree — $20.00 per credit for those credits in excess of 3 above the degree requirement.
2 — Nonresidents of New York City

a Residents of New York State

1. With a certificate of residency $20.00 per credit
   (maximum of $275.00 per half-year)

2. Without a certificate of residency $40.00 per credit
   (maximum of $450.00 per half-year)

b Nonresidents of New York State $40.00 per credit
   (maximum of $450.00 per half-year)

Refund Policy

If a student wishes to withdraw from a module or modules, any refund granted will be based on the date on which he files withdrawal forms with the registrar, not on the last date of his attendance in class. No portion of the consolidated fee, special fees, or penalty fees is refundable, except when the student’s registration is cancelled or altered for the college’s convenience. Refunding of tuition for modules dropped by a student will be made in accordance with the following schedule:

Withdrawal before the scheduled opening date of the session 100%
Withdrawal within one week after the scheduled opening date of the session 75%
Withdrawal during the second week after the scheduled opening date of the session 50%
Withdrawal during the third week after the scheduled opening date of the session 25%
Withdrawal after completion of the third week of the session None

Military Refund

The following principles govern refunds to students withdrawing for military service:

1 — Military service must be documented with a copy of induction or military orders.

2 — In order to obtain credit, a student must complete 80 percent of a module. No refund will be made to a student who has received credit.

3 — In instances where students who have enlisted in the U.S. Armed Forces do not attend for a sufficient time to qualify for credit, but continue in attendance to within two weeks of active duty, refund of tuition and all fees, except application fee, will be made in accordance with the previously mentioned refund schedule.

4 — In instances where students who are drafted into the U.S. Armed Services do not attend for a sufficient time to qualify for credit, there will be a 100 percent refund of tuition and all fees, except the application fee.
RECORDS

The office of the registrar and admission services is the repository of the student's college records. The staff of the registrar's office will supply students with information related to their college records and refer those students requiring additional assistance to the proper college official.

Following are explanations of various items pertaining to the student's college record and descriptions of services available to the students, faculty, and staff of the college:

Student Identification Number and Card

When a student files his initial application to attend Hostos, he is asked to supply the college with his social security number. This number becomes the student's identification number. The purpose of the identification number is to prevent the misfiling of any student records and to enable the college to utilize its data processing facilities and programs in keeping student records. Entry to the data bank is by numeric identification of the student. The use of the social security number eliminates the need to assign another number to the student.

Transcripts and Certified Statements

To secure a transcript, complete the transcript request form available in the office of the registrar. There is a charge of $2.00 per transcript requested to be sent; however, transcripts to be sent to another college of the City University of New York or the State University of New York are forwarded free of charge.

Transcripts are never sent automatically, whether for transfer, employment, or any other reason; each must be specifically requested. This is done to safeguard the privacy of the student's official record from unauthorized reviews.

Certified statements required for such things as proving current or past attendance may be secured, without charge, upon filing of an application available in the office of the registrar.

Changes of Name and/or Address

Any change of address or name must be reported to the college on the form available in the registrar's office. In the case of a change of name because of marriage, the student should report the change and indicate whether she wants to retain her maiden name on all of her college records. In the case of a change of name because of court order, it is necessary for the student to produce the court order at the time of reporting the change. The court order will be returned to the student.

Veterans' Affairs

All students who are planning to receive educational benefits under the provisions of the GI Bill must report to the Veterans Administration, 252
Requests for Permits/Transfer to Another College/Application for Leave of Absence

Seventh Avenue, New York, New York, prior to registering to secure a "certificate of eligibility." The veteran should then report to the registrar’s office with the form. It is necessary for every veteran attending Hostos to report to the registrar’s office each successive session (that is, in September, January, and June) to initiate a VA Form 21E-1999.

Foreign Students

Foreign students who are studying on student visas and registering for the first time at Hostos Community College must report to the office of the registrar before registration in order to initiate an "I-20" form.

REQUESTS FOR PERMITS TO ATTEND ANOTHER COLLEGE

The student is responsible for securing a bulletin from the prospective host college and fulfilling whatever requirements it may establish for his attendance there. In addition, the student must report to the registrar’s office to arrange for a permit to attend another college. This is required in order to insure that the student will receive credit toward his degree at Hostos. Permits granted to students to attend other units of the City University include waivers of tuition.

HOW TO TRANSFER TO ANOTHER COLLEGE

A student who has decided to apply for transfer to another college must contact that institution and comply with the requirements for admission set down by its administration. The student should arrange for an official transcript from Hostos to be sent in support of his application for admission. All questions concerning specific information should be directed to the office of admission at the school to which the student is seeking admission. Any Hostos student who contemplates such a transfer should arrange to see his college counselor to discuss the advisability of the transfer before making a final decision. It is necessary for all students transferring, with the exception of those who transfer upon graduation from Hostos, to arrange for a leave of absence.

APPLICATION FOR LEAVE OF ABSENCE

Any student who decides, upon consultation with his counselor, to arrange for a leave of absence from Hostos must file a properly completed application for the "leave." The major purposes of filing an application for leave of absence are to clear the student’s record and make it possible for him to return to the college with relative ease and to set down clearly the terms of the student’s future matriculation and financial aid, when applicable. Blank forms are available in the office of the registrar.
READMISSION

A student who has been granted a leave of absence and wishes to return to matriculate at Hostos should contact the registrar at least one month prior to the beginning of classes in a given session of the college.

REINSTATEMENT

A student who has lost his matriculation and wishes to return to matriculation status, after having fulfilled the conditions set down at the time of his dismissal, should contact the registrar at least one month prior to the beginning of classes in a given session of the college.

CHANGE OF CURRICULUM

The opportunity for all students at Hostos Community College to change their career and/or educational objectives is provided for. Students wishing to change their curriculum area should report to the office of the registrar to place their names on the waiting list for the program in which they wish to enroll. Priority will be given to students already enrolled at Hostos. As openings occur, eligible students will receive instructions by mail from the office of the registrar.

APPLICATION FOR GRADUATION

At least six months prior to the date of expected graduation, the student must file an application for graduation. This will provide time for the office of the registrar to check the student’s records thoroughly and thus insure his graduation.

COUNSELING

An extensive counseling program has been developed for Hostos students by the division of student services. Freshman students are provided with an orientation program to acquaint them with the various programs and services offered at Hostos. Seminars and group counseling are offered to all students, throughout the year, to complement individual counseling.

The counseling staff is organized into units which meet specific needs:

1. Academic and personal counseling.
2. Psychological and social services.
3. Student activities.
4. Admissions counseling.
5. Transfer counseling.

Each of these units works in close coordination with the financial aid office and the student health services unit.
Counseling

Counseling Referrals
Students may go directly to the counseling unit they feel is best able to assist them, or they may be referred to a specific unit by a faculty member. When the nature of a student's difficulty is not clear either to the student or to the faculty member, the student will be referred to the director of counseling. The director will make a diagnosis and refer the student to the counselor who can best meet his needs.

Academic and Personal Counseling
The academic and personal counseling unit provides continuing academic advisement and counseling for students. Career and program planning are discussed individually. Personal problems which may be impeding academic progress are explored, and students are aided in finding viable alternatives which can help them to resolve their difficulties. The need for academic remediation may be revealed, in which case a developmental skills program may be prescribed. Social problems and family conflicts often interfere with a student's academic progress and require the support offered by counseling. Academic advisement and counseling are also provided by the department chairman of the academic area in which the student is enrolled. The academic and personal counseling unit works closely with the instructional staff to diagnose sources of difficulty and to facilitate and maximize the progress of students.

Psychological and Social Services
The psychological and social services unit serves students who are troubled by personal or social problems while completing their studies at Hostos. Through an intensive program of group and individual counseling, counselors are able to provide the attention, understanding, and time needed to assist students with psychosocial problems. The unit maintains close contact with community agencies, such as public assistance and housing agencies, drug addiction and preventive programs, and veterans' and draft counseling organizations, and inter-institutional referrals are often made to enable students to benefit from the services offered by these agencies. The unit also works on a consultative basis to serve other counselors and faculty members who request its aid with regard to students. In addition, students working under the guidance and supervision of counselors often provide counseling services to fellow students.

Student Activities
The student activities counselors assist students in developing social and cultural programs and providing opportunities for group interaction and in developing a framework within which student leadership may develop. Counselors assist in developing and organizing dances, clubs, a college newspaper, lectures, and fund-raising activities. The student government works closely with counselors in developing these activities. Faculty members are encouraged to serve as advisors to many of these activities. Establishment of a day care center for children of full-time students is in progress.
Admissions and Transfer Counseling

Admissions and transfer counselors work closely with the registrar’s office to provide counseling for students who are entering, graduating, or transferring from Hostos. Articulation agreements are being established with both public and private colleges in order to facilitate the transfer of credits earned at Hostos. Students who have completed 34 credits are expected to meet with the transfer counselor to discuss their transfer to other colleges.

STUDENT HEALTH SERVICES

The student health services unit is staffed by a part-time college physician and a full-time registered college nurse. At present, the following health services are available to students:

1 — Routine and diagnostic physical examinations.
2 — First aid and emergency treatment.
3 — Counseling and advice on general health matters.
4 — Referrals to health agencies of the City of New York which provide such services as chest X-rays, immunizations, prenatal care, and blood tests.

In order to provide more effective service to the student body, an appointment system for physical examinations has been instituted. The college nurse is responsible for making appointments (room 201).

College Physician’s Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>10 a.m. to 2:00 p.m.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8 a.m. to 12:00 noon</td>
</tr>
<tr>
<td>Friday</td>
<td>4 p.m. to 7:00 p.m.</td>
</tr>
</tbody>
</table>

College Nurse’s Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>9 a.m. to 5:00 p.m.</td>
</tr>
<tr>
<td>Tuesday</td>
<td>9 a.m. to 5:00 p.m.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8 a.m. to 4:00 p.m.</td>
</tr>
<tr>
<td>Thursday</td>
<td>9 a.m. to 5:00 p.m.</td>
</tr>
<tr>
<td>Friday</td>
<td>11 a.m. to 7:00 p.m.</td>
</tr>
</tbody>
</table>

Until a free or low-cost prescription program for students is established, those students who have medical insurance or prescription plans, for example, Medicaid, Blue Cross, or Local 1199 or Local 420 prescription plans, are advised to bring their identification cards at the time of the doctor’s visit.

The college physician will also be available for telephone consultation from 9 a.m. to 5:00 p.m., Monday through Friday (ext. 329, 330).
FINANCIAL AID

Some students need financial assistance to help pay for the various costs of attending college. Those costs might include college fees, books, and other study supplies. The financial aid counselor will discuss the criteria for obtaining financial aid with each student. Students interested in obtaining further information about financial aid should report to the financial aid office (room 231) to examine available financial aid programs.

ACADEMIC STANDING

The following policy statement was approved by the Faculty College Council on May 30, 1972:

All students enrolled in the college as full-time students are required
1 — To be registered for at least 12 credits during the first half-academic-year of attendance at the college.
2 — To have completed at least 9 credits and be registered for 12 credits for the second half-academic-year of attendance.
3 — To have completed at least 18 credits and be registered for 12 credits for the third half-academic-year of attendance.
4 — To have completed 30 credits and be registered for 12 credits for the fourth half-academic-year of attendance.
5 — In subsequent years to have completed 12 credits at the end of each half-academic-year and be registered for 12 credits for each succeeding half-academic-year until the requirements for an associate degree are completed.

Note: Those students not meeting the credit completion requirements will automatically be placed on probation.

Probation and Suspension

A student cannot be suspended for academic reasons before the end of his third semester. During his probation the student will consult with both the instructional faculty and the counseling staff to determine how to make up his deficiencies.

Probation

Probation is a trial period, during which students who have been notified of academic deficiencies will have the opportunity to remedy them. During this period, faculty and counseling resources will be made available to the student, and his or her selection of courses will be tailored to enhance the probability of success.

A student who completes fewer than the required number of credits in each academic half-year will be placed on probation. The registrar will
notify the dean of students when students develop credit deficiencies and counselors will be assigned to work with the students to correct the deficiencies.

Suspension

Probationary status will be reviewed at the end of each academic half-year. Suspension, or temporary separation from the college, will be applied only to those students who fail to pursue the study plan they have developed with faculty and counselors for the probationary period. Students will be suspended as a result of the College Council recommendations, and they will be so notified within one month following the end of the academic half-year.

A student who receives a notice of suspension should meet with his counselor to develop plans for removing his credit deficit. This may be accomplished through independent study or part-time attendance at Hostos or another recognized institution as a tuition-paying student.

ATTENDANCE

Students at Hostos Community College are required to attend all classes scheduled for each module for which they are registered. Limited absences are permitted only when:

1 – The teacher assigns the student to some alternate learning activity related to the module, and

2 – This activity consists of work employing audio-tutorial or other learning aids in the educational media services center and is directly related to the module, or

3 – The student is assigned to research activity which will result in a written project that goes beyond the content that might normally be covered in the module.

It is assumed that, in such cases, student and teacher will confer regularly, and that the teacher will be aware of student progress and any problems the student may encounter in his course of study.

Faculty members are to maintain attendance records, and to report to the registrar, dean of students, and financial aid office excessive absences which might indicate that students require counseling or that students are no longer in attendance at the college.

Each academic department is free to develop a more specific policy on attendance within the general college-wide framework.

STATEMENT ON PUBLIC ORDER:
Policy of the City University of New York on Student Decorum

RESOLVED, That the Board of Higher Education in compliance with Chapter 191 of the Laws of 1969, hereby adopt the following rules and
regulations for the maintenance of public order on college campuses and other college property used for educational purposes.

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

The tradition of the university as a sanctuary of academic freedom and center of informed discussion is an honored one, to be guarded vigilantly. The basic significance of that sanctuary lies in the protection of intellectual freedoms: the rights of professors to teach, of scholars to engage in the advancement of knowledge, of students to learn and to express their views, free from external pressures 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. We accordingly announce the following rules and regulations to be in effect at each of our colleges which are to be administered in accordance with the requirements of due process as provided in the Bylaws of the Board of Higher Education.

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

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

"a. Have the affirmative responsibility of conserving and enhancing the educational 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 the Board, the lawful resolutions of any of its committees and the policies, programs and lawful resolutions of the several faculties;

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

I. Rules

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

2. Individuals are liable for failure to comply with lawful directions issued
by representatives of the 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 or property, or theft of or damage to property of any person on 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 University/college, or whose presence on any such campus obstructs and/or forcibly prevents others from the exercise of their rights or interferes with the institution’s educational processes or facilities, or the rights of those who wish to avail themselves of any of the institution’s instructional personal, administrative, recreational, and community services.

7. Disorderly or indecent conduct on University/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 damage upon a building or the grounds of the University/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 University/college.

II. Penalties

1. Any student engaging in any manner in conduct prohibited under substantive Rules 1-8 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 1-8 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 Board of Higher Education, or suspension with/without pay pending a hearing before an appropriate college authority, dismissal after a hearing, ejection, and/or arrest by the civil authorities. 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 1-8 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 1-8 shall be subject to ejection, and/or arrested by the civil authorities.

Sanctions Defined:

A. ADMONITION. An oral statement to the offender that he has violated university rules.

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

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

D. DISCIPLINARY PROBATION. Exclusion from participation in privileges or extra-curricular activities as set forth in the notice of disciplinary probation for a specified period of time.

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

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

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

H. COMPLAINT TO CIVIL AUTHORITIES.

I. EJECTION.

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

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

Adopted by the Board of Higher Education June 23, 1969, Calendar No. 3(b)
EDUCATIONAL MEDIA SERVICES

The principal goal of educational media services is to contribute to the development of the learner’s full potential by providing students and faculty with supportive audio-visual materials and equipment. Educational media services provide the student with a variety of learning strategies, which permit him to learn at his own pace and to achieve his instructional objectives.

The educational media office is located in room 114.

Located in room 108, the learning resources center is designed to assist the student who wishes to study independently or to pursue individualized instruction. The center contains 36 carrels and a variety of audio-visual equipment and materials including audio-tapes, videotapes, films, filmstrips, slides, and transparencies. A language laboratory containing 25 stations is located in room 228.

THE TESTING CENTER

In the testing center students can demonstrate achievement in module or milestone units. Tests for modules and milestones are given in the testing center, which is open daily from 9:00 a.m. to 7:30 p.m. When ready to take a test, the student makes the arrangements with his instructor and then simply reports to the testing center (room 407) and signs in. The completed test is then sent to the instructor for scoring and credit.

THE LIBRARY

The library is located on the first floor of the Concourse campus building. The new quarters are large, bright, and comfortable, with enough space to accommodate the student growth expected in the next few years at Hostos.

The materials available have been carefully selected to meet the curriculum needs and special interests of the college community. For example, the Black and Puerto Rican studies and Spanish language collections are expanding rapidly. Also, a special collection of works by and about Eugenio María de Hostos has been started. For entertainment and light reading, many popular titles are available in the paperback collection.

A librarian is always on duty to assist students and faculty with reference questions about the use of library materials.
The Division of Arts and Sciences
Requirements for Associate in Arts (A.A.) and Associate in Science (A.S.) Degrees

A minimum of 64 credits is required for either the A.A. or A.S. degree and must include the specified number of credits in each subject area indicated below. Students planning to continue studies leading to a B.A. or B.S. degree should contact either the counseling center or the appropriate department chairman or program director at Hostos for information regarding suggested concentrations and procedures for applying to senior colleges. Suggested programs of study for students planning to transfer to a four-year college and continue studies toward a degree in an area not included in the Hostos curriculum can be developed in consultation with a counselor in the student services area.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Associate in Arts</th>
<th>Associate in Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>9 – 11 credits</td>
<td>6 – 10 credits</td>
</tr>
<tr>
<td>Behavioral—Social Sciences</td>
<td>12 credits</td>
<td>6 credits (same discipline)</td>
</tr>
<tr>
<td>Modern Languages</td>
<td>6 credits</td>
<td>No requirements</td>
</tr>
<tr>
<td>Mathematics</td>
<td>6 credits</td>
<td>12 – 14 credits</td>
</tr>
<tr>
<td>Visual and Performing Arts,</td>
<td>4 credits</td>
<td>2 credits</td>
</tr>
<tr>
<td>Black Studies, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puerto Rican Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Education/Athletics</td>
<td>2 credits</td>
<td>2 credits</td>
</tr>
<tr>
<td>Science</td>
<td>8 credits</td>
<td>24 credits (one science for 2 years, either biology, chemistry, or physics, plus a one-year sequence in a different science)</td>
</tr>
<tr>
<td>Electives</td>
<td>13 – 17 credits</td>
<td>6 – 12 credits</td>
</tr>
<tr>
<td>Total Credits</td>
<td>64 credits required for degree</td>
<td>64 credits required for degree</td>
</tr>
</tbody>
</table>
BEHAVIORAL SCIENCES

The behavioral sciences department offers instruction in psychology, sociology, and anthropology. Introductory modules are offered in each of these subjects. Students who wish to concentrate in psychology or sociology for eventual transfer to a four-year college are advised to consult with a member of the faculty in the behavioral sciences department for assistance in planning their programs.

**PSY 1031 General Psychology** 3 credits (2 cycles)
The student will be able to define or recognize terms related to historical, current, and experimental foundations of modern psychology, theories of learning, growth and development, perception, motivation, personality, mental health, and social behavior. Module is offered in English and Spanish.

**PSY 1035 Developmental Psychology** 3 credits (2 cycles)
The student will be able to define or recognize terms related to research methods in child psychology, prenatal development of the child, principles of heredity, psychological development of the child, intellectual processes and social behavior, the concept of stages of development, and instinctive behavior in human beings. The student will be able to define or recognize terms related to personality development of the child from the time of birth to the period of preadolescence, including the period of initial socialization, language development, toilet training, emergence of anxiety, the period of identification, adoption of a model's behavior, and sex typing. He will be able to define or recognize the following terms related to behavioral systems in the young child: anger, hostility, and aggressive behavior; anxiety and dependent behavior; sexual motives and behavior; and development of intellectual skills. Finally, the student will be able to define or recognize terms related to the transition from childhood to adolescence, physiological and psychological changes at pubescence and puberty, conflicts confronted by the adolescent and his search for identity, the acquisition of new roles, and the importance of the family. Module offered in English and Spanish.

**ANT 1101 Introduction to Cultural Anthropology** 1 credit
The student will be able to define or recognize terms related to cultural anthropology, including the concepts of culture, cultural development, sex and marriage patterns, family and kinship patterns, social controls, and religion, magic, science, and art. Module is offered in English and Spanish.

**ANT 1102 Case Studies in Cultural Anthropology** 1 credit
The student will be able to define or recognize terms related to the following representative societies: the Tiwi of North Australia, the Eskimos of North Alaska, the Cheyenne Indians, the Swazi of Africa, the Mexican-Americans of South Texas.
ANT 1103 Project in Cultural Anthropology 1 credit
Prerequisites: ANT 1101 Introduction to Cultural Anthropology and
ANT 1102 Case Studies in Cultural Anthropology.

The student will write a paper examining a current social problem or issue
in light of anthropological knowledge from previous two modules and
other sources. Module is offered in English and Spanish.

SOC 1231 Introduction to Sociology 3 credits (2 cycles)
The student will be able to define or recognize terms related to social
mobility, role, status, race, prejudice, and factors leading to social change.
Module is offered in English and Spanish.

