## Bergen

COMM UNITY COLLEGE



## 2004 - 2005

## Di recti ons to the College

## FROM THE NORTH

(Via Garden State Parkway)
Take Exit 165, turn right (west) on Ridgewood Road, then right onto Ridgewood Avenue (crossing over Route 17) and continue to Paramus Road. Turn left onto Paramus Road and continue approximately two miles to college, proceed around jug handle to main entrance.
(Via Route 17) Turn right off Route 17 onto Ridgewood Avenue (west) to Paramus Road. Turn left onto Paramus Road and continue as above.


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http:/ / w w w, bergen.edu

## Bergen Community College, 400 Paramus Road, Paramus, New Jersey 07652-1595 (201) 447-7100 (201) 447-7845 (TTY)

The College reserves the right to change any provisions contained in this publication without prior notice. Students are responsible for the information contained in this catalog. Failure to read this catalog does not excuse students from the requirements and regulations contained herein. The curriculum is accurate as of April 2004. For the most current curriculum, see the e-catalog at http://www.bergen.edu/ecatalog/2004.

NONDISCRIMINATION POLICY: It is the policy of Bergen Community College to provide access to educational programs, services, and benefits to all students, without regard to religion, race, color, national origin, ancestry, age, sexual orientation, marital status, sex, disability, or veteran status, including veterans of the Vietnam era.

The College complies with Title VII of the Civil Rights Acts of 1964 and 1990, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Older Americans Act of 1975, and the Americans with Disabilities Act of 1990, and the New Jersey Law Against Discrimination. Questions about these laws or allegations of violations of students rights should be addressed to: Michael J. Nord, Manager of Training and Compliance, Bergen Community College, 400 Paramus Road, Paramus, New Jersey, 07652; (201) 612-5331 (voice), or (201) 447-7845 (TTY) or to the Secretary, Department of Education, Washington, D.C. 20201.

## BERGEN COMMUNITY COLLEGE



## Vision Statement

As the college moves into the twenty-first century, our vision is that of a learning community which values the contributions of all students, staff, faculty, and administrators in order to provide an unparalleled educational experience. We will support an ongoing process of improvement through continued assessment of our vision, values, practices, and mission.

## A Learning Community

We will develop the best possible educational environment, one that promotes learning, collaboration, and shared responsibility. Using proven technological advances and a variety of instructional methods, we will enhance the learning process and maintain high academic standards.

## A Service Community

We pledge to evaluate and improve our services continuously and to communicate more effectively, creating an atmosphere of civility and trust.

## A Diverse Community

We will respect the integrity of all persons and will build an inclusive community, enriched by its diversity.

## A Partnership Community

We will create partnerships with public and private institutions in fulfilling our mission. We will be vital and informed participants in the life of our county, state, and country, responsibly using all public resources in the most efficient manner.

Finally, we welcome future challenges and are willing to take the initiatives necessary to continue to be a leader among community colleges.

## BERGEN COMMUNITY COLLEGE





Dr. Steven Fischer, Coordinator of the Grounds Management program, helps a horticulture student identify a plant.


In the Sidney Silverman Library students meet to research and study.


Performers captivate the audience with a celebratory dance in the Student Center during Native American Week.


During World Week students staged an International Fashion show.


The College hosts numerous academic and cultural speakers each year, and recently welcomed James Earl Jones.


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For the most current curriculum, see the e-catalog at http://www.bergen.edu/ecatalog/2004.

## Calendar

The following page contains a general listing of the College's important dates to remember.*
Fall 2004
CLASSES BEGIN
$\qquad$ Thursday, Sept. 2Labor Day Holiday, College Closed
$\qquad$Monday, Sept. 6
Change of Registration
9:30 AM - 6:30 PM ..... Thursday, Sept. 2
9:30 AM - 5:30 PM

$\qquad$
. Friday, Sept. 3
9:30 AM - 6:30 PM

$\qquad$

$\qquad$
Tues.-Wed., Sept. 7-8
Last day to receive $75 \%$ refund

$\qquad$
Wednesday, Sept. 8
Last day to receive 50\% refund Wednesday, Sept. 15
Last day to receive $25 \%$ refund Wednesday, Sept. 22
No refunds after this date
Last day to make arrangements with Faculty to
resolve Spring/Summer 2004 "INC" grades. . . . . . Monday, Sept. 20Last day to request Audit Status. . . . . . . . . . . . . Wednesday, Sept. 22Yom Kippur Holiday, College Closes 6PM
$\qquad$ . Friday, Sept. 24
Yom Kippur Holiday, College Closed . Saturday, Sept. 25
Last day for Faculty to resolveSpring/Summer 2004 "INC" grades . . . . . . . . . . . . . . . Friday, Oct. 1
Continuing Students Priority Registrationfor Spring 2005, by appointment . . . . . . Mon.-Fri., Oct. 25-Dec. 3Application Deadline for Spring 2005 forInternational Students holding Student Visas. Monday, Nov. 1
Official Withdrawal Deadline, Fall 2004 . . . . Wednesday, Nov. 10
(Courses that start after the first week of classes or
that end mid-semester have adjusted deadlines.)
Thanksgiving Holiday, College Closed . . . . Thurs.-Fri., Nov. 25-26
es.Saturday, Nov. 27
New Students Priority Registration
for Spring 2005, by appointment
$\qquad$ Mon.-Wed., Dec. 6-15
Degree Application Registrationfor May 2005 Graduation Friday, Dec. 10
CLASSES END Monday, Dec. 20Emergency makeup days. . . . . . . . . . . . . . . Tues.-Wed., Dec. 21-22Winter Recess, College Closed

$\qquad$
Fri.-Mon., Dec. 24-Jan. 3In the event that any condition threatens to close the Collegetemporarily, check the following broadcasting stations forofficial instruction
WCBS / 880
1010WINS
http://www.WOR710.com WVNJ1160
Cablevision / News 12 NJ
Spring 2005
College Reopens Tuesday, Jan. 4
Open Registration ..... Mon.-Tues., Jan. 10-18
Martin Luther King Jr. Holiday, College Closed. . Monday, Jan. 17
CLASSES BEGIN . Thursday, Jan. 20
Change of Registration
9:30 AM - 6:30 PM ..... Thursday, Jan. 20
9:30 AM - 5:30 PM .....  Friday, Jan. 21
9:30 AM - 6:30 PM .....  Monday, Jan. 24
9:30 AM - 6:30PM Tues.-Wed., Jan. 25-26
Last day to receive $75 \%$ refund

$\qquad$

$\qquad$
Wednesday, Jan. 26
Last day to receive 50\% refund Wednesday, Feb. 2
Last day to receive $25 \%$ refund. Wednesday, Feb. 9
Last day to request Audit Status ..... Wednesday, Feb. 9
Last day to make arrangements with Faculty toresolve Fall 2004 "INC" grades. Monday, Feb. 14
Last day for Faculty to resolveFall 2004 "INC" grades
$\qquad$Friday, Feb. 25
Spring Recess, No classes.Good Friday Holiday, College Closed . . . . . . . . . . Friday, Mar. 25
No classes or academic services .

$\qquad$
Saturday, Mar. 26
Continuing Students Priority Registration
for Summer 2005, by appointment . . . . Mon.-Fri., Mar. 28-Apr. 1
Official Withdrawal Deadline, Spring 2005 . Wednesday, Mar. 30
(Courses that start after the first week of classes orthat end mid-semester have adjusted deadlines.)
New Student Registrationfor Summer 2005
Continuing Students Priority Registration
for Fall 2005, by appointment.(New Student Registrationfor Fall 2005Mon-Mon., May 2-Aug. 15
CLASSES END Wednesday, May 11
Emergency makeup days

$\qquad$
. Thurs.-Fri., May 12-13COMMENCEMENTFriday, May 20
Summer 2005
SESSION I
CLASSES BEGIN ..... Monday, May 23
Change of Registration ..... Tuesday, May 24
Memorial Day Holiday, College Closed ..... Monday, May 30
CLASSES END ..... Thursday, June 30
SESSION II
July 4th Observed, College Closed Monday, July 4
CLASSES BEGIN .....  Tuesday, July 5
Change of Registration Wednesday, July 6
CLASSES END Thursday, Aug. 11*Subject to Change

# General) <br> I N F O R M A TION 

Bergen Community College is a comprehensive, publicly supported two-year college that is fully accredited by the Commission on Higher Education of the Middle States Association of Colleges and

Schools. Through its open admissions policy, the College is committed to equal educational opportunities for all.

The instructional programs are designed to prepare students for transfer to four-year colleges and universities, or for immediate entry into a career. There are also non-credit courses offered for those seeking personal enrichment or improvement of specific skills.

The College receives funding from the Bergen County Board of Chosen Freeholders and from the State of New Jersey. This support makes it possible to maintain high-quality facilities and programs


## Philosophy

Bergen Community College realizes the need to educate citizens to meet the varied demands of a complex society and to prepare people of all ages to undertake the obligation of intelligent citizenship and family life. To this end, the College offers diverse and useful educational experiences.

The variety of programs provides choices and permits flexibility of movement from one curriculum to another, to help the student toward self-discovery and personal self-realization. High academic standards are maintained so that the student can transfer to a four-year college or be prepared for immediate employment.

The College is aware of its obligation to the student body and to the community at large. It serves as a cultural center by offering frequent lectures, symposia, films, and musical and dramatic presentations. The College's proximity to centers of learning and culture such as those in New York City enable it to draw fully on a variety of resources.

The primary emphasis of the faculty is on effective instruction of students. Research and writing directed toward these goals are encouraged. Since the general welfare of the students is of paramount importance, emphasis on individual advisement and counseling is fundamental to the College's philosophy. Faculty members are selected not only for their academic qualifications and experience, but also for their interest in maintaining close student-teacher relationships that will enable students to develop to their full potential. To enhance this aim, advisement and additional counseling services are centralized under the Vice President of Student Services. The faculty guide a variety of activities such as student government, clubs, societies, and publications. These activities serve to enrich student experiences and provide the maximum opportunity for demonstrated leadership and responsible participation.

Bergen Community College is committed to meeting the challenge of rapidly changing social, political, economic, and educational thought and to the principle that higher education for every citizen in our society is a worthy goal.

## History

The emergence of Bergen Community College as the county's first public two-year institution of higher learning was due to the determined efforts of many people to expand the range of state and county educational facilities and services.

On April 3, 1963, the Bergen County Board of Chosen Freeholders passed a resolution appointing a committee of distinguished citizens charged with the responsibility of inquiring into the needs for a two-year county college in Bergen County.

In October 1963, the "County College Study Committee" submitted its final report which stated: "The subcommittee of the county college study committee concludes that there is an immediate need for a two-year public county college in Bergen County." On April 7, 1965, the Bergen County Board of Chosen Freeholders submitted a petition to the State Board of Education requesting permission to establish a county college in Bergen County and requesting that the Commissioner of Education conduct an independent study to determine the higher education needs of Bergen County and the ability of the county to support the proposed college.

The conclusion of this independent study by the New Jersey State Commissioner of Education, described in the September 1965 report to the State Board of Education (pursuant to N.J.S.A. 18:22-101), was essentially that there was sufficient and reliable evidence of the need for a county college in Bergen County and that the county was financially able to construct and operate the proposed college.

On October 20, 1965, the Bergen County Board of Chosen Freeholders passed the necessary resolutions to establish, operate, and provide financial support for a county college in Bergen County.

On November 3, 1965, a public meeting was held, and the Freeholders passed the following resolution: "I move that the Resolution establishing the County College, which was approved on first reading at a meeting of the Board of Chosen Freeholders held on October 20, 1965, be finally adopted, and that the clerk of the Board publish the same in The Record together with statement of its final passage as required by law."

The College was projected to fulfill immediate and long-range educational needs of the citizens of the community. The 167 -acre site of the Orchard Hills Country Club in Paramus was selected for the home of Bergen Community College.

Dr. Sidney Silverman was named as the first president of the College and consultant to the Board of Trustees in August 1966. He served as president from February 1, 1967, until his retirement on June 30, 1977. Dr. Alban E. Reid was appointed as the second president of Bergen Community College on July 1, 1977.

Dr. Jose Lopez-Isa became the third president on July 1, 1982. Dr. Judith K. Winn became the fourth president on July 1, 1995.

The College registered its first class of day and evening students in September 1968, in interim buildings designed to accommodate more than 1,300 full-time students. The Master Plan, approved by the Board of Trustees on July 19, 1967, called for two phases of construction. Phase I, completed in 1973, cost about 21 million dollars and totaled 430,000 square feet. In 1987, the Board of Trustees approved a Facilities Master Plan, which called for the construction of the Student Center, the Theatre, and the C-wing of the megastructure, which provides classrooms for technology enhanced instruction. The plan included the expansion of the Sidney Silverman Library and bar-rier-free access for disabled students. And with the completion of the Technology Education Center, which opened September 2003, the 1987 Facilities Master Plan is complete.

## Accreditations

Bergen Community College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104; (215) 6625606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Commission on Recognition of Postsecondary Accreditation.

In addition, four programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP):

- Diagnostic Medical Sonography
- Medical Office Assistant
- Respiratory Therapy
- Surgical Technology

The Nursing Program is approved by the New Jersey State Board of Nursing and is also accredited by the National League for Nursing Accrediting Commission, 61 Broadway, 33rd Floor, New York, NY 10006; 212-363-5555.

The Dental Hygiene Program is accredited by the Dental Hygiene Education Commission on Dental Accreditation of the American Dental Association.

The Radiography Program is accredited by the Joint Review Committee on Education in Radiologic Technology.

The Medical Laboratory Technology Program is accredited by the National Accrediting Agency for Clinical Laboratory Services: NAACLS, 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631; (773) 714-8880.

The Physical Therapist Assistant Program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association.

The Paralegal Studies and the Legal Nurse Consultant Program are approved by the American Bar Association.

The Veterinary Technology Program is accredited by the American Veterinary Medical Association.

## Admi ssi ons

## Bergen Community College maintains an open

 door policy: anyone who is 18 years of age may take our classes; those under 18 who have a high school diploma may also take classes.Most of Bergen's academic programs are open to anyone with a high school diploma. Some health programs have limited space and specific entrance requirements.


## Degree-Seeking Students

Those wishing to complete an Associate Degree or Certificate Program must apply for admission to the College. Application forms are available from the Office of Admissions and Recruitment in Room A-129 or online at http://www.bergen.edu/admissions/online.

- Students may apply online at http://www.bergen.edu/admissions/online.
- The completed application must be returned with a nonrefundable $\$ 25$ application fee.
- Official high school transcripts (or GED test scores) must be forwarded to the Office of Admissions and Recruitment.
- If the application is filed later than July 1 for fall admission, or November 1 for spring admission, all required documentation must be enclosed with the application.
- A student on an F-1 visa must apply no later than May 1 for fall admission or October 15 for spring admission.
- Students seeking admission to health programs should apply as early as possible to allow time for entrance exams. Space in these programs is limited.
- Graduates of foreign high schools must submit official translations of their credentials showing that their education is equivalent to that of a United States high school graduate. Contact the Office of Admissions and Recruitment at 201-447-7196 for information on acceptable translation agencies.
- Students who have attended other colleges or universities must have transcripts sent to the Office of Admissions and Recruitment.
- Students must complete the Basic Skills Placement Test before registering for classes.
- All students who are accepted while in their senior year of high school must submit a final transcript upon graduation.

All students accepted to the College must submit a completed medical form before registering for a Wellness and Exercise Science course.

## Non-Degree-Seeking Students

Those who do not plan to complete an Associate Degree or Certificate Program may take classes without applying to the College. High school graduation is not a requirement for those over 18 years of age.

The Basic Skills Placement Test need not be completed before registering for classes. However, it must be completed before registering for the 12th credit or before registering for an English or mathematics course.

Non-degree-seeking students who subsequently decide to complete a degree may apply no more than 45 credits earned prior to acceptance into the degree program.

## General Educational Development (GED) Diploma

Students 18 years of age or older who do not have a high school diploma may qualify for a GED diploma by:

- Passing the high school proficiency test, and
- Completing a program of 30 General Education college credits.

Call the Office of Testing and Assessment at 201-447-7202 for more information.

## Second Bergen Community College Degree

Students who have completed a certificate or degree program at Bergen Community College and wish to pursue another certificate or degree at the College must complete and submit a new application for admission and pay the current application fee. Credits earned toward or for a prior degree or certificate are considered transfer credits and apply toward a second degree as outlined in the College Residency Policy. Such applicants should write "Second degree" at the top of their applications.

Students may earn only one Associate in Arts (A.A.) and one Associate in Science (A.S.) degree at Bergen Community College. Two or more Associate in Applied Science (A.A.S.) degrees and certificates are permissible if in different majors.

## Visiting Students

Students from other institutions should obtain written permission from their home colleges before attempting to apply or register for any courses at Bergen Community College. All prerequisites and basic skills testing requirements must be met.

## International Students

Students from outside the United States can apply for admission to Bergen Community College. They will need to apply to the College and for the international student status (F-1) with the United States Citizenship and Immigration Services (USCIS). International students must submit documentation that shows that their high school credentials are equivalent to those of a United States high school graduate. A certified translator must translate all credentials into English. Photocopies and faxed documents are not acceptable. All international applicants must provide their passports, visa status and I-94 cards before applying for international student status. Depending on the student's present immigration status, certain USCIS forms need to be completed. Sponsorship, either from the individual student or from someone else, needs to be provided in order to document the fact that the student will be financially independent while studying at Bergen Community College. The International Admissions Counselor will review all documents and, upon satisfactory review, an I-20 form will be produced.

International Admissions workshops are available throughout the
year for international applicants residing in the Bergen Community College area. These workshops cover the information required to apply, application procedures and USCIS forms, and immigration problems; and they introduce prospective students to the International Admissions Counselor. To sign up for a workshop, call 201-447-7218.

Candidates residing outside of the United States can request an international admissions packet to be mailed to them. Upon arrival in the United States, these students must report to the International Admissions Counselor's Office with their passport and approved I-20 form within the first few days of arriving in the United States (under a week's time in the United States). Deadline dates for submitting all documents are strictly enforced and are as follows: for the fall semester (September) the deadline date is May 1st; for the spring semester (January) the deadline date is October 15th. These dates are subject to any changes that might be implemented by the United States Citizenship and Immigration Services.

Please note that effective January 2003, mandatory Student Electronic Visa Information System (SEVIS) guidelines have been implemented by United States Government through the Homeland Security Department for all licensed colleges, universities and institutions that issue I-20 forms. Under these new regulations, some applicants who are requesting a change of visa status with the United States Citizenship and Immigration Services must receive official authorization from Immigration prior to being officially admitted or registering for any classes at Bergen Community College.

## Counseling for International Students

Counselors are available to advise students from other countries on their special problems, and to assist them in partaking fully in student life. For questions about Bergen Community College, United States Immigration, or problems with courses, personal matters, or anything else, call the Counseling Center at 201-4477211 to make an appointment with an international counselor.

## Students with Disabilities

Bergen Community College is fortunate to be an educational institution that is accessible to disabled students. The Office of Specialized Services serves students with physical, visual, learning, hearing, and emotional disabilities. Continuous contact should be maintained throughout a student's college experience in order to assist the student in attaining the desired academic goals.

A student with a disability who plans to attend Bergen Community College should provide documentation of the disability and accommodations needed to the Office of Specialized Services as soon as possible; otherwise, no services can be provided. You must indicate that you have a disability on the postcard insert in the application to the College or on the Web application. Disclosure on the application is voluntary but must be made if services are to be provided in a timely manner. These services can include sign language interpreters, electronic
readers, print enlargers and Braille printers, scribes, note takers, tutors, alternative testing arrangements, counseling and support groups. Students with disabilities are encouraged to visit the Office of Specialized Services in Room S-131 or call 201-6125270 or 201-447-7845 (TTY).

## Senior Citizens

Bergen County residents who have reached their 65th birthday on the date of Senior Citizen Registration may enroll in any credit courses offered by the College without payment of tuition, provided space in classes is available following registration of all other students. All applicable fees must be paid. Senior Citizen Registration will occur in person on the specific dates and times designated. All prerequisites and basic skills testing requirements must be met.

## Veterans

Students planning to receive Veterans Administration educational benefits should report to the Office of Financial Aid (Room A123, 201-447-7462) before the beginning of each semester of attendance, including summer session. Applications for benefits are also available and processed in this office. It is the student's responsibility to notify the office of any changes in enrollment during the school year.

## New Jersey National Guard

A New Jersey resident who is currently an active member of the New Jersey National Guard or a child or spouse of an active member who was killed in the performance of duty is entitled to enroll in a maximum of 15 credits per semester without the payment of tuition. Tuition-free enrollment is permitted only to the extent that federal or state financial aid does not cover tuition costs; therefore, the appropriate financial aid forms must be filed. Applicable fees must be paid by the student. Additional information may be obtained from the Veterans Affairs Advisor located in the Financial Aid Office, Room A-123, 201-447-7462.

## Volunteer Fire, First Aid, and Rescue Squad Members and Family

New Jersey residents who are active members of a volunteer fire company or volunteer first aid or rescue squad or association in good standing and the dependent children and spouse of a volunteer shall be allowed to enroll on a tuition-free basis and be eligible to receive tuition credit in an amount not to exceed $\$ 2400$. Students will be eligible for this tuition credit provided that available classroom space permits and that tuition-paying students constitute the minimum number required for the course. Registration must occur on designated days only. (A letter from the municipality must accompany the registration to the Financial Aid Office.)

In order to be eligible to receive tuition credit, a person shall agree to serve as a member of a volunteer fire company or first aid squad for a minimum of four years and sign an agreement with the municipality pledging four years of service in exchange for the tuition credit. Following each year of volunteer service
performed, the volunteer, dependent or spouse shall be entitled to receive tuition credit of up to $\$ 600$ per year, not to exceed a maximum of $\$ 2400$ over a four-year period. Students should call the Financial Aid Office at 201-447-7148 for additional information.

## Unemployed Persons

New Jersey residents who have been in the labor market for at least two years and who are unemployed or in receipt of a layoff notice are entitled to enroll in credit courses on a tuition-free basis. Enrollment is on a space-available basis and registration must occur on the designated days only. Tuition-free enrollment is permitted only to the extent that federal or state financial aid does not cover tuition cost. The student must pay all fees. Contact the Financial Aid Office for additional information.

## TESTING AND ASSESSMENT

In support of the mission of Bergen Community College, the Office of Testing and Assessment (OTA) offers a variety of testing services. The Bergen Community College Office of Testing and Assessment, 201-447-7202, is located in Room L-121 adjacent to the Student Center. The Office of Testing and Assessment serves the college community by identifying, developing, procuring, administering, processing, and/or evaluating examinations which meet a variety of administrative and instructional needs.

## General Test Taking Requirements

The Office of Testing and Assessment will not administer examinations to test takers unless they provide the following:

- Valid Identification. Acceptable identification is either a Bergen Community College student identification card, a driver's license with photo, or a Bergen County photo identification card or a valid U.S. passport.
- Student Identification Number. A student identification number is either a social security number or a Bergen Community College student identification number issued by the Registration office, Room L-129.


## Basic Skills Placement Test

Bergen Community College requires that all degree-seeking students and all non-degree-seeking students who reach their 11th attempted credit take a Basic Skills Assessment and Placement Test in reading, writing, computation, and algebra. The results of this test determine a student's required entry level courses in both English and mathematics. Under specific conditions, a student may have the placement test requirement waived. For information about waivers as well as placement test information bulletins and subject matter review sheets, visit the Office of Testing and Assessment, Room L-121. There is no fee for this examination.

## Levels of English Proficiency Test

International students or students for whom English is not their native language may be required to take the Levels of English Proficiency Test (LOEP). This test measures proficiency in reading, writing, and listening and may place students in the

American Language Program (ALP). Students placed in the ALP are required to complete this program before registering for courses in their chosen curricula. Students who complete the ALP or who have tested out of the program through the LOEP are then required to take the mathematics portion of the Basic Skills Assessment and Placement Test. Under specific conditions, a student may have the LOEP and/or mathematics test requirement waived. Further information about waivers, the LOEP, and the ALP is available at the Office of Testing and Assessment, Room L-121. There is no fee for this examination.