BIOLOGY

The biology curriculum is dual in nature: the transfer curriculum in
biology and the career-oriented curriculum in the health sciences. The
biology curriculum provides the student with the requisite skills to transfer
to a four-year college as a biology major or to move into a job as a science
technician.

Students can earn credits for each module in biology by satisfactorily
completing all milestone tests and laboratory work in each module. There
are two modes of presentation: lecture-discussion and independent study.
Laboratory attendance is mandatory.

Arts and Sciences Sequence
BIO 3701, 3801 Basic Concepts Used in Biology; BIO 3702, 3802 Blood
Food, and Reproduction in the Human Body; BIO 3703, 3803 The
Diversity of Living Things; BIO 3704, 3804 The Web of Life.
8 credits total — 2 credits per module

Health Sciences Sequence
BIO 3701, 3801 Basic Concepts Used in Biology; BIO 3711, 3811 Systems
of the Human Body I; BIO 3705, 3805 Systems of the Human Body II;
BIO 3706, 3806 Systems of the Human Body III.
8 credits total — 2 credits per module
BIO 3715, 3815 Basic Microbiology; BIO 3713, 3813 Basic Medical
Microbiology.
4 credits total — 2 credits per module

BIO 3701 Lecture Basic Concepts Used in Biology 1.5 credits
BIO 3801 Laboratory .5 credit

The student will demonstrate his knowledge of the applications of the
scientific method, the basic concepts of acids, bases, salts and electrolytes,
the concept of diffusion and osmosis, the structure and function of the
cell. Three hours lecture-discussion, three hours laboratory. Module is
offered in English and Spanish.
BIO 3702 Lecture  **Blood, Food, and Reproduction**  1.5 credits  
BIO 3802 Laboratory  **in the Human Body**  .5 credit  
Prerequisite: BIO 3701 Basic Concepts Used in Biology.

The student will be able to state or recognize terms related to the four kinds of tissues, the structure and function of the circulatory system, the structure and function of the digestive system, the structure and function of the reproductive system, the process of oogenesis and spermatogenesis, the period of cleavage, the embryonic period, the period of the fetus, and the gestation period of man. Three hours lecture-discussion, three hours of laboratory. Module is offered in English and Spanish.

BIO 3703 Lecture  **The Diversity of Living Things**  1.5 credits  
BIO 3803 Laboratory  .5 credit  
Prerequisite: BIO 3702 Blood, Food and Reproduction in the Human Body.

The student will be able to classify living organisms by use of taxonomic system and to state the economic importance of living things. The student will also be able to state or recognize terms related to structural make-up and the similarities of vertebrates. Three hours lecture-discussion, three hours of laboratory. Module is offered in English and Spanish.

BIO 3704 Lecture  **The Web of Life**  1.5 credits  
BIO 3804 Laboratory  .5 credit  
Prerequisite: BIO 3703 The Diversity of Living Things.

The student will be able to solve problems involving monohybrid and dihybrid crosses by using Mendel’s laws of inheritance. The student will state or recognize terms related to the functions of DNA and RNA in heredity, the basic concepts and theories of evolution, and the functions of an ecosystem. Three hours lecture-discussion, three hours of laboratory. Module is offered in English and Spanish.

BIO 3711 Lecture  **Systems of the Human Body I**  1.5 credits  
BIO 3811 Laboratory  .5 credit  
Prerequisite: BIO 3701 Basic Concepts Used in Biology.

The student will be able to list the four kinds of animal tissue; to state or recognize terms used in describing the body structure; to list the major bones and their functions; to describe the structure and list functions of the muscular and circulatory systems. Three hours lecture-discussion, three hours of laboratory.

BIO 3705 Lecture  **Systems of the Human Body II**  1.5 credits  
BIO 3805 Laboratory  .5 credit  
Prerequisite: BIO 3711 Systems of the Human Body I.

The student will be able to describe or recognize the structure and function of the urinary, respiratory, digestive, and endocrine systems. Three hours lecture-discussion, three hours of laboratory.
BIO 3706 Lecture Systems of the Human Body III 1.5 credits
BIO 3806 Laboratory .5 credit
Prerequisite: BIO 3705 Systems of the Human Body II.

The student will be able to describe or recognize the structure and function of the human reproductive system, the process of oogenesis and spermatogenesis, the process of implantation, the gestation period, the period of cleavage, the embryonic period, the period of the fetus and hormonal relationships, and the structure and function of the nervous system including the process of hearing and seeing. Three hours lecture-discussion, three hours of laboratory.

BIO 3712 Lecture Basic Microbiology 1.5 credits
BIO 3812 Laboratory .5 credit
Prerequisites: BIO 3701 Basic Concepts Used in Biology, BIO 3711, BIO 3705, BIO 3706 Systems of the Human Body I, II, III.

The student will be able to describe or recognize terms related to the following aspects of microbiology: history, methods of studying, cultivation, reproduction and growth, metabolism, genetics, and control. Three hours lecture-discussion, two hours of laboratory.

BIO 3713 Lecture Basic Medical Microbiology 1.5 credits
BIO 3813 Laboratory .5 credit
Prerequisite: BIO 3712 Basic Microbiology.

The student will be able to state or recognize terms related to the following: pathogens, resistance and immunity, bacteria, rickettsia, chlamydia, viruses, parasitology, mycology, and epidemiology. Three hours lecture-demonstration, two hours of laboratory.

**BLACK STUDIES**

Black Studies examines aspects of the Black experience, both in the United States and abroad. Some modules treat in depth the urban experience of the Black American, while others trace the historical events pertinent to the development of the Black people of the world.

CUB 3101 Early African History I 1.5 credits

The student will be able to trace the history of the kingdoms of Ghana, Mali, Songhai, Dahomey, Kush, and Ethiopia. Emphasis is placed on political, social, cultural, and economic history of the kingdoms south of the Sahara. Learning methods include lecture-discussion, seminar, student response through class participation.

CUB 3102 Early African History II 1.5 credits
Prerequisite: CUB 3101 Early African History I.

The student will be able to trace the history of the early African kingdoms of Benin, Kanem-Bornu, Kongo, Angola, Buganda, Zimbabwe, Zulu, and
the east coast of Africa. Learning methods include lecture-discussion, seminar, student response through class participation.

CUB 3103 African History 1885-1920 1.5 credits
The student will identify the causes of European interest in Africa as exemplified by the scramble for the partition of Africa by the European powers. Learning methods include lecture-discussion, seminar, and critical discussion of problems posed by the textual material.

CUB 3104 African History of Nationalism and Struggle for Independence 1920-1960 1.5 credits
The student will identify the causes and origins of African nationalism, Africa and the World Wars, and the African independence movement. Learning methods include lecture-discussion, seminar, student response through class participation.

CUB 3106 Politics and the Black Experience I 1.5 credits
The student will identify the phenomena of the politics of Black people within the system and alternate possibilities. Learning methods include lecture-discussion, seminar.

CUB 3107 Politics and the Black Experience II 1.5 credits
Prerequisite: CUB 3106 Politics and the Black Experience I.
The student will identify the causes and origins of bloc voting and the Black Congressional Caucus movements. Learning methods include lecture-discussion, seminar.

CUB 3108 Organized Religion and Racial Adjustment I 1.5 credits
The student will trace the development of the role of the Black church as an historical unit and as a liberator. Learning methods include lecture-discussion, seminar.

CUB 3109 Organized Religion and Racial Adjustment II 1.5 credits
Prerequisite: CUB 3108 Organized Religion and Racial Adjustment I.
The student will trace the development of the role of the Black church as an organizer and as a revolutionary force. Learning method, seminar.

CUB 3110 Black Writers and Their Philosophies I 1 credit
The student will be able to identify and analyze the major themes in the writing of Black contemporary and historical poets and novelists. Learning methods include lecture-discussion, seminar.

CUB 3111 Black Writers and Their Philosophies II 1 credit
Prerequisite: CUB 3110 Black Writers and Their Philosophies I.
The student will be able to identify and analyze the major themes in the
writings of Black dramatists and historians. Learning methods include lecture-discussion, seminar.

CUB 3112 African Literature I 1 credit
The student will be able to trace the development of African literature, the oral tradition, and African writers and their contribution to African historiography. Learning methods include lecture-discussion, seminar.

CUB 3113 African Literature II 1 credit
Prerequisite: CUB 3112 African Literature I.
The student will be able to identify the major figures and episodes in African mythology and to analyze its role in African religion, life, and history.

CUB 3114 The Black American in the Urban Setting I 1.5 credits
The student will identify problems confronting Black Americans in the cities and to analyze the effects of poor schools, substandard housing, unemployment, and political inadequacy.

CUB 3115 The Black American in the Urban Setting II 1.5 credits
Prerequisite: CUB 3114 The Black American in the Urban Setting I.
The student will identify and analyze possible solutions of problems confronting Black Americans.

CUB 3116 The Black Labor Movement I 1 credit
The student will trace the history of the early Black labor movement and analyze its implications for present-day labor organization.

CUB 3117 The Black Labor Movement II 1 credit
Prerequisite: CUB 3116 The Black Labor Movement I.
The student will trace the activities of Black caucuses within trade unions. Learning method, seminar.

CUB 3118 Philosophy of the Black Experience I 1.5 credits
The student will analyze the philosophies of major Black thinkers as they form the bases for political action. Learning methods include lecture-discussion, seminar.

CUB 3119 Philosophy of the Black Experience II 1.5 credits
Prerequisite: CUB 3118 Philosophy of the Black Experience I.
The student will trace the development of the Marcus Garvey and Malcolm X movements. Learning method, seminar.
The primary goals of the English program are to enable the student to communicate effectively in career, academic, and social situations; to understand the nature and function of language and to use it as a tool for projecting his ideas and for receiving and transmitting information. In addition to developing basic skills, study in English makes it possible for the student to order his thinking into logical structures, to exercise his creative powers, and to approach imaginative literature with the joy of discovery.

Upon completion of the required first-year English program (see below), the student may choose from a wide variety of advanced literature and writing modules. In addition to lectures and discussions, various media such as films and audio-tapes will be used to assist learning.

To successfully complete English program modules, students are required to demonstrate their achievement of course objectives in essay tests, written reports, and quizzes. The English staff works closely with the individual student, providing continual diagnostic, tutorial, and program advisement services.

On the basis of his performance in a series of placement tests, the entering student will be advised as to whether he may register for (a) the regular English first-year sequence; (b) the Libra program; or (c) the English-as-a-second-language (ESL) sequence.

Regular First-Year English Program

The combined six-credit sequence entitled ENG 1302-1303 Introduction to Composition and ENG 1304-1305 Introduction to Literature is required of every student at Hostos. These four modules are designed to enable the student to use written and spoken English as a flexible, creative tool for the expression of his ideas. Major attention is given to the essentials of English, the nature of language, writing as a communication process, and imaginative literature as a vitalizing and humanizing source of experience. The student will consistently improve his facility with written and spoken language. For the benefit of health sciences career majors, ENG 1306 Technical Writing may be substituted for ENG 1305 Introduction to Literature II.

The Libra Program

The Libra program, consisting of nine credits, will provide a total learning environment for the student who requires further development of basic English skills. The emphasis will be on communication of all kinds—reading, writing, speaking, listening—in a context of intellectual inquiry focused upon subject matter related to the health sciences or arts and sciences programs. The schedule for the student in the Libra program will include the following:

- ENG 1301 Core English (Reading, Writing, and Study Skills)
• English and Reading Workshops
• Core Subject (Health Sciences, Social Sciences, Visual and Performing Arts, Black Studies, or Puerto Rican Studies)
• Physical Education/Athletics
• Speech

The goal of the Libra program is to develop those skills which will enable the student to succeed in the regular college program.

English-as-a-Second-Language (ESL) Program
Assignment to modules at the appropriate level will be made on the basis of entrance tests. ESL 1311-1312 Basic English as a Second Language I, II is for those students who have little or no background in speaking and writing English. Credits earned in these modules may be applied to modern language requirements. ESL 1321 Intermediate English as a Second Language is equivalent to ENG 1301 Core English. ESL 1322-1323 Advanced English as a Second Language I, II is equivalent to the regular English 1302-1303 Introduction to Composition. Upon completion of ESL 1323 Advanced English as a Second Language II the student will enter the regular English program by enrolling in ENG 1304 Introduction to Literature I.

ENG 1301 Core English (for Libra program)
(See description of Libra program)

Corequisites: Listed above under Libra program.
The student will work intensively on the structure of language (grammar, spelling, punctuation, sentence construction); the organization, logic, and rhetoric of composition and speech; reading comprehension; vocabulary; note taking; effective listening. Large group presentations as well as seminars and workshops with individualized assistance will be utilized.

ENG 1302-3 Introduction to Composition I, II 3 credits
Prerequisite: ENG 1301 Core English, ESL 1321 Intermediate English as a Second Language or exemption from these on basis of passing examinations.

The student will write essays satisfying not only the essentials of English grammar, paragraph structure, and style, but also reflecting a mastery of the course content, which may include investigation into concepts of language, analysis of given essays, and criticisms of contemporary media.

ENG 1304-5 Introduction to Literature I, II 3 credits
Prerequisite: ENG 1302-3 Introduction to Composition I, II or ESL 1322-3 Advanced English as a Second Language I, II.

The student will examine selected texts exemplifying the major forms of expression in fiction, drama, and poetry. The student will demonstrate his compositional skills by analyzing these texts in writing.
ENG 1306 Technical Writing 1.5 credits
Prerequisite: ENG 1304 Introduction to Literature I.
The student will demonstrate his understanding of the principles and mechanics of good technical writing by analysis and preparation of various types of business letters, reports, and articles.

ENG 1307 Research Writing 1.5 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
An introduction for arts and sciences students to the principles of library research and their practical application. The student will demonstrate his ability to use library research skills in writing term papers and developing bibliographies.

ENG 1308 Creative Expression 1.5 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
Given exposure to a variety of art media, the student will concentrate on an individual project, to produce either a creative written work or a multimedia effort combining literature with another art medium.

ENG 1341-2 Studies in Fiction I, II. 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
Through study of selected works of such major modern writers as Dostoevsky, Mann, Kafka, and Ellison, the student will develop and demonstrate skill in analysis of narrative order, point of view, characterization, conflict, and theme.

ENG 1343-4 Studies in Poetry I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
Using a wide variety of approaches, the student will explore the ways poetry is made and how it can be enjoyed. The works of such major poets as Robert Frost, Federico Garcia-Lorca, and Langston Hughes will be read and analyzed.

ENG 1345-6 Studies in Drama I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will analyze structures and styles of modern drama through careful reading of the works of such playwrights as Ibsen, Shaw, Beckett, Miller, Jones, and Bullins.

ENG 1347-8 The Modern Short Story I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will demonstrate his understanding of the components of the short story by carefully analyzing the work of such writers as Mary McCarthy, Bernard Malamud, Flannery O'Connor, and James Baldwin.
ENG 1351-2 Shakespeare I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
Through careful study of selected histories, comedies, and tragedies, the student will trace the evolution of the playwright's career, examining Shakespeare's life and the cultural and political influences of his age. Records, films, and slides will be used extensively to develop appreciation for the Shakespearean theatre.

ENG 1353-4 The Modern American Novel I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will examine major figures of 20th century American fiction, identifying characteristic themes, styles, and structural components. Authors such as Dreiser, Steinbeck, Wright, Faulkner, Hemingway, Ellison, and Bellow will be studied in terms of their own time and surroundings as well as their relevance to the present.

ENG 1355-6 Women in Literature I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will examine the roles women have played in literature from classical times to the present, comparing these roles to the current status of women. Attention will be given to the differing view of male and female authors toward women. Slides will be used in this study.

ENG 1357-8 Science and Literature I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will analyze the changes that scientific thought has made in the course of man's intellectual development, and how those changes have been reflected in literature from Chaucer to the modern age. Readings will include the works of Milton, Tennyson, and Eliot.

ENG 1359-60 The Literature of Political Satire I, II 3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will analyze political satire in terms of content, form, and effectiveness of expression through examination of the work of such writers as Swift, Defoe, Dickens, and Orwell.

ENG 1370-71 Faculty-Student Seminar I, II 1-3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
With faculty members, the student will explore in depth a major writer or group of writers to be chosen by the seminar participants.

ENG 1390-81 Special Studies in English 1-3 credits
Prerequisite: ENG 1304-5 Introduction to Literature I, II.
The student will engage in independent study in consultation with and at
the discretion of the instructor. Work may be coordinated with other instructional departments.

ESL 1311-12 Basic English as a Second Language I, II 3 credits
Given extensive experience and exercise with simple English sentences, including commands and question-answer patterns, the student will be expected to understand and produce in speech and writing basic sentences that are grammatically consistent with conventional English usage.

ESL 1321 Intermediate English as a Second Language (equivalent to Core ENG 1301) 3 credits
Prerequisite: ESL 1311-12 or equivalent competency.
The student will identify and compose independent and dependent clauses, as well as simple and complex sentences. In addition, the student will understand how word meanings are changed by adding prefixes and suffixes to word stems and will write short paragraphs using such words in a meaningful context.

ESL 1322-3 Advanced English as a Second Language I, II (equivalent to ENG 1302-3) 3 credits
Prerequisite: ESL 1321 Intermediate English as a Second Language and ESL 1322 Advanced English as a Second Language I.
The student will recognize and compose well-organized simple, compound, and complex English sentences to be incorporated into compositions of substance with clarity and grammatical accuracy.

MATHEMATICS

The goal of the mathematics curriculum is twofold:
• To provide students in the natural and social sciences with the particular skills they need for higher-level work in their specialty.
• To give to students in the arts and sciences program a deeper appreciation for the reality of mathematics that lies beyond mere computational skill. The emphasis is on logic and systematic construction leading to more sophisticated mathematical models.

The mathematics curriculum provides a variety of offerings that survey the meaning of mathematics as a logical system. The particular models chosen to exemplify these logical principles will vary from time to time depending on the current interests of students and faculty. Since such models are meant to be illustrations only, the choice can be selective without any change of purpose.

Achieving satisfactory progress in classroom instruction requires the taking of a milestone test within a week of the classroom presentation of the material involved. In case of unsatisfactory performance a procedure for retesting will be provided by the instructor.
If a student does not show satisfactory progress, he may withdraw from the module (without penalty) and the instructor will so inform the registrar's office.

Because of the sequential nature of mathematics, missing a single lecture can often cause students difficulty in understanding material presented at a later date. Therefore, absences are permissible only under exceptional circumstances and regular attendance of all classroom instruction is strongly advised.

A student will receive credit for a module when he or she has satisfied the criteria for each of the milestones in the module. This is most commonly done by successfully answering at least 80 percent of the problems on written milestone examinations. In some cases oral examinations may be taken in place of the written form.

Students with two years or fewer of high school mathematics who wish to fulfill general mathematics requirements are advised to take the following sequence of modules:

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 1631, 1632, 1633, 1634</td>
<td>Introductory College Mathematics I, II, III, IV (6 credits)</td>
</tr>
</tbody>
</table>

Students having a more extensive mathematics background can choose the required number of credits from among the following, provided that in each case they fulfill the prerequisites:

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 1651, 1652, 1653, 1654</td>
<td>[Precalculus Sequence] (6 credits)</td>
</tr>
<tr>
<td>MAT 1661, 1662, 1663, 1664</td>
<td>[Calculus Sequence] (8 credits)</td>
</tr>
<tr>
<td>MAT 1671, 1672</td>
<td>[Advanced Calculus Sequence] (4 credits)</td>
</tr>
<tr>
<td>MAT 1681, 1682</td>
<td>[Probability and Statistics] (3 credits)</td>
</tr>
<tr>
<td>MAT 1691, 1692</td>
<td>[Computer Science] (3 credits)</td>
</tr>
<tr>
<td>MAT 1711, 1712</td>
<td>[Logic and Sets] (3 credits)</td>
</tr>
</tbody>
</table>

**MAT 1601 Basic Math Skills** 1 credit

The student will perform the four basic arithmetic operations of addition, subtraction, multiplication, and division, using whole numbers, fractions, decimals, integers, and combinations of these forms of numbers; convert units of length, weight, and capacity within the metric system; solve problems involving ratio, proportion, and percentage; solve problems involving preparation of solutions from given stock solutions; solve problems through use of Clarke's rule; convert centigrade temperature readings to fahrenheit and fahrenheit temperature readings to centigrade; express given decimals in scientific notation; and solve linear equations.

**MAT 1631 Introductory College Mathematics I** 1.5 credits

The student will study and become proficient in operations that involve the decimal system, systems with other bases, modular arithmetic, and the fundamentals of set theory. Module is offered in English and Spanish.
MAT 1632 Introductory College Mathematics II 1.5 credits
Prerequisite: MAT 1631 Introductory College Mathematics I.
The student will be able to evaluate compound statements involving disjunction, conjunction, and implications. He will be able to construct a truth table to demonstrate whether a given statement is a tautology. He will perform basic operations and identify properties possessed by the set of integers, rational and real numbers. Module is offered in English and Spanish.

MAT 1633 Introductory College Mathematics III 1.5 credits
Prerequisite: MAT 1632 Introductory College Mathematics II.
The student will be able to solve problems involving denominate numbers based on both the metric and the English systems of measurement. The student will solve problems in non-metric geometry and elementary problems in topology. Module is offered in English and Spanish.

MAT 1634 Introductory College Mathematics IV 1.5 credits
Prerequisite: MAT 1633 Introductory College Mathematics III.
The student will be able to define fundamental concepts of elementary algebra and solve linear equations with one and two variables. The student will be able to graph linear equations, relations, and functions. He will be able to solve problems through use of linear programming techniques. Module is offered in English and Spanish.

MAT 1651 Precalculus I 1.5 credits
Prerequisites: Students must have completed two years of high school algebra; or have completed MAT 1633-34 Introductory College Mathematics III, IV; or have passed qualifying examination.
The student will be able to define fundamental concepts of algebra and solve relations, linear equations, and linear inequalities. He will be able to factor and perform the fundamental operations with rational algebraic expressions and polynomials. Module is offered in English and Spanish.

MAT 1652 Precalculus II 1.5 credits
Prerequisite: MAT 1651 Precalculus I.
The student will be able to simplify algebraic expressions with integral exponents, fractional exponents, and radicals. He will be able to perform the fundamental operations with complex numbers and graph quadratic equations. Module is offered in English and Spanish.

MAT 1653 Precalculus III 1.5 credits
Prerequisite: MAT 1652 Precalculus II.
The student will be able to solve quadratic equations and systems of
equations using different techniques. Module is offered in English and Spanish.

MAT 1654 Precalculus IV
Prerequisite: MAT 1653 Precalculus III.
The student will be able to graph exponential and logarithmic functions and simplify and evaluate expressions using properties of exponents and logarithms. He will be able to solve elementary problems of numerical trigonometry. Module is offered in English and Spanish.

MAT 1661 Introductory Calculus I
Prerequisites: Students must have completed at least three years of high school mathematics including (1) two years of algebra and one of geometry; or (2) have completed MAT 1651-1654 (Precalculus Sequence); or (3) have passed a qualifying examination.
The student will review coordinate geometry and study the mathematical notion of the increment of a function and learn to apply it to limits, to slope, and, finally, to the derivative.

MAT 1662 Introductory Calculus II
Prerequisite: MAT 1661 Introductory Calculus I.
The student will study and show proficiency in operating with elementary functions and their limits, in finding the derivatives of polynomial functions, of rational functions, and of trigonometric functions, and, finally, in applying all of these operations to selected problems.

MAT 1663 Introductory Calculus III
Prerequisite: MAT 1662 Introductory Calculus II.
The student will study and show proficiency in operating with the integral as the limit of a sum, with antiderivatives, with exponential and logarithmic functions, their derivatives, and integrals. Finally, the student will prove the Fundamental Theorem of the Calculus and apply the result to selected problems.

MAT 1664 Introductory Calculus IV
Prerequisite: MAT 1663 Introductory Calculus III.
The student will apply the definite integral to standard problems involving the following: area, volume, arc length, surface of revolution, moment and center of mass, centroid, hydrostatic pressure, and work.

MAT 1671 Mathematical Analysis I
Prerequisite: MAT 1664 Introductory Calculus IV.
The student will study and become proficient in various techniques of integration and their applications. Among these techniques are included
integration by the method of partial fractions, integration by parts, and numerical methods for approximating integrals. Among the applications are included the evaluation of improper integrals and simple differential equations.

MAT 1672 Mathematical Analysis II 2 credits
Prerequisite: MAT 1671 Mathematical Analysis I.
The student will study and become proficient in his knowledge of functions and in evaluating sequences and series of constants. He will be able to test such sequences and series for convergence and divergence. He will prove Taylor's Theorem with remainder and be able to apply it to selected problems.

MAT 1681 Introduction to Probability and Statistics I 1.5 credits
Prerequisite: One year of algebra (or its equivalent).
The student will define, identify, and compute the measures of central tendency, including arithmetic mean, median, mode, and midrange; define, identify, and compute the measures of dispersion, including range, variance, and standard deviation; solve problems involving sample spaces, permutations, combinations, probability of an event, conditional probability of an event, and mathematical expectation; and identify a given probability distribution as being either binomial, normal, or other.

MAT 1682 Introduction to Probability and Statistics II 1.5 credits
Prerequisite: MAT 1681 Introduction to Probability and Statistics I.
The student will identify a variable as being discrete or continuous; use a table of random numbers to select a random sample from a given population; determine the probability of events that are normally distributed through use of tables and the standard normal distribution; determine whether a given sample adequately reflects the population from which it is taken through use of confidence interval procedures; and develop a normal distribution.

MAT 1691 Introduction to Computer Science I 1.5 credits
Prerequisite: Two years of high school algebra.

MAT 1692 Introduction to Computer Science II 1.5 credits
Prerequisite: MAT 1691 Introduction to Computer Science I.

MAT 1711 Fundamentals of Mathematics I 1.5 credits
Prerequisite: Students must have completed two years of high school algebra; or have completed MAT 1633-1634 Introductory College Mathematics III, IV; or have passed a qualifying examination.
The student will study and become proficient in the applications of formal
logic. The material involved includes logical representation of statements in symbolic form, truth value and truth tables, and the interrelationship of statements. The applications include valid and invalid argumentation, formal proof, and operations with sets.

**MAT 1712 Fundamentals of Mathematics II**
1.5 credits

Prerequisite: MAT 1711 Fundamentals of Mathematics I.

The student will study Boolean Algebra as an axiomatic system and apply this algebra to logic and argumentation. He will study and operate with switching circuits and with the computer-oriented language BASIC as illustrations of logical systems.

**MAT 1731 Number Theory I**
1.5 credits

Prerequisite: Students must have completed two years of high school algebra; or have completed MAT 1633-1634 Introductory College Mathematics III, IV; or have passed the qualifying examination.

The student will verify some fundamental properties of natural numbers; express numbers in different bases; find the greatest common divisors of two numbers by Euclid's algorithm; factor an integer by various methods such as Fermat's and Euler's methods; and become acquainted with several solved and unsolved problems in number theory.

**MAT 1732 Number Theory II**
1.5 credits

Prerequisite: MAT 1731 Number Theory I.

The student will find the number of divisors of a natural number, the sum of the divisors, the product of the divisors, and the means of the divisors; become acquainted with perfect, multiply perfect, amicable and sociable numbers and analyze various theorems related to perfect numbers; study Euler's function; solve simple diophantine equations; and study congruences.

**MODERN LANGUAGES**

Study of the modern languages is designed to enable the student to acquire elementary conversational skills in French, Spanish, or Swahili for everyday social and professional communication.

Students who already possess demonstrable practical language skills can pursue advanced offerings in language and literature (French and Spanish), including independent readings.

In the elementary conversational language offerings, the student can mark his progress by achievement of the performance objectives set forth in each module either through oral or written tests. To attain conversational skill in basic offerings (01-04 sequence) attendance is essential at each class.
meeting, reinforced by a one-hour-per-week minimum of oral practice in the language laboratory. This is also true for the Intensive French and the Intensive Spanish offerings (FRE 1911-1912 and SPA 2211-2212).

In the advanced offerings, credit is earned by the development of skills basic to the appreciation of literature, of cultural patterns, and the organization of ideas in writing techniques. Frequent individual conferences with the instructor guide the student to evaluate his own progress.

A three-credit module sequence in language offerings insures course equivalency for transfer to other colleges. All language modules carry 1.5 credits except the Intensive French and the Intensive Spanish offerings which carry one credit each.

The use of the vernacular will be limited to the minimum necessary to insure comprehension. Only the modern language will be used in the study of literature.

Arts and sciences students will receive credit for a module in the 01-04 sequence only after they have completed the entire series, unless credited with advanced placement. Health sciences students who choose a modern language as an elective need only complete a two-module sequence.

**FRENCH**

**FRE 1901-1902 Conversational French I, II** 1.5 credits each

The beginning student will demonstrate elementary skills in speaking, reading, and writing French through recitation in the classroom and in the language laboratory with tapes.

**FRE 1903-1904 Conversational French III, IV** 1.5 credits each

The student will demonstrate further development of the basic skills he acquired in FRE 1901-1902 through recitation in the classroom and in the language laboratory with tapes.

**FRE 1905-1906 Speaking and Reading French I, II** 1.5 credits each

The student will demonstrate self-expression in French through a systematic review of grammar, the reading and discussion of selected prose and poetry in class. The student will use language laboratory tapes for supplementary oral drill.

**FRE 1907-1908 Speaking and Reading French III, IV** 1.5 credits each

The student will demonstrate self-expression in French through continued systematic review of grammar, the reading and discussion of work of selected contemporary writers, the presentation of written and oral reports based on current periodicals, happenings, or subjects of personal interest. The student will use language laboratory tapes for supplementary oral drill.
FRE 1931-1932 Writing French I, II 1.5 credits each
Prerequisite: FRE 1908 Speaking and Reading French IV or the equivalent.
The student will demonstrate the skill to present ideas effectively in written French by writing expository, descriptive, narrative, and argumentative prose, as well as by translating English prose.

FRE 1941-1942 Modern French Literature I, II 1.5 credits each
Prerequisite: FRE 1908 Speaking and Reading French IV or the equivalent.
The student will read representative short works by writers of 19th and 20th century France, participate in literary discussions based on readings and lectures presented by the instructor or a visiting lecturer, and prepare both oral and written reports. The student and the instructor will review this work in tutorial sessions.

FRE 1943-1944 Extensive Readings in French I, II 1.5 credits each
Prerequisite: Consent of the instructor.
The student will read seven to ten works from a list recommended by the instructor or suggested by the student and approved by the instructor. The student will submit a written report on each of the readings and meet with the instructor to discuss his report.

FRE 1945-1946 The Age of Ideas I, II 1.5 credits each
Prerequisite: FRE 1908 Speaking and Reading French IV or the equivalent.
The student will read and discuss works of such French philosophes as Montesquieu, Voltaire, Diderot, Rousseau, and their precursors, all of whom sought to define and change the moral, social, economic, and political dimensions of society. The student will present oral and written reports on readings to establish the relevancy of contemporary social concerns with those of the 18th century French Enlightenment. The student will review his reports in tutorial sessions with the instructor.

SPANISH

SPA 2201-2202 Conversational Spanish I, II 1.5 credits each
The beginning student will demonstrate elementary skills in speaking, reading, and writing Spanish through recitation in the classroom and in the language laboratory with audio-tapes.

SPA 2203-2204 Conversational Spanish III, IV 1.5 credits each
The student will demonstrate further development of the basic skills he acquired in SPA 2201-2202 through recitation in the classroom and in the language laboratory with audio-tapes.
SPA 2205-2206 Speaking and Reading Spanish I, II 1.5 credits each
The student will demonstrate self-expression in Spanish through a systematic review of grammar, and the reading and discussion of selected prose and poetry in class. The student will use language laboratory audio-tapes for supplementary oral drill.

SPA 2207-2208 Speaking and Reading Spanish III, IV 1.5 credits each
The student will demonstrate self-expression in Spanish through continued systematic review of grammar, the reading and discussion of selected contemporary writers, and the presentation of written and oral reports based on current periodicals, happenings, or subjects of personal interest. The student will use language laboratory audio-tapes for supplementary oral drill.

SPA 2211-2212 Intensive Spanish I, II 1.5 credits each
In these modules, designed primarily for non-Spanish-speaking students in the health sciences who have little or no previous knowledge of the language, the student will practice listening to and speaking Spanish centered around conversation based on hospital situations, medical terminology, useful expressions, and idioms.

SPA 2219-2220 Spanish-American Literature I, II 1.5 credits each
Prerequisite: SPA 2208 Speaking and Reading Spanish IV or the equivalent.
The student will read representative short works by writers from the colonial period through those of 19th century Spanish-American countries, with emphasis on the latter century, participate in literary discussions based on readings and lectures presented by the instructor or visiting lecturers, and prepare both oral and written reports. The student and the instructor will review this work in tutorial sessions.

SPA 2221-2222 Spanish-American Literature III, IV 1.5 credits each
Prerequisite: SPA 2208 Speaking and Reading Spanish IV or the equivalent.
In these modules, continuations of SPA 2219-2220, the student will read representative works of contemporary writers, participate in literary discussions based on readings and lectures presented by the instructor or a visiting lecturer, and prepare both oral and written reports. The student and the instructor will review this work in tutorial sessions.

SPA 2231-2232 Writing Spanish I, II 1.5 credits each
Prerequisite: SPA 2208 Speaking and Reading Spanish IV or the equivalent.
The student will demonstrate the skill to present ideas effectively in written Spanish by writing expository, descriptive, narrative, and argumentative prose, as well as by translating English prose.

SPA 2241-2242 Modern Spanish Literature I, II 1.5 credits each
Prerequisite: SPA 2208 Speaking and Reading Spanish IV or the equivalent.
The student will read representative short works by writers of 19th and 20th century Spain, participate in literary discussions based on readings and lectures presented by the instructor or visiting lecturers, and prepare both oral and written reports. The student and the instructor will review this work in tutorial sessions.

SPA 2243-2244 Extensive Readings in Spanish I, II 1.5 credits each
Prerequisite: Consent of the instructor.

The student will read seven to ten works from a list recommended by the instructor or suggested by the student and approved by the instructor. The student will submit a written report on each of the readings and meet with the instructor to discuss this report.

SPA 2245-2246 The Golden Age I, II 1.5 credits each
Prerequisite: SPA 2208 Speaking and Reading Spanish IV or the equivalent.

The student will read and discuss representative works of the classical period (with particular emphasis on drama) and prepare written and oral reports based on the readings and lectures presented by the instructor or visiting lecturers. The student and the instructor will review these reports in tutorial sessions.

SWAHILI

SWA 2401-2402 Conversational Swahili I, II 1.5 credits each
The beginning student will demonstrate basic skills in speaking, reading and writing Swahili through recitation in the classroom and in the language laboratory with audio-tapes.

SWA 2403-2404 Conversational Swahili III, IV 1.5 credits each
The student will demonstrate further development of the basic skills he acquired in SWA 2401-2402 through recitation in the classroom and in the language laboratory with audio-tapes.

PHYSICAL EDUCATION/ATHLETICS

The physical education/athletics department is committed to providing the student with the knowledge and physical skills necessary to develop and maintain physical fitness throughout life.

In order to meet the needs and interests of each learner, a variety of modules are offered in such areas as team sports, dance, combatives, and individual and group sports. A comprehensive program of recreation and intramural and intercollegiate athletics is also being developed to meet the various levels of skill and interest of the entire Hostos community. At present, the college supports intercollegiate basketball and baseball teams.
All students are required to attend at least 80 percent of the scheduled class meetings until completion of the module. Any student exceeding the maximum number of absences permitted will be dropped from the module and will not be allowed to register for that module at a subsequent cycle without the permission of the instructor.

**PED 0011 Beginning Swimming** 1 credit
The student will be able to observe the rules of water safety and perform the basic swimming strokes associated with the American Red Cross Program for beginning swimmers. Module is offered in English and Spanish. Coed.

**PED 0012 Intermediate Swimming** 1 credit
Prerequisite: The student must pass a basic skills test measuring his or her ability to do the crawl and the breast and back strokes, and must be able to tread water for 30 seconds.

The student will be able to perform advanced swimming strokes and diving skills and develop stamina in the water. Module is offered in English and Spanish. Coed.

**PED 0020 Senior Life Saving** 1 credit
Prerequisite: The student must pass a basic skills test measuring stamina and skill levels of all strokes to gain admittance into this module.

The student will be able to observe advanced rules of water safety and perform advanced swimming strokes and life-saving techniques as required by the American Red Cross Senior Life Saving. Module is offered in English and Spanish. Coed.

**PED 0003 Fitness Through Dance** 1 credit
The student will be able to achieve total body conditioning and develop a heightened sensitivity to non-verbal communication. Module is offered in English and Spanish. Coed.

**PED 0004 Black and Puerto Rican Dance** 1 credit
The student will be able to perform the basic movements of Black and Puerto Rican dance and be able to recognize the origins of Black and Puerto Rican dance. The student will have the opportunity to explore creative movements. Module is offered in English and Spanish. Coed.

**PED 0040 Advanced Athletics — Basketball** 1 credit
The student will receive credit after he has met pre-established criteria in the activity of intercollegiate basketball.
PED 0041 Advanced Athletics — Baseball
The student will receive credit after he has met pre-established criteria in the activity of intercollegiate baseball.

PED 0007 Personal Physical Fitness
The student will measure his present level of dynamic fitness and will correlate physical fitness and personal health. Learning methods include lab sessions.

PED 0015 Weight Training and Body Development
The student will learn the basic terms and concepts and perform the basic skills associated with weight training and body building. The student will develop and practice his own personal weight-training program.

PED 0009 Slimnastics and Figure Control
The student will learn the basic terms and concepts of body development and weight control by means of isometric and calisthenic exercises. Learning methods include lecture-discussions, films, demonstrations, and lab sessions.

PED 0030 Handball, Paddleball
The student will be able to perform the fundamental skills associated with the activities of handball and paddleball and develop a higher level of physical fitness through participation. Coed.

PED 0001 Coaching Men — Basketball
The student will state, recognize, and perform the elements involved in coaching basketball, with emphasis upon practice organization, design, game skills, and formation of game strategies.

PED 0006 Judo
The student will be able to perform the skills required in the attainment of “Yellow Belt.” Coed.

PED 0008 Self-Defense for Men & Women
The student will be able to defend himself or herself against attacks from the front, side, and back, in situations relating to safety at home and in the streets. Coed.

PED 0050 Beginning Karate
The student will be able to utilize the fundamental blows of Karate. Coed.

PED 0005 Beginning Fencing
The student will be able to perform competitively with the foil, executing various attacks and parries. Coed.
PED 0025 Advanced Fencing 1 credit
The student will be able to perform competitively with the epee and the sabre.

PED 0002 Bowling 1 credit
The student will be able to state the basic rules, methods of scoring, and etiquette of bowling and to demonstrate the fundamental bowling skills. Learning methods include discussions, video-tapes, demonstrations, and lab sessions. Coed.

PED 0013 Beginning Tennis 1 credit
The student will be able to play basic tennis and observe the rules and etiquette of the game. Learning methods include lecture-discussions, video-tapes, demonstrations, and lab sessions.

PED 0023 Intermediate Tennis 1 credit
Prerequisite: The student must demonstrate to the instructor the basic skills of tennis taught in the beginning tennis module.

The student will be able to improve his tennis game by using advanced tennis skills as well as court strategy. Learning methods include lecture-discussions, video-tapes, demonstrations, and lab sessions.

PED 0010 Stunts and Tumbling 1 credit
The student will be able to perform gymnastic exercises and to explore the reality of fear, creative expression, and awareness of self.

PED 0016 Beginning Yoga 1 credit
The student will be able to perform the fundamental exercises and breathing techniques of Yoga as a basis for physical and mental self-improvement.

PED 0017 Intermediate Yoga 1 credit
Prerequisite: PED 0016 Beginning Yoga or permission of the instructor.

The student will be able to perform with a reasonable proficiency the fundamental asanas and breathing exercises of Hatha Yoga and the art of deep relaxation.

PED 0027 Advanced Yoga 1 credit
Prerequisite: PED 0017 Intermediate Yoga or permission of the instructor.

The student will be able to execute with ease and fluidity the basic techniques of Yoga and some of the advanced variations as well.

PED 0060 Rock Climbing 1 credit
The student will be able to demonstrate the fundamental skills of
mountaineering (class 5). Emphasis is placed on the use of pitons, rope handling, and belaying.

PED 0019 Independent Study 1 credit
Prerequisite: Permission of the chairman of the department.
The student will be given an opportunity, in consultation with the chairman of the department, to formulate an individualized, independent program of learning within the physical education program. Coed.

PHYSICAL SCIENCES

Chemistry
The general chemistry sequence of modules (CHE 4001-4004 General Chemistry I-IV) emphasizes: (1) the correlation of physical and chemical properties of matter with atomic and molecular structure; and (2) quantitative relationships in chemistry.

The chemistry and survival sequence of modules (CHE 4009-4010 Chemistry and Survival I-II) covers: (1) a short survey of atomic structure, chemical bonds and organic compounds, and the origin of life and chemical evolution; and (2) a study of air and water pollution, solid waste disposal, drugs and drugs' action, and food and nutrition.

The introductory chemistry sequence of modules (CHE 4011-4012 Introductory Chemistry I-II) includes the study of atomic structure and chemical bonds and a short survey of organic and biological chemistry.

The organic chemistry sequence of modules (CHE 4021-4024 Organic Chemistry I-IV) embraces the study of the principal classes of aliphatic and aromatic compounds and special topics in organic chemistry (macromolecules, steroids, carbohydrates, amino acids, and peptides). The emphasis is on structural theory, reaction mechanisms, and organic syntheses. The experimental work is designed to train the student in basic organic laboratory techniques.

The analytical chemistry sequence of modules (CHE 4005-4006 Analytical Chemistry I-II) includes the study of the basic principles and practices related to analytical chemistry theory, analytical chemistry techniques, selection of appropriate analytical methods of handling data, practical aspects of clinical analyses. The intent of the sequence is to train the student in some of the basic analytical chemistry techniques.

Attendance of laboratory sessions is mandatory. All laboratory performance objectives must be completed before completion of the module is reported.

CHE 4001 Lecture General Chemistry I 1.5 credits
CHE 4101 Laboratory .5 credit
Prerequisite: Satisfactory performance on the diagnostic math skills test administered by the chemistry department.
The student will be able to analyze data and solve problems related to the principles of atomic structure, the atomic theory, and the gas laws. Three hours lecture-demonstration, three hours laboratory. Learning methods include lecture-demonstration, independent study. Module is offered in English and Spanish.