## Basic Mathematics and Elementary Algebra Retests

To support the instructional objectives of the Developmental Mathematics program, retests for mathematics and algebra are administered by the Office of Testing and Assessment. Students must receive written permission forms from their instructors which they then present to the test administrator, during the hours noted on the permission form.

## Challenge Tests

Due to a variety of circumstances students may not perform to the best of their abilities on the Basic Skills Assessment and Placement Test. To reassess basic skills proficiency, Challenge Tests are offered in English, Computation, and Algebra. Challenge Tests are offered periodically throughout the semester. A copy of Challenge Test policies and procedures with a current schedule of test dates may be obtained in person from the Office of Testing and Assessment, Room L-121.

## Proficiency Tests

Proficiency tests are offered as a means of placement for a variety of college-level courses. Successful scores on proficiency tests allow students to register for a higher level course within the same discipline sequence. However, a successful proficiency test carries no course credit. Proficiency test registration forms can be obtained from the Office of Testing and Assessment, Room L121. There is a $\$ 30$ fee for each proficiency test taken.

## Credit-by-Examination

The Office of Testing and Assessment administers credit-byexamination (CBE) for a large number of college-level courses. In order to receive college credit for a particular course, a student must earn a passing grade on specific subject examinations. Upon successful completion of an examination, the student will pay a $\$ 15$ per-credit fee and will receive a CBE grade. The CBE grade is not included in attempted credits but is included in earned credits. The CBE grade is not computed in a student's cumulative grade point average. Registration information may be obtained at the Office of Testing and Assessment, Room L-121. There is a $\$ 30$ fee for each test.

## College Level Examination Program

Bergen Community College students may earn college credit for learning achieved outside formal college courses through the College Level Examination Program (CLEP). Visit the Office of Testing and Assessment (Room L-121) for more information about CLEP.

## General Educational Development (GED) Test

Bergen serves as a test center for the GED test. The GED test consists of five parts: Writing, Social Studies, Science, Mathematics, and Reading. Advanced registration is required. Registrants are required to:

- Register in person on specific dates
- Pay a $\$ 25$ fee in the form of a Money Order payable to the Commissioner of Education
- Present a valid picture identification with signature
- Provide proof of birth date (a certificate of consent to participate, obtainable through this office, must be signed by a parent or guardian for students 16 and 17 years old and submitted at registration)
- Present all test scores from previous GED tests


## Special Accommodations Testing

A variety of accommodations can be provided to students if they are disabled. Each semester these students are required to visit the Office of Specialized Services (Room S-131) to obtain accommodations for their classes.

The Office of Testing and Assessment will provide special testing based on approval from the Office of Specialized Services. Professors will also be notified. Detailed information remains confidential unless the student signs a written release form or presents a danger to self or others.

## Instructional Makeup Testing

The Office of Testing and Assessment administers makeup tests as a service for students who, for compelling and exceptional reasons, have missed a scheduled classroom examination. Students must receive prior permission from and make arrangements with their course instructors to take these examinations under specific conditions in the Office of Testing and Assessment, Room L-121.

## Testing for Online/Telecourses

The Office of Testing and Assessment (OTA) administers examinations to students who are enrolled in online or telecourses originating at Bergen Community College or at other institutions. Faculty should contact the OTA at 201-447-7202 for information on testing procedures. Students may take their required examinations during posted testing office hours and must follow the General Testing Requirements.

## World Language Testing

The College awards credit and/or course waivers for World Languages through Bergen Community College World Language proficiency tests, the New York University Proficiency Testing in Foreign Languages Program, and the College Level Examination Program (CLEP). For information on any of these testing options, contact the Office of Testing and Assessment at 201-447-7202, Room L-121.

## 2+2 Program

Bergen Community College participates in a $2+2$ Program whereby college credits may be granted to high school students who successfully pass the equivalent of a final examination. Students who have at least a "C" average in high school and who are recommended by their instructors and principal are eligible for the program. There is a $\$ 30$ fee for each examination. Upon payment of the usual tuition and fees, and matriculation into a program at Bergen Community College, students receive a Credit-ByExamination (CBE) grade for each course successfully tested. A CBE grade is not included in attempted credits but is included in earned credits. A CBE grade is not computed in a student's cumulative grade point average.

## Proctoring Services

The Office of Testing and Assessment provides special test proctoring for individuals who are participating in programs sponsored by colleges, universities, government agencies, private institutions, and business and industry which require a secure examination environment. Individuals requesting this service must make arrangements with their program sponsor to send confidential test materials and administrative instructions to the Office of Testing and Assessment. A fee is charged for test administration.

## Outcomes Assessment

Students may be asked to participate in one or more outcomes assessment measures including statewide or college-designated standardized or locally developed assessment tests or procedures. If selected, students are required to participate in these assessment activities.

## Nursing Department Testing Candidates

Admissions: All candidates for admission to the Nursing Program are required to take the Nurse Entrance Test (NET). Candidates must achieve a passing score. The results will be another criterion used in the admission process. Specific test information will be sent to candidates once the application has been processed. Further information is available at the Office of Testing and Assessment. There is a $\$ 15$ fee for this test.
Exit Examination: A nationally standardized examination will be given in the fourth level of the nursing curriculum. Only those students who achieve a passing score and have met all other degree requirements will be certified by the Director to take the NCLEX-RN. There is no fee for this test; there will be a fee for repeat exams.

## TRANSFER OF CREDIT

An official high school transcript is required in order to complete matriculation unless the applicant has a bachelor's degree. Applicants transferring from regionally accredited colleges may be admitted with advanced standing, if admission requirements of Bergen Community College are met. Official college transcripts must be forwarded to the Transfer Evaluator, Room A129, and students will receive a Transfer Equivalency Report in
the mail. Students can also access their records online via WebAdvisor. Transfer credit and advanced standing will be granted only for those courses that are similar to those offered at Bergen Community College and applicable to the student's program of study. Grades below "C" are not accepted for transfer.

## College Residency Policy

Students may apply a maximum of 45 transfer credits toward a degree. The maximum number of credits that can be applied toward a certificate depends on the number of credits required by the certificate. These credits may be compiled from a prior Bergen Community College degree/certificate, transfer credits from other institutions, and/or proficiency and CLEP examinations. The balance of credits required for any degree or certificate must be earned through actual course enrollment at Bergen Community College.

## Request to Take Courses at Other Institutions

Degree-seeking students desiring to take a course or courses at another institution must fill out the appropriate form obtainable in the Office of Registration and Student Information Services.

## TRANSFER TO OTHER INSTITUTIONS

Transcript Request forms are available in the Office of Registration and Student Information Services. College policy requires that a student's signature appear on all transcript requests. The College is not obligated to furnish a transcript to any student or alumnus whose financial obligation to the College has not been satisfied. Only unofficial copies of a transcript will be issued directly to students.

## New Jersey Full-Faith-and-Credit Policy

In 1973, the New Jersey Board of Higher Education adopted a Full-Faith-and-Credit policy in an effort to improve articulation between community and state colleges and to remove any artificial barriers to transfer for community college graduates. The intention of this policy was to permit county college graduates with an A.A. or A.S. degree to enter state colleges as full juniors. With the July 1, 1994, dissolution of the Department of Higher Education, the Full-Faith-and-Credit policy is no longer a written guideline. However, the Commission charged with overseeing higher education in New Jersey is committed to the intent of this policy, and community college credits and transfer degrees continue to be treated as before. The policy allows individuals who earn A.A. and A.S. degrees at New Jersey community colleges to receive full credit at the state colleges for their general education courses but does not preclude the state colleges from requiring additional general education work. The Full-Faith-andCredit policy applies to New Jersey community colleges and New Jersey state colleges, including Thomas Edison State College. It does not apply to Rutgers University or the New Jersey Institute of Technology; students are encouraged to access NJTransfer at http://www.njtransfer.org, the Web-based statewide articulation program to determine how Bergen courses transfer to these colleges.

## Transfer Articulation Agreements and Dual Degree Programs

Transfer Articulation Agreements with four-year institutions have been developed for graduates of many Bergen Community College programs. Bergen Community College participates in the Rutgers University Dual Degree Program. More information about transferring to New Jersey colleges can be found at http://www.njtransfer.org.

## Degree Pathways Program

After earning an associate degree at Bergen Community College, students may continue to earn 20 additional credits at Bergen, and apply those credits toward a Thomas Edison State College bachelor's degree. The remaining bachelor's degree requirements can be completed through Thomas Edison State College Distance Learning courses, either at home or by using Bergen

Community College facilities. Distance Learning courses are online courses, e-mail courses, Interactive Television Video courses, and telecourses.

## Transfer Counseling

For assistance with the college selection process, students are encouraged to attend Transfer Advising Workshops which are held throughout each semester. Appointments with a transfer counselor may be made in the Counseling Center (A-118). Information and reference materials are provided in the Transfer Library and in the Sidney Silverman Library. Applications for most local colleges may be obtained in Room A-118.
Representatives from New Jersey and out-of-state colleges visit the campus throughout the year.

## ENTRANCE REOUIREMENTS FOR HEALTH CAREER PROGRAMS

Admission to college programs in health careers is limited to a specific number of candidates each year because of requirements imposed by accrediting agencies and by the availability of faculty, college laboratory and clinical agency resources. To insure that all applicants are evaluated in the same way, within each discipline, criteria for acceptance have been developed by the Division of Science and Health and the Division of Student Services. These criteria will be utilized in determining the candidates who will be offered admission.

All candidates for admission to the Nursing Program are required to take the Nurse Entrance Test. (See Nursing Department Testing in this chapter.) All candidates for Dental Hygiene are required to take the Health Occupations Basic Entrance Test (HOBET). There is a $\$ 15$ fee for this test.

If you have not taken the necessary high school prerequisites, the courses can be made up by substituting courses taken at Bergen. These courses must be taken before you apply to Nursing or any health career program. To be considered for most programs, science prerequisites must have been completed within the last ten years. Applicable college science courses taken more than ten years ago are not transferable. Students who hold a visa of any type may apply for a health career program after attending the College for a minimum of one semester.

A successful candidate for a health career program at Bergen Community College must possess certain abilities and skills necessary to provide and maintain safe and effective care administered to the patient. The candidate must be able to function on an independent level without any intermediary. These skills and abilities include: observation, communication, motor skills, cognitive and intellectual skills, behavioral and social attributes.

Students accepted into certain health career programs, who on the basis of the basic skills testing results require remediation, will be placed into a deferred acceptance category until remediation needs have been met. Deferred acceptance students must remain in contact with the Director or Coordinator of their specific health career program during progression through required remediation. Applicants to Dental Hygiene, Diagnostic Medical Sonography, Physical Therapy Assistant, and Radiography programs must complete remediation prior to acceptance into the program.

Full and part-time students in Allied Health programs must carry personal medical health insurance.

Nursing students must carry personal medical health insurance, malpractice insurance, and be certified in cardio-pulmonary resuscitation (CPR) by the American Red Cross (Health Provider Certificate or Professional Rescue Certification). In addition, all nursing students are required to complete health examination forms upon admission to the program and fulfill the requirement for a yearly Mantoux skin test for tuberculosis.

Students seeking admission to Nursing (Day), Dental Hygiene, Diagnostic Medical Sonography, and Radiography must submit complete applications by March 1 for fall (September) admission. Nursing (Evening) applications are due by November 1 for spring (January) admission. These deadlines may be extended, if classroom space permits.

The Joint Commission on Accreditation of Healthcare Organizations (JACHO), the primary accrediting body for clinical agencies, requires criminal history background checks for all individuals engaged in patient care. Students who have engaged in criminal activity in the past will be ineligible to participate in clinical practice and will be dropped from the nursing or allied health program. Students will be charged for the cost of the background check.

## Minimum Entrance Requirements for Health Career Programs

(Each prerequisite course must be passed with 2.0 or higher)

| PROGRAM | COLLEGE CODE | LENGTH/DEGREE | PREREQUISITES | SUBSTITUTIONS | MINIMUM G.P.A. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Dental Hygiene | AAS.AH.DENTL | 2 year AAS | Chemistry w/lab, Biology w/lab, Algebra | CHM 100 BIO109*, <br> MAT 035 or MAT 031/032 | $\begin{aligned} & 2.5 \\ & \text { (Passing score } \\ & \text { on HOBET) } \end{aligned}$ |
| Diagnostic Medical Sonography | AAS.AH.DMS | 2 year AAS | One Biology w/lab, Algebra General Physics | BIO 109*, <br> MAT 035 or MAT 031/032 <br> PHY185 | 2.5 |
| Exercise Science | CERT.EXER.SCI AS.PS.EXER | 1 year Certificate 2 year AS | HS Graduation or GED HS Graduation or GED | None None | $\begin{aligned} & 2.0 \\ & 2.0 \end{aligned}$ |
| Health Science | AAS.H.HLTH.SCI | 1 year AAS | Prof. Cert./License | None | 2.0 |
| Medical Laboratory Technology | AAS.AH.MLT | 2 year AAS | Chemistry w/lab Biology w/lab, Algebra | CHM 100 <br> BIO 109*, <br> MAT 035 or MAT 031/032 | 2.5 |
| Medical Office Assistant | AAS.AH.MOA CERT.MOAA | 2 year AAS <br> 1 year Certificate | One Science One Math | $\begin{aligned} & \text { BIO 109*, } \\ & \text { MAT 011 } \end{aligned}$ | 2.0 |
| $\begin{aligned} & \text { Nursing (Day) } \\ & \text { Nursing (Eve.)*** } \end{aligned}$ | AAS.NURS.DAY AAS.NURS.EVE | 2 year AAS | Chemistry w/lab Biology w/lab, Algebra | CHM 100 <br> BIO 109*, <br> MAT 035 or MAT 031/032 | $\begin{aligned} & 2.5 \\ & \text { (Passing score } \\ & \text { on NET) } \end{aligned}$ |
| Physical Therapist Assistant $\dagger$ | AAS.AH.PTA | 2 year AAS | Chemistry w/lab Biology w/lab, Algebra | CHM 100 <br> BIO 109*, <br> MAT 035 or MAT 031/032 | 2.0 |
| Pre-Chiropractic | AS.NSM.CHIR | 2 year AS | HS Graduation or GED | None | None |
| Radiation Therapy | CERT.RAD.THERAPY | 1 year Certificate | Certification as Radiographer | None | 2.5 |
| Radiography | AAS.AH.RAD | 2 year AAS | One Science, Algebra | BIO 109*, <br> MAT 035 or MAT 031/032 | 2.5 |
| Respiratory Therapy | AAS.AH.RESP | 2 year AAS | Chemistry w/lab Biology w/lab, Algebra | CHM 100 <br> BIO 109*, <br> MAT 035 or MAT 031/032 | 2.0 |
| Surgical Technology | CERT.SURG | 1 year Certificate | HS Graduation or GED | None | 2.0 |
| Vascular Technology | AAS.AH.VAS | 2 year AAS | One Biology w/lab, Algebra General Physics | BIO 109*, <br> MAT 035 or MAT 031/032 | 2.5 |
| Veterinary Technology $\dagger \dagger$ | AAS.H.VET | 2 year AAS | Chemistry w/lab Biology w/lab, Algebra | CHM 100 <br> BIO 115, <br> MAT 035 or MAT 031/032 | 2.0 |

* HS Biology is waived if college biology, preferably BIO109, is successfully completed.
** The Diagnostic Medical Sonography Program is a regional program that utilizes clinical affiliates throughout New Jersey. Students may be required to travel to distant sites and provide their own transportation in the clinical education component of the program.
*** Evening Nursing applicants cannot be accepted until general corequisites (8 courses) have been completed. These courses are: BIO109, BIO209, WRT101, WRT201, PSY101, PSY106, SOC101, and WEX101.
$\dagger$ Meeting the minimum requirements does not guarantee admission into the Physical Therapist Assistant Program; admission is selective. Additional criteria used to select individuals include: overall GPA, science GPA, year biology or anatomy completed, experience (paid or volunteer) in a physical therapy setting or other allied health field, prior education, and letters of recommendation from physical therapist(s).
$\dagger \dagger$ Applicants for the professional component (second semester) of the Veterinary Technology program cannot be accepted until all prerequisites have been completed. These courses include WRT101, BIO115, CHM112, VET102, and VET103. Students are advised to consult with the coordinator of the Veterinary Technology program for additional information regarding the application procedures.Technology program for additional information regarding the application procedures.
- Students seeking admission to Nursing (Day), Dental Hygiene or Diagnostic Medical Sonography must submit complete applications by April 1, for fall admission. Nursing (Evening) applications are due by November 1 for spring (January) admission. These deadlines may be extended, if classroom permits.


## Special

Bergen Community College has special programs to meet the individual needs of each student. Whether you are a recent high school graduate, a working professional returning to college, a talented high school student, or a senior citizen - BCC has a program to help you reach your goals.

Participation in the Honors Program, Cooperative Education, or Study Abroad can enrich your college experience. Check bulletin boards for information about special activities sponsored by these programs during the academic year.

## Educational Opportunity Fund (EOF) Program

The Educational Opportunity Fund Program was instituted by the New Jersey State Legislature in 1968 for the purpose of helping economically and educationally disadvantaged students obtain a college education.

Students who are accepted into the program are provided with a grant and comprehensive support services designed to enhance their college experience and to insure the success of each participant. Such services include extensive counseling, tutorial assistance, academic advisement, career exploration, and workshops geared toward the specific needs of the students.

Participants are encouraged to attend a six-week summer program immediately prior to the fall semester of the freshman year. The summer program helps students adjust to the college environment, and also focuses on academic preparation for the fall semester. In order to qualify for EOF, a student must be a legal resident of New Jersey for at least 12 consecutive months prior to receiving the grant, have a high school diploma or equivalent, enroll for 12 or more credits as a degree-seeking student, and meet financial guidelines. Dependent and Independent students are financially eligible for an EOF grant based on the following scale:

| Household Size | Gross Income for Previous Year not to Exceed* |
| :---: | :---: |
| 2 persons | $\$ 23,880$ |
| 3 persons | $\$ 30,040$ |
| 4 persons | $\$ 36,200$ |
| 5 persons | $\$ 42,360$ |
| 6 persons | $\$ 48,520$ |
| 7 persons | $\$ 54,680$ |
| 8 persons | $\$ 60,480$ |

*Subject to change. Add \$6,160 for each additional member of the household.

The EOF Program is not an entitlement program. Initial EOF eligibility is determined on the basis of both economic and educational criteria. Because a student or a student's family currently falls within the income criteria does not make the student automatically eligible for EOF. Although students may qualify for the program, admission criteria give priority to first-time, fulltime freshmen and to EOF transfer students in good standing from another EOF Program.

Individuals interested in the Educational Opportunity Fund Program should contact the EOF Office in Room A-126, 201-447-7139.

## College Experience Program

The College Experience Program (CEP) is intended as a mechanism for talented high school juniors and seniors to pursue advanced education at an early stage in their academic life. Courses applied for should represent an advanced experience and reflect an accelerated academic interest. Approved applicants will be permitted to take up to two courses or six credits per semester when enrolling for the fall or spring semesters. During the summer sessions students will be permitted to take one course per session.

## Eligibility:

1. High school junior or senior at least 16 years old.
2. Overall average of "B" (3.0) in high school courses.
3. Written approval by parent and high school officials. Home schooled students must meet all requirements.

Students who participate in the CEP should note that all grades earned as a result of courses attempted or completed serve to establish a permanent record at BCC. Auditing courses is not permitted in the CEP. Application forms for the CEP are found in the back of the registration booklets published each semester. These are available at the Office of Registration and Student Information Services or by calling 201-447-7218.

College Experience Program applicants must obtain special approval before registering for courses. Applications must be returned to the Office of Registration and Student Information Services according to the published deadlines.

## Developmental Program

All degree-seeking students and all non-degree-seeking students who reach their 11th attempted credit must take a Basic Skills Assessment and Placement Test in both English and mathematics unless they qualify for a waiver. (See Basic Skills Testing, page 13.) As a result of this test the student may have to enroll in nondegree credit developmental courses in English and/or mathematics which often combine regular course work with laboratory activities. These preparatory courses emphasize the development of basic reading, writing, computation, and algebra skills which will help students perform successfully in college-level courses.

English Basic Skills. Based on the results of the English portion of the Basic Skills Assessment and Placement test, a student may be placed in one of four entry-level English courses: Developmental Skills I and Developmental Skills II, English Skills, Directed Studies in Writing and Composition I, or Composition I alone. Students placed in Developmental Skills I and II or English Skills must enroll in their required course in their first semester at the College.

Math Basic Skills. Based on the results of the mathematics portion of the Basic Skills Assessment and Placement Test, a student may be placed in developmental math courses: Basic Mathematics (MAT-011) or the sequence of Algebra A and B (MAT-031 and MAT-032), or Algebra (MAT-035).

Academic Intervention and Monitoring System (AIMS)
AIMS is an academic and personal support program designed for students who are most at risk in a college environment because of their deficiencies in reading, writing, thinking, and mathematical skills. AIMS exists to help these students achieve academic success, remain in school, and develop a greater sense of independence and self-esteem. The AIMS program offers full-time, first semester students at BCC the following advantages:

- Special orientation and registration session.
- Preselected program of courses and services, including Basic Mathematics (Computation), Developmental Skills I (English), Basic Communications (Speech), Directed Studies in Academic Skills, tutoring, and individual counseling.
- Prescheduled patterns of courses.
- Small classes, averaging 15-18 students.
- A full-time credit limit of 14 institutional credits.
- Individualized attention from both classroom instructors and counselors.

The AIMS program is a joint effort supported by the Division of Arts and Humanities; the Division of Business, Mathematics, and Social Sciences; the Division of Student Services; and the Office of the Academic Vice President. To discuss the advantages of the AIMS program in further detail, please contact the AIMS program coordinator, Room L-121, at 201-447-7168.

## American Language Program

International students for whom English is not their first language and who are admitted to or planning to attend Bergen Community College will be given the Levels of English Proficiency Test (LOEP). Testing results will be used to place students into the American Language Program (ALP) courses at Bergen Community College.

Non-degree college credits earned upon successful completion of American Language Foundation, Level I, II, or III may not be used to fulfill degree requirements. English Composition I and II (for international students) courses fulfill the same college degree requirements as English Composition I and II.

## Courses

Credits
American Language Foundations
ALP-004, 005, 006, 007, and SPE-009
American Language Level I
ALP-041, 042, 043, 044, SPE-001
American Language Level II
ALP-051, 052, 053, 054, SPE-002
American Language Level III
ALP-061, 062, 063, 064, SPE-003
Students placed in the ALP may enroll for a maximum of 15 credits per semester. Students who wish to enroll on a part-time basis should see an international student counselor for advisement on proper course selection. Students placed in the American Language Program cannot take college-level courses until they have successfully completed all levels of the program
as well as having passed required exit examinations. Also, upon completion of required ALP courses, students must take a mathematics placement test or be granted a waiver.

## Cooperative Education, Career Counseling, and Employment Services

Cooperative Education is an academic program at Bergen
Community College in which students combine classroom learning with practical work experience. The aim of the program is to provide students with meaningful and valuable learning experiences as well as specific skills related to career goals. In some majors, Co-op is mandatory and in some it is optional. On campus, students continue their usual academic program and participate in a Co-op seminar where they explore the relationship between academics and day-to-day work situations. Students receive academic credit for successful completion of the Co-op Work Experience in which more than 300 employers participate.

To be eligible, a student must have fulfilled the prerequisite of the Co-op course. After the requirements are completed, students should contact the Cooperative Education and Career Development Center to meet with a counselor and obtain assistance with placement in their Co-op Work Experience.

In addition, the center offers career counseling and maintains job listings for Bergen Community College students and alumni. Ongoing workshops in Resume Writing, Interviewing Skills and Job Search Strategies are offered throughout the semester. For information about the above programs, call the Cooperative Education and Career Development Center at 201-447-7171 or visit Room C-100.

## Service Learning

Service Learning is the integration of academic instruction with community service within a specific course. It focuses the student on critical thinking, reflection, and civic responsibility. Students who choose the Service Learning option participate in an organized service activity that meets a community need. Students bring their related experience back to the classroom deepening their understanding of the course content. Check the registration book or your professor for courses that offer a Service Learning component. For further information, call the Cooperative Education and Career Development Center at 201-447-7171 or visit Room C-100.

## Honors Program

Honors sections of General Education courses are offered during the fall, spring, and summer semesters. The Honors Program offers courses in English, Philosophy and Religion, History, the Social Sciences, Business, Science, and Math. (A complete listing of honors courses being offered in a given semester is available in that semester's registration booklet.) Students with a strong high school record or a college GPA of at least 3.4 are eligible for the program and are invited to enroll. Honors students enjoy smaller and more challenging classes taught by excellent faculty. They also have access to an honors advisor each semester, get to attend transfer seminars specifically
designed for those honors students, and have their honors courses designated as such on transcripts. Participation in the Honors Program also enhances students' prospects for transferring to desirable universities, often with scholarships.
For further information, please contact the Director of the college Honors Program, Dr. Alan Kaufman, at 201-493-3550 or akaufman@bergen.edu.

## Study Abroad

Through Bergen Community College's membership in CCIS (College Consortium for International Studies) Bergen students have more than 50 programs to choose from in over 30 countries throughout the world. Programs are offered in Africa, Asia, Europe, and Latin America. Programs are available in Argentina, Australia, Bulgaria, Canada, Chile, China, Costa Rica, Cyprus, Dominican Republic, Ecuador, England, France, Germany, Greece, Hungary, India, Italy, Jamaica, Mexico, Nicaragua, Portugal, Russia, Scotland, South Korea, Spain and Switzerland.

Study abroad experiences range from a summer, a semester, or an academic year. The programs are, for the most part, designed for undergraduate credit. Your studies may include the language and culture of the host country, as well as business, art, the European Union, service-oriented work experiences and much, much more. Study abroad programs are designed for cultural immersion and many sites offer a chance to live with a family in the host country. You must have completed one semester at BCC, be a full-time student, and be in good academic standing in order to participate. At least a 2.5 cumulative grade point average on a 4.0 scale is required. Certain programs require a 3.0 average.

Financial aid may be used for study abroad programs. It is a good idea to apply early. Early application allows your financial aid office to complete the review of your eligibility for financial aid and to get all of the paperwork done. Be sure to apply no later than fifteen weeks prior to departure. Special scholarships are also available for students demonstrating financial need.

To find out more about this opportunity, make an appointment with Prof. Amparo G. Codding, Coordinator of World Languages and Cultures 201-447-7167. You may also want to visit the study abroad Web site for additional information
http://www.bergen.edu/study_abroad.

## Continuing Education

The Division of Continuing Education is the entrepreneurial arm of Bergen Community College. The emphasis of the Division revolves around economic development through job training, career enhancement, and enrichment programming leading to lifelong learning. The Division serves as a testing ground for new programs, many in partnership with associate degree programs. It also serves as a pathway for adults who seek to pursue higher learning within the institution and beyond.

Through the Division of Continuing Education, adult students and
children are able to sample a variety of learning formats. Classes are often hands-on. Students are able to learn in the classroom, through a variety of field trips or online. The Division often brings training to the student's workplace either through the Center for Business and Industry or through a worksite-based open enrollment program. Classes are offered in the evening or on weekends to accommodate working adults and school children. Daytime schedules and asynchronous online courses mean that there is a program to meet almost any schedule.

To ensure the Division remains current with the needs of Bergen County residents, the staff reach out to create partnerships with industry groups, non-profit organizations and other educational institutions. Course topics are current, with new titles offered continuously based upon labor market and recreational trends. Topics include: Web Server Management, Web Design and Development, Cisco Certified Network Associate, A+ Certified Computer Technician, Microsoft Certified Systems Engineer, Computers in the Workplace, Entrepreneurship and Finance, Medical Billing, Management Development, Drug and Alcohol Counseling, Certified Nursing Assistant, Hemodialysis Technician, Alternative Healing and Reflexology courses as well as Interior and Fashion Design.

For information and a course catalog, please contact the Division of Continuing Education at 201-447-7488, menu option \#4, or visit the Registration Office, Technology Education Center, Room 115. Office hours are Monday through Thursday 8:30 a.m. to 8:00 p.m., and Friday, 8:30 a.m. to 5:00 p.m. The catalog may also be viewed online at http://www.bergen.edu/continuinged.

## Institute for Learning in Retirement

Senior citizens over 55 years of age participate in Bergen Community College's Institute for Learning in Retirement (ILR). Short courses covering everything from Ancient History to the

Theory of Relativity are offered each semester. The College's ILR is one of 250 institutes, affiliated with Elderhostel, established to meet the needs and interests of adults who share a love of learning. Dues are $\$ 85$ a year. Membership includes pool and library privileges and other benefits. There are no prerequisites, exams, or grades for participants. For further information or to be placed on the mailing list, call Dean Lois E. Marshall at 201-6125464 and leave name, address, and telephone number.

## Small Business Development Center

The Small Business Development Center (SBDC) at Bergen Community College is one of ten centers statewide with headquarters at the Rutgers University Graduate School of Management (NJBDC) and is part of a national network of over 1,000 centers nationwide. These centers offer comprehensive management consultations and technical assistance to the small business community. The SBDC is partially funded by the U.S. Small Business Administration, N.J. Commerce and Economic Growth Commission, as well as the private sector. Expert advice is provided at no cost, on a confidential one-on-one basis by SBDC professional staff and private consultants. Areas of counseling include, but are not limited to:

- Accounting/Recordkeeping
- Advertising
- Business Planning
- Cash Flow Management

- Employment Issues
- Financial Management
- Government Procurement
- International Trade
- Marketing Strategies
- Start-up/Acquisition Sales

The SBDC regularly conducts low-cost workshops covering entrepreneurial subjects such as start-up issues, marketing,

financing, and the business plan. The College's state-of-the-art technology, library, and research resources are available. You can reach the SBDC at 201-489-8670. The SBDC is located in the Philip Ciarco Jr. Learning Center (see description below). Consult the Continuing Education catalog for more information or e-mail requests to vdelia@bergen.edu.

## Philip Ciarco Jr. Learning Center

The Philip Ciarco Jr. Learning Center, located at 355 Main Street in Hackensack, was founded by the College in 1970 primarily to provide educational and counseling services for adults who have not completed a formal high school education and for adults who are interested in studying English as a Second Language. Since then, many thousands of adults have enrolled at the Center. A significant number of these adults have gone on to college and other post-secondary training, while many others have enrolled to improve their quality of life through language acquisition or through the development of workplace skills for employment or job betterment.

The Center offers a variety of courses both on-site and off-site for adults who wish to enhance their education. Through the concept of individualized instruction, adults who have not completed their education can enroll in the Center's programs at any time and at any level of ability and move from that point on to achievement of their goals. The programs at the Ciarco Learning Center are scheduled to enable adults to enroll at any time, regardless of whether they are seeking basic remediation or preparation for college admission.

Adults seeking to earn a Bergen Community College associate degree can also begin their program at the Ciarco Learning Center. The facility houses spacious seminar rooms, computer laboratories, and student lounge areas. The Center is a welcoming and supportive environment for adult learners.

For further information, call the Ciarco Learning Center at 201-489-1551 or visit our website at: http://www.bergen.edu/CiarcoCenter.

## The following programs and services are offered through the

 Ciarco Learning Center:- Adult Basic Skills
- Community Counseling Services
- NJ Public Information Job Search Network Site
(http://www.wnjpin.state.nj.us)
- Workplace Employability Skills
- High School Equivalency (GED) preparation courses
- SIGI (System Information Guidance Interaction) Career Information
- English as a Second Language
- Citizenship Preparation
- College-Level Courses
- Inmate Education (Bergen County Sheriff's Department)
- Work First New Jersey Programs
- On-site Corporate Training

- On-site Workforce Development
- Cisco Networking Academy
- Small Business Development Center
- Official State of New Jersey GED Testing Site
- NJ Department of Labor Workforce Learning Link
- IBM Adult Literacy Reading Recognition Program


## Community Counseling Services.

Free counseling services for adults include:

- Guidance for making decisions about jobs/careers
- Guidance for developing employability skills
- Counseling for completing high school education
- Planning college education
- Locating special educational and training programs
- Referrals to agencies providing specialization in personal issues
- Academic counseling for enrolled students


## Links with Business and Industry. The Ciarco Learning

 Center extends its scope of services by providing customized training programs for business and industry that stress the attainment of measurable objectives by the student. Specific components of these programs focus on Basic Skills development (reading, math, and critical thinking skills); English as a Second Language, which includes work-related communication skills and general communications; Work Place Maturity Skills, together with basic computer literacy and software applications; and GED preparation. These programs can be sponsored solely by the company, labor union, or through collaborative ventures with the Department of Labor and the federal TRA Program.The Helen L. Haber Scholarship. A $\$ 500$ scholarship is awarded annually to a qualified woman on the basis of financial need and educational commitment.

# Regi stration \& TUITION 

At Bergen Community College, you have the
option of registering in person or online.
WebAdvisor accounts are available for all students enrolled in credit programs.
Sign up for a WebAdvisor account by visiting
http://go.bergen.edu and selecting WebAdvisor
for Students. Registration books, containing
the course schedules are published each
semester.


## Academic Advisement

Student course advisement is provided by faculty throughout the year on a drop-in basis in the Academic Advising Center, Room A-101, in the Student Center, and at Late Registration.
Counselors are available by appointment in the Counseling Center, Room A-118.

## New Student Orientation

Prior to the start of classes, an orientation program is held to provide an opportunity for new students to become acquainted with college objectives, facilities, and programs. Students also tour the campus and attend various social functions. Information pertaining to the orientation program is mailed to all entering students.

## Registration

A course schedule is published each semester that provides all necessary course information, the academic calendar and deadlines for the semester, registration forms and policy.

Priority Registration. Currently enrolled students are given priority over all new students at the start of each semester's registration period. Students who have earned the most credits will be invited to register first. Returning students may call the Registration Office to request a priority registration date based on their completed credits.

Open Registration. After the Priority Registration period, new students will be permitted to register.

Late Registration. Two to three weeks before the semester starts, students may encounter long registration lines and a high proportion of closed course sections. Payment of tuition and fees in full is expected at the time of registration.

## Web Registration via WebAdvisor

WebAdvisor is a Web interface that allows students to register online and access their records at the College. WebAdvisor accounts are available for all students enrolled in credit programs. Most students have already been issued a WebAdvisor user name and password and may begin using Web-Advisor immediately by logging in. Otherwise, eligible students may sign up for a WebAdvisor account online by visiting http://go.bergen.edu and selecting WebAdvisor for Students, I'm new to WebAdvisor. For more information, please go to http://go.bergen.edu.

## Cancellation of Classes

The College reserves the right to cancel a class for which there is insufficient enrollment or to make changes in prerequisites,
instructor assignments, course descriptions, credits and scheduled offerings in the academic year as it may deem necessary for the proper and efficient functioning of the College.

Should a course be cancelled by the College, students enrolled will be given the opportunity to enroll for other courses in which seats remain. Those choosing not to enroll will receive a full refund.

## Student Responsibility

You will be held responsible for reading all pertinent information in college publications regarding withdrawals, course drops, college deadlines, tuition refunds. You are responsible for compliance with the rules and regulations as stated in college publications. Students who have holds or violations on their records will not be permitted to register for classes, receive final semester or session grades, or obtain copies of their academic transcripts or other college records.

## Academic Calendar

Students are responsible for referring to the official academic calendar and complying with the dates and procedures contained therein. The calendar is published in each semester's registration booklet.

## TUITION AND FEES

Tuition and fees are payable at the Bursar's office. Checks and money orders must be made payable to Bergen Community College and have student's social security number or College ID number on the face. Visa and MasterCard are also acceptable. Please do not send cash through the mail.

Students who register in person will be provided a bill at the time of registration. The bill specifies the date that payment is required. Failure to pay in full by the specified date may result in the cancellation of registration. Students who register using WebAdvisor may view their account balance online immediately after registering by going to Account Balance on the Student Menu. Payment can be made by printing the form at Make a Payment.

Scholarships and other financial aid must be presented at the Financial Aid Office in order to be considered for payment of tuition and fees. Scholarships and financial aid are not applicable to the admission fees or tuition deposit.

No student may be enrolled in classes until all outstanding charges have been paid. Tuition and fees are applicable only to the semester for which they are paid. These monies can be transferred to a subsequent semester with the authorization of the student.

## Admission Fees

## Application Fee

(Nonrefundable)
Reinstatement Fee
(Nonrefundable)
Tuition Deposit for Nursing and
Allied Health Admitted Students
(Nonrefundable and nontransferable) $\$ 100.00$

A nonrefundable tuition deposit is required of full-time and parttime first-year Nursing and Allied Health students at the time of their acceptance. The Acceptance Form will contain a specific due date for payment of the deposit and the return of the form. An accepted student may submit a written request for an extension until May 1. Written requests for extensions will be granted and will not jeopardize a student's admission to the College.

A tuition deposit may only be applied to the semester for which it was paid. No tuition deposit is required after the first semester the student attends as a degree-seeking student.

## General Fee ( $\mathbf{1 5 \%}$ of tuition)

Payable by all students each semester or session, the general fee partially defrays the following costs: registration, library, laboratory breakage, student and intercollegiate activities, student government, identification cards and graduation cost. This general fee is non-refundable and payable each semester or session on a per credit basis.

## Applicable Course Fees

In courses where additional instructional cost factors are incurred, the student will be charged a course fee ranging from $\$ 30.00$ to $\$ 90.00$. Schedules and bills will indicate which courses have an additional cost factor. The tuition and fees are subject to change.

Special Registration Fee: $\$ 5.00$ per student per semester.

|  | Per-Credit Rate |  |  |
| :--- | :---: | :---: | :---: |
| General Fee | Technology Fee |  |  |
| Bergen County <br> Resident | $\$ 82.60$ | $\$ 12.40$ | $\$ 4.40$ |
| Out-of-County <br> Resident | $\$ 171.00$ | $\$ 12.40$ | $\$ 4.40$ |
| Out-of-State <br> Resident | $\$ 181.00$ | $\$ 12.40$ | $\$ 4.40$ |
| Students on <br> Non-Immigrant <br> Visas | $\$ 171.00$ | $\$ 12.40$ | $\$ 4.40$ |

Non-Credit Tuition. The maximum non-credit tuition charge for state fundable courses will be $\$ 8.50$ per contact hour. The maximum laboratory fees for these courses are $\$ 12.75$ per contact hour.

## NJVCC Online Course Fee. The New Jersey Virtual

 Community College online course fee will be $\$ 90$ per credit, including tuition, general, and technology fees.Students in Health Career Programs incur additional costs for items such as uniforms, instruments, liability insurance, and transportation. These costs vary by program and are factored into financial aid benefits.

Returned Check Fee
$\$ 30.00$

Any checks not honored by the bank will incur a returned check fee and will require restitution in cash, money order, or certified check. All future transactions with the College must also be made by cash, money order, or certified check.

## Student Accident and Sickness Insurance

Students ( 12 credits or more) will be automatically billed for medical insurance coverage. Any student who changes status from fulltime ( 12 credits or more) to part-time (less than 12 credits) by September 30, will not be billed for medical insurance coverage, and any fee collected will be refunded to the student. The plan is specifically designed for students and is offered at a reasonable premium. If you already have health/hospital insurance and do not wish this coverage, you must request a waiver of the insurance fee. A waiver form will be available at the time of registration. You must complete the form and provide your insurance carrier's name and address and your policy number. Upon receipt of the form, the fee will be waived and/or your payment refunded. The deadline for submitting waivers for the fall semester is September 30, and January 31, for those students enrolling for the spring semester. You may wish to retain this coverage regardless of other insurance since it may help to cover part or all of your medical/hospitalization costs. Part-time students (11 credits or less) are offered the option of purchasing a medical benefit plan through the College. Specific information is available in a brochure which may be obtained at the Bursar's Office (Room A-229) or the Health Services Office (Room B-101).

## Stop Payment

Students who issue stop-payment authorization against checks paid to the College for tuition, fees, and other services are held responsible for such payment. A returned check fee for such stop payment authorizations will also be assessed. Once the outstanding financial obligations have been met in the Office of the Bursar, students are eligible to withdraw from classes according to the guidelines indicated under WITHDRAWAL FROM CLASSES (in this chapter) and the posted college deadlines for withdrawal from classes.

## Delinquent Students

Delinquent students are those who have outstanding financial obligations to the College or those who fail to return college materials on loan or assignment to them. Such students will have a "hold" placed on their records, will not receive copies of academic transcripts and will not be permitted to register for the next session. In the case of a graduating senior, conferment of the degree will be withheld. When materials cannot be returned because of loss or damage resulting from carelessness, the student is liable for the full retail price of a new replacement.

## RESIDENCY REOUIREMENTS

According to regulations of the State of New Jersey (N.J.A.C. 9A:5), tuition charges are determined by the student's permanent place of residency, or domicile. A residence established solely for the purpose of attending a particular college cannot be defined as a person's true, permanent domicile (home). To be considered a resident of the state, a student must have resided in New Jersey for one
day before enrolling at a public college in this state. To be considered a resident of Bergen County, a student must be a state resident as defined above, and must show proof of having a permanent residence in the county. The Office of Registration \& Student Information Services of Bergen Community College must make a determination of the residency status of students, and, as such, reserves the right to require students to show proof of residency prior to enrolling.

## When Do You Prove Residency?

Residency should be proven at registration or prior to the start of the semester/session. If residency is not proven, you will be charged at the out-of-county or out-of state rate. Once the semester/session has begun, proof of residency can be submitted for the subsequent semester session; however, tuition charges will not be adjusted for the current term.

## How Do You Prove Residency?

U.S. citizens or permanent residents should submit to the Office of Registration \& Student Information Services:

One of the following in your name:

- A copy of your valid Driver's License/Permit
- A recent Tax, Water or Utility Bill
- A copy of a current Lease or Deed
- A Bergen County ID Card, which can be obtained at the County Clerk's Office in Hackensack, One Bergen Plaza, Room 120; (201) 336-7000 (follow menu instructions).


## AND

If you are an independent student: A copy of your current and previous year's New Jersey 1040 Income Tax form OR
If you are a dependent student: A copy of your parents' or legal guardian's current and previous year's New Jersey 1040 Income Tax form.

All students on non-immigrant visas are charged at a non-immigrant visa rate which is equivalent to the out-of-county rate. All students will be asked to submit evidence of residency.

Online applicants who cannot bring required proof in person may fax a copy of required documents to the Registrar's Office, Attention Mr. Jerry Evans. The fax number is 201-670-7973. Name, address, and telephone number should be included on all faxes. The College reserves the right to see original documents.

## Out-of-County

Out-of-county residents may pay in-county rates if they present a completed out-of-county chargeback with their tuition payment. The forms and instructions for a chargeback are available at the Bursar's Office (Room A-229) and at the Admissions \& Recruitment Office (Room A-129). Depending upon home county requirements, a new chargeback will be needed for each academic year, or in some cases, for each semester.

## WITHDRAWAL FROM CLASSES

A student is not officially withdrawn from the College or from an individual course unless the appropriate form has been filled out and filed with the appropriate office (see chart, below). Refunds are based on the date that the drop or withdrawal form was filed. See the Refunds section in this chapter for more information. Students are responsible for being aware of refund and last-day-to-withdraw deadlines, which are published in the Registration booklet.

- Failure to officially withdraw from a course you are no longer attending will result in a grade of "E" or "F" that will be calculated into your grade point average as a failing grade.
- You must initiate the official withdrawal process from the College or from an individual course-instructors cannot initiate the process for you.
- When you file the request, you will be given a receipt, either a bill/schedule showing the drop or withdrawal, or a copy of the withdrawal form. You should keep this for your records. Students withdrawing via WebAdvisor should confirm that the process was completed by checking the page My Class Schedule.
- Your liability for tuition and fees is based on the refund schedule and the date that the withdrawal request was submitted.
- Withdrawal requests will not be honored for students who have outstanding violations (Bursar's Office holds, Financial Aid holds, etc.).

| Student Status | Place <br> AIMS students | Testing Office |
| :--- | :--- | :--- |
| EOF students | Room <br> International students on student visas | Counseling Center |$\quad$ A-118

## BEFUNDS

Refunds are based on the date that the drop or withdrawal form was filed (see Withdrawal from Classes), and are figured according to the following schedule.

|  | Fall/Spring | Summer |
| :--- | :--- | :---: |
| Withdrawal before scheduled <br> opening day of the semester or session* | $100 \%$ | $100 \%$ |
| Withdrawal before the start of the second <br> week of classes* | $75 \%$ | $50 \%$ |
| Withdrawal before the start of <br> the third week of classes* | $50 \%$ | $25 \%$ |
| Withdrawal before the start of <br> the fourth week of classes* | $25 \%$ | $0 \%$ |
| Withdrawal after the end of <br> the third week of classes* | $0 \%$ | $0 \%$ |

[^0]
## Method of Refund

Refund will be made by college check in the name of the student and mailed to the address of record unless directed in writing by the student to do otherwise. Credit card refunds will be processed upon request by the student to the account originally charged. At least four weeks after the semester has started or four weeks after completion of the withdrawal process should be allowed before receipt of the refund check is expected. Students on scholarship or other tuition assistance who withdraw in time for a refund will receive the refund only if the grantor agrees. Refund will be offered to the grantor first. Refunds for special sessions conducted by the College are paid in accordance with the calendar covering that specific session and within the framework and guidelines spelled out above.

The following fees and deposits are not refundable: Application for Admission Fee
Tuition Deposit
for Allied Health Admitted Students
\$ 100.00
General Fee
$15 \%$ of tuition
Reinstatement Fee
\$ 25.00
Technology Fee (per credit)
\$ 4.40

## Refunds for Military Service

Students who are called to active duty in the Reserve or National Guard or who are inducted into other branches of the military may apply for a full refund of tuition and fees. Students must be actively attending the course to within seven days of departure. Application for refund must be processed before the end of the semester in which the withdrawal occurs. In those cases where the instructor agrees to assign a grade because the student has completed most of the work for the course, there will be no entitlement to a refund of tuition and fees.

## Recalculation of Federal Pell Grants

The Financial Aid Office determines a student's enrollment after the change of registration period is over each semester.

## Return of Federal Student Financial Aid Funds when a Student Withdraws from All Classes During a Semester

The new Federal requirements for return of Student Financial Aid Awards prescribe a statutory schedule to determine the amount of Student Financial Aid Program funds a student has earned when the student ceases attendance based on the period of time the student was in attendance.

Up through the $60 \%$ point in each payment period (semester) a pro rata schedule is used to determine how much Student Financial Aid Program funds the student has earned at the time of withdrawal. After the $60 \%$ point in the payment period, a student has earned $100 \%$ of the Student Financial Aid Program funds. If a student receiving federal financial aid withdraws from all classes before completing $60 \%$ of the semester, a calculation is performed to determine if a portion of the financial aid received must be returned to the school.

The amount of Student Financial Aid Program assistance earned is the percentage of Student Financial Aid Program assistance that has been earned multiplied by the total amount of Student Financial Aid Program assistance that was disbursed (and that could have been disbursed) for the payment period as of the day the student withdrew.

The percentage earned is one of the following:

- If the day the student withdrew occurs on or before the student completed $60 \%$ of the payment period for which the assistance was awarded, the percentage earned is equal to the percentage of the payment period for which assistance was awarded that was completed. That is, if you completed $30 \%$ of the semester, you earn $30 \%$ of the assistance you were originally scheduled to receive.
- If the day the student withdrew occurs after the student has completed $60 \%$ of the payment period, the percentage earned is $100 \%$.