CHE 4002 Lecture General Chemistry II 1.5 credits
CHE 4102 Laboratory .5 credit
Prerequisite: CHE 4001 General Chemistry I.

The student will be able to correlate the electrical properties of matter with the structure of crystalline salts and metals and solve problems related to the application of Faraday’s laws, quantities involved in chemical changes, and the composition of solutions. The student will also be able to predict the physical and chemical properties of the elements according to the periodic classification. Three hours lecture-demonstration, three hours laboratory. Learning methods include lecture-demonstration, independent study. Module is offered in English and Spanish.

CHE 4003 Lecture General Chemistry III 1.5 credits
CHE 4103 Laboratory .5 credit
Prerequisite: CHE 4002 General Chemistry II.

The student will be able to balance oxidation-reduction equations. The student will also be able to apply the principles of quantum mechanics to the electronic configuration of atoms and predict the physical, chemical, and bonding properties of representative elements of the sub-classes of metals, non-metals, and transition elements. Three hours lecture-demonstration, three hours laboratory. Learning methods include lecture-demonstration, independent study. Module is offered in English and Spanish.

CHE 4004 Lecture General Chemistry IV 1.5 credits
CHE 4104 Laboratory .5 credit
Prerequisite: CHE 4003 General Chemistry III.

The student will be able to analyze data concerning the chemical reactivity of covalent bonding, identify the classes of hydrocarbons, state their properties, and work out simple synthetic problems. The student will also be able to state or recognize terms used in nuclear chemistry. Three hours lecture-demonstration, three hours laboratory. Learning methods include lecture-demonstration, independent study. Module is offered in English and Spanish.

CHE 4005-4006 Techniques of Analytical Chemistry I - II 2 credits each (lecture and laboratory)
Prerequisites: MATH 1651-1654 Precalculus I-IV or mathematics that includes knowledge of (1) solutions to algebraic equations; (2)
functional relationships among variables; (3) operations and logarithms, and (4) probability and statistics. CHE 4001-4002 General Chemistry I-II (with permission of instructor) or CHE 4001-4004 General Chemistry I-IV. ENG 1301 Core English or equivalent competencies, including note-taking and reading at a 10th grade level of comprehension in English.

The student will be able to demonstrate the principles and practices related to: (1) analytical chemistry, including fundamental concepts of solid and liquid samples, basic tools of analytical chemistry, and laboratory safety; (2) correct techniques of sample preparation, volumetric methods of measurement, gravimetric analyses, and spectrophotometry; (3) selection of methods and data handling; and (4) practical aspects of clinical analyses. It is recommended that students take the entire sequence. Attendance of both lectures and laboratory sessions is required (three hours lecture, five hours laboratory). In addition to lecture-discussion, recitations, and laboratory session, learning methods include audio-tapes covering important points in the lecture, film loops covering important laboratory techniques, written handouts and other tutorial material. Unknown determinations are to be made in the laboratory. Individual conferences will be scheduled with the instructor for each student.

CHE 4009 Chemistry and Survival I 2 credits
The student will be able to state or recognize terms related to the atomic theory, chemical bonding, and molecular structure. The student will also be able to define terms and propose solutions to or analyze specific problems related to food and nutrition and air pollution. Three hours lecture-discussion, two hours demonstration-laboratory. Module is offered in English and Spanish.

CHE 4010 Chemistry and Survival II 2 credits
Prerequisite: CHE 4009 Chemistry and Survival I.
The student will be able to define terms related to the problems of water pollution and water treatment, solid waste disposal, pesticide residues, and the chemical and physiological action of drugs; he will apply this knowledge to the solution of relevant problems. The student will also state or recognize terms related to the origins of life and chemical evolution. Three hours lecture-discussion, two hours demonstration-laboratory. Module is offered in English and Spanish.

CHE 4011 Lecture Introductory Chemistry I 1.5 credits
CHE 4111 Laboratory .5 credit
Prerequisite: MAT 1601 Introductory College Mathematics I.
The student will be able to solve problems or analyze data which require a knowledge of the principles of the atomic theory, chemical bonding, and solution chemistry; the student will also be able to recognize, identify, or
describe the different classes of organic compounds, their physical, chemical, or physiological properties, and their industrial or pharmacological use. Three hours lecture-demonstration, two hours laboratory. Learning methods include lecture-demonstration, independent study. Module is offered in English and Spanish.

CHE 4012 Lecture Introductory Chemistry II 1.5 credits
CHE 4112 Laboratory .5 credit
Prerequisite: CHE 4011 Introductory Chemistry I.

The student will be able to state or recognize terms related to the chemistry of the carbohydrates, lipids, and proteins, and their metabolic pathways; the chemistry of heredity; and the principles of biochemistry that contribute to health and disease. Written tests and oral reports are required. Three hours lecture-demonstration, two hours laboratory. Learning methods include lecture-demonstration, independent study. Module is offered in English and Spanish.

CHE 4021 Lecture Organic Chemistry I 1.5 credits
CHE 4121 Laboratory .5 credit
Prerequisite: CHE 4004 General Chemistry IV.

The student will be able to name and illustrate by means of structural formulas the products obtained for simple reactions of the hydrocarbons, alkyl halides, alcohols, amines, nitriles, and compounds that contain the carbonyl group. The student will also be able to analyze the principles which underlie chemical bonding and molecular reactivity. Three hours lecture-discussion, four hours laboratory. Learning methods include lecture-discussion, independent study.

CHE 4022 Lecture Organic Chemistry II 1.5 credits
CHE 4122 Laboratory .5 credit
Prerequisite: CHE 4021 Organic Chemistry I.

The student will be able to demonstrate by means of diagrams, structural representation, and prediction of reactivity in chemical reactions principles related to structural theory, reaction mechanisms, elementary reaction rate theory, substitution, and elimination reactions of alkyl halides, alcohols, and related compounds. Three hours lecture-discussion, four hours laboratory. Learning methods include lecture-discussion, independent study.

CHE 4023 Lecture Organic Chemistry III 1.5 credits
CHE 4123 Laboratory .5 credit
Prerequisite: CHE 4022 Organic Chemistry II

The student will be able to write the structural formula(s) of the expected product(s) for a given reaction, predict the reactivity of individual organic compounds, and solve simple synthetic problems which require a knowledge of molecular rearrangements, substitution, elimination, and addition
reactions. Three hours lecture-discussion, four hours laboratory. Learning methods include lecture-discussion, independent study.

CHE 4024 Lecture Organic Chemistry IV 1.5 credit
CHE 4124 Laboratory .5 credit
Prerequisite: CHE 4023 Organic Chemistry III

The student will be able to demonstrate by writing structural formulas and drawing diagrams principles related to heterocyclics, natural products, spectral properties of organic molecules, and the relationship of physiological activity to molecular structure.

Physics

The physics sequence, which consists of eight credits or four two-credit modules, provides instruction intended to serve one or more of the following goals:

1 — To stimulate the student’s interest in science by providing a clear and understandable view of basic physical science.

2 — To provide a sound basis in physics for students intending to transfer to four-year colleges as science majors.

3 — To provide instruction in necessary scientific skills for students in career programs (such as radiologic technology).

Students registered in physics modules are required to attend all laboratory sessions.

PHY 4301 Lecture Introductory Physical Science 1.5 credits
PHY 4401 Laboratory .5 credit
Prerequisite: Sufficient knowledge of basic fractions, decimals, and percentages to pass a mathematics skills entrance examination.

The student will demonstrate ability to apply basic mathematics skills to the solution of simple problems illustrating the principles of atomic theory of matter and the basic theory of motion. Three hours lecture-discussion, three hours laboratory. Learning methods include lecture-discussion-demonstration, problem solving.

PHY 4302 Lecture Motion 1.5 credits
PHY 4402 Laboratory .5 credit
Prerequisite: PHY 4301 Introductory Physical Science.

The student will be able to recognize or state the definitions and properties of the basic quantities used in describing motion by solving problems involving those quantities. Three hours lecture-discussion, three hours laboratory. Learning methods include lecture-discussion-demonstration, problem solving.
PHY 4303 Lecture Electricity and Light 1.5 credits
PHY 4403 Laboratory .5 credit
Prerequisite: PHY 4302 Motion.
The student will be able to solve simple problems involving electricity, magnetism, and electromagnetic waves. Three hours lecture-discussion, three hours of laboratory. Learning methods include lecture-discussion-demonstration, problem solving.

PHY 4304 Lecture Atomic and Nuclear Physics 1.5 credits
PHY 4404 Laboratory .5 credit
Prerequisite: PHY 4303 Electricity and Light.
The student will be able to solve problems involving properties of the atom and nucleus. Three hours lecture-discussion, three hours of laboratory. Learning methods include lecture-discussion-demonstration, problem solving.

PUERTO RICAN STUDIES

Puerto Rican studies offers a variety of courses dealing with the history of Puerto Rico and its culture, economics, politics, and literature. Classes are conducted in Spanish and in English. Students should inquire at registration to determine whether a module is being offered in Spanish or in English.

Students concentrating in Puerto Rican studies acquire an understanding of the unique identity of Puerto Rican culture and a solid preparation for advanced studies. The procedure for earning credits and achieving progress in Puerto Rican studies is to successfully complete the performance objectives of each module.

Learning methods include participation in seminars, conducting research, and making educational field trips in the United States, Puerto Rico, and the Caribbean. For modules mainly oriented to independent study, learning methods include individual meetings with the instructor and individual student research projects which sometimes include field work in the community. The goal in all cases is to obtain a panoramic view of the historic Puerto Rican personality.

Information about modules to be offered during the 1972-73 academic year not listed in this catalog will be made available to students at registration in September and in February.

CUP 3151 History of Puerto Rico I 1.5 credits
The student will be able to trace the history of Puerto Rico from the pre-Columbian era to the 16th century.
CUP 3152 History of Puerto Rico II 1.5 credits
Prerequisite: CUP 3151 History of Puerto Rico I.
Sequential continuation of CUP 3151, with particular emphasis on the Indian civilization, the Spanish conquest and colonization, and the political and social development of the country until the end of the 16th century.

CUP 3153 History of Puerto Rico III 1.5 credits
The student will be able to trace the history of Puerto Rico from the beginning of the 17th century to the present.

CUP 3154 History of Puerto Rico IV 1.5 credits
Prerequisite: CUP 3153 History of Puerto Rico III.
Sequential continuation of CUP 3153, with particular emphasis on the struggle for independence, the abolition of slavery, the granting of autonomy in 1897, the Spanish American War, and U. S.-Puerto Rican relations from 1898 to the present.

CUP 3155 Culture of Puerto Rico I 1.5 credits
By means of films, transparencies, and seminars, the student will identify the visual patterns of Hispanic sources in the culture of Puerto Rico to the 16th century.

CUP 3156 Culture of Puerto Rico II 1.5 credits
Prerequisite: CUP 3155 Culture of Puerto Rico I.
Sequential continuation of CUP 3155, from the 16th century to the present.

CUP 3157 Puerto Rican Literature I 1.5 credits
By means of lectures, readings, and reports on the prose and poetry of representative Puerto Rican authors, the student will identify the relationship of Puerto Rican literature to the literature of the Caribbean area. Emphasis will be placed on the early colonial Spanish period.

CUP 3158 Puerto Rican Literature II 1.5 credits
Prerequisite: CUP 3157 Puerto Rican Literature I.
Continuation of CUP 3157. Emphasis is placed on post colonial period.

CUP 3159 Puerto Rican Literature III 1.5 credits
Prerequisites: CUP 3157, 3158 Puerto Rican Literature I, II.
Continuation of CUP 3158. Emphasis is placed on the 19th century.

CUP 3160 Puerto Rican Literature IV 1.5 credits
Prerequisites: CUP 3157, 3158, 3159 Puerto Rican Literature I, II, III.
Continuation of CUP 3159. Emphasis is placed on the 20th century.
CUP 3165 Puerto Rican Theatre I 1 credit
The student will be able to trace the development of early Puerto Rican theatre.

CUP 3166 Puerto Rican Theatre II 1 credit
The student will be able to trace the development of Puerto Rican theatre to the present.

SOCIAL SCIENCES

The social sciences curriculum is designed to help students to develop a more satisfactory perspective on their own situations; to enhance their critical abilities in evaluating social situations and social responses; to strengthen their involvements in the problems of their communities; and to provide the necessary social sciences background for successful work at the senior college level.

The curriculum is problem-oriented. From this orientation a motivation for disciplinary pursuits is generated. Student papers are stressed and provide the opportunity for student-faculty conferences.

Beginning students in the social sciences must commence by taking any one of the four core courses: Introduction to Social Science I-II, Introduction to Political Economy I-II, Introduction to Comparative History I-II, and Social Science of Health I-II. After completing one of the core courses, students may then choose any or all of the remaining core courses or an elective course.

SSC 4600 Introduction to Social Science I 1.5 credits
The student will be able to investigate selected social problems from various viewpoints, including history, politics, economics and philosophy. Module is offered in English and Spanish.

SSC 4601 Introduction to Social Science II 1.5 credits
Prerequisite: SSC 4600 Introduction to Social Science I.
A continuing study of social problems and the relevance of the social sciences to them. Module is offered in English and Spanish.

ECO 4640 Introduction to Political Economy I 1.5 credits
The student will analyze and explain the relationship of history, economics, and politics to each other in the context of the development from feudalism to capitalism. Module is offered in English and Spanish.

ECO 4641 Introduction to Political Economy II 1.5 credits
Prerequisite: ECO 4640 Introduction to Political Economy I.
The student will analyze the basic functions of capitalism and its development into monopoly capitalism and imperialism. Module is offered in English and Spanish.

**HIS 4660 Introduction to Comparative History I** 1.5 credits
The student will describe and explain selected aspects of Asian, African, Latin American, and European civilizations. The student will apply methods of historical analysis. Module is offered in English and Spanish.

**HIS 4661 Introduction to Comparative History II** 1.5 credits
Prerequisite: HIS 4660 Introduction to Comparative History I.
The student will analyze the interaction of civilizations and view history from a world perspective of interaction and change. Module is offered in English and Spanish.

**SSC 4701 Social Science of Health I** 1 credit
The student will analyze the American health system based on an understanding of the economics and politics of American society.

**SSC 4702 Social Science of Health II** 1 credit
Prerequisite: SSC 4701 Social Science of Health I.
The student will investigate the nature of the health industry, hospitals, community health services, and health workers and their unions. The student will also be able to compare U.S. health care with health systems in other countries.

**ECO 4646 Political Economy of Latin America I** 1.5 credits
Prerequisite: Completion of parts I & II of a core course.
The student will study and analyze the problem of underdevelopment in Latin America as related to dependency on the United States. Module is offered in English and Spanish.

**ECO 4647 Political Economy of Latin America II** 1.5 credits
Prerequisite: ECO 4646 Political Economy of Latin America I.
The student will study and analyze various theories in movements for change and will examine the recent history of Chile and Cuba in particular. Module is offered in English and Spanish.

**HIS 4662 American History I** 1.5 credits
Prerequisite: Completion of parts I & II of a core course.
The student will examine American history with a view to understanding America's present. The student will analyze and trace the impact of such developments as the European colonization of America, the enslavement of Black people, economic patterns, and early American political, social, and religious attitudes.
HIS 4663  American History II  1.5 credits
Prerequisite: HIS 4662 American History I.
The student will continue his study of America's development, including American foreign politics and ideology, and internal political, social, and economic movements.

HIS 4664  Studies in American Slavery I  1.5 credits
Prerequisite: Completion of parts I & II of a core course.
The student will describe and analyze the historical slavery of Black people in the United States and Latin America and its repercussions on American society.

HIS 4665  Studies in American Slavery II  1.5 credits
Prerequisite: HIS 4664 Studies in American Slavery I.
The student will analyze contemporary forms of slavery, including mental colonization, neo-economic slavery, the prison systems, and other forms of captive labor.

HIS 4666  Modern Latin American History I  1.5 credits
Prerequisite: Completion of parts I & II of a core course.
The student will be able to trace the development of Latin America from independence to the beginning of the 20th century.

HIS 4667  Modern Latin American History II  1.5 credits
Prerequisite: HIS 4666 Modern Latin American History I.
The student will describe and analyze significant developments in the history of 20th century Latin America.

SSC 4637  Independent Study  1-3 credits
Prerequisite: Completion of parts I & II of a core course.
The student may elect to develop an independent program of study of topics not offered through the regular program of modules. Students interested in independent study should consult with the social sciences faculty. Module is offered in English and Spanish.

VISUAL & PERFORMING ARTS

The visual and performing arts department offers introductory modules in art, music, theatre, and the development of culture. Modules in applied art, music, photography, and theatre are also offered. The department provides opportunities for independent study of the visual and performing
arts. The modules are designed for the student who wishes to enrich his program and basic knowledge of the arts as well as for the student who may choose art, music, photography, or theater as a future area of major concentration in a four-year college.

The procedure for earning credits and achieving progress in this department is to complete the performance objectives of a module by successfully fulfilling the learning criteria.

Learning methods vary but include participation in lectures and discussions, seminars, and workshops; taking tests; and the practical application of artistic techniques. Independent study often includes intensive skill development of artistic techniques and field trips planned by student and instructor.

VPA 3501-3502 Art and Civilization I, II
The student will be able to analyze and draw conclusions about the various cultures of Western civilization by investigating the artist’s changing relationship to society. Part II cannot be taken without part I.

VPA 3503-3504 Art and Civilization III, IV
The student will be able to analyze and draw conclusions about the various cultures of Western civilization by investigating history through art and the role of the artist as social critic. Part IV cannot be taken without part III.

VPA 3505-3506 Art and Civilization V, VI
The student will be able to analyze and draw conclusions about the functions of work and leisure in Western society by investigating past and present attitudes toward these activities and by examining how and why they have changed.

VPA 3521 Introduction to Art I
The student will be able to recognize and identify the various forms of the plastic arts. He will be able to trace the development of art from prehistoric times through the Middle Ages. Learning method: seminar. Module is offered in English and Spanish.

VPA 3522 Introduction to Art II
The student will be able to trace the development of art from the Renaissance to the modern world. Learning method: seminar. Module is offered in English and Spanish.

VPA 3523 Introduction to Art III
Choice of seminars, to be announced during registration periods, dealing with particular art themes, schools, movements, forms, techniques, and painters. Learning method: seminar. Module is offered in English and Spanish.
VPA 3524 Introduction to Art IV 1.5 credits
Prerequisite: None for new seminars, VPA 023 Introduction to Art III for sequential seminars or the consent of the instructor.
Continuation of VPA 3523 Introduction to Art III or choice of new seminars to be announced during registration periods. Learning method: seminar. Module is offered in English and Spanish.

VPA 3531 Applied Art I 1.5 credits
The student will be able to master basic techniques in the arts of sculpture, drawing, and painting. Learning method: seminar. Module is offered in English and Spanish.

VPA 3532 Applied Art II 1.5 credits
Prerequisite: VPA 3531 Applied Art I or consent of the instructor.
Continuation of VPA 3531 Applied Art I. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3533 Applied Art III 1.5 credits
Prerequisites: VPA 3531, 3532 Applied Art I, II or the consent of the instructor.
The student will be able to master more advanced techniques in the arts of sculpture, drawing and painting. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3534 Applied Art IV 1.5 credits
Prerequisites: VPA 3531, 3532, 3533 Applied Art I, II, III or the consent of the instructor.
Continuation of VPA 3533 Applied Art III. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3535 Applied Art V 1.5 credits
Prerequisites: VPA 3531, 3532, 3533, 3534 Applied Art I, II, III, IV or the consent of the instructor.
The student will be able to complete an independent project in the plastic arts. Learning method: independent workshop. Module is offered in English and Spanish.

VPA 3536 Applied Art VI 1.5 credits
Prerequisite: VPA 3535 Applied Art V.
Continuation of VPA 3535 Applied Art V. Learning method: independent workshop. Module is offered in English and Spanish.

VPA 3537 Art Field Experience I 1 credit
The student will attend museums, galleries, and exhibitions, while fulfilling
particular criteria established by the instructor. Learning method: independent study. Module is offered in English and Spanish.

**VPA 3538 Art Field Experience II** 1 credit

Prerequisite: VPA 3537 Art Field Experience I.

Continuation of VPA 3537 Art Field Experience I. Learning method: independent study. Module is offered in English and Spanish.

**VPA 3551 Introduction to Music I** 1.5 credits

The student will be able to recognize and identify major concepts of music theory and to train the ear to listen to component parts. Learning method: seminar. Module is offered in English and Spanish.

**VPA 3552 Introduction to Music II** 1.5 credits

Prerequisite: VPA 3551 Introduction to Music I or the consent of the instructor.

The student will be able to trace the history of musical development from ancient times to the present. Learning method: seminar. Module is offered in English and Spanish.

**VPA 3553 Introduction to Music III** 1.5 credits

Choice of seminars, to be announced during registration periods, dealing with particular music topics, themes, movements, forms, composers, or techniques. Learning method: seminar. Module is offered in English and Spanish.

**VPA 3554 Introduction to Music IV** 1.5 credits

Prerequisites: None for new seminar, VPA 3553 Introduction to Music III for sequential seminars or the consent of the instructor.

Continuation of VPA 3553 Introduction to Music III or choice of new seminars to be announced during registration periods. Learning method: seminar. Module is offered in English and Spanish.

**VPA 3561 Applied Music I** .5 credit or more

The student will be able to master basic musical techniques. Particular instruments and specialized instructions to be announced during registration periods. Learning methods include seminar, coaching, and independent study. Module is offered in English and Spanish.

**VPA 3562 Applied Music II** .5 credit or more

Prerequisites: VPA 3561 Applied Music I or consent of instructor.

Continuation of VPA 3561 Applied Music I. Learning methods include seminar, coaching and independent study. Module is offered in English and Spanish.
VPA 3563 Applied Music III .5 credit or more
Prerequisites: VPA 3562 Applied Music II or consent of the instructor.
Continuation of VPA 3562 Applied Music II. Learning methods include seminar, coaching and independent study. Module is offered in English and Spanish.

VPA 3564 Applied Music IV .5 credit or more
Prerequisite: VPA 3563 Applied Music III or consent of the instructor.
Continuation of VPA 3563 Applied Music III. Learning methods include seminar, coaching, and independent study. Module is offered in English and Spanish.

VPA 3569 Music Field Experience I 1 credit
The student will attend concerts, recitals, operas, etc., while fulfilling particular criteria established by the instructor. Learning method: independent study. Module is offered in English and Spanish.

VPA 3570 Music Field Experience II 1 credit
Prerequisite: VPA 3569 Music Field Experience I.
Continuation of VPA 3569 Music Field Experience I. Learning method: independent study. Module is offered in English and Spanish.

VPA 3581 Introduction to Theatre I 1.5 credits
The student will be able to identify and analyze the styles, forms, and works of major playwrights and be able to trace the development of the theatre from the Greeks to the Renaissance. Learning method: seminar. Module is offered in English and Spanish.

VPA 3582 Introduction to Theatre II 1.5 credits
Continuation of VPA 3581 Introduction to Theatre I, tracing the development of the theatre from the Renaissance to the present. Learning method: seminar. Module is offered in English and Spanish.

VPA 3583 Introduction to Theatre III 1.5 credits
Choice of seminars, to be announced during registration periods. The student will be able to identify and analyze particular theatre periods, playwrights, dramatic characters, and forms. Learning method: seminar. Module is offered in English and Spanish.

VPA 3584 Introduction to Theatre IV 1.5 credits
Prerequisites: None for new seminars; VPA 3583 Introduction to Theatre III for sequential seminars or the consent of the instructor.
Continuation of VPA 3583 Introduction to Theatre III or new seminar to be announced during registration periods. Learning method: seminar. Module is offered in English and Spanish.
VPA 3591 Applied Theatre I 1.5 credits
The student will be able to master the basic techniques of acting and/or production. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3592 Applied Theatre II 1.5 credits
Prerequisite: VPA 3591 Applied Theatre I or consent of the instructor.
Continuation of VPA 3591 Applied Theatre I. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3593 Applied Theatre III 1.5 credits
Prerequisites: VPA 3591, 3592 Applied Theatre II, III or the consent of the instructor.
The student will be able to master advanced techniques of acting and/or production. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3594 Applied Theatre IV 1.5 credits
Prerequisites: VPA 3591, 3592, 3593 Applied Theatre I, II, III or the consent of the instructor.
Continuation of VPA 3593 Applied Theatre III. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 3597 Theatre Field Experience I 1 credit
The student will attend dramatic plays, musicals, operas, ballets, and other live, current theatrical performances, as well as theater plants and exhibitions, while fulfilling particular criteria established by the instructor. Learning method: independent study. Module is offered in English and Spanish.

VPA 3598 Theatre Field Experience II 1 credit
Prerequisite: VPA 3597 Theatre Field Experience I.
Continuation of VPA 3597 Theatre Field Experience I. Learning methods include seminar and workshop. Module is offered in English and Spanish.

VPA 1501 Speech I 1 credit
The student will be able to master the basic techniques of speech; the emphasis is on relaxation, audience analysis, and impromptu speaking. Learning methods include seminar and workshop.

VPA 1502 Speech II 1 credit
Prerequisite: VPA 1501 Speech I or the consent of the instructor.
Continuation of VPA 1501 Speech I. The emphasis is on extemporaneous speaking. Learning methods include workshop and seminar.
VPA 3261  Applied Photography I  1.5 credits
Prerequisite: Consent of instructor.
The student will be able to operate a 35mm camera and exposure meter, to develop black and white film which he has exposed, to make contact prints, and to print enlargements. Learning methods include seminar and workshop.

VPA 3262  Applied Photography II  1.5 credits
Prerequisite: Consent of instructor.
The student with previous experience in picture taking and processing will be able to use negatives which he has already generated in performing contact printing, editing, enlarging, and photo finishing. Learning methods include seminar and workshop.

VPA 3263  Applied Photography III  1.5 credits
Prerequisite: Consent of instructor.
The student with previous photographic experience will be able to plan and execute a picture story. He will be able to identify the methods of other photo-journalists by viewing published picture stories and books, and by discussing the work of his fellow photographers in class. Learning methods include seminar and workshop.

VPA 3264  Applied Photography IV  1.5 credits
Prerequisite: Consent of instructor.
The student will expand a short picture story into a cross-discipline project, including text and in-depth picture coverage. This module can be undertaken for additional credit in an area other than visual and performing arts. Learning methods include independent study and seminar.
HEALTH CORE

The health core curriculum serves to introduce students to the entire range of educational experiences within the health field by offering an overview of basic health concepts (common to all of the health professions) derived from the natural (biological), the behavioral, and the social sciences. The health core curriculum relies heavily on developing guided learning experiences which are meaningful to all individuals in the health professions as they carry out their individual but related responsibilities. Emphasis is placed on the human relations skills essential to effective performance in the health professions. The curriculum is organized around three major health-related components—scientific knowledge, attitudinal concepts, and behavioral concepts.

Learning strategies available to the student include lecture-discussion, tutorials, seminars, films, audio-tapes, graphic displays, laboratory experience, independent study, field experience, and group projects.

Health core offerings are open to all health sciences and arts and sciences students.

HLT 6501 Foundations of Health Science 1 credit
The student will be introduced to an overview of the health field, the concept of the health team, and community health agencies. He will explore the cultural, psychological, sociological, and physiological aspects of basic health concepts. Module is offered in English and Spanish.

HLT 6502-6503 Interpersonal Relations and Teamwork 1.5 credits each — Parts A and B
The student will demonstrate his knowledge and use of various interpersonal skills in the area of human relations and patient care by participating in small T-groups, role playing, and lecture-demonstration. The student will also identify and analyze certain psychological concepts necessary to understand the factors of patient behavior. Modules are offered in English and Spanish.

HLT 6504 Medical Terminology 1 credit
The student will demonstrate a clear understanding of medical language, including word construction, definition, and use of terms related to all areas of medical science such as human anatomy and physiology and disease classification.
HLT 6505  Laboratory Skills  
2 credits  
The student will demonstrate his understanding of fundamental principles underlying patient care. He will be provided with an opportunity to demonstrate in the college laboratory the basic skills needed in the delivery of health services.

HLT 6506  Contemporary Health Issues — Part I  
1.5 credits  
The student will examine important current health problems. The student entering this module is expected to gain an understanding of the decision-making process regarding health, some knowledge of statistical terms, and the spread and control of communicable diseases. Module is offered in English and Spanish.

HLT 6507  Contemporary Health Issues — Part II  
1.5 credits  
Prerequisite: HLT 6506 Contemporary Health Issues — Part I.  
A continuation of Contemporary Health Issues — Part I. In this module, the student examines many of the problems of health and disease confronting today's urban resident, with particular emphasis on those problems created by the environment. The student also analyzes health problems where the individual's attitudes and habits play a critical role in his own health. Module is offered in English and Spanish.

HLT 6508  Mental Health I  
1.5 credits  
Prerequisites: HLT 6502-6503 Interpersonal Relations and Teamwork—Parts A and B.  
The student will demonstrate his knowledge of the field of mental health through various tests, written reports, and participation in class discussion. He will review the history of the mental health movement, personality development, the factors and theories of neurosis and psychosis, the prevention of mental illness, the determinants of mental health, and hospital and agency care.

HLT 6509  Mental Health II  
1 credit  
Prerequisite: HLT 6508 Mental Health I.  
This module is a continuation of HLT 6508 Mental Health I.

HLT 6510  Human Sexuality  
2 credits  
The student will demonstrate his understanding of the dynamics of human sexuality by exploring basic knowledge and attitudes related to sexual behavior. The student will be required to demonstrate his knowledge of sexual anatomy and physiology, the concepts of intersex, family planning, and the changing concepts of masculinity and femininity.

HLT 6511  Health Problems of the Young Child  
2 credits  
The student will examine the health needs and problems of young
children. He will analyze the role played by the home and school in the physical development of the child. Common disorders and diseases of childhood and the principles of nutrition related to meal planning for young children will be examined.

HLT 6514 Nutrition 2 credits
The student will demonstrate a clear understanding of the meaning of nutrition and its relation to health. The student will analyze and identify the different kinds of nutrients, their chemical nature, and main sources. The student will also demonstrate his knowledge of the specific diets for different age groups and various pathological conditions. Module offered in English and Spanish.

HLT 6516 Psycho-Social Aspects of Patient Care 2 credits
Prerequisites: HLT 6502-6503 Interpersonal Relations and Team work — Parts A and B, or approval of instructor.
The student will demonstrate his knowledge of psycho-social interaction between patient and health worker. Emphasis will be placed on a maximum involvement in an unstructured, dynamic, sensitivity-training experience within a small group. Learning methods include role playing, video-taping of small group discussions, films, lecture-discussion.

HLT 6520 Poverty and Health 2 credits
The student will be required to read, analyze in writing, and discuss selected material concerning health and poverty. This module is designed to provide the student with an understanding of the nature of poverty, economic and social differences in the prevention of illness and the maintenance of health, differences in physical and mental health, varieties of treatment of the sick, differences in readjustment and rehabilitation of the patient, and current efforts to deal with poverty and ensure proper medical care.

HLT 6521 Environmental Health Science 2 credits
The student will be able to identify the forces affecting the environment and examine ways to protect it. The student will identify past, present, and potential environmental health problems, analyze community implications, and identify possible solutions.

DENTAL HYGIENE

The dental hygiene program at Hostos Community College is designed to prepare graduates for immediate employment in the field of dental hygiene and to provide opportunities for career mobility. Candidates for the program are selected from among recent high school graduates and
persons already employed in the dental field. It is recommended that all candidates for the dental hygiene program have a background in chemistry and biology. The curriculum is a two-and-one-half-year program consisting of ten eight-week cycles. Graduates are eligible for transfer to senior colleges with junior-year status where they may earn a bachelor’s degree in health education, dental hygiene education, or public health and administration.

Students in the dental program are required to enroll in all modules in the prescribed sequence. Credits are earned by class attendance (to include scheduled lectures, laboratory sessions, and clinical sessions) and successful completion of prescribed milestone tests.

Program of studies leading to associate in applied science (A.A.S.) degree in dental hygiene.

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td>Biology</td>
<td>8</td>
</tr>
<tr>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1.5</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Health Core</td>
<td>8</td>
</tr>
<tr>
<td>Technical modules in dental program</td>
<td>29.5</td>
</tr>
<tr>
<td>Speech</td>
<td>2</td>
</tr>
</tbody>
</table>

DEN 5301 Dental Terminology 1 credit

Prerequisite: HLT 6504 Medical Terminology.

The student will demonstrate his ability to read, interpret, and record with understanding dental information and materials in the supervision and delivery of dental care.

DEN 5302 Dental Auxiliary Practice 4 credits

Prerequisite: HLT 6502 Interpersonal Relations and Teamwork—Part A.

The student will demonstrate in the clinic the following techniques or procedures related to the role of the auxiliary in dental practice: sterilization, radiology, dental materials, dental specialties, emergencies and clinical chairside assisting. Learning methods include lecture-discussion, seminar, clinical experience.

DEN 5303-5304 Oral Anatomy and Physiology 3 credits

Prerequisite: DEN 5301 Dental Terminology.

The student will identify, describe, and locate the teeth, bones of the skull, muscles of mastication, tongue, face, pharynx; glands of the oral cavity, cranial nerves and blood vessels of the head and neck. Learning methods include lecture-discussion, tutorial.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEN 5305</td>
<td>X-ray</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>The student will demonstrate a knowledge of radiation production, protection, techniques of exposure, processing, mounting, and the anatomical landmarks used in radiology.</td>
<td></td>
</tr>
<tr>
<td>DEN 5306</td>
<td>Practice Management</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DEN 5301 Dental Terminology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will demonstrate general office administration and patient management in a dental office.</td>
<td></td>
</tr>
<tr>
<td>DEN 5307</td>
<td>Preclinical Dental Hygiene</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DEN 5303-5304 Oral Anatomy and Physiology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will interpret and demonstrate the procedures relative to the dental hygiene appointment and preventive dental care.</td>
<td></td>
</tr>
<tr>
<td>DEN 5308</td>
<td>Clinical Dental Hygiene I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DEN 5307 Preclinical Dental Hygiene.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will demonstrate clinical skills in the areas of dental prophylaxis, charting, and radiology. Learning methods include clinical experience.</td>
<td></td>
</tr>
<tr>
<td>DEN 5309</td>
<td>Clinical Dental Hygiene II</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DEN 5307 Preclinical Dental Hygiene.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will perform the oral prophylaxis, expose and process X-rays, apply fluoride, chart, and give patient instruction. Learning methods include clinical experience.</td>
<td></td>
</tr>
<tr>
<td>DEN 5310</td>
<td>Oral Histology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DEN 5303-5304 Oral Anatomy &amp; Physiology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will explain or recognize terms related to the development and structural characteristics of the head, face oral cavity, and teeth.</td>
<td></td>
</tr>
<tr>
<td>DEN 5311</td>
<td>Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prerequisites: DEN 5317-5318 Oral Pathology.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will list the following characteristics of drugs used in the clinical practice of dental hygiene and dentistry: action and use, methods of administration, and toxicology.</td>
<td></td>
</tr>
<tr>
<td>DEN 5312</td>
<td>Clinical Dental Hygiene Lecture</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: DEN 5307 Preclinical Dental Hygiene.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student will demonstrate advanced techniques of dental hygiene practice.</td>
<td></td>
</tr>
</tbody>
</table>
DEN 5313-5314 Periodontology  1 credit
Prerequisite: DEN 5310 Oral Histology.
The student will list diseases and their symptoms of the gingival and periodontal tissues. The student will describe prevention, preservation, and cures as they relate to these tissues.

DEN 5315-5316 Dental Health Education  2 credits
The student will demonstrate his knowledge of the methods and materials used in teaching dental health to individuals and groups. The student will be required to prepare lesson plans and presentations. Learning methods include lecture-discussion, independent study, seminar, field experience.

DEN 5317-5318 Oral Pathology  2 credits
Prerequisite: DEN 5310 Oral Histology.
The student will state and explain terms related to general and oral pathologic conditions, etiologies of diseases, inflammation, infection, immunity, and degenerative processes.

DEN 5319 Community Dental Hygiene  2 credits
Prerequisite: HLT 6502-6503 Interpersonal Relations and Teamwork — Parts A and B.
The student will provide dental health service to the community and establish personal relationships with people treated outside a clinical situation. Learning methods include seminar, field experience, and lectures.

EARLY CHILDHOOD EDUCATION

The rapid expansion of early childhood programs has created a need for personnel trained in the philosophy and methodology of working with young children. The program of early childhood education at Hostos Community College is designed to prepare students with the background, knowledge, and skills for employment in schools, day care centers, and other agencies providing programs for infants and young children.

The course of study combines classroom instruction with workshops, seminars, and field experiences. Students have an opportunity to apply theoretical knowledge through firsthand experiences in the methods and materials of instruction and by observation and participation in early childhood programs.

For students who are planning to continue their education, an associate of arts degree (12-credit early childhood elective concentration) is offered. For students planning to delay further study, the program leading to the associate of applied science degree is offered.
Learning methods available to the student include lecture-discussion, independent study in early childhood laboratory, and workshop experience.

ECE 6801 Programs for Young Children 1.5 credits
The student will demonstrate his knowledge of the basic objectives of early childhood education and the various programs for young children that are provided by public and private agencies. Module is offered in English and Spanish.

ECE 6802 Foundations in Early Childhood Education 1.5 credits
Prerequisite or corequisite: ECE 6801 Programs for Young Children.
The student will demonstrate his familiarity with the basic philosophy, methods, and materials of early childhood education, including theory, curriculum, program planning equipment, student space, and school and community services. Opportunities for independent study in early childhood laboratory as well as lecture-discussions will be offered. Module is offered in English and Spanish.

Curriculum In Early Childhood Education I
ECE 6803 Language Arts for Young Children—Part A 1 credit
Prerequisites or corequisites: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.
The student will be able to plan and organize language arts activities in early childhood education. The student will demonstrate his familiarity with children's literature, listening activities for young children, and reading readiness skills. The student will be able to effectively read, tell, and dramatize children's stories, and participate in language games and reading readiness activities.

ECE 6804 Language Arts for Young Children—Part B 1 credit
Prerequisite or corequisite: ECE 6803 Language Arts for Young Children—Part A.
This module is a continuation of ECE 6803 Language Arts for Young Children Part A.

ECE 6805 Social Studies for Young Children 1 credit
Prerequisite or corequisite: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.
The student will be able to plan and organize social studies activities in early childhood programs. The student will demonstrate his familiarity with the resources and methods used in developing social studies concepts through the preparation of materials and activities.
Curriculum In Early Childhood Education II

ECE 6806-6807 Creative Art Activities—Parts A and B 1 credit each
Prerequisite or corequisite: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.

The student will demonstrate his ability to organize creative art activities for young children. The student will display dexterity with such media as paint, clay, paper and wood, and an understanding of the methods of introducing young children to the values of these materials. Special learning techniques include workshop experience.

Curriculum In Early Childhood Education III

ECE 6808-6809 Music and Rhythmic Activities—Parts A and B 1 credit each
Prerequisite or corequisite: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.

The student will be able to plan and organize creative music and rhythmic activities for young children. The student will demonstrate an understanding of terms related to the fundamentals of music theory and the techniques needed in introducing singing, playing, moving, and listening activities in early childhood programs. Special learning methods include workshop experience.

Curriculum in Early Childhood Education IV

ECE 6810 Science for Young Children 1 credit
Prerequisite or corequisite: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.

The student will be able to plan and organize science activities in early childhood programs. The student will be able to prepare materials used to present introductory science concepts to young children.

ECE 6811 Mathematics for Young Children 1 credit
Prerequisite or corequisite: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.

The student will be able to plan and organize mathematics activities and materials in early childhood programs.

ECE 6812 Field Experience in Early Childhood Education I 1 credit
Prerequisites: ECE 6801 Programs for Young Children, ECE 6802 Foundations in Early Childhood Education.

The student will observe early childhood programs such as day care
centers, prekindergartens, kindergartens and infant care programs. The student will discuss these programs in weekly seminars.

**ECE 6813 Field Experience in Early Childhood Education II** 1 credit
Prerequisite or corequisite: ECE 6812 Field Experience in Early Childhood Education I
The student will observe and participate in an assigned early childhood program. The student will discuss his observations in weekly seminars.

**ECE 6814 Field Experience in Early Childhood Education III** 1 credit
Prerequisite: ECE 6813 Field Experience in Childhood Education II.
The student will participate in an early childhood program. The student will discuss application of theoretical knowledge in a classroom situation at scheduled seminars.

**ECE 6815 Field Experience in Early Childhood Education IV** 1 credit
Prerequisite: ECE 6814 Field Experience in Early Childhood Education III.
The student will demonstrate in an early childhood program the principles and skills introduced during the entire childhood education sequence. Special learning methods include field experience and seminars.

**MEDICAL LABORATORY TECHNOLOGY**

The medical laboratory technology program provides training for the student in the basic skills required for a career in medical technology.

Students who wish to enter this program should have completed high school courses in biology, chemistry, and mathematics through intermediate algebra. The student will be required to make up courses in those areas in which he or she is found to be lacking.

In addition to the courses listed for this program, which are offered at Hostos, the medical technology student will study and work 1,000 hours in an approved hospital laboratory under the supervision of Hostos faculty and hospital laboratory personnel.

Upon completion of the required courses and the hospital training, the student will receive the associate in applied science (A.A.S.) degree and will be eligible to receive a New York City Health Department license as a certified laboratory technician.

Graduates of the program will be eligible for transfer to a senior college within CUNY or to other colleges which offer bachelor (B.A.) degrees in medical technology or other sciences.

Program of studies leading to the A.A.S. degree in medical laboratory technology.
**Communication Skills**

**English**

6 credits

**Natural Sciences**

BIO 3701 Basic Concepts Used in Biology, BIO 3711, 3705, 3706 Systems of the Human Body I, II, III

8 credits

CHE 4001, 4002, 4003, 4004 General Chemistry I, II, III, IV

8 credits

**Mathematics**

MAT 1631, 1632 Introductory College Mathematics I, II

3 credits

MAT 1633, 1634 Introductory College Mathematics III, IV, or MAT 1681, 1682 Introduction to Probability and Statistics I, II

3 credits

**Health Core**

HLT 6501 Foundations of Health Science

1 credit

HLT 6502, 6503 Interpersonal Relations and Teamwork — Parts A, B or HLT 6506, 6507 Contemporary Health Issues I, II

3 credits

HLT 6504 Medical Terminology

1 credit

Physical Education/Athletics

1 credit

Electives may be selected from arts and sciences programs.