The percentage and amount not earned is the complement of the percentage of Student Financial Aid Program assistance earned multiplied by the total amount of Student Financial Aid Program assistance that was disbursed (and that could have been disbursed) to the student, or on the student's behalf, for the payment period, as of the day the student withdrew.

The percentage of the payment period completed is the total number of calendar days in the payment period for which the assistance is awarded divided into the number of calendar days completed in that period as of the day the student withdrew.

If the student receives less Student Financial Aid Program assistance than the amount earned, the school must comply with the procedures for late disbursement specified by the U.S. Department of Education in regulations.

If the student receives more Student Financial Aid Program assistance than the amount earned, the school, or the student, or both, must return to the Student Financial Aid Program the unearned funds as required below. The school must return the lesser of:

- The amount of Student Financial Aid Program funds that the student does not earn; or
- The amount of institutional costs that the student incurred for the payment period multiplied by the percentage of funds that was not earned.

The student (or parent, if a Federal PLUS loan) must return or repay, as appropriate, the remaining unearned Student Financial Aid Program grant and loan funds. However, a student is not required to return $50 \%$ of grant assistance received by the student that is the responsibility of the student to repay.

## Method of Return of Funds by the Student

The student (or parent, if a Federal PLUS loan) must return the unearned funds for which they are responsible to loan programs in accordance with the terms of the loan, and to grant programs as an overpayment. Grant overpayments are subject to repayment arrangements satisfactory to the school, or overpayment collection procedures prescribed by the Secretary of the U.S. Department of Education.

## FINANCIAL AID

The College is committed to counseling and aiding students and prospective students with financial need through the Financial Aid Office. The Office is located in Room A-123 and the teletelephone number is 201-447-7148.

## Types of Financial Aid

Grants and Scholarships are gift aid. They do not have to be repaid and are the most desirable form of aid. Call the Vice President for Student Services, at 201-447-7491, for information about scholarships available to Bergen Community College students.
Loans are money given to a student that must be repaid.
Work/Study is money paid to a student for work performed.
Financial Aid programs available for eligible students include:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- Federal Work/Study
- Federal Family Education Loan Program (Stafford \& Plus)
- New Jersey Class Loan
- New Jersey Distinguished Scholars
- New Jersey Educational Opportunity Fund
- New Jersey Garden State Scholars
- New Jersey Pilot (Part-Time Tuition Aid Grant)
- NJ STARS (Student Tuition Assistance Reward Scholarship)
- New Jersey Tuition Aid Grant
- New Jersey Urban Scholars
- Private and Institutional Scholarships
- Veterans' Administration Educational Benefits



## Qualifications for Financial Aid

In order to be considered for all the federal and state aid programs students must:

1. Be accepted as a degree-seeking student by the Admissions Office.
2. Complete and submit the Free Application for Federal Student Aid (FAFSA). This is the application document used for determining eligibility for both federal and state financial aid programs. Be sure to include Bergen Community College's Title IV code (004736) in the section "What Colleges Do You Plan To Attend?" If you choose you can complete an FAFSA online and submit your data over the Internet. All you need is a computer with access to the Internet. FAFSA on the Web can be found at http://www.fafsa.ed.gov. Because electronic signatures hold the same legal status as written signatures, students and parents applying for aid may sign their FAFSA on the Web applications by using their PIN Numbers, allowing the process to be completed totally online. If you or your parents do not have a PIN Number, be sure to request one at http://www.pin.ed.gov before you complete the FAFSA. You can request a PIN as early as your senior year in high school.
3. Complete and submit the Bergen Community College Certification Form which is available at the Financial Aid Office.
4. Meet the standards of Academic Progress as set by the college to conform with federal and state regulations. A copy of the standards is available at the Financial Aid Office. These standards are in addition to the Satisfactory or Conditional Academic Standing Regulations. (See the chapter on Academic Regulations in this catalog.)
5. Submit the following documents to the Financial Aid Office:
a. A copy of the student's high school diploma
b. A copy of the student's Alien Registration card, if a non-citizen.
6. Submit additional documents as indicated by the Financial Aid Office.

## Application Deadlines for Financial Aid

Students interested in receiving financial assistance, including student loans, should file an application and must submit all required documentation by the following deadlines:

| Fall Applicants, Continuing Students | May 1 |
| :--- | ---: |
| Fall Applicants, New Students | July 1 |
| Spring Only Applicants | November 15 |

Once a student's financial aid file is complete, it will be reviewed by a financial aid counselor. An award letter will be sent to the student indicating what aid programs have been awarded. If a student wishes to use financial aid funds in the payment of a tuition bill, the student should not register for classes until an award letter has been received. The application process can take up to six weeks; therefore, students are urged to file the FAFSA and submit required documents well before the application deadlines.

## Standards of Academic Progress

In order to receive financial aid a student must be making satisfactory academic progress. These standards, as adopted by the College, conform to the federal and state regulations. Poor grades, failures, and withdrawal from courses (both officially and unofficially) can adversely affect your eligibility for financial aid assistance. Most students fail the standards of progress because they did not successfully complete the average of the total credits attempted at Bergen Community College. Review the chart below to determine the number of credits you must complete in order to meet the standards of academic progress.

If you are in a Degree program:
And the total number of credits you have attempted at BCC is: 1-28 credits
29-56 credits
57 or more $75 \%$ of your credits
If you are in a Certificate Program:
And the total number of credits You must have you have attempted at BCC is: completed: $1-14$ credits $65 \%$ of your credits 15-28 credits $70 \%$ of your credits 29 or more $75 \%$ of your credits In addition to meeting the above percentage of completed courses, students are allowed a maximum number of credits attempted in which they must complete a degree or certificate program and are eligible for financial aid. The formulas for determining the maximum number of credits are as follows:

For all A.A., A.S., A.A.S. Degrees:
The maximum number of credits that may be attempted equal
$85+(1.333 x$ the number of remedial credits required $)$

## For all Certificate Programs:

The maximum number of credits that may be attempted equal $43+(1.333 x$ the number of remedial credits required $)$

Students who fail to meet the academic standards of progress because of extenuating circumstances may appeal their eligibility to the Committee on Academic Progress. Please be aware that a student's documents and financial aid application will not be reviewed unless the student files an appeal and that appeal is granted by the Committee.

## Education Tax Credits Available to Federal Tax Filers

Both the Hope and Lifetime Learning Tax Credits-which directly reduce the amount of federal income tax owed-are targeted to help working and middle income families. Following are guidelines on what the tax credits cover, who qualifies, and IRS sources to contact for information.

A Hope Tax Credit of up to $\$ 1,500$ can be claimed for each of the first two years of college or vocational school for each eligible student in a family. The student must be enrolled at least half-time at an eligible educational institution and not have completed his or her first two years of study. The credit is $100 \%$ of the first $\$ 1,000$
of payments for qualified tuition and fees and $50 \%$ of the second $\$ 1,000$. The goal of Hope is to make it possible for all Americans to afford the cost of the first two years of a college education. In most states, the Hope credit will cover the tuition and fees of a community college education. There is no limit on the number of eligible students who can claim a Hope credit in a household in any given year.

Example: A married couple with an adjusted gross income of $\$ 60,000$ with two children in college at least half-time-one a freshman at a community college with a tuition of $\$ 2,000$ and the other a sophomore at a private college with tuition of $\$ 11,000$. Using the Hope Scholarship Tax Credit, this couple can cut their taxes by $\$ 3,000$.

The Lifetime Learning Tax Credit picks up where Hope leaves off and is available to vocational, college, graduate and professional students; adults who want to upgrade their job skills or acquire new ones or pursue another course of study; and even to students taking a single course as long as it is job related. Filers can claim a Lifetime Learning Credit up to $\$ 1,000-20 \%$ of the first $\$ 5,000$ paid in qualified tuition and fees. A taxpayer can claim only one Lifetime Learning Credit per tax year for the aggregate amount of the qualified tuition and fees of those students in the family for whom no Hope credit is claimed. There is no limit, however, on the number of years a taxpayer may claim the Lifetime Learning Tax Credit.

Examples: A homemaker in a family with adjusted gross income of $\$ 70,000$ enrolls in a graduate teacher training program at a public university-tuition $\$ 3,500$. Using the Lifetime Learning Credit, her family's income taxes are cut by $\$ 700$. Or a married auto mechanic with family income of $\$ 32,000$ goes back to school to take some computer courses to improve job skills. The tuition is $\$ 1,200$-the tax savings, \$240.

Both tax credits are phased out for joint filers who have between $\$ 80,000$ and $\$ 100,000$ of adjusted gross income, and for single filers who have between $\$ 40,000$ and $\$ 50,000$ of adjusted gross income.

Taxpayers cannot claim both credits for the same student in one tax year, even if the student is a sophomore at the beginning of the tax

year and a junior in the second half of the tax year. Families will be able to claim the Lifetime Learning Tax Credit for some members of their family and the Hope Tax Credit for others who qualify in the same tax year. Qualified expenses covered by the tax credits are tuition and required fees, less any grants and scholarships that are received tax free. Room, board, books and supplies are not covered.

To take advantage of the Hope and Lifetime Learning Tax Credits, taxpayers must complete and submit IRS form 8863 with their federal tax return. For more information, call the IRS Help Line at 1 (800) 829-1040, read IRS publication 970 or visit the Treasury Department's Web site at http://www.irs.gov..

## Academic Policies)

## \& REGULATIONS

## While you are attending Bergen Community College, the Office of Registration and Student Information Services will maintain your academic record. You will be responsible <br> for your own academic progress. <br> Academic advisors, tutors, and counselors will be available to help you succeed. Attaining an associate degree is the first step toward realizing your goals.



## ACADEMIC RECORDS

The Office of Registration \& Student Information Services maintains an academic record for each student. Students receive specific and cumulative reports of their achievement and status at the end of each semester or session.

## Verification or Certification of Student Status

Verification or certification of student enrollment status can be done only with the student's signed consent. Verification or certification can be requested at the Service Window (A-129) of Registration \& Student Information Services by filling out a Verification Authorization form, or by mailing or faxing a request to Registration \& Student Information Services containing the student's signed consent. The process usually takes about three to five working days, except during in-person registration periods, when there may be some delay. Documents requiring the College Seal cannot be returned to the student; they must be mailed directly to the requesting agency or organization.

## GRADING

Students are responsible for their own academic progress and standing, for preparing and participating in those classes in which they are enrolled, and for attaining the best possible record. The instructors assign a grade based on a composite of course elements which represents an evaluation of performance, scholarship, and competence of the student.

## Mid-Semester Grades

At the mid-semester point, students may confer with their instructors regarding their academic performance. Formal midsemester grades are not issued.

## Final Grades

Final grades are assigned by instructors at the end of each semester or session. Final grades may be viewed through WebAdvisor at http://go.bergen.edu. Students may also request an academic report reflecting their final grades from The Office of Registration and Student Information Services.

## Incomplete Grades

The grade "INC" (incomplete) indicates that a portion of required course work has not been completed and evaluated by the end of the semester due to unforeseen, but fully justified reasons, and that there is still a possibility of earning credit. It is the responsibility of the student to bring pertinent information to the instructor and to reach agreement on the means by which the remaining course requirements will be satisfied. The instructor may not issue the "INC" grade unless it is requested by the student and the condi-

tions for resolving the incomplete are agreed upon in a contract, with the exception of missing the final exam due to an emergency. All grades of "INC" that are not resolved by the deadline in the academic calendar will be converted to grades of "F."

A student is not eligible to receive a degree until outstanding "INC" grades are resolved either by completion with a passing grade or by acceptance of an " F " (failing) grade. At that time a supplemental graduation check will be done by the Office of Registration \& Student Information Services and the degree awarded if appropriate.

## Repeating of Courses

1. A student shall have the option to repeat once any course in which a grade of $\mathrm{D}, \mathrm{C}, \mathrm{C}+, \mathrm{B}$ or $\mathrm{B}+$ was earned, and only the higher earned grade shall be computed in the grade point average (GPA). The lower grade will be marked with an " $R$ " and will be excluded from the GPA calculation.
2. A student shall have the option to repeat an "F" or "E" grade earned once. If the student fails to complete the course after two attempts, the student may appeal, in writing, to the appropriate department head, stating any extenuating circumstances which should be considered, for permission to repeat the course again. If the student successfully repeats a course, the higher grade shall be computed in the GPA. The " $F$ " or " $E$ " grade will be marked with an " $R$ " and will be excluded from the GPA calculation. Note: A student who does not successfully complete a course after two attempts may be unable to complete a degree program. Permission to repeat is not automatic.
3. It is understood that a student who earns a "D" grade in a given course generally shall be able to pursue the next higher course. Exceptions should be noted for all Allied Health courses and for selected courses as noted in individual course descriptions.
4. A student may not repeat a course in which a grade of "A," "CBE" (credit by exam), "TR" (transfer credit), or "INC" (incomplete) was received.

## Academic Forgiveness Policy

Academic Forgiveness is designed to allow students who have gotten off to a bad start a chance to get poor grades removed from their GPA. The Academic Forgiveness Policy at Bergen Community College contains two options:

## Option I - Academic Forgiveness based upon past academic performance <br> Option II - Academic Forgiveness based upon change of curriculum

A student may request Academic Forgiveness once under the academic performance option and once under the change of curriculum option. If a student requests forgiveness for a course or courses in which he or she has earned a grade of "D," the credits earned in any such course or courses will be removed from the total credits earned, and the student will receive no credit for the course.

## Option I: Past Performance

After three consecutive years of non-attendance, a student may request Academic Forgiveness based upon past academic performance. The request will be reviewed after the student has completed at least one semester. The student must complete 9 credits and earn a GPA of 2.5 for the request to be approved. When the student's request is approved, grades of " $F$," " $E$," " $R$," and optionally "D" for the courses from the prior attendance period will be removed from the student's GPA. However, the courses will remain on the students official transcript designated with a special code for Academic Forgiveness.

## Option II: Change of Curriculum

A student may request Academic Forgiveness based upon a change of curriculum at any time after matriculation and after credits have been attempted. If a student's request is approved, grades of "F," "E," "R," and optionally " $D$ " in courses that were required by the student's former program but are not required by the new program will be removed from the student's GPA. However, the courses will remain on the student's official transcript designated with a special code for Academic Forgiveness.


## Course Grade Appeal Policy

1. A student raising a complaint or concern about a course grade may discuss the matter with the individual faculty member no later than the first two weeks of the semester immediately following receipt of the grade.
2. If the grade appeal is not resolved, the student may bring the matter to the appropriate department head within two weeks of discussion with the instructor.
3. The department head will investigate the appeal and attempt to resolve the matter as expeditiously as possible. The department head will notify the student either in writing or orally of the result.
4. If the appeal is not resolved, the student may put the appeal in writing, attaching copies of any supporting information and send it to the appropriate divisional dean within two weeks of hearing from the department head.
5. The divisional dean may consult other faculty in the discipline and the department head and may choose to meet with the student. The dean will notify the student in writing of the resolution. Grade appeals are sometimes a lengthy process and may take several weeks to resolve at this stage. Every effort will be made to notify the student within one month.
6. After receipt of the dean's written response, a student may continue the appeal process by writing to the Academic Vice President. The student should attach copies of all previous correspondence regarding the appeal and copies of supporting documentation.
7. The Academic Vice President will consult all parties involved in the appeal process and may choose to meet with the student. Grade appeals may also take several weeks to resolve at this stage.
8. The Academic Vice President will notify the student in writing of the results of the appeal. Every effort will be made to notify the student within one month.

## AUDITING CLASSES

Students who wish to take courses with the understanding that they will not receive a grade or credit for them may do so as auditors.

- An application for audit status must be obtained from the Office of Registration \& Student Information Services.
- Auditors are subject to the same tuition and fee structure as credit students.
- Once enrolled as an auditor, a student may not change to credit status, nor may a student who is enrolled for credit change to audit, unless such a change is requested prior to the end of the third week of instruction.
- The "AU" grade will be recorded on college transcripts for an audited course. This is an administratively assigned grade which indicates a student has purchased a seat for a particular class. It does not denote mastery of subject material.
- Audited courses do not satisfy prerequisites, or count towards the student's load for financial aid or sports eligibility purposes.


The following grades may be assigned by the instructor:

| Grade |  | Point Value | Description | Included in <br> Attempted Credits | Included in <br> Earned Credits |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | $=$ | 4.0 | Yxcellent | Yes | Included in <br> Cumulative Average |
| B + | $=$ | 3.5 | Very Good | Yes | Yes |
| B | $=$ | 3.0 | Good | Yes | Yes |
| C + | $=$ | 2.5 | Above Average | Yes | Yes |
| C | $=$ | 2.0 | Average | Yes | Yes |
| D | $=$ | 1.0 | Below Average | Yes | Yes |
| E | $=$ | 0.0 | Unofficial Withdrawal | Yes | Yes |
| INC | $=$ | None | Incomplete | Yes | Yes |
| F | $=$ | 0.0 | Course must be | Yes | No |

Note: An "@" preceding any of these grades indicate that Academic Forgiveness has been granted, in which case the grade will be excluded from the GPA calculation.

The following grades are administratively assigned, and are not assigned by instructors:

| The following grades are administratively assigned, and are not assigned by instructors: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade |  | Point Value | Description At | Included in Attempted Credits | Included in Earned Credits | Included in Cumulative Average |
| AU | = | None | Auditor | Yes | No | No |
| TR | = | None | Transfer credit from another institution | No | Yes | No |
| W | = | None | Official withdrawal | Yes | No | No |
| CBE | = | None | Credit by examination equivalent to earned grade of "C" or better | de No | Yes | No |

Grades of A, INC, TR, and CBE cannot be repeated. Grades of B, C, D, E, AU, and F may be repeated only once.
The higher grade is retained and the lower grade is marked " $R$ " and is not figured in the GPA.

## How to Calculate Your Grade Point Average (GPA):

Grades of $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}$, and F are assigned a point value ( $\mathrm{A}=4$ points, $\mathrm{B}+=3.5$ points, $\mathrm{B}=3$ points, $\mathrm{C}+=2.5$ points, $\mathrm{C}=2$ points, D $=1$ point, $\mathrm{E}=0$ points, $\mathrm{F}=0$ points). Your GPA is calculated by multiplying the point value of the grade you received in each course by the number of credits offered for the course. The resulting number is called "quality points." Next, add up the total quality points and divide by the number of graded credits. Include only the grades of A, B, C, D, E, and F; other grades do not affect your GPA.

Example: A student receives the following grades over the course of two semesters at Bergen Community College:

## Grade <br> Point value of grade

Credits for Course
Total
Quality Points

## Semester I

## U.S. History

Foundations of Phys. Ed.
Speech Communication
Statistics
English Composition I

| C | 2 | $\times$ |
| :--- | :--- | :--- |
| B | 3 | $\times$ |
| A | 4 | $\times$ |
| C | 2 | $\times$ |
| D | 1 | $\times$ |

$\begin{array}{llll}\times & 3 & = & 6 \\ \times & 2 & = & 6\end{array}$
6
6
12
6
3
$3=3$
$\overline{14}$ Total GPA Credits $\overline{33}$ Total Quality Points

This student earned a semester GPA of 2.36 for Semester I. This was arrived at by dividing the total quality points (33) by the total GPA credits (14). The student's semester GPA was 2.36.

## Semester II

English Composition
U.S. History II

General Biology I
Music Appreciation

| F | 0 | $\times$ |
| :--- | :--- | :--- |
| B | 3 | $\times$ |
| A | 4 | $\times$ |
| C | 2 | $\times$ |


| 3 | $=0$ |  |
| :---: | :---: | :---: |
| 3 | $=\quad 9$ |  |
| 4 | 16 |  |
| 3 | 6 |  |
| 13 | al GPA Credits $\overline{31}$ | Total Quality Points |

The student earned a semester GPA of 2.38 for Semester II (31 divided by 13).
A "Cumulative, GPA" for this student is arrived at by adding the "Semester I Total Quality Points" (33) to the "Semester II Total Quality Points", (31). The resulting figure is called the "Cumulative Quality Points." In our example, the Cumulative Quality Points add up to " 64 ."
Add the Semester I Total GPA Credits (14) to the Semester II Total GPA Credits (13). The resulting figure is called "Cumulative GPA Credits."
Divide the Cumulative Quality Points by the Cumulative GPA Credits. The resulting figure is called the "Cumulative GPA" as it reflects all of the grades earned at BCC. Therefore, for the purpose of our example, this student has a Cumulative GPA of 2.37: 64 Cumulative Quality Points divided by 27 Cumulative Credits $=2.37$ Cumulative GPA.
Students wishing further assistance in understanding their grade point average should contact the Counseling Center in Room A-118.

## ACADEMIC HONORS

## Dean's List

The Dean's List is official recognition by the faculty of outstanding academic accomplishment. Any degree-seeking student who has maintained a cumulative scholastic average of 3.50 or better (minimum 24 credits) qualifies for this honor. The Dean's List is compiled each semester several weeks after grades are
processed. (Students with unresolved "INC" grades at the time of compilation are ineligible.)

## Honors List

The Honors List is official recognition by the faculty of outstanding academic achievement during the course of one semester. Any degree-seeking student who has attained a scholastic average of 3.50 or better (minimum 12 credits) qualifies for this honor. The Honors List is compiled each semester several weeks after grades are processed. (Students with unresolved "INC" grades at the time of compilation are ineligible.)

## Chi Alpha Epsilon

The first 14 members of Chi Alpha Epsilon were inducted at Bergen Community College in 2003. This honor society recognizes the academic achievements of students admitted to the College through non-traditional criteria. Its purposes are to promote continued high academic standards, to foster increased communication among its members, and to honor academic excellence achieved by students admitted to college via developmental programs. The faculty advisors are Professor Timothy Foote and Professor Stafford Barton.

## Phi Theta Kappa

Phi Theta Kappa, the International Honor Society of the TwoYear College recognized by the American Association of Community Colleges, is represented at Bergen Community College by the Alpha Epsilon Phi Chapter. Its purpose is the recognition of academic excellence and the promotion of scholarship, fellowship, leadership, and service in the two-year college. Students must meet the following criteria for membership and retention.

## A. Eligible Degree Programs

Students in the following degree programs are eligible for continued and new membership: AA Degree, AS Degree, AAS Degree.

## B. Registration

1. New Members. Qualified students are selected from those who are registered for the fall or spring semesters. Membership is not open during the summer session. Students must be invited to join by the Faculty Advisor. Students will receive a letter in the mail if they qualify.
2. Continued Membership. Qualified students will retain membership as long as they are actively registered fall and spring semester between induction and graduation. PTK members are not required to attend summer sessions.

## C. Grade Point Average

1. New Members. Students must achieve the following cumulative GPA based on degree credits attempted or earned:

| Credits <br> Category | Qualifying <br> GPA* | Credits <br> Attempted $* *$ | Credits <br> Earned $* *$ |
| :---: | :---: | :---: | :---: |
| 1 | 4.0 | $12-15$ | $12-15$ |
| 2 | $3.90-4.00$ | $16-31$ | $16-31$ |
| 3 | $3.80-4.00$ | $32-47$ | $32-47$ |
| 4 | $3.65-4.00$ | $48+$ | $48+$ |

* The qualifying GPA includes grades in all degree as well as nondegree courses.
** Attempted and/or earned credits in non-degree credits courses are not used to determine minimum credits in these categories.

1. Where the number of degree credits earned and number of degree credits attempted fall into different categories, the qualifying GPA is determined by the category that has the least number of credits.
2. Continued Membership. Students must maintain a cumulative GPA of at least 3.50 . Students who fall below a 3.50 cumulative grade point average will lose their membership in the Alpha Epsilon Phi Chapter.
3. All Grades are Considered. Grades in all degree and non-degree courses from all semesters and sessions during which time the student took course work at Bergen Community College are considered in determining the qualifying cumulative GPA of new members and the retention of continuing members.
4. Transfer Students. Students who have transferred to Bergen Community College may apply for consideration for membership using the "Degree Credit Earned" category. Each student must be assessed on a case-by-case basis and must make an appointment with the Phi Theta Kappa advisor or co-advisor.
5. Leave of Absence. Students who take a leave of absence must notify the Phi Theta Kappa advisor in writing on their return to reactivate member status.

## D. The Society

Alpha Epsilon Phi is an active society on campus. To maintain enhanced membership within the Chapter, attendance at meetings and/or service is necessary. Participation equates to approximately eight hours per year, and the type of service changes from year to year depending on the chapter's executive committee. There are no excused absences from required meetings; missing a meeting results in two hours of participation. During the past ten years, the annual time devoted to Phi Theta Kappa by a member is approximately 18 hours.

## DEGREE REOUIREMENTS

Bergen Community College offers degree programs leading to Associate in Arts (A.A.), Associate in Science (A.S.), and Associate in Applied Science (A.A.S.) degrees. A student is required to complete a minimum of 64 degree credits for graduation. The College also offers a number of one-year certificate programs and short-term certificates of achievement.

Students may be required to take courses in English, mathematics, and/or elementary algebra which are not part of their curricula to remove deficiencies or to upgrade skills as indicated by the results of the Basic Skills Placement Test. Students in all A.A. and A.S. degree programs and in certain A.A.S. and Certificate programs are required to successfully complete a course in basic algebra if indicated by the placement test. Students in A.A.S. and Certificate programs should refer to the catalog curriculum guides for their specific programs to determine whether they must successfully complete a course in basic algebra.

To be eligible for an Associate Degree (A.A., A.S., A.A.S.) or a certificate, a student must be degree-seeking and in good standing, and have completed the number of degree credits specified for the particular curriculum with a 2.00 or better cumulative grade point average. The student must also have satisfied or waived any course requirements resulting from the Basic Skills Placement Test.

A student must be officially enrolled and degree-seeking at the College during the regular semester or summer session in which the degree will be conferred.

## Application for Degree and Graduation

It is the responsibility of the student to apply for a degree or certificate by completing an Application for Degree, which can be obtained from the Registration section of the Colleges Web site at http://www.bergen.edu/registration or the Office of
Registration and Student Information Services Window, Room A-129. Degrees are conferred in accordance with the calendar shown:

## If completing requirements by:

December (Fall Semester)
May (Spring Semester)
August (Summer I/Summer II)
If, after filing the application, a candidate is unable to complete the degree requirements by the date indicated on the student's original application, the student should notify the Office of Registration and Student Information Services immediately. The Application for Graduation will not be automatically extended. The candidate will be required to submit a new application for the semester/session of anticipated completion. Please note that, although degrees are awarded at three times during the academic year, there is only one Commencement ceremony, which takes place in May (please check the academic calendar for exact date). Diplomas will be withheld from all students who have outstanding holds and/or violations.

Students wishing to participate in the May Commencement ceremony must notify the Director of Student Life by March 3. Lists for graduation are compiled as of this date.

## Allocation of Credit Hours to Courses

Bergen Community College operates on a semester credit hour basis. Generally, one credit hour is assigned for each 800 minutes of lecture-discussion or for each 1600 to 2400 minutes of laboratory experience during a semester or session. (Certain clinical experiences, cooperative education, or courses delivered through non-traditional means may be assigned credit by different formulas.)

## Course Load and Restrictions

Full-Time Students. A full-time program consists of 12 to 18 credit hours of course work per semester.

Part-Time Students. A part-time program consists of 1 to 11 credit hours of course work per semester during the fall or spring semesters.

Summer Session Students. All students are restricted to a maximum of 8 credit hours during summer sessions I and II. Credits for eleven-week summer courses count into the 8 -credit limit for each summer session.

## Change of Curriculum

A student desiring a curriculum change should discuss the possibilities with his or her counselor to determine degree requirements, prerequisites, and the appropriateness of the contemplated new curriculum. A student may change curriculum by the following procedure:

A student desiring a curriculum change should discuss the possibilities with his or her counselor to determine degree requirements, prerequisites, and the appropriateness of the contemplated new curriculum. A student may change curriculum by the following procedure:

1. Arrange an appointment with a counselor in the Division of Student Services
2. Obtain the approval of the counselor on the appropriate form for the curriculum change he or she wishes to make

Curriculum changes requested after the completion of 32 credits may require the approval of the Office of the Vice President of Student Services.

## ACADEMIC REGULATIONS

## Academic Integrity

In cases when students are charged with academic irregularities, such as cheating during an examination or plagiarism in the preparation of an essay, laboratory report, or oral presentation, the instructor has the authority to:

1. Give the student a failing grade for the assignment if, within the course's total requirements, non-completion of that assignment would not constitute sufficient ground for failing the course; or,
2. Give the student a failing grade for the course if, within the course's total requirements, non-completion of that assignment would preclude the student's passing the course.

The instructor must make a written report to the Vice President of Student Services of whatever action he or she has taken and its justification. In turn the Vice President of Student Services must send a copy of the instructor's report to the student. Within ten days of receipt of such notification, the student may appeal the decision in writing to the Vice President of Student Services. The Vice President of Student Services shall be responsible for maintaining a cumulative file of all infractions of academic dishonesty.

Two such offenses shall be sufficient grounds to suspend a student from the College. Thus, should it be verified that a student has committed a second such offense, the Vice President of Student Services will report the matter to the Committee on Academic Standing and recommend an appropriate action.

## Plagiarism

Plagiarism is a form of academic dishonesty and it is a punishable offense. Plagiarism is the act of taking someone else's words, opinions, or ideas and claiming them as one's own. If a student commits an act of plagiarism, the instructor has the authority to assign a failing grade for the assignment or in some cases, the entire course. After two offenses, a student may be suspended from the College.

## Satisfactory Academic Standing

Any student who maintains a grade point average based upon the following scale shall be classified as a student with satisfactory academic standing:

| Cumulative | GPA |
| :--- | :--- |
| GPA Credits |  |
| $12-23$ credits | 1.7 |
| $24-35$ credits | 1.8 |
| $36-47$ credits | 1.9 |
| $48+$ | 2.0 |

## Academic Probation

Any degree-seeking or non-degree-seeking student, whether fullor part-time, who fails to achieve the minimum grade point aver-
age as stated above shall be classified as a student on academic probation and will be sent a letter to that effect by the Office of Registration and Student Information Services.

Academic probation is a warning that a student's cumulative grade point average is unsatisfactory and that the student will be academically suspended unless a minimum grade point average is met. Students on academic probation will not be permitted to register either by mail or in person until they meet with a counselor in the Counseling Center. Students registered with the EOF Office or Specialized Service Office should meet with their appropriate counselor.

## Removal of Academic Probation Status

Any student who, after the end of the conditional semester, meets the grade point average for credits attempted as specified above shall be classified as a student with satisfactory academic standing and will be notified of such standing by the Office of Registration and Student Information Services.

## Academic Suspension

A student with conditional academic standing who fails to achieve the required grade point average at the end of his/her conditional academic standing semester will be placed on academic suspension. Suspended students will be reclassified in a status of unsatisfactory academic standing.

A student on academic suspension will not be allowed to register for one semester (fall or spring) and will be classified as a student with unsatisfactory academic standing. The suspended student will not be permitted to register for any intervening summer sessions. Notification of academic suspension will be sent to the student by the Office of Registration and Student Information Services along with conditions for seeking reinstatement.

## Academic Dismissal

A student reinstated after academic suspension will be given conditional academic standing. A student who fails to meet the minimum grade point average at the end of the conditional semester will be dismissed.

## Reinstatement After Academic Suspension or Dismissal

After being suspended/dismissed a student is eligible to make application for reinstatement after one semester (excluding summer sessions). If reinstated, the student will be reclassified as a student with conditional academic standing. All reinstated students must meet with a counselor before registration.

A request for reinstatement can only be initiated by a written application to the Committee on Academic Standing in accordance with the posted college deadline. The Committee on Academic Standing shall review the reinstatement application and render a decision or delegate the authority for reinstatement to Counseling faculty. There is a $\mathbf{\$ 2 5}$ fee for the reinstatement application.

## Appeals of Student Status

A student who desires to appeal his/her status may do so by making an application for reinstatement in the Counseling Center, Room A-118. Students registered with the EOF or Specialized Services Office should meet with their appropriate counselor.

## Committee on Academic Standing

The Committee on Academic Standing is comprised of faculty members from each of the divisions within the College and student government representatives. It is chaired by the Vice President of the Division of Student Services. The committee reviews all reinstatement applications and special appeals and renders decisions. Appeals to the committee will be considered only if initiated within a two year period of the end of the semester in which the appeal issue occurred. The committee also takes responsibility for reviewing and recommending policies and procedures pertaining to the overall academic regulations of the College.

## Class Attendance

All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

## Suspension of Classes

Students should listen to local broadcast stations in the event of emergencies when classes may have to be suspended; they should not telephone college offices or broadcast stations for information. (See Emergencies in the Student Life section.)

## Absence of Instructor

Students are expected to wait twenty minutes for a faculty member to come to class. If at the end of twenty minutes, the faculty member does not come, the students should sign an attendance sheet which indicates the course, date, and time. A student should deliver the attendance sheet to the divisional office if between 9:00 a.m. and 5:00 p.m. or to the evening office if before 9:00 a.m. or after 5:00 p.m. Students cannot be penalized by faculty for not waiting longer than twenty minutes.

## Procedure for Student Complaints About Faculty

1. A student raising a complaint or concern about an individual faculty member should discuss the matter with the involved faculty member.
2. If it is not resolved, the student should then bring the matter to the appropriate department head.
3. The department head will hear both sides orally and attempt to resolve the issue as expeditiously as is possible (usually within one week).
4. The student will be informed by the department head as to the outcome. If the student is still not satisfied, the student should put the complaint in writing addressed to the appropriate divisional dean.
5. The matter then becomes a formal complaint or concern and will be dealt with as such.
a. Other faculty in the discipline may be consulted by the involved faculty member and divisional dean.
b. Counselors from the Counseling Center may be consulted by any involved party.
c. A meeting of all concerned may be set up.
d. Recommendations may be solicited orally or in writing from each participant. The student will be informed by the divisional dean as to the outcome.
6. If the student is still not satisfied, the student should refer the matter to the Academic Vice President in writing.

## ACCEPTABLE USE OF INFORMATION TECHNOLOGY RESOURCES

Bergen Community College provides a rich information technology environment to support its educational activities and administrative functions. These resources, including computing systems and software, as well as internal and external data, voice, and video networks, are shared resources. To preserve them for the common good, the College expects all users, including students, faculty, staff, administrators, other employees, and members of the general public using the College's information technology resources to comply in all respects to institutional and external standards for their appropriate use. Although incidental personal use is permitted, these resources should be used primarily for College educational and administrative purposes, and such incidental personal use must conform to these same standards of appropriate use. By using College information technology resources, users agree to abide by all College acceptable use and related policies and procedures, as well as applicable federal, state, and local laws. The College reserves the right to bar access to its network or other information technology resources to those who violate its acceptable use and related policies and procedures. Further, violations may result in disciplinary action, including suspension, dismissal, and legal proceedings.

The College's Acceptable Use policy, administrative guidelines, and procedures may be found at http://www.bergen.edu/acceptableuse.

## Administrative Guidelines, Regulations, and Procedures

Bergen Community College reserves the right to monitor its information technology resources and telecommunications network to protect the integrity of its computing systems, workstations, and lab facilities, and to ensure compliance with all acceptable use and related policies and procedures. To this end, the College reserves the right to inspect any and all computer systems or data that reside on its telecommunications network for violations of any acceptable use and related policies and procedures.

## Acceptable and Unacceptable Use

Because of the richness of the Internet and the College's information technology resources, it is not possible to catalogue
exhaustively all acceptable and unacceptable uses. The lists below are meant to be illustrative. Employees and students should consult with their supervisors or classroom instructors, respectively, about the appropriateness of other uses. In free time areas, users should address questions to lab supervisors or other responsible parties.

In deciding what is and is not an acceptable use, there are two overriding principles: (1) the College's information technology and telecommunication resources exist to support the College's mission, and (2) the College is committed to ensuring a positive learning environment for all members of its community. Thus, all users are obliged to demonstrate civility in any and all exchanges and postings, including the content of Web pages, both official and unofficial. The College reserves the right to remove from its telecommunications networks any content judged to be racist, pornographic, or designed to denigrate members of the College community.

## Acceptable Use

1. Gathering and providing research material and data
2. Analyzing research data
3. Preparing course materials
4. Completing class and homework assignments
5. Enhancing coursework
6. Enhancing educational approaches and teaching methods
7. Obtaining and disseminating college related knowledge
8. Developing and administering targeted demographic surveys
9. Using Web Advisor to register online for courses or to access information about one's own academic performance
10. Using Datatel's Colleague or other institutional software within the scope of one's normal duties

## Unacceptable Use

1. Using the network for gambling, any other illegal activity, or any activity prohibited by the College's acceptable use and related policies and procedures, including but not limited to violations of copyrights, software agreements and other contracts
2. Using the college systems for commercial or profit-making purposes
3. Altering system software or hacking in any form
4. Gaining unauthorized access to resource entities, including use of others' passwords
5. Invading the privacy of individuals
6. Posting anonymous messages
7. Creating and displaying threatening, obscene, racist, sexist, or harassing material, including broadcasting unsolicited messages or sending unwanted mail
8. Disobeying lab and system policies, procedures, and protocols (e.g., time limits on workstation usage)
9. Using the network in support of groups outside the college when such use is not in keeping with the mission of the college
10. Creating and using individual Web pages not primarily focused on the mission of the college
11. Using Web Advisor to access information about someone other than oneself
12. Accessing data or making use of data in Datatel's Colleague or other administrative systems software not relevant to the scope of one's job responsibilities

## Security Breaches

Attempts to alter system software, to bypass security protocols, to introduce viruses, worms, or other malicious or destructive programs, or otherwise "to hack" are expressly forbidden. Any member of the College community, including a student, who intentionally breaches security will be subject to disciplinary action, including suspension and dismissal.

## E-MAIL

E-mail is defined as all technologies used to transfer messages, including e-mail, instant messaging and peer to peer file exchange. E-mail is a tool for business purposes. Users have a responsibility to use this resource in an efficient, effective, ethical and lawful manner. In general, e-mail communications should follow the same standards expected in written business communications and public meetings.

## Accounts

It is the intention of the College to have on file e-mail addresses for all full-time faculty, administrators, adjuncts, and students. Email accounts are also provided for staff whose job responsibilities include regular computer access. Generally, e-mail accounts are closed when employment ends or when the student is no longer enrolled. However, the College may choose to extend email privileges to adjuncts and students during periods of stopout. Further, upon request, the College will keep active e-mail accounts for Professors Emeriti and retired full-time faculty.

## Students

All students enrolled in credit courses are required to have a valid e-mail address on file in Colleague. Students may enter a preferred e-mail address in Colleague using WebAdvisor. Students who do not have an e-mail address on file in Colleague may be assigned an e-mail address with a BCC domain. Students may also request a BCC e-mail address through the College's Web site. The College will not maintain more than one e-mail address for any student.

## Broadcast E-mail

Authority to send e-mail to all students using the Colleague system rests with the Executive Vice-President and the VicePresident of Student Services. In cases of emergency, the Office of the Vice-President of Technology and Information Services may be contacted. Such e-mail is strictly limited to the official conduct of College business, and is not to be used for promotion or marketing purposes. All Colleague broadcast e-mail must include the following footer: "You have received this e-mail because you are or have been a student at Bergen Community College. If you do not wish to be contacted by e-mail, please reply to noe-mail@bergen.edu.

Student Clubs and other groups wishing to use e-mail to promote events or other activities should maintain separate distribution lists, targeting only those who have indicated interest in receiving such communication.

## Strictly Prohibited

The following use of e-mail is strictly prohibited. Employees receiving such material should immediately report it to their supervisors. Students with BCC e-mail accounts should contact the Coordinator of Judicial Affairs.

- The creation and exchange of messages that are offensive, harassing, obscene or threatening.
- The exchange of privileged, confidential or sensitive information to inappropriate persons.
- The creation and exchange of advertisements, solicitations, chain letters, or other spam.
- Use of e-mail for commercial purposes.
- The creation, storage or exchange of information in violation of copyright laws.
- Reading or sending messages from another person's account, except under proper delegate arrangements.
- Copying or forwarding messages belonging to another user which have been altered in such a way as to change the intent of the author.


## Guidelines

Users should follow these guidelines and conventions:

- Ensure that messages are addressed to the appropriate recipient(s).
- Do not subscribe to list servers or other distribution lists that are not college related. Such lists tend to overload and affect the performance of the e-mail system.
- Users must not compromise the privacy of their passwords by giving them to others or exposing them to public view. Passwords should be changed on a regular basis.
- Retain messages only if relevant to the work or an anticipated litigation. The College's e-mail system is set to retain messages for no more than six months. Messages having a legitimate business purpose greater than six months should be archived to a desktop folder or printed and filed.
- Address messages to recipients who "need to know." Messages sent unnecessarily to a long list of recipients lowers system performance, and may annoy recipients.
- Avoid opening messages or attachments received from unknown senders or responding to instant messages or other peer to peer technologies from strangers. Messages and attachments can carry viruses, and IM and peer to peer technologies are often used by intruders with malicious intent.
- Construct messages professionally (spelling and grammar) and efficiently (subject field, attachments).


## Account Log-ons and Passwords

Account log-ons and passwords, including e-mail, are issued to individuals for their sole use and are non-transferable. Owners are responsible for all usage of their assigned accounts, log-ons, and passwords.

## WebAdvisor

WebAdvisor is a Web interface that allows students to access information contained in Datatel's Colleague, the administrative database used by Bergen Community College. Students may use WebAdvisor to register for classes, to view their class schedules, to check grades, to check on progress toward degree requirements, etc. The College expects to add additional features to WebAdvisor in the future.

WebAdvisor accounts are available for all students enrolled in credit programs. (At the moment, however, students with outstanding English Basic Skills or ALP placements may not use WebAdvisor to register for classes. They may, however, use WebAdvisor to view their class schedules and other functions.) New students are strongly encouraged to attend an in-person registration or advisement session before using a WebAdvisor account. Eligible students without WebAdvisor user names and passwords may access their WebAdvisor account by going to http://go.bergen.edu, selecting the "WebAdvisor for Students" menu, and selecting "I'm new to WebAdvisor". Then, follow the on-screen directions. Check the WebAdvisor FAQ for answers to common questions, such as how to reset your password.

## Violations of Acceptable Use and Related Policies and Procedures

Users are expected to notify the Office of Information Technology, classroom instructor, free time lab supervisor, or other responsible party, as appropriate, of intentional or unintentional breaches in access and data security of which they become aware. In addition, employees who are aware of serious violations of acceptable use or related policies and procedures (including malicious tampering, virus infection, or "hacking") are required to report such activity to their immediate supervisors. In the case of complaints about materials believed to be offensive or otherwise inappropriate, users are encouraged to express their concerns directly to those believed to be misusing the systems and/or to lab supervisors. If the situation persists they should bring the matter to the attention of Public Safety or other responsible parties. Individuals who violate acceptable use and related policies and procedures will be subject to appropriate sanctions, including suspension, dismissal, and legal proceedings.

According to the US Copyright Act, illegal reproduction of software or other material is an offense which will subject the violating individual to civil and monetary damages. The use of e-mail or any college system for harassment or criminal activity may result in criminal penalties, including fines and imprisonment.

## BCC WEB SITE GUIDELINES

BCC encourages the use of the Internet by faculty, staff, and students as both an information resource and as a method of communication. In keeping with this, members of the college community may have Web pages on the BCC servers. All Web page developers are expected to act responsibly and to adhere to both the BCC Acceptable Technology Use Guidelines and to the procedures established by the College for Web pages. In particular, the college expects that all members of the college community will (1) obey all applicable federal, state, and local laws, including copyright law; (2) adhere to fair use guidelines; (3) give proper attribution of any sources; (4) not use College hardware, software, or communications for personal profit; and (5) not place any information on the Web pages which reflects negatively on the College or any member of its community. Further, all Web page developers are expected to make every effort to ensure that the BCC Web site, and all pages contained within it, is accessible to students with disabilities. The College has the right to monitor all Web pages placed on its servers and remove any that violate the College's guidelines or procedures. Further, the College has the right to prohibit access to its computing resources to anyone who violates either the guidelines or subsequently established procedures.

## BCC Web Site Procedures

In the following procedures an official page is defined as one which primarily contains information normally found in the College catalog, such as courses of study, and course descriptions.

## ‘Official' Web Pages

## 1. BCC Web Page

The BCC Web page (http://www.bergen.edu) is the College's principal Web site. It is the responsibility of the Office of Public Relations to establish style and appearance guidelines for the Web page and other official pages. Any information to be included on the official College Web site is to be approved by and routed through this office.

## 2. Division, Department, and Curriculum Web pages

Each division, department, and curriculum is expected to have its own Web page. These Web pages are to have a designated Web site manager who is identified on the Web site by name, office, and e-mail address; are to be updated on a regular basis so that all information is relevant, timely, and appropriate; contain the date created or last revised; have appropriate releases or copyright permissions for all photographs, artwork, or text; follow the style guide established by the Office of Public Relations for use of BCC logo, fonts, and overall layout; verify and update all links regularly; and be approved initially by the Office of Public Relations before being uploaded to the college servers. Division, Department, and Curriculum Web pages will be limited by the resources available. Subsequent alterations and additions to the Division, Department, and Curriculum Web pages are subject to periodic review by the Office of Public Relations.

## ‘Unofficial' Web Pages

## 1. Faculty and Course Web Pages

Full-time and adjunct faculty members are encouraged to have their own Web pages. When developing Web pages, faculty members are to adhere to the following:

- Pages should be professional, not personal.
- Pages should not refer in any way whatsoever to any personal profit making enterprise such as private practice, or consulting.
- There must be signed releases or copyright permissions for any artwork, photographs, video or audio segments, or quoted text.
- Pages should fully identify the faculty member, giving name, position, office location, office telephone number, and e-mail address. It is suggested that the Web page also include work schedules or office hours.
- Other appropriate information may be publications, presentations, and professional affiliations.
- If the page links to a personal Web page, the faculty member is responsible for the appropriateness of the information on the personal Web page.
- Pages may not contain any material that in any way violates federal, state, or local law or material that reflects negatively on the college or any member of its community.
- All information on the Web pages is to be timely and relevant. Pages should be updated regularly and links checked for accuracy.

Faculty are encouraged to develop course Web sites, with information such as course outlines, student assignments, lecture notes, PowerPoint presentations, and homework answers. Faculty, staff, and course pages may be limited by available resources. Faculty who need assistance developing a Web site should consult the Center for Instructional Technology.

## 2. Student Organization Home Pages

Official student organizations, that is, those recognized by the Office of Student Activities, may have Web pages on a BCC server. Student organizations that wish to have a page loaded on the servers are to have approval from the Director of Student Activities; designate a member of the club as Web page manager and the Web page manager must be identified on the page; commit to updating all information in a timely fashion; abide by the College's Acceptable Use Policy and Administrative Guidelines, obey all federal, state, and local laws, including copyright law; adhere to fair use guidelines; and give proper attribution of any sources; not post anything which reflects negatively on the college or any member of its community; and verify regularly that all links from their page are active. Club Web pages will be limited by available resources.

## 3. Individual student home pages

Individual students may only have Web pages on the BCC server when required as part of a course. The faculty member for the course is responsible for establishing standards for student Web pages and for ensuring that students have adhered to these standards before the pages are uploaded to the BCC servers. Student Web pages will be limited by available resources.

# Student LIFE 

## Code of Student Conduct

The Board of Trustees authorizes the President of the College to employ the process of criminal and civil law to terminate any campus disruption and to restore college function and prevent injury to persons or property. The College reserves the right to suspend or dismiss any student for justifiable cause and regards this right as part of the college contract.