9 credits

**Medical Laboratory Technology Courses**

MLT 5920, 5921 Science Survey for MLT Students I, II

1.5 credits each

MLT 5901, 5902 Routine Laboratory I, II

4 credits

MLT 5903, 5904 Clinical Chemistry I, II

4 credits

MLT 5906, 5907 Histology I, II

4 credits

MLT 5908, 5909 General Microbiology I, II

4 credits

MLT 5910, 5911 Medical Microbiology I, II

4 credits

MLT 5912 Hospital Laboratory Practice

0

66 credits

MLT 5920, 5921 Science Survey for MLT Students I, II

The student will be introduced to the basic concepts of medical laboratory science. He will learn to use basic laboratory instruments such as the microscope and the balance. The student will read, analyze, and outline college science texts.

MLT 5901, 5902 Routine Laboratory I, II


The student will demonstrate the use of the microscope in identifying and counting blood cells. The student will perform hemoglobin and hematocrit determinations by standard methods, standard urine analysis tests and blood-banking techniques. Lecture-discussion two hours, laboratory four hours.
MLT 5903, 5904 Clinical Chemistry I, II 2 credits each
Prerequisites: BIO 3706 Systems of the Human Body III, CHE 4004 General Chemistry IV, MAT 1633 Introductory College Mathematics II.

The student will be required to perform standard current biochemical determinations using both manual techniques and automated procedures. Lecture-discussion two hours, laboratory four hours.

MLT 5906, 5907 Histology I, II 2 credits each
Prerequisite: BIO 3706 Systems of the Human Body III.

The student will be required to process tissue in paraffin and frozen sections for microscopic examination. The student will study and identify cells, tissues, and organs from human and animal sources. Lecture-discussion two hours, laboratory four hours.

MLT 5908, 5909 General Microbiology I, II 2 credits each
Prerequisite: BIO 3706 Systems of the Human Body III.

The student will be required to describe and classify the main groups of micro-organisms; isolate and cultivate micro-organisms in the laboratory. The student will learn to practice sterile techniques and prepare micro-organisms for microscopic examination. Lecture-discussion two hours, laboratory four hours.

MLT 5910, 5911 Medical Microbiology I, II 2 credits each
Prerequisite: MLT 5909 General Microbiology II.

The student will be required to examine, describe, and classify micro-organisms of medical importance. The student will cultivate and identify the organisms in the laboratory using standard methods of identification. Lecture-discussion two hours, laboratory four hours.

MLT 5912 Hospital Laboratory Practice 0 credit
Prerequisites: BIO 5906 Systems of the Human Body III, CHE 4004 General Chemistry IV, MLT 5902 Routine Laboratory II, MLT 5921 Science Survey for MLT Students II.

Corequisites: MLT 5903 Clinical Chemistry I, MLT 5906 Histology I, MLT 5908 General Microbiology I.

The student will be required to study and work in a hospital laboratory approved by the New York City Department of Health for a period of 1,000 hours.

MEDICAL SECRETARIAL SCIENCE

The career-oriented medical secretarial science curriculum offers the interested student an opportunity to acquire the typing, shorthand, and
transcription skills and work attitudes essential for successful secretarial employment within the allied health field. The program is planned to include additional important learning experiences within other relevant health core and arts and sciences areas of study.

This curriculum can best be completed over a period of three years. Students must meet the performance standards of diagnostic examinations before being registered into certain modules. Students are expected to attend all classes. Credits in each module are earned by successfully completing the stated success criteria of the module. Credits for previous experience will be given on the basis of proficiency examinations. Students will be invited to participate in the Medical Secretarial Science Club and various departmental activities. Upon completion of the program, students will be prepared either for productive secretarial employment within the allied health field or for transfer to a four-year college.

MES 5601 Typing I-A  
1 credit

The student will operate the typewriter by touch method, manipulating its mechanical controls efficiently. He will correctly arrange and type horizontal centering and elementary production problems. The student must demonstrate his ability to type 20 words per minute for one minute with a maximum error allowance of two at least twice during the module in order to be registered into Typing I-B. Credit will not be given for Typing I-A until all the success criteria for Typing I-B have been met.

MES 5602 Typing I-B  
1 credit

Prerequisite: MES 5601 Typing I-A or equivalent skill as demonstrated on a proficiency test.

The student will arrange and correctly type various styles of mailable business letters, envelopes, outlines, basic manuscripts, and basic tabulations. The student must demonstrate his ability to type 30 words per minute for five minutes with not more than three errors on straight-copy material, or 35 words per minute for five minutes with not more than five errors on straight-copy material, a minimum of three times during a module. Upon completing the module, the student must demonstrate a production rate of 20 words per minute on mailable copy.

MES 5603 Intermediate Typing II-A  
1 credit

Prerequisite: MES 5602 Typing I-B or equivalent skill as demonstrated on a proficiency test.

The student will demonstrate his ability to type detailed and varied business letters and two-page manuscripts with footnotes and bibliographies. The student must type a carbon copy for all letters and memos. He will participate in an original research paper project which will be coordinated with the English department. The student must type 35 words per minute for five minutes with no more than three errors on straight-copy material at least three times during the module or type 40 words per minute for five minutes with not more than five errors on
straight-copy material at least three times during the module. The student will be required to increase his production rate to 23 words per minute on mailable copy. Credit will not be given for Intermediate Typing II-A until the success criteria of Intermediate Typing II-B have been met.

**MES 5604 Intermediate Typing II-B**

Prerequisite: MES 5603 Intermediate Typing II-A or equivalent typing skill as demonstrated by a proficiency test.

MES 5604 Intermediate Typing II-B is a continuation of MES 003 Typing II-A. The student will demonstrate his knowledge and use of production techniques by arranging and correctly typing two-page memos with additional notations, lined tables, and various business forms. In this module the student will begin typing medical letters and reports. The student will be required to type 40 words per minute with no more than three errors for five minutes on straight-copy material at least three times during the module, or type 45 words per minute with not more than five errors on straight-copy material at least three times during the module. The student will be required to demonstrate a production rate of 25 words per minute on mailable copy.

**MES 5605 Advanced Typing III-A**

Prerequisite: MES 5604 Intermediate Typing II-B or equivalent typing skills as demonstrated on proficiency test.

The student will demonstrate his ability to type 45 words per minute with no more than three errors for five minutes on straight-copy material at least three times during the module, or type 50 words per minute with no more than five errors for five minutes on straight-copy material at least three times during the module. The student will be required to demonstrate his ability to produce 28 words per minute on mailable copy at the completion of this module. The student will review production techniques by typing advanced letters, memos, tabulations, and reports. The student will arrange and type accounting and legal forms. The student will demonstrate his competence in typing medical letters, reports, basic medical forms, application letters, resumes, and follow-up letters in preparation for employment. Credit will be given for MES 5605 Advanced Typing III-A upon completion of the success criteria of MES 5606 Advanced Typing III-B.

**MES 5606 Advanced Typing III-B**

Prerequisite: MES 5605 Advanced Typing III-A or equivalent typing skill as demonstrated on a proficiency test.

Students must demonstrate the ability to type at a rate of 50 words per minute with no more than three errors for five minutes on straight-copy material at least three times during the module, or type 55 words per minute with no more than five errors on at least three straight-copy timings given during the module. The student must demonstrate a
production rate of 30 words per minute on mailable copy at the completion of the module. Students will review production techniques by typing letters, memos, tabulation, and reports. The student will type various medical forms and reports such as medicare forms, narcotics reports, and patient accounts. The student will continue to type medical letters, reports, and basic forms.

MES 5607 Survey of Basic Typing Skills 1 credit
Prerequisite: The student must have previous typing experience and must take a diagnostic typing test to determine typing proficiency. (Students who meet the success criteria of the diagnostic typing test will be excused from this module and placed in the typing module which best suits their typing proficiency level.)

The student will be given a review of the keyboard with emphasis on drills and timings to improve speed, accuracy, and basic production techniques. The student must type 25 words per minute for one minute with a maximum error allowance of two at least twice during the module in order to register into Typing I-B. Upon completing this module, the student may take proficiency tests for advanced typing modules. Credit will be given for this module upon completion of Typing I-B or its equivalent.

MES 5611 Machine Transcription I-A (Credit determined on basis of contact hours)
Prerequisite: MES 5604 Intermediate Typing II-B or equivalent typing skill as demonstrated on proficiency test.
Corequisite: MES 5605 Advanced Typing III-A; if student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The student will develop skill at transcribing letters, memos, and reports, containing terminology from such fields as transportation, advertising, publishing, government, education, banking, and insurance. The student will demonstrate his English skills and his business vocabulary by spelling, defining, writing, and punctuating materials selected from and relating to a machine transcription workbook. The student will be required to demonstrate his ability to transcribe 22 words per minute on mailable copy before registering for MES 5612 Machine Transcription I-B. Credit for MES 5611 Machine Transcription I-A will be given upon completion of MES 5626 Machine Transcription I-B.

MES 5626 Machine Transcription I-B (credit determined on basis of contact hours)
Prerequisite: MES 5611 Machine Transcription I-A or equivalent transcription skills as demonstrated by a proficiency test.
Corequisite: MES 5606 Advanced Typing III-B; if student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The student will demonstrate transcription skills by transcribing letters, memos, and reports containing terminology from such fields as data processing, law, science, engineering, social service, welfare, metals industry, and medicine. The student will demonstrate his English skills and business vocabulary by spelling, defining, writing, and punctuating material selected from and relating to machine transcription. The student will be required to transcribe 25 words per minute at the end of the course.

MES 5648 Medical Machine Transcription II-A  
(credit determined on basis of contact hours)

Prerequisite: MES 5626 Machine Transcription I-B or equivalent skill as determined by a proficiency test.

Corequisite: MES 5657 Medical Typing and Laboratory Experience IV-A, HLT 6504 Medical Terminology, BIO 3701 Basic Concepts Used in Biology, BIO, 3711, 3705, 3706 Systems of the Human Body I, II, III.

The student will demonstrate the ability to transcribe from both Dictaphone and Edison Edisettes medical histories, summaries, treatment forms, and a variety of other medical material relating to such specialties as neurology, gastroenterology, pediatrics, and endocrinology. A minimum transcription rate of 28 words per minute must be achieved for module completion. Credit for this module will be given upon completion of success criteria for MES 5649 Machine Transcription II-B.

MES 5649 Medical Machine Transcription II-B  
(credit determined on basis of contact hours)

Prerequisite: MES 5648 Medical Machine Transcription II-A or equivalent skill as determined by a proficiency examination.

Corequisite: MES 5648 Medical Typing and Laboratory Experience IV-B.

The student will demonstrate the ability to transcribe from both Dictaphones and Edison Edisettes medical histories, summaries, treatment forms, and a variety of other medical material relating to such specialties as chemotherapy, cardiology, dermatology, urology, and others at a rate of 30 words per minute. Upon meeting the success criteria (30 words per minute) of this course, the student will receive credit for Medical Machine Transcription II-A and II-B.

MES 5621 Elementary Shorthand I-A (Gregg)  
2 credits

Prerequisite: A satisfactory score on a diagnostic English test, consisting of reading, spelling, word choice, proofreading, sentence syntax, knowledge of similarly spelled words, and punctuation.
Corequisite: If student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The student must meet the success criteria of dictated and transcribed shorthand notes covering the principles and brief forms read and dictated in lessons 1-24 of the textbook before registering in Shorthand 1-B. The student will be able to answer correctly 90 percent of questions on shorthand theory and achieve 93 percent accuracy on transcription. The student will demonstrate his business vocabulary and transcription skills by reading, defining, spelling, writing, and punctuating material selected from and related to lessons 1-24 of the shorthand textbook. Credit will not be given until module requirements for Shorthand 1-B have been met.

MES 5622 Elementary Shorthand 1-B (Gregg) 2 credits

Prerequisite: Students must complete MES 5621 Shorthand 1-A or equivalent shorthand skill demonstrated in proficiency tests.

Corequisite: If student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The student will demonstrate knowledge of shorthand theory, read fluently from his own dictated shorthand notes, correctly punctuate all sentences, and exhibit his business vocabulary, transcription skills, and English skills by reading, defining, spelling, writing, punctuating material selected from and related to the shorthand textbook beginning with lesson 25. When transcribing dictated shorthand theory words, brief forms, and phrases, both in connected-matter and word-list form, the student must meet the success criteria of 90 percent accuracy on outlines and 93 percent accuracy on transcription at least three times during the module. The student will write new material dictated at a rate of 50 words per minute for four minutes or at a rate of 60 words per minute for three minutes, and transcribe it with 93 percent accuracy at least three times during the module to receive credit. The student will receive credit if the success criteria is met in a combination of three takes of new material dictated at 50 to 60 words per minute.

MES 5628 Intermediate Shorthand and Transcription II-A (Gregg) 2 credits

Prerequisite: MES 5622 Elementary Shorthand 1-B or equivalent skills demonstrated in a proficiency test, MES 5602 Elementary Typing 1-B or equivalent skills demonstrated in a proficiency test.

Corequisite: MES 5604 Intermediate Typing II-A.

The student will demonstrate his knowledge of shorthand theory by meeting the success criteria of dictated and transcribed theory tests. He will exhibit his transcription skill by transcribing dictated shorthand notes at the typewriter. He will demonstrate his knowledge of written number forms, capitalization, proofreading, spelling, word usage, and other related
transcription skills in various nontyping activities. The student will exhibit his writing speed by taking new-matter dictation given at a beginning rate of 60 words per minute for varying lengths of time. The student must take new-matter dictation at 70 words per minute for three minutes (or a combination of both) and transcribe it with 93 percent accuracy at least three times during the module in order to be registered into MES 5629 Intermediate Shorthand and Transcription II-B. Credit will not be given for Intermediate Shorthand and Transcription II-A until the success criteria of Intermediate Shorthand and Transcription II-B have been met.

MES 5629 Intermediate Shorthand and Transcription II-B (Gregg) 2 credits
Prerequisite: MES 5628 Intermediate Gregg Shorthand and Transcription II-A or equivalent skills demonstrated in a proficiency test.
Corequisite: If the student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

MES 5629 Intermediate Shorthand and Transcription II-B is a continuation of Intermediate Shorthand and Transcription II-A. The student will demonstrate his knowledge of shorthand theory by meeting the success criteria of dictated theory tests which will be transcribed into correct English. The student will exhibit his increased writing speed by taking new-matter dictation beginning at 70 words per minute for varying lengths of time. To receive credit for this module, the student will be required to take new-matter dictation at 70 words per minute for five minutes a minimum of three times during the module, or take new-matter dictation at 80 words per minute for three minutes at least three times during the module (or a combination of both), transcribing the material with 93 percent accuracy. Students will demonstrate their ability in shorthand transcription by transcribing shorthand notes at the typewriter. Upon completion of this module credit will be given for both Intermediate Shorthand and Transcription II-A and II-B.

MES 5644 Medical Terminology for Advanced Shorthand and Transcription III-A (Gregg) 1 credit
Corequisite: MES 5605 Advanced Typing III-A, MES 040 Advanced Shorthand and Transcription III-A.

The student will demonstrate shorthand vocabulary in such medical specialties as cardiology, thoracic medicine, dermatology, and diabetes. The student will demonstrate this knowledge by reading from his own dictated medical notes; he will meet the success criteria of 90 percent accuracy on outlines and 93 percent accuracy on transcription; the student
will write new-matter medical dictation at speeds given in conjunction with MES 040 Advanced Shorthand and Transcription III-A. Credit for this module will be given upon meeting the success criteria of Medical Terminology for Advanced Shorthand and Transcription III-B.

**MES 5640 Advanced Shorthand and Transcription III-A (Gregg)** 2 credits


*Corequisite:* MES 5605 Advanced Typing III-A, MES 5644 Medical Terminology for Shorthand and Transcription III-A; if the student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The student will demonstrate his familiarity with business and medical vocabularies and fluency in taking dictation, beginning at 80 words per minute. The student will be required to take new-matter dictation at 80 words per minute for five minutes a minimum of three times during the module and transcribe it with 93 percent accuracy; or take new-matter dictation at 90 words per minute for three minutes a minimum of three times and transcribe it with 93 percent accuracy, or a combination of both, in order to register in MES 5641 Advanced Shorthand and Transcription III-B. Students will exhibit shorthand transcription skill on new-matter dictation containing medical vocabulary. The student will refine both typing and non-typing transcription skills. Credit will not be given for MES 5640 Advanced Shorthand and Transcription III-A until the success criteria of MES 5641 Advanced Shorthand and Transcription III-B have been met.

**MES 5641 Advanced Shorthand and Transcription III-B (Gregg)** 2 credits

*Prerequisite:* MES 5640 Advanced Shorthand and Transcription III-A or equivalent skills as demonstrated on a proficiency test.

*Corequisite:* MES 5606 Advanced Typing III-B, MES 5645 Medical Terminology for Advanced Shorthand and Transcription III-B.

The student will demonstrate an increased familiarity with business and medical vocabularies and increased fluency in taking dictation, beginning at 90 words per minute. The student will be required to take new-matter dictation at 90 words per minute for five minutes a minimum of three times during the module and transcribe it within 93 percent accuracy, or take new-matter dictation at 100 per words per minute a minimum of three times, or a combination of both, in order to meet module requirements. In shorthand transcription the student will exhibit transcription skill on new-matter dictation containing medical and business vocabulary. The student will continue to refine both typing and non-typing transcription skills.
MES 5642 Advanced Shorthand and Transcription III-C (Gregg) 1.5 credits
Prerequisite: MES 5641 Advanced Shorthand and Transcription III-B or equivalent skills as demonstrated in a proficiency test.
Corequisite: MES 5657 Medical Typing and Laboratory Experience IV-A, developmental skills in English if necessary.

During this module the student will take dictation and transcribe letters, conferences, hospital reports, and other materials relating to various medical specialties such as cardiology, thoracic medicine, endocrinology, urology, gynecology, and obstetrics. The student will be required to take new-matter dictation at 110 words per minute for three minutes a minimum of three times during the module and transcribe it with 93 percent accuracy, or a combination of both. A transcription rate of 28 words per minute must be attained. Credit for this course will be given upon completion of success criteria for MES 5643 Advanced Shorthand and Transcription III-D.

MES 5643 Advanced Shorthand and Transcription III-D (Gregg) 1.5 credits
Prerequisite: MES 5642 Advanced Shorthand and Transcription III-C or equivalent skills as demonstrated on a proficiency test.
Corequisite: MES 5658 Medical Typing and Laboratory Experience IV-B.

The student will demonstrate his ability to integrate the business and medical vocabularies learned in previous modules by taking office-style dictation and transcribing letters, conferences, reports, and other materials using terminology from various medical specialties such as neurology, gastroenterology, orthopedics, and mental health. The student will be required to take new-matter dictation at 120 words per minute a minimum of three times during the module, or dictation at 110 words per minute for five minutes, and transcribe it with 93 percent accuracy or a combination of both and transcribe it with 93 percent accuracy. A transcription rate of 30 words per minute must be attained in order to complete the module.

MES 5645 Medical Terminology for Advanced Shorthand and Transcription III-B
1 credit
Prerequisite: MES 5644 Medical Terminology for Advanced Shorthand and Transcription III-A, or equivalent skills demonstrated in a proficiency test.
Corequisite: MES 5641 Advanced Shorthand and Transcription III-B, MES 5606 Advanced Typing III-B; if the student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The student will demonstrate an increased shorthand vocabulary for such medical specialties as diabetes, urology, endocrinology, and mental health. The student will demonstrate this knowledge by reading and transcribing from his own notes; he will meet the success criteria of 90 percent accuracy on outlines and 93 percent accuracy on transcription; the student
will take and transcribe dictation given at varying lengths of speed for varying lengths of time in conjunction with MES 5641 Advanced Shorthand and Transcription III-B. Upon completion of success criteria for this module, credit will be given for Medical Terminology for Advanced Shorthand and Transcription III-A and III-B.

MES 5648 Medical Terminology for Advanced Shorthand and Transcription III-C 1 credit
Prerequisite: MES 5645 Medical Terminology for Advanced Shorthand and Transcription III-B, MES 5641 Advanced Shorthand and Transcription III-B.
Corequisite: MES 5642 Advanced Shorthand and Transcription III-C, MES 5657 Medical Typing and Laboratory Experience IV-A.

The student will demonstrate shorthand vocabulary for such medical specialties as gynecology and obstetrics, pediatrics, gastroenterology, and chemotherapy. The student will demonstrate this knowledge by reading and transcribing from his own notes; he will meet the success criteria of 90 percent accuracy on outlines and 93 percent accuracy on transcription. The student will take and transcribe dictation given at varying lengths of time in conjunction with MES 5642 Advanced Shorthand and Transcription III-C. Credit will be given for this upon completion of MES 5643 Medical Terminology for Advanced Shorthand and Transcription III-D.

MES 5647 Medical Terminology for Advanced Shorthand and Transcription III-D 1 credit
Prerequisite: MES 5646 Medical Terminology for Advanced Shorthand and Transcription III-C, MES 5642 Advanced Shorthand and Transcription III-C.
Corequisite: MES 5643 Advanced Shorthand and Transcription III-D, MES 5657 Medical Typing and Laboratory Experience IV-B.

The student will demonstrate a shorthand vocabulary for such medical specialties as orthopedics and neurology. The student will integrate all previously learned vocabulary by taking dictation and transcribing from his own notes; he will meet the success criteria of 90 percent accuracy on outlines and 93 percent accuracy on transcription. Dictation will be given in conjunction with MES 5643 Advanced Shorthand and Transcription III-D.