All students are governed by college rules and regulations. Each student is expected to exercise discretion, and act within the limits of decorum and propriety at all times and in all places.
Students are especially accountable for behavior that contributes to, or results in:

1. Danger to the safety and well-being of oneself and others;
2. A breach of college rules and regulations;
3. Disobedience to local, state or federal laws;
4. A disruption of the College's regularly planned programs and activities;
5. Academic dishonesty;
6. The unauthorized use and the abuse of alcohol and the illegal use and the abuse of drugs are specific violations of student conduct. These rules apply when attending college functions either on campus or off campus, or functions of college chartered organizations conducted either on campus or off campus.


An important factor in your success and happiness at Bergen Community College will be how well you balance your time here. The value of these years of your life can be worked into one simple equation:

What you get out = What you put in!
This equation works in the classroom, in your social life, and in your extracurricular involvement. The Office of Student Life is here to help you get the most out of Bergen Community College by getting involved in one of the many student-run organizations on campus. One of the largest benefits of being involved in a college activity is the opportunity to learn to effectively communicate with others. This will help you in whatever your future holds: four-year college, self-owned business, or in the workforce. Give it a try. Stop by the Office of Student Life (A-115) and ask about student clubs or call us at 201-447-7215. And don't worry about being inexperienced. We will guide and teach you what you need to know to become an effective leader, a skill that will reward you in whatever path you choose to follow. And if you don't see the club you want on the list below, we can help you get it started!

## Student Government Council

The Student Government Council (SGC) is the voice and governing body for Bergen Community College students. The Council consists of an executive board, senators, and a representative from each student club and organization. The Student Government Council meets weekly and all meetings are open to BCC students.

## Student Activities Board

The Student Activities Board (SAB) plans and provides programming for an active social environment for BCC students.
Programs offered include musical events, lectures, dances, drivein movies, field trips to Broadway plays, sporting events, weekend sightseeing and ski trips. In addition, SAB works with clubs and organizations to provide other diversified programs including World Week, Women's History Month and Black History Month. Students wishing to participate on the SAB should contact the Office of Student Life at 201-447-7215.

## CLUBS

Note: All clubs may not be active every semester.

## African Student Coalition

Students interested in their African heritage are welcome. Programs will be presented to delve into their roots and history.

## American Sign Language (A.S.L.) Club

This club was formed to raise the awareness of the college campus regarding the language and culture of the Deaf and Hard of hearing communities.

## Anime Club

Anime is a student club that focuses on learning more about the Anime style of drawing and illustration, derived mostly from the Japanese artist. Story lines are strongly influenced by issues of technology, religion, and the environment, as well as teaching about choices, leadership, and helping others.

## Asian Indian Student Association

Students interested in Indian culture or of Indian descent are encouraged to become involved with this association. The main purpose of the association is to promote activities at the college, which increase awareness of Indian culture.

## Biology Club

Students studying or interested in the biology field are welcome to join this club.

## Black Student Union

The Black Student Union sponsors social and cultural events aimed at increasing awareness about the rich heritage of African-
American people. The club also promotes political awareness with visits from local government officials.

## Buehler Columbia Amateur Astronomers Association

The Buehler Columbia Amateur Astronomers Association was formed on February 8, 2003, to be responsible for the ordering and maintenance of the equipment of the Emil Buehler Trust Observatory, located in the Technology Education Center. The club also conducts "public nights," on most Saturday nights, for the observation of celestial objects, and other special events in conjunction with the observatory.

## Caribbean Club

The Caribbean Club provides a support system for students of Caribbean descent or origin. The club visits a variety of exhibits on Caribbean art, books, and music, and sponsors events to promote the cultural richness of this region.

## Chess Club

Like to play chess? This is the club for you! Weekly chess matches are held at Bergen and the club participates in collegiate tournaments.

## Chinese Club

The Chinese Club brings students together to share traditions and celebrate the Chinese culture through meetings and events.

## Christian Fellowship

Members of the Christian Fellowship conduct bible readings, hold discussions on religious themes, and view religious movies. All are welcome.

## Creative Writing Club

The club is intended for students with an interest in creative writing and reading. Students meet to read and critique each other's work.

## Criminal Justice Club

Comprised of students from all disciplines, the Criminal Justice Club is dedicated to the development of greater understanding of the complex problems and responsibilities facing the criminal justice system in a multicultural society. The club sponsors speakers with specialized backgrounds and trips that bring students into contact with institutions within the three areas of the system. An emphasis is placed on projects that promote career opportunities for the BCC student.

## Dance Club

Students studying or interested in pursuing the art of dance are welcome to join this club, which meets in the rehearsal studio Room C-106D. Free dance lessons in a variety of dance styles are offered throughout the year, culminating in a Summer Dance Intensive.

## Dental Hygiene Club

Students in the Dental Hygiene Club sponsor an annual open house, help promote dental care awareness on campus, and participate in the New Jersey Dental Hygiene meetings in order to remain current with the latest developments in dental health care.

## Early Childhood Education Club

The Childhood Education Club meets to discuss issues in childcare. Each year, the club sponsors forums on children's rights and many of the issues that confront the child care profession today.

## Environmental Club

The Environmental Club is one of Bergen's more active organizations. Students interested in preserving the environment, recycling, environmental issues and concerns are welcome.

## Filipino-American Association

The Filipino-American Association promotes the Philippine heritage through its various cultural and social events, workshops, and lectures. It is open to all students of Filipino descent and those interested in the rich history and culture of the Philippines.

## Flowetry Club

The Flowetry Club is comprised of students who enjoy expressing themselves through song, poems, and improvised performance. The club performs and sponsors many events on campus.

## Gay/Lesbian/Bisexual/Transsexual Alliance

The organization strives to create an environment conducive to the personal and social development of individuals who identify as gay, lesbian, bisexual, and trans-gendered, and to advance awareness and unity among the entire BCC community.

## Hillel

The purpose of Hillel at Bergen Community College is to give members the opportunity to explore various dimensions of Jewish history, philosophy, and culture and to participate in Jewish cultural events. All members of Bergen Community College are invited to participate.

## Horticulture Club

Students who want hands-on-activity in working with plants and cut flowers are invited to become members in the Ornamental Horticulture Club. The club plans and executes a variety of floral displays and garden designs. Members make visits to botanical gardens to explore the multitude of flora and fauna that exist in nature.

## Intercollegiate Athletics

The Athletic Department presently sponsors a variety of popular intercollegiate athletic programs for men and women. The men's intercollegiate teams include soccer, cross-country, basketball, baseball, golf, wrestling, track and field, and tennis. The women's programs compete in cross-country, softball, basketball, volleyball, track and field, golf, and tennis. The intercollegiate programs include professional coaches and schedules, which compete on a national level. The athletic facilities are professionally maintained. They include a gymnasium that seats 1,200 persons for basketball; a 75 -foot by 45 -foot, 6 -lane swimming pool; soccer, baseball and softball fields; an 8-lane track; and a fitness center.

The College is a member of the Garden State Athletic Conference as well as the National Junior College Athletic Association (NJCAA). The College also competes in Region XIX, which consists of colleges from New Jersey, Eastern Pennsylvania and Delaware. Individual teams may also schedule games with two-year colleges from other states and Canada.

The Bulldogs (colors - purple, white, orange) regularly place athletes on All-American, All-Region, and All-Conference athletic and scholastic teams.

## International Students Association

The International Students Association brings together foreign and American students to share their diverse cultural backgrounds and to discuss current international events. The club sponsors trips to cultural centers and film festivals, and provides international career guidance sessions.

## Intramural Sports

Intramural sports are available to those students who enjoy competition with a less rigorous schedule. The Athletic Department, which sponsors intramurals, provides activities such as threeman basketball, four on four soccer, tennis, chess, volleyball, ping pong, and others depending on student interest. The coed activities are scheduled during student activity hours and are available to all College students. Awards are presented to winners in each category. Students need to be in good physical condition and sign an intramural waiver form. If you are interested in getting involved in intramurals, please call 201-447-7182.

## Korean Student Association

Students get together to share their culture and experiences. The club also sponsors activities to promote awareness of Korean culture at Bergen Community College.

## Latin American Student Association

The Latin American Student Association is a student organization interested in promoting the culture of Spanish speaking countries. The Latin American Student Association is very active and sponsors seminars, workshops, lectures, movies, and trips to theater performances. In addition to these cultural events, the Association also organizes parties and bake sales to fund some of its activities. All students are invited to join!

## Media Club

Students studying or interested in the field of media are welcome to participate in this club. Producing a weekly video program to air in the Student Center is one of their new ventures.

## Music Interactive Club

Students interested in promoting music activities and participating in musical activities and/or performances are welcome to join the Music Interactive Club.

## Muslim Student Association

The purpose of the MSA is to provide the opportunity for the college community to explore the dimensions of Islamic thought, history, beliefs and customs and to provide a forum for discussion of these entities. The MSA invites all members of the college community to participate.

## Native American Heritage Club

The Native American Heritage Club recently formed to celebrate, study, and explore those with direct Native American roots. A major fall festival and celebration is planned with music, dancers, food, powwows, lectures, and movies.

## Nursing Student Association

The Nursing Student Association strives to contribute to nursing education in order to provide the highest quality health care. To this end, the association sponsors programs on current topics including stress, biomedical ethics, AIDS, teenage suicide, and others. The club also sponsors an orientation program for first semester nursing students. In addition, members attend the New Jersey Nursing Students Association Convention.

## Paralegal/Legal Nurse Consultant Club

The Paralegal/Legal Nurse Consultant Club is open to any students studying or interested in the Legal Assistant field.

## Philosophy Club

The Philosophy Club, also known as LOGOS, sponsors various speakers, programs, and philosophical discussions throughout the year.

## Phi Theta Kappa

Students who meet the academic criteria may be invited to join the Alpha Epsilon Phi Chapter of Phi Theta Kappa, the International Honor Society of the Two-Year College. The group's purpose is the recognition of academic excellence and the promotion of scholarship, fellowship, leadership, and service.

## Physical Therapist Assistant Club

The Physical Therapist Assistant Club (PTAC) exists to increase the awareness of the physical therapist assistant program and physical therapy on the BCC campus and within the community. The PTAC coordinates varied educational and philanthropic activities as well as sponsors an orientation program for the first semester PTA students.

## Polish Cultural Club

The Polish Cultural Club brings students together to share in their culture and hosts events that celebrate Polish culture.

## Psychology Club

The Psychology Club familiarizes students with the many different areas of psychology. The club also provides lectures, discussion groups and other activities that guide students' decision making about what topics and specializations of psychology they might wish to pursue. Students of all majors are welcome to join the Psychology Club.

## R.E.B.E.L. University

R.E.B.E.L. (Reaching Everyone By Exposing Lies) is the antitobacco organization on campus.

## Respiratory Club

Students interested in the field of respiratory therapy are encouraged to join this organization. The club participates in the annual state Respiratory Bowl, distributes literature during the Great American Smoke Out day, and visits a New York hospital.

## Russian Club

This club is for students with an interest in Russian language and culture. The club brings various speakers, artists, and performers to the college to give the entire BCC community a chance to share in Russian culture.

## Sci-Fi Club

The focus of this club is science fiction movies, television, books, and video games. The club frequently shows films, which are open to all of BCC.

## Sociology/Social Work Club

Fostering exploration and understanding of human behavior and social problems, the Sociology/Social Work Club is committed to encouraging the objective study of contemporary social issues and promoting careers in the social and human services. All students are welcome.

## Speech and Debate Club

This organization focuses on public speaking, and the development of logical arguments. The members participate in several debate tournaments throughout the year.

## Staff and Student Club

Bergen Community College employees who are taking classes at the College are welcome to join this organization. Field trips, lectures, book swaps, and functioning as a support group are the major activities of this club.

## S.T.A.R. Club

The goal of the Student Team Ability Resource Club is to motivate Bergen students to help each other to achieve their goals and to develop a sense of altruism among the student body.

## Technology Club

This club deals with the interaction of people and technology in modern society. The club also sponsors various activities on campus, including technology workshops and computer repair clinics.

## Theatre Club

Students interested in performing or participating in any area of theatrical productions are invited to join the BCC Theatre Club. During the fall and spring semesters, the Theatre Club presents a variety of productions which include comedy, drama, musicals, and experimental pieces. Past productions have included "Dangerous Liaisons," "Chicago," and "Lysistrata."

## The Torch

As the BCC student newspaper, The Torch keeps the college community informed about the on-campus events, student activities, student and faculty achievements, and other news of interest to the student body. No journalism experience is necessary and all students are encouraged to join the staff of the newspaper.

## Veterans Club

Comprised primarily of veterans, reservists, and members of the National Guard, the Veterans Club is involved in a series of activities focusing on the observance of holidays which commemorate American veterans. Members have visited the Vietnam Memorial in Washington, D.C., and will return to the capital to participate in the national Veterans Day observance. The Veterans Club invites all students on campus to take part in the activities.

## Vet Tech Club

The objective of this organization is to expose students of the Northern New Jersey Consortium for Veterinary Technician Education to the field of veterinary technology and to join together to promote animal welfare.

## FOUNDATION ALUMNI NETWORK

The Bergen Community College Foundation Alumni Network advances the mission of the College by promoting ideas, leadership, and personal relationships among alumni, current students, faculty, staff, and administration. The Alumni Network links BCC graduates to the past, present, and future for College benefits and services.

The Network offers members extensive benefits and services:

- Use of College facilities including Library resources, pool, com-
puter labs, and athletic facilities
- Special Career services including employment skills workshops, job listings, and assistance with resume writing
- A variety of social activities including seminars, receptions, and special trips

For more information, call or write the Foundation Alumni Network at the College, c/o Scoskie Hall, 201-447-7117 or by e-mail at AlumniNetwork@Bergen.edu.

## RULES AND REGULATIONS

At the beginning of the academic year each student is expected to obtain a copy of the College Catalog, Student Handbook and the Academic Calendar. The catalog contains information about the College in general; courses of study; student activities; and rules, regulations and procedures essential to student life on campus. Every student is responsible for knowing the information included in the catalog and the academic calendar.

## Alcohol and Drug Policy

The Bergen Community College Board of Trustees approved the following policy resolution regarding drugs and alcohol: "In accordance with Public Law 101-226, Bergen Community College declares that it will endeavor to provide its employees and students with an environment that is free of the problems associated with the unauthorized use and abuse of alcohol and illicit drugs."
Therefore, Bergen Community College prohibits the unlawful possession, use, or distribution of illicit drugs on College property or as part of any of its activities.

The College alcohol policy prohibits possession or consumption of alcoholic beverages on the Bergen Community College campus, with the exception of special, approved receptions in the Meeting and Training Center. Violators may be subject to suspension or dismissal. Intoxication and/or disorderly conduct resulting from consumption of alcoholic beverages will be considered a serious violation of campus regulations and may result in disciplinary action.

Local, state and federal laws that apply to unlawful possession, use, or distribution of illicit drugs and alcohol will be enforced.
Individuals and organizations in violation of College policy and regulations are subject to disciplinary sanctions. As appropriate, sanctions may range from verbal warning up to dismissal. Sanctions may also include completion of an appropriate rehabilitation program or referral to appropriate legal authorities for prosecution.

These policies apply to all Bergen Community College employees and students as well as visitors to the College.

The possession or sale of drugs is a violation of the law. Bergen Community College will, therefore, make every effort to uphold the law and render assistance and support to law enforcement agencies legally and ethically pursuing their objectives, while at the same time render assistance to students when needed or necessary. In light of the foregoing statement, Bergen Community College's drug policy is as follows:

1. Faculty members, employees of the institution, and students are asked to report or submit to the Executive Vice President and Vice President of Student Services any knowledge or evidence directly or indirectly relating to the possession or sale of drugs anywhere on the college campus or at any time during a collegeconnected activity.
2. The Executive Vice President and Vice President of Student Services shall submit to the College President all information they may come by regarding the possession, sale, or use of drugs on the college campus or during any college-connected activity and will recommend the appropriate course of action to be followed.
3. Bergen Community College students convicted of a drug charge or who admit, in writing, to the possession or sale of drugs anywhere on the college campus or during any college-connected activity will be subject to dismissal from the College.
4. Information given to a counselor during the privacy of a counseling session will not be divulged by the counselor unless, in the judgment of the counselor, there exists a clear and imminent danger to life, limb or property.

Students should refer to the document "Bergen Community College Student Program to Prevent Illicit Use of Drugs and Abuse of Alcohol," available through the offices of the Executive Vice President, Vice President of Student Services, Health Services, Counseling, and the Department of Public Safety.

## Chaperones

One chaperone is required at all activities, although it is recommended that two serve at social functions. One of the chaperones must be a member of the college faculty or administration. The duties of the chaperones shall be as follows:

## On Campus Events

- To supervise the activity and assure adherence to college polices and regulations.
- To enforce BCC's policy on ZERO alcohol consumption.
- To cooperate with the committee chairperson in seeing that good taste and proper standards of conduct are maintained.
- To submit a brief summary report/evaluation to the Office of Student Life after the event.


## Off Campus Events

- To abide by the duties listed above.
- Must present the Office of Student Life with a list of all students attending the event, as well as an Emergency Contact Form for each attendee.
- If it is an overnight event (conference, seminar, etc.), the Office of Student Life needs to be provided with all information regarding the trip. This includes transportation, hotel and conference information.
- The chaperone must have all emergency numbers

In the event of an emergency the chaperone must contact Dr Ralph Choonoo and Dr. Calvin Woodland.

The Chaperone must be at each event from beginning to the end.

## Club and Student Organization Policy

Students at Bergen Community College are encouraged to enrich their college experience through a variety of activities including student government, clubs, student publications, and athletics. The personal development of students is enhanced through these out-of-class activities. Although clubs are open to all Bergen students, special interests of students are served by many clubs that are oriented to particular student groups and academic majors.

Financial support is provided to clubs and organizations in order to build an active campus life that will have a broad appeal across the student population. Funds are distributed to clubs and organizations in a manner that assures fair, non-discriminatory allocations that are devoid of conflict-of-interest. The division of general fees allocated for student activities shall be on a percentage basis as per a schedule approved by the Board of Trustees.

1. All clubs and other student organizations must be chartered by the Student Senate.
2. The Student Senate does not charter a club or other organization unless:
a. There is ample evidence that it has a meaningful place in student life;
b. It will observe College rules and regulations as well as those adopted by the Student Senate
c. It can maintain an active membership;
d. It does not use the College name to own, rent, borrow or in any other way permanently or temporarily acquire off-campus facilities for housing, meetings, social events and other causes. However, in certain cases, special events may be conducted off-campus with the written consent of the Vice President of Student Services;
e. It does not purchase any items in the name of the College;
f. It does not discriminate according to sex, race, religion, national origin, sexual orientation or disability;
g. It has a faculty advisor;
h. The members of each club or other student organization are duly enrolled students of Bergen Community College in "good academic standing;"
i. Each club or other student organization submits three copies of its constitution to the Student Life Office;
j. Each club or other student organization to be considered must register each semester by submitting a list bearing the names, home addresses and telephone numbers of its officers to the Student Life Office.
3. College facilities will only be granted to an organization that has correctly registered, whose treasurer's books have been audited and approved, whose debts have been cleared, and whose Constitution is on file. A policies and procedures manual is available through the Student Life Office.

## Financial responsibilities

- The president of the organization and the chairman of the func-
tion are responsible for the financial obligations involved. If tickets are printed, they must be serially numbered and a careful count kept of the number of tickets sold and the number given out as complimentary tickets.
- All contracts must be signed by the Vice President of Student Services, or his designee. Copies of the contract must be filed in the Student Life Office.
- The College Controller in the Office of the Vice President of Administrative Services is to act in an advisory capacity to any organization in need of assistance in regard to Internal Revenue taxes or any other financial matter.
- A financial report must be completed and filed with the Student Life Office no later than two weeks after the function.
- A detailed and documented list of expenses must be retained as a permanent record by the organization.


## College Name or Seal Usage

Individual students may not use the name or official seal of Bergen Community College in correspondence with other student groups, colleges, or outside organizations, unless this is done in an official capacity by a recognized student organization and approved by the Office of Student Activities.

## Demonstrations

The philosophy of Bergen Community College is to encourage freedom in the expression of ideas presented in a scholarly and law abiding manner. Demonstrations that interfere with the daily operations of Bergen Community College or cause personal injury to individuals or damage to property will not be permitted on campus. Students involved in the planning or implementation of such a demonstration shall be subject to disciplinary action by the College and prosecuted to the fullest extent of the law. The President is authorized to employ the process of criminal and civil law to terminate any campus disruption and to restore college function and prevent injury to persons or property. The College permits demonstrations when conducted in accordance with the following conditions:

1. That they are not designed to and do not interfere with the daily operations of Bergen Community College;
2. That they are not designed to and do not cause personal injury to individuals or damage to property;
3. That they are limited to exterior areas (sidewalks and lawns); no activity will be permitted inside college buildings or in doorways leading to buildings. There shall be no interference with building or campus ingress and egress. Speaking to other persons shall be conducted so as not to interfere with their easy passage by;
4. That the intention to hold a demonstration and all its particulars must be filed 48 hours in advance of the event. The statement of intention must include date, time, and location of demonstration, purpose of said demonstration, approximate number of participants, type of activity involved (e.g., picketing, distribution of leaflets, chanting) and names of three individuals responsible for maintaining reasonable order.

## Dress Regulations

Students are expected at all times and in all places to exercise discretion and dress in accordance with propriety, good taste, and public health requirements. It is further expected that the students' habits will reflect cleanliness, good grooming, and a concern for personal health.

## Eating and Drinking

Eating or drinking in classrooms, lecture rooms, laboratories, gymnasium, library, natatorium, or passageways is forbidden. Eating and drinking are permitted in cafeteria and vending areas only.

## Emergencies

All emergencies, accidents, or injuries which occur on College property are to be reported to the Public Safety Department or the Health Services Office within 48 hours of the accident. In the event that any condition threatens to close the College temporarily, listen to the following broadcasting stations for official instruction: WCBS/880, WOR/710, 1010 WINS, WVNJ 1160, and Cablevision/News 12 NJ, or $\log$ on to the College's Website, http://www.bergen.edu. Students may also wish to log on to http://www.1010WINS.com to sign up for e-mail notification of college closings. Please do not call the school.

## Emergency Telephone Calls/Messages

The College does not have a public address system or a paging service and cannot seek students out to deliver telephone calls or messages.

## Equity in Athletics Disclosure Act

In compliance with Equity in Athletics Disclosure Act, Bergen Community College collects and publishes data which includes a list of varsity teams, the number of participants, budgets, gender participation, coaches' salaries, and total revenue generated. Copies of this report can be reviewed or obtained in the Research and Planning Office, Student Center, Library, Financial Aid, Admissions, Registration and Student Information Services or the Athletic Department.

## Family Education Rights and Privacy Act of 1974

The Family Education Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's educational records within 45 days of the day the College receives a request for access

Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.

Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want to be changed, and specify why it is inaccurate or misleading.

If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another College official in performing his or her tasks.

A College official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Another important exception concerns the concept of "Directory Information." Information specified as "Directory Information" can be released without the consent of the student unless the student specifically requests that such information be withheld. This may be done by filling out a form available at the Office of Registration and Student Information Services (A-129).

Please note that Bergen Community College does not publish a student directory. This information is released only in connection with state and federal reporting and in publications such as the Commencement Program or Sports programs and news releases on graduates and student achievements.

Bergen Community College classifies the following information as "Directory Information": name and address, date of birth, dates of attendance, enrollment status (full-time, part-time), degrees, honors and awards received, field of study, participation in officially recognized activities and sports.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Bergen Community College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are:

## Family Policy Compliance Office <br> U. S. Department of Education <br> 600 Independence Avenue, SW Washington, D.C. 20202-4605

Students who may want to familiarize themselves with the act may do so by reviewing this federal act available at the Library Reference Desk and in the Office of Student Services.

Students with inquiries and/or concerns regarding the act, policy and/or procedures of the College are directed to make an appointment to speak with a counselor in the Division of Student Services or the Manager of Training and Compliance.

When deemed appropriate, the counselor shall refer the student to the Vice President of Student Services or the Manager of Training and Compliance if further discussion is warranted.

## Gambling

All forms of gambling are prohibited on the Bergen Community College campus and during all college-connected activities. Offenders are subject to disciplinary action that may result in suspension or dismissal.

## Good Neighbor Policy

It has been previously stated that each student is expected to exercise discretion and act within the limits of decorum and propriety at all times and places. This statement cannot be too strongly emphasized in relation to property immediately adjacent or close to the College. Students are cautioned not to trespass on the neighboring golf courses; offenders will be subject to disciplinary action by the College.

## Graduation/Transfer Rates

In compliance with the Higher Education Amendments of 1998, Bergen Community College collects information on graduation and transfer of its students. Copies of a report on graduation and transfer rates may be reviewed/obtained in the Research and Planning Office, the Library, the Admissions Office, and the Office of Registration and Student Information Services.

## Grievance Procedures - Section 504/ADA

Bergen Community College has adopted an internal grievance procedure providing for prompt and equitable resolution of complaints alleging any action prohibited by federal regulations implementing section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990 (ADA). Section 504 and ADA state, in part, that "no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by an such entity."

Complaints should be addressed to the Manager of Training and Compliance, Office of the Executive Vice President, Room A-330, telephone: 201-612-5331, who has been designated to coordinate section 504/ADA compliance efforts.

1. A complaint should be filed in writing, contain the name and address of the person filing it, and briefly describe the alleged violation of the regulations.
2. A complaint should be filed within 30 days after the complainant becomes aware of the alleged violation.
3. An investigation, as may be appropriate, shall follow a filing of a complaint. The investigation shall be conducted by the Manager of Training and Compliance. These rules contemplate thorough investigations affording all interested persons and their representatives, if any, an opportunity to submit evidence relevant to the complaint.
4. A written determination as to the validity of the complaint and a description of the resolution, if any, shall be issued by the Manager of Training and Compliance and a copy forwarded to the complainant no later than 25 working days after its filing.
5. The section 504/ADA coordinator shall maintain files relating to the complaints filed.
6. The right of a person to a prompt and equitable resolution of the complaint filed hereunder shall not be impaired by the person's pursuit of other remedies such as filing of a section 504/ADA complaint with the responsible federal department or agency. Utilization of this grievance procedure is not a prerequisite to the pursuit of other remedies.
7. These rules shall be construed to protect the substantive rights of interested persons, to meet appropriate due process standards, and to assure that Bergen Community College complies with section 504/ADA and implementing regulations.

## Guest Speaker Program Policy

1. The Student Life Office is to be notified two weeks in advance of the purpose, time, place, speaker(s), topic(s), and other preparations as necessary.
2. When such notification has been received, the Student Life Office will follow one of the following alternatives:
a. Record the appropriate information thus enabling the organization to extend an invitation, or
b. After consultation with the organization sponsoring the program, refer the matter to the Vice President of Student Services.
3. When a student organization presents a speaker on a controversial topic, the organization is to make provisions for the expression of opposing viewpoints either at the same meeting or at a subsequent meeting within a four-week period.
4. No publicity may be given to a proposed program before the following conditions have been met:
a. The Vice President of Student Services has certified that the proposed program has been duly registered.
b. Each guest speaker has been invited and has accepted the invitation.
5. Literature may be posted on authorized bulletin boards only; nothing may be posted on the exterior of college buildings or elsewhere on the college campus.
6. The program sponsors are responsible for assuring proper compliance with all the rules and regulations.

## Hours

Persons must leave the college buildings and grounds by 11:00 p.m. When use of the college facilities beyond the limits set above is deemed necessary, approval must be obtained from the appropriate cabinet officer, and arrangements made in writing through the Office of Public Safety.

## Noise and Sound

Bergen Community College values an environment conducive to learning. It is expected that students respect and support that concept. Noise created by electronic devices cannot and will not be tolerated. Students who disturb the normal operation of the College may be subject to disciplinary action.

## Off-Campus Trips

An officially registered college club or organization that wishes to sponsor an off-campus trip must file written application and receive approval through the Office of Student Life at least one week prior to the event. All trips must be appropriately chaperoned and are governed by college rules and regulations.

## Petitions

If a petition is circulated on campus, a copy must be approved by the Office of Student Life. Each copy must bear the words "Bergen Community College," the name of the group or groups sponsoring the petition, and the petition itself.

## Posters, Notices, Circulars

Posters and notices are not to be sent to instructors to read in class. If a group wishes to distribute circulars to the faculty, approval must be received directly from the Office of the Vice President of Student Services. Notices for students are to be distributed in such a fashion so as not to interfere with student traffic or with the regular functioning of the College. Pressure is not be exerted upon individuals to accept notices. General postings must be approved by the Office of Student Life.

## Public Safety

The Public Safety Department is located in Room L-154 and open for emergencies 24 hours a day; its telephone number is 201-4477116. The campus is patrolled by officers at all times to ensure a safe and secure environment. Violations of campus regulations, criminal laws, or any emergency must be immediately reported.

## Safety and Fire Regulations

Bergen Community College observes all safety and fire regulations and supports the local agencies charged with the responsibility for their enforcement. In the event of an emergency situation requiring evacuation of the facilities, alarms will be sounded throughout the buildings. You are instructed to take your personal belongings with you and immediately leave the building by the nearest stairway. Do not use the elevators.

## Sexual Harassment Policy

Bergen Community College is committed to providing its students and employees with an academic and work environment free from sexual harassment or discrimination. Sexual harassment in any form constitutes prohibited, unprofessional and unacceptable conduct, and is a violation of Title VII of the Civil Rights Acts of 1964 and 1990, as amended, Title IX of the Education Amendments of 1972, the New Jersey Law Against Discrimination, established case law and State policies. The policy applies to all persons. Administrators, faculty, staff, and students are all covered.

Harassment of students by faculty and staff as well as by other students is covered, as is harassment of faculty and staff by students. Harassment by vendors, including contractors, is prohibited. The College will not tolerate, condone, or allow sexual harassment of any of its students or employees, by any instructional, supervisory, managerial, or administrative personnel, co-workers, students, independent contractors, vendors, or others with whom the College does business. Bergen Community College will enforce this policy and expects all employees and students to be diligent in preventing, detecting, and reporting any incidents of sexual harassment. Bergen Community College expects each employee and student to avoid any acts or statements that may constitute sexual harassment and to ensure that his or her conduct complies with this policy. The College will take appropriate disciplinary action when an investigation reveals that an individual has engaged in any such prohibited conduct.
A. For the purposes of this policy, Sexual Harassment is defined as unwelcome sexual advances or sexually explicit comments, requests for sexual favors, and/or other verbal or physical conduct based on the gender of the affected individual when:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of employment or academic achievement; or
2. Submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions affecting that individual; or
3. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an unreasonably intimidating, hostile or offensive working or educational environment. Hostile environment sexual harassment includes, but is not limited to:
a. Generalized gender-based remarks and behavior;
b. Inappropriate, unwanted, offensive physical or verbal sexual advances and comments;
c. Solicitation of sexual activity or other sex-linked behavior by promise of reward;
d. Coercion of sexual activity by threat of punishment;
e. Gross sexual imposition such as touching, fondling, grabbing or assault.
B. An individual need not be a personal target of harassment to file a complaint. The individual instead may show that other individuals were sexually harassed and that this harassment created a hostile or intimidating work or academic environment.
C. Conduct under (A1-3) above by any instructional, supervisory, managerial, or administrative personnel, co-workers, students,
independent contractors, vendors, or others with whom the College does business constitutes prohibited sexual harassment when a reasonable person of the same sex as the aggrieved individual would consider it sufficiently severe or pervasive to alter the conditions of employment or education or to create an intimidating, hostile, or offensive working or educational environment.
D. Student-on-student harassment is a violation of Bergen

Community College's Sexual Harassment Policy and must be reported to the Manager of Training and Complaince, Room A330, teletelephone number 201-612-5331. Unwelcome sexual conduct by another student, student-on-student harassment, that disrupts a student's ability to learn or conduct that creates a hostile learning enviornment will be handled through the College's policies that address student conduct, including the Rules and Regulations found in this Catalog, not the Complaint Process for resolving Sexual Harassment Complaints.
E. Every member of the College community should be aware of the fact that the College is strongly opposed to sexual harass ment and that the College will take whatever action it deems necessary to prevent, correct, and if necessary, discipline behavior that violates this policy. Disciplinary action for employees can range from reprimands to dismissal. Students violating this policy may be reprimanded, suspended, or dismissed from the College.

## Campus Sexual Assault Victim's Bill of Rights

A college or university in a free society must be devoted to the pursuit of truth and knowledge through reason and open communication among its members. Academic communities acknowledge the necessity of being intellectually stimulating where the diversity of ideas is values. Its rules must be conceived for the purpose of furthering and protecting the rights of all members of the university community in achieving these ends.

The boundaries of personal freedom are limited by applicable state and federal laws and institutional rules and regulations governing interpersonal behavior. In creating a community free from violence, sexual assault, and non-consensual sexual contact, respect for the individual and human dignity are of paramount importance.

The state of New Jersey recognizes that the impact of violence on its victims and the surrounding community can be severe and long lasting. Thus, it has established this Bill of Rights to articulate requirements for policies, procedures, and services designed to insure that the needs of victims are met and that the colleges and universities in New Jersey create and maintain communities that support human dignity.

The following rights shall be accorded to victims of sexual assault that occur:

- On the campus of any public or independent institution of higher education in the state of New Jersey, and
- Where the victim or alleged perpetrator is a student at that institution, and/or when the victim is a student involved in an off-campus sexual assault.


## Human Dignity Rights

- To be free from any suggestion that victims must report the crimes in order to be assured of any other right guaranteed under this policy
- To have any allegations of sexual assault treated seriously; the right to be treated with dignity
- To be free from any suggestion that victims are responsible for the commission of crimes against them
- To be free from any pressure from campus personnel to: Report crimes if the victim does not wish to do so.
Report crimes as lesser offenses than the victim perceives the crime to be.
Refrain from reporting crimes to avoid unwanted personal publicity.


## Rights to Resources On and Off Campus

- To be notified of existing campus and community based medical, counseling, mental health, and student services for victims of sexual assault whether or not the crime is formally reported to campus or civil authorities
- To have access to campus counseling under the same terms and conditions as apply to other students in their institution seeking such counseling
- To be informed of and assisted in exercising:

Any rights to confidential or anonymous testing for sexually transmitted diseases, human immunodeficiency virus, and/or pregnancy
Any rights that may be provided by law to compel and disclose the results of testing of sexual assault suspects for communicable diseases.

## Campus Judicial Rights

- To be afforded the same access to legal assistance as the accused
- To be afforded the same opportunity to have others present during any campus disciplinary proceeding that is allowed the accused
- To be notified of the outcome of the sexual assault disciplinary proceeding against the accused.


## Legal Rights

- To have any allegation of sexual assault investigated and adjudicated by the appropriate criminal and civil authorities of the jurisdiction in which the sexual assault is reported
- To receive full and prompt cooperation and assistance of campus personnel in notifying the proper authorities
- To receive full, prompt, and victim-sensitive cooperation of campus personnel with regard to obtaining, securing, and maintaining evidence, including a medical examination when it is necessary to preserve evidence of the assault.


## Campus Intervention Rights

- To require campus personnel to take reasonable and necessary actions to prevent further unwanted contact of victims by their alleged assailants
- To be notified of the options for and provided assistance in changing academic and living situations if such changes are reasonably available.


## Statutory Mandates

- Each campus must guarantee that this Bill of Rights is implemented. It is the obligation of the individual campus governing board to examine resources dedicated to services required and to make appropriate requests to increase or reallocate resources where necessary to ensure implementation
- Each campus shall make every reasonable effort to ensure that every student at that institution receives a copy of this document
- Nothing in this act or in any "Campus Assault Victim's Bill of Rights" developed in accordance with the provisions of this act, shall be construed to preclude or in any way restrict any public or independent institution of higher education in the State from reporting any suspected crime or offense to the appropriate law enforcement authorities.


## Smoking Policy

Bergen Community College facilities are smoke free. Smoking is not allowed in any building on campus. We are required by statute to enforce this policy. The following enforcement procedures will be in effect:

1. An initial warning will be issued to an individual who violates the policy. The notice will advise the person that smoking is not permitted in any Bergen Community College building. The violator's name, address, and social security number will be recorded on the warning notice. The person filing the complaint and witnesses will sign the form. Copies of the warning notice will be sent to the Public Safety Department for record keeping.
2. A second violation will result in a letter being sent to the violator warning of the consequences of another violation.
3. The accumulation of three violations within any one of the specified periods will result in charges being filed in municipal court. The specified periods are September 1 to December 31, January 1 to April 30, and May 1 to August 31.

Any person on campus may issue a warning notice for violation of the smoking policy. Warning notice forms are available from the Office of Public Safety, Room L-154.

## Social and Educational Functions Policy

As a matter of policy, scheduling of all social and educational functions other than regular classes and field trips must be cleared and approved through the Office of Student Life.

## Refreshments

When a group wishes to have refreshments served by the Food Service, the appropriate form "Food Service Purchase Requisition" must be filled out in the Office of Student Life.

## Special Equipment

- The public address system: To use any of the P.A. systems on campus, permission must be obtained from the Office of Student Life.
- Other equipment: Requests for other types of equipment for students' functions are generally directed toward the Office of Student Life.


## Notifications

Supervisor of Public Safety should be notified of all on-campus social or academic functions.

## Solicitation/Fund-raising

An officially registered college club or organization that wishes to sell merchandise or sponsor a fund-raising event must request permission to do so by written application submitted to the Office of Student Activities two weeks prior to the date of the event. All solicitation or fund-raising activities must be directly related to and clearly supportive of the purposes and objectives of the club or organization.

## Traffic Regulations

The municipal police, as well as Campus Public Safety officers, enforce all traffic and parking regulations on campus. Students violating traffic and parking regulations on campus are subject to fines, penalties, and/or disciplinary action that could lead to suspension or dismissal from the College.
Students planning to use campus parking facilities must obtain a parking permit decal for their vehicle. This sticker is obtained after proper registration of the vehicle has been completed at the Department of Public Safety, Room L-154. Students must present a valid driver's license and the current bursar's receipt, and/or I.D. card. Campus parking and traffic regulations for the academic year are published in a separate pamphlet available in the Department of Public Safety. Parking is permitted only in designated areas. Individuals violating college regulations are subject to fines as outlined in the Motor Vehicle Regulation booklet.

## Academi c \& Student

## FACILITIES

## The Sidney Silverman Library, an important resource for information, study, and intellectual enrichment, is an integral part of the College's educational programs. To support the curriculum, the library acquires, organizes, and provides access to a variety of print, media, and electronic resources for individual and classroom use.

The Library entrance is located on the 2nd level of the main building and is open seven days a week during the fall and spring semesters, and weekdays during the summer.

## THE SIDNEY SILVERMAN LIBRARY AND LEARNING RESOURCE CENTER

## Reference Network/Computer Services

The Library's Reference Network consists of clusters of computers with high speed Internet access. Priority on Library computers is given to Bergen Community College students engaged in course-related work.

## Help for Students

Experienced library staff are available during all regularly scheduled hours to help students and to offer guidance in using the Library's extensive collection of print and electronic resources.

## Library Instruction

The Library works in partnership with classroom faculty to provide students with instruction in basic research techniques and database searching.

## Library Collection

The Library materials are selected with consideration for the varied interests and educational needs of students and faculty and include books, newspaper, magazines, and extensive electronic holdings available $24 / 7$ via the Library Web site. The resources of other libraries in Bergen County, New Jersey, and the nation are available to Bergen Community College students through interlibrary loan.

## Media Services

Library Media Center provides a full range of multi media services. The collection includes videotapes, DVDs, and CDs on a wide variety of subjects to meet educational goals. Students are encouraged to use this collection for self-instruction, review, and enrichment.

## Other Services

Photocopiers and microfilm reader-printers are available in the Library for student use.

Adaptive equipment is available for students with special needs and includes text magnifiers and workstations equipped with screen magnification and screen reading software. The Library also has an extensive collection of closed-captioned videos.

Library Web Page http://www.bergen.edu/library
The Library Web page is the gateway to Library information and services. Please check for current information.

## INSTRUCTIONAL FACILITIES AND SERVICES

## Academic Advising Center

The Academic Advising Center [Main Building, Room A-101; 201-612-5480] assists students with information about Basic Skills Tests results and required courses, degree program requirements, selecting courses and developing a schedule of classes, and other important information regarding academic progress and College policies and procedures. The Faculty Advisors are available on a drop-in basis and help students interpret the Program Evaluation, which is available on WebAdvisor (http://go.bergen.edu).

## Adaptive Technology Laboratory

The Adaptive Technology Laboratory, located in the Office of Specialized Services (Room S-131), provides adaptive technology to aid students who are learning disabled, visually impaired, hard of hearing or deaf. The laboratory contains electronic readers, print enlargers and Braille printers, and special laptop computers that can be used in the classroom. Scribes, note takers, tutors, alternative testing arrangements, counseling, and support groups are available. To take advantage of these services, the student needs to indicate that he or she has a disability on the application to the College. Documentation needs to be provided to the Office of Specialized Services at 201-612-5270 or 201-447-7845 (TTY). Additional equipment is available in the library and Technology Education Center.

## Allied Health and Nursing Facilities

Each Health Care curriculum is supported by extensive facilities including X-ray and ultrasound units, hospital laboratory equipment, a dental hygiene clinic, a surgical technology laboratory, and the Veterinary Technology Surgical Nursing Center.

## Anna Maria Ciccone Theatre

The Anna Maria Ciccone Theatre accommodates an audience of 300 and serves a wide range of performing arts. Most importantly, the theatre serves as an environment where students develop their skills in a full range of theatre crafts. The Ciccone Theatre is equipped with a state-of-the-art computerized lighting system capable of controlling hundreds of lights at the push of a button. Students in the theatre and communication arts curricula learn to operate the lighting equipment as well as the sound and stage rigging systems.

The Ciccone Theatre contains all of the necessary support spaces, including dressing rooms, rehearsal space, administrative office space, and workshop areas for scenery, props, wardrobe, and lighting.

While the primary purpose of the theatre is to meet the educational needs of BCC students, the facility also serves as a showcase for the performing arts. Dance, theatre, and music groups perform regularly in the theatre. Tickets are discounted for students and senior citizens, for BCC student productions and for the performing arts series. Season brochures may be obtained from the Community and Cultural Affairs Office in Room A315 , or by calling 201-447-7428.

## Art Facilities

The Art Program maintains several studios and labs for teaching traditional and electronic media. (See: Computer Graphics Lab, Fine Arts Studio, Multimedia Lab, and Photography Studio and Darkroom.)

## Center for Collegiate Deaf Education

The New Jersey Commission on Higher Education has designated Bergen Community College as one of two regional centers for students who are deaf or hard-of-hearing. Housed within the Office of Specialized Services, the center provides access through the provision of note takers, tutors, assisting devices, and sign language interpreters. Please call 201-612-5270 or 201-447-7845 TTY for more information or visit the center in Room S-152.

## Child Development Center

Child Development Center in East Hall is a unique laboratory school, licensed by the Division of Youth and Family Services, to provide care for children $21 / 2$ to 6 years of age. The center is staffed by teachers certified in Early Childhood Education and student interns enrolled in the Associate Degree Program in Early Childhood Education. A comprehensive renovation in 1997 expanded and upgraded the facility by adding three new classrooms, computers, and a one-way observation room so that students can view classroom operations.

## Computer Facilities

Bergen Community College is committed to providing all students with appropriate access to modern technology. All labs are equipped with state-of-the-art computers loaded with Microsoft Office Suite and curriculum specific software.

Many students choose majors or courses where computer hardware or software is the topic being studied. Many more students make use of computers in learning topics like math, English and world languages, visual arts, engineering, drafting, culinary arts, communication, nursing, and sociology. Multimedia software and the Internet provide faculty and students with new ways to interact and to better understand many concepts and realworld experiences, complementing traditional teaching methods.

Bergen has over 40 networked computer labs and classrooms designed with a computer workstation for each student. There are additional specialized and smaller facilities for specific disciplines. Also, over 80 traditional classrooms are equipped with projection systems, and most with a computer workstation, at the presenter's podium. All classrooms are Internet accessible. The Library makes extensive use of computers, both to support patron services such as circulation of traditional print materials and to access electronic documents.

Many classes meet regularly in computer-equipped facilities. There are also free-time computing labs open up to 13 hours a day available to all currently enrolled Bergen students. Every Bergen student is eligible to obtain and use an electronic mail account. In addition, the College hosts course-related Web pages for students enrolled in certain Web development courses.

The Information Commons, located in the Technology Education Center (TEC 114), provides computer, network, and Internet access in a relaxed, comfortable setting. Study carrels and informal seating allow students to work individually or in small groups. Wireless access to the Internet is available to students throughout the Technology Education Center and along the outside perimeter of the building, providing the opportunity to study outdoors in pleasant weather and still stay connected.

Bergen's collection of computers, software, and their Internet connections are constantly being expanded, renewed, and maintained in order to provide the best possible learning opportunities for BCC students.

## Computer Graphics Lab

The E-189 Computer Graphics Lab is equipped with 25 state-of-the-art Macintosh workstations for instruction in Photoshop, Illustrator, QuarkXPress, and Painter. Additional Macs are integrated into the E-175 graphic design studio.

## Cooperative Education and Career Development Center

Below is a list of programs and services offered by the Cooperative Education and Career Development Center. The mission of the office is to offer students programs and services that will promote success in their academic and professional careers. The office is located in Room C-100, 201-447-7171.

Cooperative Education is an academic course in which eligible students apply what they have learned in the classroom to positions related to their major or career goals. By working in pre-professional positions in business, government, or public service organizations, students gain hands on experience as they earn academic credit.

Service Learning is academically based community service. While studying theory and course content in their classes, students have the opportunity to contribute to the community. Students participate in Service Learning by choosing this option, which is offered in a number of academic courses each semester.

Career Counseling is encouraged at any time during a student's college experience, but is especially effective when students explore career options early in their education. Students can request individual counseling by scheduling an appointment with a counselor.

Part-time Job Employment. Part-time and temporary job listings are available for students and alumni.

Full-time Job Employment. Full-time professional positions are available for graduating and continuing students.

Workshops. Throughout the year, the center offers workshops on a wide variety of career topics, including: Career Planning, Resume Writing, Interviewing Skills, and Job Search Strategies. Watch bulletin boards in front of A-129 and C-100 for time and place.

Special Events. Learn about employers and career paths through Co-Opportunity Day, on campus recruiting, and the Job Fair. Contact the center for the latest information on upcoming events.

Computerized Career Guidance. Students are encouraged to use SIGI PLUS (System Information Guidance Interaction) throughout their academic career. This computer program helps students to assess their skills, values, and interests in order to develop a list of potential career choices.

On Campus Recruitment. Employers are available with job offerings throughout the year in front of the cafeteria.

Resume Critique Service. Students may obtain a copy of our Resume Writing Guide and drop off their resume drafts for critiquing by a counselor. Resumes can be picked up within 48 hours. Visit the "Resume Doctor" in the Student Center, Monday or Thursday 11:00 a.m. - noon.

Career Library. Available to all students for research on careers. There are materials on resume writing, interviewing, and conducting a job search. Students can also research career fields, salaries, and employers.

## Educational Broadcast Center

The Educational Broadcast Center provides students with a learning laboratory which expands their talents in the media field. The center includes a student television studio, a full scale television production studio, a radio lab, and editing suites. The EBC is used by students in broadcasting and mass communications courses. The college television program, "On-Campus," is produced in the EBC.

## English Language Resource Center

The English Language Resource Center, located in East Hall Room E-126, provides help to students whose native language is not English. The center assists students to become proficient in English through multimedia computer programs, cassettes, video tapes and books as well as individual tutoring. The English Language Resource Center also offers ESL conversation groups and specialized language skill workshops. The center is open when classes are in session for day and evening hours.