MES 5653 Medical Office Practice-A 1.5 credits
Prerequisite: MES 5606 Advanced Typing III-B, MES 5626 Machine Transcription I-B.
Corequisite: MES 5648 Medical Machine Transcription II-A, MES 5657 Medical Typing and Laboratory Experience IV-A.

The nonshorthand student will integrate typing and machine transcription skills with routine medical office knowledge and skills. The student will
demonstrate an awareness of activities that relate to patients which a secretary performs such as meeting the patient, answering the telephone, and making appointments. The student will demonstrate an understanding of the personality traits, attitudes, and work habits essential to the medical secretary. Learning methods include field trips to various hospitals and medical centers in the metropolitan area and opportunities to type actual medical forms and reports. Credit for MES 5653 Medical Office Practice-A will be given upon completion of MES 5654 Medical Office Practice-B.

**MES 5654 Medical Office Practice-B**

1.5 credits

**Prerequisite:** MES 5657 Medical Typing and Laboratory Experience IV-A, MES 5649 Medical Machine Transcription II-B.

**Corequisite:** MES 5657 Medical Typing and Laboratory Experience IV-B, MES 5649 Medical Machine Transcription II-B; if the student requires remedial work in English, he will be assigned to developmental skills modules in the English department.

The non shorthand student will integrate typing and machine transcription skills with routine medical office knowledge and skills by typing actual medical forms and reports obtained from local medical facilities. The student will demonstrate an understanding of activities relating to patients which a secretary performs. Learning methods include field trips to various hospitals and medical centers. The student will demonstrate an understanding of personality traits, attitudes, and work habits essential to the medical secretary.

**MES 5655 Medical Secretarial Practice-A**

1.5 credits

**Prerequisite:** HLT 6504 Medical Terminology, MES 5641 Advanced Shorthand and Transcription III-B, MES 5606 Typing III-B.

**Corequisite:** MES 5644 Medical Terminology for Advanced Shorthand and Transcription III-A Gregg.

The student will demonstrate the coordinated typing and shorthand skills with routine office skills and those activities relating to patients which may be performed satisfactorily by a professional medical secretary. The student will demonstrate an understanding of the personality traits, attitudes, and work habits peculiar to the proper relationships of the medical secretary with patients and with the doctor. Learning methods include field trips to various metropolitan hospitals and medical centers and the opportunity to type actual medical forms and reports. Credit for MES 5655 Medical Secretarial Practice-A will be given upon completion of MES 5656 Medical Secretarial Practice-B.

**MES 5656 Medical Secretarial Practice-B**

1.5 credits

**Prerequisite:** MES 5655 Medical Secretarial Practice-A.
Corequisite: MES 5658 Medical Typing and Laboratory Experience IV-B, MES 5647 Medical Terminology for Advanced Shorthand and Transcription III-D, MES 5643 Advanced Shorthand and Transcription III-D.

The student will further coordinate typing and shorthand skills with routine office skills and those activities which relate to patients that may be performed satisfactorily by a professional medical secretary. The student will demonstrate an understanding of the personality traits, attitudes, and work habits peculiar to the proper relationships of the medical secretary with doctor and patient. Learning methods include field trips to various metropolitan hospitals and medical centers and additional opportunities to type actual medical forms and reports.

MES 5657 Medical Typing and Laboratory Experience IV-A 1 credit
Prerequisite: MES 5606 Advanced Typing III-B, or equivalent skills as demonstrated on a proficiency test; HLT 6504 Medical Terminology.

The student will type medical forms, reports, treatment records, medical histories, and related materials obtained from local hospitals in addition to textbook material. The student will be required to type 55 words per minute for five minutes with a maximum error allowance of three, a minimum of three times, or type 60 words per minute for five minutes with a maximum error allowance of five at least three times during the module. A production rate of 32 words per minute on mailable copy must be obtained to complete this module. Credit for this module will be given upon meeting the success criteria for MES 5658 Medical Typing and Laboratory Experience IV-B.

MES 5658 Medical Typing and Laboratory Experience IV-B 1 credit
Prerequisite: MES 5657 Medical Typing and Laboratory Experience IV-A or equivalent skills as demonstrated on a proficiency test.

The student will develop his medical typing ability by typing various forms of medical material obtained from local hospitals in addition to textbook material. The student will be required to type 60 words per minute for five minutes on straight-copy material with an error allowance of three, a minimum of three times, or type 65 words per minute for five minutes on straight-copy material three times with an error allowance of five. A production rate of 35 words per minute must be achieved for completion of the module.

NURSING

The nursing program is designed to provide the student with the basic knowledge and skills needed to identify and meet the physical and emotional needs of the patient. The curriculum focuses on health concepts
important in helping the patient to maintain or regain a state of optimum health.

The student earns credit as he completes the performance objectives identified for each module (this includes performance objectives related to the clinical experiences).

Program of studies leading to associate in applied science (A.A.S.) degree in nursing.

<table>
<thead>
<tr>
<th>minimum credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
</tr>
<tr>
<td>Biology</td>
</tr>
<tr>
<td>Microbiology</td>
</tr>
<tr>
<td>Behavioral Sciences</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
<tr>
<td>Health Core</td>
</tr>
<tr>
<td>Nursing</td>
</tr>
<tr>
<td>Social Sciences</td>
</tr>
<tr>
<td>Black Studies, Puerto Rican Studies, or Visual and Performing Arts</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>64 credits</strong></td>
</tr>
</tbody>
</table>

The following prenursing modules must be completed before the student may begin the nursing curriculum: HLT 6501 Foundations of Health Science, HLT 6502 Interpersonal Relations and Teamwork-Part A, BIO 3701 Basic Concepts used in Biology, two credits of English, MATH 1601 Basic Math Skills, and HLT 6504 Medical Terminology.

**NUR 6201 The Patient as a Person**

3 credits

Prerequisites: All prenursing modules.


The student will identify various aspects of the nursing process, including problem-solving, patient-centeredness, rehabilitation, and teaching and legal responsibilities. The student will demonstrate basic skills in assessing patients’ health, implementing nursing care plans, and developing clinical analysis records. Students will be introduced to basic concepts for the preparation of medication. Learning methods include lecture-discussion, audio-visual tapes, films, demonstrations, programmed instruction, and clinical laboratory.

**NUR 6202 History and Current Issues**

.5 credit

The student will recognize ethical, legal, and occupational responsibilities
of the nurse in the present and changing health delivery system. The student will define terms related to the history of nursing from antiquity to the present.

NUR 6203 Man as an Organism I 3 credits
Prerequisite: NUR 6201 The Patient as a Person.
Corequisites: PSY 1031 General Psychology (Part II), BIO 3705 Systems of the Human Body II, one credit in English.
The student will identify nursing responses connected with basic physiological needs of patients, including personal cleanliness, nutrition, posture, exercise, sleep, and rest. The student will employ preventive and supportive nursing measures in responding to these needs. The student will also classify, prepare, and administer oral medications to selected patients. Learning methods include lecture-discussion, audio-visual tapes, films, demonstration, and clinical laboratory.

NUR 6204 Man as an Organism II 3.5 credits
Prerequisite: NUR 6203 Man as an Organism I.
Corequisites: BIO 3706 Systems of the Human Body III; a social sciences elective.
The student will identify nursing responses to patients having problems maintaining normal fluid and electrolyte balance and respiratory, gastrointestinal, and genito-urinary integrity. The student will employ preventive and supportive nursing measures in responding to these problems. The student will also classify, prepare, and administer oral and parenteral medications connected with nursing problems. Learning methods include lecture-discussion, audio-visual tapes, demonstrations, and clinical laboratory.

NUR 6206 Man in Society 3 credits
Prerequisites: NUR 6204 Man as an Organism II.
Corequisites: BIO 3712 Basic Microbiology; one credit in English; HLT 6510 Human Sexuality.
The student will be required to apply principles and methods of behavioral sciences in observing and analyzing behavior of patients who are experiencing mental illness of varying degrees. The student will demonstrate therapeutic communication skills on a one-to-one basis and in participation in group activities. The student will contribute as a member of the health team in preventive aspects, treatment, and rehabilitation of the mentally ill. Learning methods include lecture discussion, individual and group conferences, audio-cassettes, films, and clinical laboratory.

NUR 6208 Nursing Patients with Major Health Problems I 5 credits
Prerequisites: BIO 3712 Basic Microbiology; NUR 6204 Man as an Organism II; NUR 6206 Man in Society.
Corequisite: BIO 3713 Basic Medical Microbiology.
The student will implement and evaluate nursing care of patients with pathological conditions relating to inflammation, fluid and electrolyte balance, oxygen supply and demand, and hormonal control. The student will demonstrate skills in dressing changes, regulation and measurement of fluid and electrolyte intake and output, administration of oxygen via various methods, and cardiopulmonary resuscitation. Learning methods include audio-cassettes, slides and tapes, film demonstrations, programmed instruction, plus lectures and two days per week of clinical experience.

NUR 6207 Man and His Family I, II 2.5 credits each
Prerequisite: NUR 6208 Nursing Patients with Major Health Problems I.
Corequisites: 3 elective credits.
The student will plan and organize care for individuals and families on the basis of their growth and development and the reproductive phases of the life cycle. The student will be required to recognize and interpret the interrelationship between physiological, social, emotional, and intellectual functioning in order to identify alterations caused by pathophysiological processes. The student will apply nursing-care principles in selecting priorities, observing symptoms, providing physical care, assessing and alleviating symptoms, and interacting with patients and families. Learning methods include lecture-discussion, audio-visual tapes, demonstration, and clinical laboratory.

NUR 6209 Nursing Patients with Major Health Problems II 5 credits
Prerequisites: NUR 6208 Nursing Patients with Major Health Problems I; NUR 6207 Man and his Family I, II.
Corequisites: Two elective credits.
The student will use previous nursing knowledge and skills to correlate new information regarding neurological pathology, gastrointestinal pathology, neoplasms, and trauma in caring for patients. The student will use principles and methods from behavioral, social, and biological sciences in developing and implementing plans for nursing care. Learning methods include tapes and slides, films, printed material, as well as lectures and two clinical practice days per week.

RADIOLOGIC TECHNOLOGY

The radiologic technology department is designed to provide the student, under the direction of a radiologist/physician, with the essential skills needed to use ionizing radiation as a means of determining the nature of disease or injury. The student participates in classroom lecture/discussions as well as clinical experiences in hospital settings. Learning approaches include the use of audio-tapes, films, slides, and transparencies, as well as laboratory sessions on campus.
Program of Studies Leading to A.A.S. Degree in Radiologic Technology

<table>
<thead>
<tr>
<th>Arts &amp; Sciences</th>
<th>Minimum credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td>Biology</td>
<td>8</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
</tr>
<tr>
<td>Health Core</td>
<td></td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Skills</td>
<td>2</td>
</tr>
<tr>
<td>Interpersonal Relations and Teamwork</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Health Science</td>
<td>1</td>
</tr>
<tr>
<td>Contemporary Health Issues</td>
<td>3</td>
</tr>
<tr>
<td>Modules In Radiologic Technology</td>
<td>17</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Clinical Radiography</td>
<td>12</td>
</tr>
</tbody>
</table>

68 credits

All students in the radiologic technology department must complete all modules in a cycle before proceeding to the next cycle. Before beginning the clinical radiography part of the program, the student must complete all modules in the first two cycles. A total of 2,200 hours of clinical radiography practice at an affiliated hospital (to include two summers) is required.

XRA 5111 Recording Media and Processing 1 credit

Prerequisites: HLT 6501 Foundations of Health Science, HLT 6502 Interpersonal Relations and Teamwork-Part A, HLT 6504 Medical Terminology.

The student will identify the chemistry of processing solutions, darkroom accessories, and the composition of radiographic film and film holders.

XRA 5112 Contrast Media 1.5 credits

Prerequisites: HLT 6504 Medical Terminology, HLT 6505 Lab Skills, XRA 5132 Radiographic Anatomy, XRA 5212 Radiation Protection.

The student will identify the composition and use of contrast media and radiographic procedures involving the digestive system, biliary tract, and urinary system.

XRA 5113 Radiographic Technique I 1.5 credits

Prerequisite: MAT 1601 Basic Math Skills.

The student will identify the basic principles of radiographic exposure and image formation. Laboratory required.
XRA 5114 Radiographic Positioning I 1.5 credits
Prerequisites: XRA 5132 Radiographic Anatomy, XRA 5113 Radiographic Technique I, HLT 6505 Lab Skills, XRA 5112 Radiation Protection, XRA 5122 Recording Media and Processing.

The student will identify the radiographic positioning techniques for various examinations of the skeletal system. Laboratory required.

XRA 5121 Radiographic Positioning II 1 credit
Prerequisites: XRA 5114 Radiographic Positioning I, XRA 5122 Radiographic Technique II.

The student will identify the advanced radiographic positioning techniques of the skeletal system and the principles of tomography. Laboratory required.

XRA 5122 Radiographic Technique II 1 credit
Prerequisites: XRA 5113 Radiographic Technique I, XRA 5111 Recording Media and Processing, MAT 1631, 1632 Introductory College Mathematics I, II, XRA 5290 Clinical Radiography I.

The student will identify the advanced concepts of radiographic exposure, preparation, and use of technique charts and introduction to radiographic equipment calibration. Laboratory required.

XRA 5131 Skull Radiography 1 credit
Prerequisites: XRA 5132 Radiographic Anatomy, XRA 5121 Radiographic Positioning II, XRA 5122 Radiographic Technique II.

The student will identify the radiographic positioning techniques of the skull, including intraoral procedures.

XRA 5132 Radiographic Anatomy 1 credit
Prerequisites: BIO 3701 Basic Concepts used in Biology, HLT 6504 Medical Terminology.

The student will identify structures of the human body and the application of radiography to these structures.

XRA 5133 Medical-Surgical Diseases 1 credit
Prerequisites: HLT 6504 Medical Terminology, BIO 3701 Basic Concepts used in Biology, BIO 3702 Blood, Food, and Reproduction in the Human Body, BIO 3705, 3706, Systems of the Human Body II and III.

The student will identify the application of radiography to pathological conditions.
XRA 5141 Pediatric Radiography .5 credit
Prerequisites: XRA 5212 Radiation Protection, XRA 5114, 5121 Radiographic Positioning I, II, XRA 5113, 5122 Radiographic Technique I, II.

The student will identify the techniques and equipment pertinent to pediatric radiography.

XRA 5142 Introduction to Special Procedures 1 credit
Prerequisites: XRA 5114, 5121 Radiographic Positioning I, II, XRA 5113, 5122 Radiographic Technique I, II, XRA 5132 Radiographic Anatomy, XRA 5112 Contrast Media, XRA 5291 Clinical Radiography II.

The student will identify those radiographic examinations involving surgical procedures and specialized equipment which include the circulatory system, respiratory system, and the reproductive system.

XRA 5212 Radiation Protection 1.5 credits
Prerequisites: BIO 3701 Basic Concepts used in Biology, MAT 1631, 1632 Introductory College Mathematics I, II, HLT 6504 Medical Terminology.

The student will identify the principles of protection and the use of monitoring devices.

XRA 5214 Ethics and Law 1 credit
Prerequisites: HLT 6501 Foundations of Health Science, HLT 6504 Medical Terminology.

The student will identify the professional conduct and legal responsibilities of a radiologic technologist.

XRA 5221 Radiation Biology 1 credit
Prerequisites: XRA 5212 Radiation Protection, MAT 1631, 1632 Introductory College Mathematics I, II.

The student will identify the biological effects of ionizing radiation.

XRA 5222 Introduction to Radiotherapy .5 credit
Prerequisites: XRA 5212 Radiation Protection, XRA 5221 Radiation Biology, MAT 1631, 1632 Introductory College Mathematics I, II.

The student will identify the therapeutic use of radiation and instrumentation.

XRA 5241 Administration and Management 1 credit
Prerequisites: HLT 001 Foundations of Health Science, HLT 002, 003 Interpersonal Relations and Teamwork-Parts A and B.
The student will identify the principles and methods of effective departmental administration and personnel management.

XRA 5290 **Clinical Radiography I**

*4 credits*

**Prerequisites:** XRA 5111 Recording Media and Processing, XRA 5112 Contrast Media, XRA 5113, 5122 Radiographic Technique I, II, XRA 5114, 5121 Radiographic Positioning I, II, XRA 5212 Radiation Protection, XRA 5214 Ethics and Law.

The student will observe and apply elementary radiographic procedures under the direct supervision of a radiologist.

XRA 5291 **Clinical Radiography II**

*4 credits*

**Prerequisites:** XRA 5290 Clinical Radiography I, XRA 5112 Contrast Media, XRA 5113, 5122 Radiographic Technique I, II, XRA 5114, 5121 Radiographic Positioning I, II.

The student will perform advanced radiographic procedures under the supervision of a radiologist.

XRA 5330 **Clinical Radiography III**

*4 credits*

**Prerequisites:** XRA 5131 Skull Radiography, XRA 5121 Radiographic Positioning, XRA 5133 Medical-Surgical Diseases, XRA 5221 Radiation Biology, XRA 5214 Ethics and Law.

The student will perform specialized radiographic procedures under the supervision of a radiologist.
THE CITY UNIVERSITY OF NEW YORK

The City University of New York is a public institution comprising ten senior colleges, eight community colleges, and an affiliated medical school. The university-wide doctoral program is supervised from the Graduate School and University Center in mid-Manhattan. The Board of Higher Education is the Board of Trustees for the university.

The university dates from 1847, when the needs of the city for free higher education were first met by the establishment of The Free Academy — now City College — as the result of a public referendum. In 1961, seven municipal colleges, then operated by the Board of Higher Education, became the City University of New York through state legislation. The continuing growth of the university encompasses new institutions, an expansion of facilities to serve more students, and new programs and research geared to current urban needs.

To widen opportunity, the City University of New York has developed the largest university-sponsored program in the nation to aid disadvantaged high school youth to enter and stay in college through the College Discovery Program and Operation SEEK (Search for Education, Elevation, and Knowledge). Urban centers, offering short-term vocational training and college-adapter courses, are operated by the City University under contract with the State University of New York.

Beginning with the high school graduating class of June 1970, the City University introduced its policy of open admissions, which guarantees a place in one of the university's colleges to every New York City resident who receives a high school diploma from a public or private high school.

The colleges of the university continue the tradition of free tuition for undergraduate matriculants who are bona fide residents of New York City.

The Board of Higher Education

Jack I. Poses, First Vice-Chairman, B.C.S., LL.D.
Barbara A. Thacher, Second Vice-Chairman, A.B., M.A.
David I. Ashe, B.S.S., J.D.
Herbert Berman, B.A., LL.B.
Frederick Burkhardt, A.B., Ph.D., B.Litt., LL.D.
Maria Josefa Canino, B.A., M.S.
Alexander A. Delle Cese, B.S., J.D.
Fileno DeNovellis
Jean-Louis d'Heilly, A.A., B.A.
Frederick O'R. Hayes, A.B., M.P.A., M.A.
Norman E. Henkin, B.B.S., LL.B.
Minneola P. Ingersoll, B.A.
Robert Ross Johnson, B.A., B.D.
James Oscar Lee, A.B., B.D., M.A., Th.D., D.D.
John A. Morsell, Ph.D.
Edward S. Reid, B.A., LL.B.
Francisco Trilla, B.S., M.D.
Eve Weiss, B.A., J.D.
Nils Y. Wessell, B.S., M.Sc., Ph.D.
Arleigh B. Williamson, B.A., M.A.
Isaiah E. Robinson
N. Michael Carfora, Secretary of the Board
Arthur H. Kahn, B.S.S., J.D., General Counsel

Presidents of the Colleges of The City University Of New York

Milton G. Bassin, B.M.E., M.M.E., P.E., York College
William M. Birenbaum, J.D., Staten Island Community College
James A. Colston, B.S., M.A., Ph.D., LL.D., L.H.D., Litt.D., Bronx Community College
Edgar D. Draper, B.A., M.A., Ph.D., Borough of Manhattan Community College
Leon M. Goldstein, A.A.S., B.A., M.A., Kingsborough Community College
John W. Kneller, A.B., A.M., Ph.D., Brooklyn College
Cándido A. de León, A.B., M.A., Eugenio María de Hostos Community College
Leonard Lief, A.B., A.M., Ph.D., Herbert H. Lehman College
Robert E. Marshak, A.B., Ph.D., The City College
Joseph S. Murphy, A.B., M.A., Ph.D., Queens College
Hans Popper (Acting) Ph.D., M.D., Mount Sinai School of Medicine
Mina Rees, A.B., A.M., Ph.D., Sc.D., Litt.D., LL.D. University Graduate Division
Donald H. Riddle, B.A., M.A., Ph.D., John Jay College of Criminal Justice
Kurt R. Schmeller, A.B., M.A., Ph.D., Queensborough Community College
Herbert Schueler, B.A., M.S., Ph.D., Richmond College
Herbert M. Sussman, B.A., M.A., New York City Community College
Richard D. Trent, A.B., A.M., Ed.D., Medgar Evers College
Clyde J. Wingfield, B.A., M.A., Ph.D., The Bernard M. Baruch College
Officers of the City University of New York

Robert J. Kibbee, A.B., M.A., Ph.D., Chancellor
Seymour C. Hyman, B.Ch.E., M.S., P.E., Ph.D., Deputy Chancellor
Timothy S. Healy, A.B., M.A., D.Phil., Vice-Chancellor for Academic Affairs
J. Joseph Meng, A.B., J.D., Vice-Chancellor for Administrative Affairs
David Newton, B.S., M.A., Ph.D., Vice-Chancellor for Faculty and Staff Relations
Frank J. Schultz, A.B., M.B.A., Vice-Chancellor for Budget and Planning
Allen B. Ballard, Jr., B.A., M.A., Ph.D., University Dean for Academic Development
James J. McGrath, B.S., M.S., University Dean for Community College Affairs
Lester G. Brailey, B.S., M.A., Ed.D., University Dean for Admission Services
Nathaniel H. Karol, B.S.S., M.A., LL.B., LL.M., J.D., University Dean for Business and Research Administration
Kenneth M. King, B.A., Ph.D., University Dean for Computer Systems
Benjamin Rosner, B.A., M.A., Ed.D., University Dean for Teacher Education
Peter S. Spiridon, B.C.E., P.E., M.C.E., University Dean for Campus Planning and Development
Carter G. Marshall, M.S., M.P.H., University Dean for Health Affairs
Henry D. Paley, B.A., B.S., Director of University Relations

THE STATE UNIVERSITY OF NEW YORK

The State University of New York, established by the State Legislature in 1948, comprises 70 colleges and centers. In September 1970, 69 were conducting classes: four university centers (two of which, Buffalo and Stony Brook, include health sciences centers), two medical centers, 13 colleges of arts and sciences, two specialized colleges, six two-year agricultural and technical colleges, five statutory colleges, and 37 locally sponsored, two-year community colleges.

Governed by a Board of Trustees appointed by the Governor, the State University of New York comprises all State-supported institutions of higher education, with the exceptions of the senior colleges of the City University of New York. Each college and center of the State University is locally administered. Although separated geographically, all are united in the purpose of improving and extending varied opportunities to the youth of New York State.

The State University motto is: “Let Each Become All He is Capable of Being.”
Board of Trustees of The State University of New York

Mrs. Maurice T. Moore, B.A., LL.D., L.H.D., Chairman
New York City

James J. Warren, L.H.D., Vice-Chairman
Albany

Manly Fleishmann, A.B., LL.B. (Buffalo)
William D. Hassett (Buffalo)
John L. S. Holloman, Jr., B.S., M.D. (East Elmhurst)
Hugh R. Jones, A.B., LL.B. (Utica)
Clifton W. Phalen, B.S., LL.D. (New York City)
Mrs. Bronson A. Quackenbush, A.B. (Herkimer)
John A. Roosevelt, A.B. (Hyde Park)
Oren Root, A.B., LL.B., LL.D. (New York City)
Mrs. Edward Siegel (Plattsburgh)
Roger J. Sinnott, B.S. (Utica)
Thomas Van Arsdale (Flushing)
Don J. Wickham, B.S. (Hector)

Ernest L. Boyer, A.B., M.A., Ph.D., Chancellor of the University
Merton W. Ertell, Ph.D., Deputy Vice-Chancellor
Bruce Dearing, Ph.D., Vice-Chancellor for Academic Programs
Harry W. Porter, A.B., M.S., Ph.D., Provost
Raymond W. Kettler, M.A., Vice-Chancellor for Finance, Management, and Business
Martha J. Downey, B.S., M.A., Secretary of the University

Ewald B. Nyquist, Commissioner of Education
Albert H. Berrian, Associate Commissioner of Education

HOSTOS COMMUNITY COLLEGE
OFFICERS OF ADMINISTRATION

OFFICE OF THE PRESIDENT
Cándido Antonio De León, President
A.B., M.A.

Gladys Aponte, Labor Relations Designee
B.A., M.A., L.L.B.

Gerald M. Sircus, Director of Institutional Research
A.B., M.A.

Anne D. Grosso, Director of College Relations
B.A., M.A.
Marie Said, Secretary to the President

OFFICE OF THE VICE PRESIDENT FOR ACADEMIC AFFAIRS

Rafael L. Cortada, Vice-President for Academic Affairs
A.B., M.A., Ph.D.

Evangelos J. Gizis, Associate Dean of Faculty
B.A., M.S., Ph.D.

Clara Torres, Director of Educational Media Services
B.A., M.A., M.A.

Flagg Kris, Chief Librarian
B.A., M.L.S.

OFFICE OF THE DEAN OF HEALTH SCIENCES

Cyril H. Price, Dean of Health Sciences
D.D.S.

Leroy R. Sparks, Associate Dean of Health Sciences
B.S., X-Ray Technology Diploma

OFFICE OF THE DEAN OF ADMINISTRATION

T. David Foxworthy, Dean of Administration
A.B., M.A., Ed.D.

Albert G. Henriques, Campus Facilities Officer
B.A., M.A., B.Arch.

Fabian N. Amaobi, Business Manager
B.A., M.B.A.

Darrel Fleury, Assistant Fiscal Officer
B.B.A., M.B.A.

Leo Schreiber, College Director of Personnel
B.A.

OFFICE OF STUDENT SERVICES

Gladys Correa, Dean of Student Services
B.A., M.A.

Jorge Morales, Director of Counseling
B.A., M.S.W.

Clifford Bullard, Director of Financial Aid
B.A., M.A.

Alvin Bridgewater, Associate Registrar
B.A., M.A.

George Torres, Assistant Registrar
B.A.

Marcos Charles, College Physician
M.D.

Benita Tejeda, College Nurse
R.N.
DEPARTMENT CHAIRMEN, PROGRAM DIRECTORS

Arts And Sciences, Department Chairmen

Behavioral Sciences, Prof. Leslie Ault
B.A., M.A., Ph.D.

Biology, Prof. Ernest Knight
B.S., M.A., Ph.D.

English, Prof. Zane Rodriguez
B.A., M.A.

Mathematics, Prof. Arthur Clarke
B.A., Ph.L., S.T.L., M.A., Ph.D.

Modern Languages, Prof. Raoul Perez
B.S., M.A., Ph.D.

Physical Education/Athletics, Prof. Wallace Pina
B.S., M.A.

Puerto Rican Studies,

Social Sciences, Prof. Patricia Oldham (Acting Chairman)
B.A., M.A.

Visual and Performing Arts, Prof. David Barrie
B.A., M.A.

Health Sciences, Department Chairmen

Dental Hygiene, Prof. Anita Carter
B.S., M.S.

Health Core, Prof. Shirley Hinds
B.A., M.N., M.A., M.P.H.

Medical Executive Secretary, Prof. Patricia Parzych
B.S., M.S.

Medical Laboratory Technology, Prof. Dorothy Burnham
B.A., M.A.

Nursing, Prof. Carmen T. Tiburcio
A.A.S., B.S., M.S.

Radiologic Technology, Prof. Iris McDonald
B.A.

Arts and Sciences, Program Directors

Black Studies, Edward Maynard
B.A., M.A., Ph.D.

Health Sciences, Program Directors

Early Childhood Education, Prof. Paula Zajan
B.A., M.A., Ed.D.
FACULTY AND STAFF

Fabian N. Amaobi, Business Manager
B.A., London University; M.B.A., St. John's University

Othello Anzolut, Instructor, Counseling
B.A., City College; M.A., New York University

Gladys Aponte, Assistant Professor and Labor Relations Designee
B.A., M.A., L.L.B., University of Puerto Rico

Edward Armas, Assistant to Higher Education Officer, Counseling
B.S., Manhattan College

Leslie Ault, Assistant Professor and Chairman, Behavioral Sciences
B.A., Columbia College; M.A., Michigan State University; Ph.D., Columbia University

Inez Ayres, Instructor, Radiologic Technology
B.S., St. Bonaventure University

Maria Barbosa, Instructor, Behavioral Sciences
B.A., M.A., University of Puerto Rico

Maria Bardequez, Lecturer, Medical Executive Secretary
B.A. University of Puerto Rico

David Barrie, Assistant Professor and Chairman, Visual and Performing Arts
B.A., University of Toledo; M.A., Catholic University of America

Neli Jo Barsy, Instructor, Modern Languages
B.A., Barnard College; M.A., Columbia University

Virginia Bersamin, Instructor, Nursing
B.S., Philippines Women's University; M.A., Teachers College Columbia University

Jose Betancourt, Assistant Professor, Library
B.A., University of Puerto Rico; M.S., Columbia University; M.A., New York University

Cecilia Black, Instructor, Dental Hygiene
B.S., Columbia University; M.A., 'Adelphi University

John Blauvelt, Higher Education Assistant, Data Processing
B.S.S., Fairfield University; M.B.A., Fairleigh Dickinson University

Alvin Bridgewater, Associate Registrar
B.A., M.A., Inter American University of Puerto Rico

Louis Brown, Instructor, Biology
B.A., Hunter College; M.S., New York University

Milton Brown, Instructor, Physical Education/Athletics (on leave 1972-1973)
B.S., State University at Oswego; M.A., Teachers College Columbia University
Clifford Bullard, Assistant Professor and Director of Financial Aid
B.A., M.A., New York University

Dorothy Burnham, Instructor and Chairman, Medical Laboratory Technology
B.A., M.A., Brooklyn College

Heinz Butt, Research Assistant, Facilities Planning
B.Arch., Cooper Union

Wilfred Callender, Associate Professor, English
B.A., M.A., Brooklyn College; J.D., Brooklyn Law School

Harcourt Carrington, Assistant Professor, Counseling
B.S., Morgan State College; M.A., New York University; M.A., New School for Social Research

Anita Carter, Assistant Professor and Chairman, Dental Hygiene
B.S., M.S., Columbia University

Dario Casado, Associate Professor, Behavioral Sciences
B.A., Colegio Real Spain; M.A., Fordham University; Ph.D., St. John’s University

Ruth Castor, Assistant to Higher Education Officer, Grants
B.A., Bennett College

Marcos Charles, College Physician
M.D., Santo Domingo Medical School

Peggy Chute, Instructor Nursing
B.S., Wayne State College; M.E., Columbia University

Arthur Clarke, Associate Professor and Chairman, Mathematics
B.A., Georgetown University; Ph.L., S.T.L., Woodstock College; M.A., Fordham University; Ph.D., Yeshiva University

John Colon, Instructor, Counseling
B.A., M.A., Inter American University of Puerto Rico

Mamie Conway, College Laboratory Technician B, Nursing
R.N., Mercy Douglas Hospital

Gladys Correa, Professor and Dean of Students
B.A., M.A., Hunter College

Rafael L. Cortada, Professor and Vice-President for Academic Affairs
A.B., Fordham University; M.A., Columbia University; Ph.D., Fordham University

Carmen Cuevas, Assistant to Higher Education Officer, Counseling
B.A., Hunter College

Steven Delgado, College Laboratory Technician B, Physical Sciences
B.A., Queens College

Diana Diaz, Instructor, English
B.A., Hunter College; M.A., Columbia University
Rita C. DiMarco, Instructor, Medical Executive Secretary  
B.S., Long Island University; M.S., Baruch College

Jose Dones, Assistant Professor, English  
B.A., University of California at Santa Barbara; M.A., Ph.D., University of Rochester

Gertrude Dourdounas, Instructor, Radiologic Technology  
Diploma, Radiologic Technology, Nassau Hospital, A.A.S., Hostos Community College

Ronald Ellis, Assistant Professor, Physical Sciences  
B.A., Hunter College; M.A., Teachers College Columbia University

Edward Feely, Associate Professor, Biology  
B.S., Manhattan College; M.S., Ph.D., Fordham University

Alice Fisher, Instructor, English  
B.A., M.A., San Diego State College

Darrel Fleury, Assistant Fiscal Officer  
B.B.A., Clarkson College; M.B.A., C. W. Post College

David Forst, Instructor, Health Core  
B.B.A., City College; M.A., New York University

T. David Foxworthy, Professor and Dean of Administration  
A.B., M.A., Ed.D., Columbia University

Nicolette Fraction, Instructor, Library  
B.A., M.S., Queens College; M.L.S., Pratt Institute

Mariano Garcia, Professor, Mathematics  
B.S., M.S., Washington and Jefferson College; Ph.D., University of Virginia

Arnold Genus, Instructor, Library  
B.S., M.S., Columbia University

Evangelos J. Gizis, Associate Professor and Associate Dean of Faculty  
B.S., Athens University; M.S., Ph.D., Oregon State University

Carlos Gonzalez, Lecturer, Counseling  
B.A., City College

Nellie Gonzalez, Lecturer, Counseling  
B.A., University of Puerto Rico

Sylvia Greer, Lecturer, Biology  
B.S., South Carolina State College

Anne D. Grosso, Higher Education Associate, Director of College Relations  
B.A., Queens College; M.A., New York University

Albert G. Henriques, Higher Education Associate, Campus Facilities Officer  
B.A., M.A., New York University; B.Arch., Cooper Union

Carlos Hernandez, Assistant Professor, Health Core  
B.S., M.A., University of Puerto Rico
Mildred Hernton, College Laboratory Technician B, Physical Sciences
B.S., Tennessee A and I State University

Shirley Hinds, Assistant Professor and Chairman, Health Core
B.A., Hunter College; M.N., Western Reserve University; M.A., New York University; M.P.H., Columbia University

Henry J. Hoffman, Jr., Research Assistant, Educational Media

Alvin Hollingsworth, Assistant Professor, Visual and Performing Arts
B.F.A., M.F.A., City College

Selena James, Instructor, Dental Hygiene
B.S., Temple University

Isaias deJesus, Lecturer, Mathematics
B.A., University of Puerto Rico

Harvey Jolt, Assistant Professor, Health Sciences
B.B.A., City College; M.B.S., New York University

Josephine Buck Jones, Assistant Professor, Black Studies
B.A., Stowe Teachers College; M.A., Washington University

Thomas Joyce, Assistant Professor, Mathematics
B.A., Manhattan College; M.A., Fordham University

Bette Kaplan, Instructor, Counseling
A.B., Barnard College; M.A., City College

Anne Klein, Instructor, Nursing
B.S., Mercy College

Ernest Knight, Associate Professor and Chairman, Biology
B.S., Alabama A and M College; M.A., Ph.D., New York University

Jack Korson, Assistant to Fiscal Officer

Flagg Kris, Assistant Professor and Chief Librarian
B.A., San Francisco State College; M.L.S., University of California

Lois Lamdin, Associate Professor, English
B.A., M.A., Ph.D., University of Pittsburgh

Cándido Antonio de León, Professor and President
A.B., St. Peters College; M.A., New School for Social Research

Milagros M. Lopez, Lecturer, Behavioral Sciences
B.A., University of Puerto Rico

Arie Mayer, Research Assistant, Facilities Planning
B.Arch., Pratt Institute

Edward Maynard, Assistant Professor and Program Director, Black Studies
B.A., Brooklyn College; M.A., Teachers College Columbia University; Ph.D., New York University

Tommy L. McBride, Assistant to Business Manager
A.A.S., New York City Community College

Carmen C. McLean, Associate Professor, Nursing
B.S., Hunter College; M.A., New York University
Freda McClean, Assistant Professor, English
B.A., Bennett College; M.A., Atlanta University

Naomi McCoy, Instructor, Nursing
B.S., Bellevue Hospital; M.A., Teachers College Columbia University

Iris L. McDonald, Instructor and Chairman, Radiologic Technology
B.A., Clark College

Gonzalo Mendoza, Instructor, Library
M.S., Rutgers State University; Faculty of Philosophy and Letters
National University of Colombia

Carmen Menendez, Research Assistant, College Translator

Jorge Morales, Assistant Professor and Director of Counseling
B.A., City College; M.S.W., New York University

John Munoz, Assistant Professor, Counseling
B.B.A., Baruch College

Lois G. Muzio, Instructor, Nursing
B.S., M.Ed., Teachers College Columbia University

Jose Nieto-Iglesias, Professor, Puerto Rican Studies
B.A., University of Valladolid; Master in Law, University of Santiago de Compostela; M.A. in Education, Escuela Normal, Diploma in Psychology, Ph.D., University of Madrid

Judith Nowinski, Assistant Professor, Modern Languages
B.S., M.A., Ph.D., Columbia University

Mario Ojeda, Assistant to Higher Education Officer, Testing Center
B.A., Inter American University of Puerto Rico

Patricia Oldham, Instructor and Acting Chairman, Social Sciences
B.A., Albright College; M.A., University of Michigan

Elsa Orejuela, Instructor, Medical Laboratory Technology
Certificate, Medical Technologist University of Valle, Cali, Colombia

Carmen Ostoloza, Coordinator of Cooperative Education Program
B.S., Inter American University; M.A., New York University

Patricia Parzych, Instructor and Chairman, Medical Secretarial Sciences
B.S., Nazareth College; M.S., Hunter College

Antonio Pedraza, Lecturer, Health Core
B.S., Hunter College

Raoul Perez, Professor and Chairman, Modern Languages
B.S., M.A., Howard University; Ph.D., University of Chicago

Eleanor Peterson, Instructor, Nursing
Diploma, Harlem Hospital School of Nursing; B.S., Teachers College Columbia University

Myrtle Pickett, Lecturer, Nursing
B.S., Hunter College
Lorraine Pinckney, College Laboratory Technician A, Medical Laboratory Technology
Certificate, Eastern School for Physician’s Aids

Wallace Pina, Associate Professor and Chairman, Physical Education/Athletics
B.S., Manhattan College; M.A., Teachers College Columbia University

Cyril H. Price, Professor and Dean of Health Sciences
D.D.S., Howard University

Manuel Ramos, Assistant Professor, Modern Languages
B.A., City College; M.A., Teachers College Columbia University

George Ramsay, Instructor, Radiologic Technology
B.S., Southern Illinois University

Ralph Ranald, Professor, English
B.A., M.A., University of California at Los Angeles; M.A., Ph.D., Princeton University

Graciela Rivera, Assistant Professor, Puerto Rican Studies
Diploma, Juilliard School of Music

Zane Rodriguez, Assistant Professor and Chairman, English
B.A., Holy Cross College; M.A., Fordham University

Peter Roman, Assistant Professor, Social Sciences
B.A., University of California at Berkeley; M.A., Princeton University

Adrian Romero, Assistant Professor, Biology
B.A., Inter American University; M.A., Hofstra University

Minerva Rosario, Lecturer, Child Care
B.S., City College

Morris Rose, Higher Education Assistant, Data Processing

Louise Schneider, Assistant Professor, Health Core
B.A., Brooklyn College; M.A., Duke University; M.P.H., Columbia University

Leo Schreiber, Higher Education Assistant, College Director of Personnel
B.A., Brooklyn College

Milton Schulman, Associate Professor, Biology
B.S., Long Island University; M.A., Ph.D., New York University

Lawrence Seid, Assistant Professor, Health Core
B.A., Michigan State University; M.A., New York University

Evelyn Silverman, Lecturer, English
B.A., Brooklyn College

Gerald M. Sircus, Higher Education Officer, Director of Institutional Research
A.B., Brooklyn College; M.A., New York University
Leo Soskind, Associate Professor, Medical Laboratory Technology
B.A., Brooklyn College; M.S., Ph.D., New York University

Leroy Sparks, Associate Professor and Associate Dean of Health Sciences
B.S., St. Louis University; Diploma, Alexian Brothers Hospital School of Radiologic Technology. Certifications: Bureau of X-ray Technology, Department of Health, State of New York; and the American Registry of Radiologic Technology

Michael Stimola, Lecturer, Counseling
B.S., Fairleigh Dickinson University; M.A., Teachers College Columbia University

Robert Taylor, Lecturer, Physical Education/Athletics
B.S., University of Cincinnati

William A. Taylor, Assistant Professor, Biology
B.A., M.S., Indiana University

Benita Tejeda, College Nurse
R.N., Columbia University

Carmen T. Tiburcio, Associate Professor and Chairman, Nursing
A.A.S., Brooklyn College; B.S., Columbia University; M.S., New York Medical College

Clara Torres, Higher Education Officer, Director of Educational Media
B.A., University of Puerto Rico; M.A., University of California at Los Angeles; M.A., New York University

George Torres, Assistant Registrar
B.A., State University at Stony Brook

LaVergne Trawick, Lecturer, Counseling
B.A., Barnard College

David Ucko, Instructor, Physical Sciences
A.B., Columbia College; Ph.D., Massachusetts Institute of Technology

Magda Vasillov, College Laboratory Technician C, Educational Media
B.A., Wellesley College

Mwangi Wa-Njau, Assistant Professor, Black Studies
B.A., Wayne State College; M.Sc., Queens College

Clara Watnick, Assistant Professor and Chairman, Physical Sciences
B.S., City College; M.S., Ph.D., Seton Hall University

Beth Weinstock, Assistant Professor, Visual and Performing Arts
B.A., University of Wisconsin; M.A., Columbia University

Robert L. Wheeler, Assistant Professor, Health Core
B.S., North Carolina Central University; M.S.P.H., Columbia University
Amos Wilson, Assistant Professor, Behavioral Sciences  
B.A., Morehouse College; M.A., New School for Social Research

Doris Withers, Instructor, Biology  
B.S., Howard University; M.S., University of Illinois

N. Gregory Wynn, Instructor, English  
B.S., North Carolina State, M.A., New York University

Rosalina Velez, Assistant Professor, Nursing  
B.S., University of Puerto Rico; M.A., Teachers College Columbia University

Paula Zajan, Professor and Director, Child Care  
B.A., M.A., Hunter College; Ed.D., New York University

Zoland Zile, Instructor, Radiologic Technology  
B.S., Alderson-Broaddus College