## The Emil Buehler Trust Observatory

The Emil Buehler Trust Observatory is equipped with two permanent 16 -inch reflecting telescopes and a third 16 -inch portable telescope for handicapped students. The new observatory is made available to the community at large and supplements the outstanding resources of the Buehler Challenger Space and Science Center, also located on the College campus.

## Fine Arts Studio

In addition to its computer graphics, computer animation, and photography labs, the Art Program utilizes the Room E-181 Fine Arts Studio for teaching courses in drawing, life drawing, and painting.

## Greenhouse

A new 2500-square foot Greenhouse Complex in East Hall features four different computer controlled environments, simulating conditions ranging from hot, dry desert sands to the tropical rain forest. The Greenhouse displays the diversity of plant life around the world. The complex includes a propagation room for cuttings and grafts and a large work area for class projects. The Greenhouse serves students in botany, plant science, interior plantscaping, greenhouse management and plant propagation. Students studying in greenhouse production courses have the opportunity to grow a variety of flower and vegetables crops. The Hotel/Restaurant program uses a section of the Greenhouse to grow fresh herbs for culinary seasonings.

## Hotel/Restaurant Labs

Two fully equipped kitchens and a cafeteria permit students in the Hotel/Restaurant/Hospitality Program to gain experience in the culinary arts and food preparation. Their newly renovated kitchen contains full-size Garland convection ovens, professional six-burner ranges, a professional pressure-steamer, a dry room and walk-in, six- and four-door commercial refrigerators and freezers. It is also equipped with professional steam tables, restaurant stainless steel worktables and a restaurant size icemaking machine.

## ITV

The interactive classrooms in the Main College Building and in the Technology Education Center electronically link BCC to classrooms in area high schools, colleges, and to satellite down-links. Through these facilities the College participates in national teleconferences and offers classes to high school and college students.

## Laboratory Theatre

The Laboratory Theatre, located in East Hall, presents comedy, drama, dance, and original works by theatre groups and community dance companies of Bergen County. In addition, student productions are also presented throughout the fall and spring semesters.

## Math Center

The Math Lab offers tutorial services and computer-based assistance for students enrolled in mathematics courses at all levels. The hours when the lab is open are posted on a semester-bysemester basis. The lab is located in Room C-110.

## Multimedia Lab

The S-250 Multimedia Lab is the College's new state-of-the-art multimedia center for teaching computer animation and electronic music. First opened in January 2000, the Multimedia Lab provides art and music students with exciting opportunities for cut-ting-edge experimentation in 2D and 3D computer animation, and in computer generated music composition and performance. All machines will be running Softimage, Premiere, Aftereffects, Photoshop, Illustrator, Soundforge, and Cakewalk (a digital MIDI composition program). The lab contains 15 synthesizers / samplers. Music students create their own compositions using
the latest technology involving sequencing, editing, and mixing, to a final CD of their own music.

## Online Writing Lab (OWL)

The BCC Online Writing Lab (OWL) is an expansion of the Writing Center. Also called "Writer's In-Sites," the BCC OWL is a Web site designed to help students with all aspects of the writing process. It is full of links to sites about how to generate ideas for writing, organize written ideas, write resumes and cover letters, do research papers, write papers for various college subjects, and edit and proofread papers. This site also contains links to chat-rooms and discussion forums about writing and academic subjects in the College. It can be accessed by typing http://www.bergen.edu/owl

## Photography Studio and Darkroom

The Art Program maintains a fully functional traditional photography studio and black and white darkroom with 15 enlargers in Rooms S-258 and S-256. Photographic works are also manipulated digitally using Photoshop in the S-250 Multimedia Lab and the E-189 Computer Graphics Lab.

## Piano Laboratories

There are two class piano labs on campus. The first is in Room E-124 and contains 15 electronic pianos used principally for class piano instruction. The second is a new, state-of-the-art multimedia lab in Room S-250, which is equipped with 15 synthesizers/samplers along with the latest software for creating electronic music compositions.

## Stryker Manufacturing Lab

Located in the Technology Education Center, the Stryker Manufacturing Lab, adjoined by two Computer Aided Drafting and Design labs, houses computerized milling and turning equipment, a model shop, and a metrology station. In this simulated manufacturing laboratory, students are able to follow a high-tech manufacturing workflow, from developing a design to crafting and testing the prototype to actual manufacture of the commodity.

## Surgical Technology Laboratory

A \$573,300 High-Tech Workforce Excellence Grant awarded by the New Jersey Commission on Higher Education provided funding to create and equip a simulated high technology operating room, used to train students in the Surgical Technology Certificate Program on the equipment and instruments used in medical facilities. The laboratory is located in Room S-240.

## Technology Assisted Learning Lab (TALL)

The Technology Assisted Learning Lab (TALL), located in Room $\mathrm{C}-110$, is equipped with several computers and the latest instructional software to provide students self-paced individualized instruction in a variety of content areas. Staffed by faculty, professional assistants, and students, the lab provides assistance in mathematics and English and a variety of other subjects. Hours are posted on a semester-by-semester basis.

## Technology Education Center

The two-story, 50,000-square-foot Technology Education Center features a state-of-the-art Meeting and Training Center, a simulated manufacturing lab, six computer labs, two computer-aided drafting and design (CADD) labs, an interactive television and videoconference classroom, an electronic library, and a two-domed observatory. Wireless technologies are used throughout the center.

## Testing and Assessment

The Office of Testing and Assessment, located in Rooms L-121 and L-123, adjacent to the Student Center, offers a variety of testing services. Among those tests administered are the English and mathematics Basic Skills Tests; the Comprehensive English Language Test; challenge, proficiency, and credit-by examination tests in a number of subject areas; and classroom make-up tests.

## Tutoring Center

The Tutoring Center, staffed with peer and professional tutors, offers free individual and group tutoring, supplemental instruction, and online tutoring for subjects offered at BCC. The Tutoring Center provides alternative approaches to problem solving and organizational skills. Tutors help clarify classroom lectures and textbooks and help students prepare for exams. These services build student self-confidence and reduce fear of failure. The Tutoring Center is equipped with the latest technology and software, including tapes, books, review sheets, exercises, and software programs. The Tutoring Center success is due to the team collaboration, which consists of Tutoring Center staff members, tutors, faculty, counselors, and administrators. The Tutoring Center is located in Rooms S-118-119, and can be reached at 201-447-7489.

SMARTHINKING, the online tutoring program, is currently available free for all BCC students. Students apply for the SMARTHINKING account by submitting an online application form at (http://www.bergen.edu/smarthinking) or filling out an application at the Tutoring Center. Instructors may get these applications for their classes from the center.

If there are any questions, please contact:
Khairia Fazal, Tutorial Supervisor, Room C-115, 201-447-7908
Lena Bakir, Tutorial Assistant Supervisor, Room C-114, 201-4477837
Madhvi Shah, Evening and Saturday Supervisor, Room C-114, 201-447-7837
Elizabeth Viola, Secretary, Room S-118, 201-447-7489

## Writing Center

The Writing Center, located in the Technology Assisted Learning Lab (TALL) in Room C-110, is designed to help students improve their writing. Individualized tutorials in all facets of the writing process including development of ideas, organization, editing, and proofreading are available to all students enrolled in college-level courses. The center also offers computer-assisted instruction in grammar, study skills, and writing. Students receive assistance in written assignments, including research papers, in all content areas. Additionally, faculty can receive assistance in developing writing
assignments for their classes or professional projects, such as grant proposals, dissertations, or publications. All Writing Center instruction is provided by full-time faculty and professional staff of Bergen Community College. See also, the Online Writing Lab (OWL), which is an expansion of the Writing Center.

## STUDENT FACILITIES AND SERVICES

## Athletic Facilities

The college athletic facilities include a gym, pool, six outdoor tennis courts, weight rooms, an eight-lane track, soccer, baseball and softball field, and access to the nine-hole county golf course adjacent to the campus. In addition, a fitness parcourse is located around the grounds of the campus, and a Fitness Center is in S-128.

## Auditorium

The auditorium is located in the Student Center and accommodates an audience of 100 . The auditorium is used by faculty and student groups for lectures, film series, video conferences, and hosts many of the Student Activities Board's events.

## Bookstore

Required textbooks, notebooks, and student supplies may be obtained in the college bookstore located on the main floor of the college center. The bookstore will buy back most textbooks anytime except the first two weeks of classes. Prices paid depend on whether books will be used for the current or following terms. The bookstore telephone number is 201-447-9298.

The bookstore accepts personal checks, with two forms of matching ID. Both forms of ID must have the same address that is imprinted on the check. Checks must be imprinted; starter checks are not accepted. There is a $\$ 20$ charge for any check returned to the bookstore by the bank. Visa, MasterCard, American Express, Discover, and money orders are accepted for payment.

Textbooks may be returned under the following conditions: All returns must be accompanied by a sales receipt, no exceptions. If the course is dropped by the student, the student must present his or her withdrawal slip, as well as book receipt, within one week of the beginning of the semester/session. All other returns must be made within seven days of purchase. Books must be in original purchase condition (new, unmarked, and unwrapped). All returns must be accompanied by the book receipt. There will be no refunds on study aids, such as Cliff Notes, dissection kits, calculators, and office supplies. Refunds on purchases by check will be given after ten business days allowing check to clear.

Students may find out the cost of textbooks and order books online at http://www.efollett.com. The books will be shipped directly to the student. Students should allow seven to ten business days for their books to be delivered, especially during the beginning of each semester when book purchases are at their peak.

## Bookstore Hours (Subject to change)

## Fall and Spring

| Monday-Thursday | $9 \mathrm{am}-8 \mathrm{pm}$ |
| :--- | ---: |
| Monday-Thursday (no classes in session) | $9 \mathrm{am}-5 \mathrm{pm}$ |
| Friday | $9 \mathrm{am}-3 \mathrm{pm}$ |
| Friday (if the building is closed) | CLOSED |

## Summer Hours

| Monday-Thursday (Summer Sessions) | $9 \mathrm{am}-7 \mathrm{pm}$ |
| :--- | ---: |
| Monday-Thursday (no classes in session) | $9 \mathrm{am}-5 \mathrm{pm}$ |
| Friday (if the building is open) | $9 \mathrm{am}-3 \mathrm{pm}$ |
| Friday (if the building is closed) | CLOSED |

## Career Development

The Cooperative Education and Career Development Center (Room C-100) offers career counseling, part-time and full-time job placement, workshops on a variety of career topics, a resume critique services, job fairs and on-campus recruitment, computerized career guidance, and a career library.

## Child Development Center

The Child Development Center, in East Hall, is available to BCC students and employees as well as residents of Bergen County. The center is designed for children $21 / 2$ to 6 years of age and is open from 7:45 a.m. to 5:30 p.m. daily. It is licensed by the State of New Jersey and staffed by full-time teachers and interns from the College's Early Childhood Education Program. Children may be enrolled on a full-time, part-time, or drop-in basis.

## Counseling Center

The Counseling Center [Main Building, Room A-118; 201-4477211] has a staff of Professional Counselors that offer a wide variety of services for students.

Academic Counselors assist students in selecting programs of study that are appropriate for their personal and professional goals. Students and counselors work together to choose a program of study that is suitable to the student's needs based on factors such as academic status and history, professional goals and educational backgrounds. Workshops and literature are provided in the areas of study skills, time management, and test taking.

Personal Counselors provide students with a safe and confidential atmosphere where they have an opportunity to talk about their individual concerns. The Personal Counselors will help students understand themselves, explore alternatives, reach a decision, or feel better about coping with problems. When appropriate, a student may be referred to outside agencies.

International Counselors provide services and programs to international students. Following international student admission to Bergen, the International Counselors are available to help students with adjustments to this country and to help students take part fully in student life.

Transfer Counselors assist students with information and resources for transferring to a 4-year college. They are available by appointment when appropriate, and through Transfer Information Sessions to meet students' needs in a variety of ways. Other transfer resources include Transfer Express, Transfer Day and Transfer Evening, a Transfer Guide and Transfer Connection brochure, and "Best Bets" course equivalents for specific colleges.

Alcohol and Drug Resources and Services. The Counseling and Health Services Offices are available to assist Bergen Community College students with education, information, and counseling services for alcohol and drugs. Counselors are available to provide students with confidential, nonjudgmental individual counseling and to help students understand and identify factors that may point to substance abuse in themselves, their family, or friends. Counseling is offered as a first step in acknowledging the presence of a related problem. Counselors provide referrals to treatment programs, and support to students as they make the transition to outside agencies. The counselors maintain a list of agencies which provide assistance with drugs and alcohol concerns in the Bergen County area.

## Services for Students with Disabilities

A wide variety of services are available to students with documented disabilities thorough the Office of Special Services (OSS) in Room S-131. If a student has been classified in high school or had a 504 plan, it is highly recommended that the student contact OSS during the college application process. A more detailed explanation can be found on the college Web site http://www.bergen.edu. Personal information is kept confidential.

The following accommodations may be provided on a semester to semester basis to students who have documented disabilities. Accommodations are provided only through the Office of Special Services and must be planned as early as possible. The main telephone number is 201-612-5270. Accommodations and services may include:

Extended test taking time
Organizational strategies
Tutoring
Career counseling
Adaptive equipment computer labs
Referral for off campus services
Student support groups
Job placement assistance
Academic counseling
Sign language interpreters
Note takers
Student and parent orientation
Educational support strategies
Ongoing psychotherapy or personal attendant services are not provided by the College.

## Dental Hygiene Clinic

The Dental Hygiene Clinic in Room S-327 is open to BCC students and the public, and provides preventative dental care services. The clinic is operated by students in the Dental Hygiene Program under the supervision of licensed dentists and dental hygienists. It is open three days a week in the fall semester and five days a week in the spring. For an appointment or information, call 201-447-7180.

## Fitness Center

The Fitness Center for student use is located in Room S-128 and is open weekdays at specified times. These hours are posted each semester. Diverse exercise workouts are made possible by a variety of exercise equipment.

## Food Services

The College cafeteria is open for breakfast, lunch and dinner Monday through Friday and breakfast and lunch Saturday during the fall and spring semesters. It is open with more limited hours during the summer sessions. Automated food vending machines are located throughout the campus. Dunkin' Donuts ${ }^{\circledR}$ in the Student Center, is also open during the week. The Hotel/Restaurant/Hospitality Program operates a small cafeteria in East Hall during the fall semester and a restaurant called "The Bergen Room" in the main building during the spring semester.

## Health Services

The Health Services office, located in Room B-101, is staffed by registered nurses for the purpose of rendering first aid, emergency care, health information, and health counseling. In addition, neighboring hospitals provide emergency medical service for more critical needs. The telephone number is 201-447-9257, fax number is 201-447-0327. More information about the health services can be obtained from BCC Web site at: http://www.bergen.edu/sservices/health.asp.

Students, at the time of admission, will be asked to supply pertinent health and immunization information. All students admitted to Allied Health, Nursing, and Dental Hygiene programs will be notified of specific health and immunization requirements.

Any illness or discomfort a student is experiencing should be reported to the college nurse. Injuries incurred on campus, or during a college-connected activity, must be reported immediately to the college nurse or Public Safety Office. If it is not possible to make an immediate report, a report must be made before 48 hours have elapsed.

## Housing

The College has no housing available.

## Specialized Services Office

The Office of Specialized Services (Room S-131) serves students with physical, visual, learning, hearing, and emotional disabilities. The Adaptive Technology Lab is located in this office.

## Student Center

The student center is the community center of the College, a place for all members of its family (students, faculty, administration, alumni, and guests) to meet and interact. The Student Center provides services, conveniences, and programs which all members of its family may need in their daily life on campus, and offers an informal setting for friendships to develop outside of the classroom.

The Student Center hosts various activities which the Student Activities Board (SAB), and the Student Government Association (SGA) sponsor throughout the year: daytime musicians, film festivals, entertainment, and other social activities. These activities give all members of the BCC community a chance to come together and interact.

## Veterans Services

Information and advice concerning veterans affairs and military service are available through the Office of Financial Aid, Room A-123; 201-447-7462.

## Welcome Center

The Welcome Center, located in the Student Center, offers weekly tours of the megastructure, and has a variety of brochures and pamphlets available about the College, as well as bus schedules, notices about activities

## Wellness Center

The primary function of the Bergen Community College Wellness Center [Rooms L-121B and L122; wellness@ bergen.edu; 201-6125365] is to identify ongoing wellness needs and resources. The purpose of the Wellness Center is to promote total wellness in the college community of students, staff and faculty. It combines all the health aspects--physical, social, emotional, spiritual and mental. The Wellness Center Committee is composed of interested students, staff, and faculty who meet to develop and present programs on current topical issues.

## COMMUNITY USE OF COLLEGE FACILITIES

As a public institution committed to serving all the people of Bergen County, Bergen Community College has expanded its definition of services to include encouraging the use of its Paramus campus and the Philip Ciarco Jr. Learning Center in Hackensack for public events and programs sponsored by nonprofit community groups and professional organizations. The Office of Community and Cultural Affairs, 201-447-7428, processes requests for community use of the facilities

## Programs <br> BY DEGREE

Bergen Community College offers three types of degree programs:
Associate in Arts (AA),
Associate in Science (AS), and
Associate in Applied Science (AAS).
The academic programs at Bergen Community College are classified as transfer or career programs.

## TRANSFER (AA) and (AS) PROGRAMS

Transfer programs include a course of study that corresponds to the freshman and sophomore offerings at most colleges and universities and are designed primarily for students planning to transfer into a baccalaureate degree program. In recent years, BCC has worked to simplify the transfer process by signing articulation agreements with colleges and universities in New Jersey and throughout the United States.

## Associate in Arts (AA) Degree <br> Liberal Arts

Options:

General Curriculum
Cinema Studies
Communication Arts Economics
History
Literature
Philosophy

Political Science
Psychology
Religion
Social Sciences
Sociology
Women's Studies
World Languages and Cultures

## Associate in Arts (AA) Degree <br> Fine and Performing Arts

Options:
Art
Music Arts
General
Computer-Based Recording
Electronic Music
Music Business
Theatre Arts
General
Acting
Dance
Technical Production

## Associate in Science (AS) Degree <br> Natural Sciences or Mathematics

Options:
General Curriculum
Biology
Chemistry
Computer Science

Mathematics
Physics
Pre-Chiropractic

## Associate in Science (AS) Option in Engineering Science <br> Associate in Science (AS) Degree <br> Professional Studies <br> Options:

General Curriculum
Broadcasting
Business Administration
Business Administration-Accounting
Business Administration-International Trade
Business Administration-Management
Business Administration-Marketing
Education
Exercise Science
Journalism
Social WorK

## CAREER (AAS) PROGRAMS

Career programs emphasize training needed to enter a chosen field of employment. Designed for students planning to begin a career immediately after receiving their associate degree, career programs are available in various technologies, health sciences, human services, and business. Graduates of these programs work as technicians, accountants, secretaries, paralegals, legal nurse consultant, law enforcement officers, commercial artists, nurses, and professionals in local and nationwide organizations. Note: Under some circumstances, students can transfer from these programs to four-year colleges and universities.

## Associate in Applied Science (AAS) Degree

## Allied Health

Dental Hygiene Physical Therapist
Assistant
Diagnostic Medical Sonography
Health Science
Medical Laboratory Technology
Medical Office Assistant
Radiography
Respiratory Therapy
Vascular Technology
Veterinary Technology

Art
Computer Animation
Graphic Design/Computer Graphics

## Business Administration

Accounting
Banking, Credit and Finance
Legal Nurse Consultant
Paralegal Studies
Business Technologies
Hotel/Restaurant/Hospitality
Catering/Banquet Management
Hospitality Management
Information Technology
Networking Administration
Office Technology
Travel and Tourism
Web Development and Management

## Human Services

Correctional Studies
Criminal Justice (full-time and part-time sequences)
Early Childhood Education
Industrial and design technologies
Drafting and Design Technology
Electronics Technology
General Engineering Technology
Manufacturing Technology
Nursing
Day and Evening Sequences
Science Technology
Environmental Technology
Horticulture
Science Laboratory Technology

## ONE-YEAR CERTIFICATE PROGRAMS

Computer Aided Drafting (CAD)
Computer Animation
Computer Graphics
Computer Science
Computer Technical/ Help Desk Support
Culinary Arts
E-Commerce: Business Emphasis
Environmental Technology
Exercise Science
Floral Design
Grounds Management

Hospitality Management
Landscaping
Medical Office Administrative
Assistant
Music Business
Music Technology
Networking and Web
Development
Office Technology
Radiation Therapy Technology
Small Business Management
Surgical Technology
Travel Service
U.S. Studies

## CERTIFICATES OF ACHIEVEMENT

Commercial Music Production
Environmental Technology
Geographic Information Systems (GIS)
Manufacturing Design
Professional Cooking
Special Imaging for Radiologic Technologists
Certificates of Achievement award recognition to students who successfully complete a program of specialized courses in a specific discipline. These courses prepare a student for a specific occupation or job responsibility or encompass a specialized body of knowledge in the arts or sciences.

Certificate of Achievement programs must be between 12 and 18 credit hours, excluding 0-level courses. Students are required to demonstrate proficiency in English and mathematics Basic Skills according to current college policy for matriculated students. Students required to take English Basic Skills courses must enroll in the required course in their first semester. But required mathematics courses must be taken only if required as prerequisites by courses in the certificate program. Other prerequisites for specific Certificate of Achievement programs may be established by the appropriate academic disciplines.

## CURRICULUM REOUIREMENTS

Students are advised to read the curriculum material carefully with attention to the following:

1. General education requirements

The list of requirements that precedes each group of curricula is applicable to all programs of study within that section.
2. Semester-by-semester-sequence

For the purpose of this publication, programs are shown in a two-year, four-semester sequence. However, students may attend BCC on a part-time basis and complete a degree in more than two years. Bergen also offers two summer sessions which provide an opportunity to accelerate studies and complete a degree in less than two academic years.

## 3. General education courses

Most curricula contain general education electives that must be selected from the list on page 63.

## 4. Course prerequisites

Some courses require prerequisites. Refer to the course descriptions section to determine prerequisites.
5. Curricular guidelines

Guidelines may change from year to year. Students must follow the guidelines that are effective as of their matriculation date.

## DISTANCE LEARNING

Bergen Community College uses Internet technologies and related media to provide more flexible ways to attend the college. All distance learning courses are the equivalent of their traditional on-campus counterparts. They cover the same subject matter, carry the same credit, and require the same degree of student effort. Students taking distance learning courses will have ready access to the faculty member by phone, e-mail, and through scheduled office hours.

## Online courses via the Internet

Students in online courses access all course information and materials and participate in class activities online via the Internet. Online courses require that students have regular access to a computer and the Internet, are organized, and have the discipline to work independently. Online courses may have either online or proctored tests. Proctored tests require that students come either to the Bergen Testing Center on campus or to another acceptable site at which proctoring can be arranged. Individual discussions with instructors can be arranged online or during office hours on campus. Bergen has a large online program with many courses. Students can earn all of the credits necessary for general education requirements, nine associate degree programs, and one certificate program. Bergen is a founding member of the New Jersey Virtual Community College Consortium (NJVCCC). Bergen students can enroll in NJVCCC online courses offered by NJVCCC participating schools. All NJVCCC online courses are offered for the same tuition rate, regardless of county or state residence.
For more information and a current listing of Bergen's online courses, go to: http://www.bergen.edu/dlearning.

## Online hybrid courses

Online hybrid courses combine a mixture of campus classroom sessions with coursework done online via the Internet. Like online courses, these courses require that students have access to computers, are organized, and have the discipline to complete some course work independently. Students attend classes at least one session per week on campus, and, because face-to-face class sessions are required, an attendance policy may be enforced. For computer requirements and other useful information, go to http://www.bergen.edu/dlearning/faq.asp

## Web-enhanced courses

Web-enhanced courses meet for regularly scheduled class meetings on campus. However, Web-enhanced courses provide access to some course materials and activities on the Internet. Access to a computer and the Internet are required for these courses, but students can get this access by using Bergen's student computer labs if needed.

## TeleWeb courses

TeleWeb courses enable students to earn college credits at home by viewing course videotapes, completing reading and writing assignments, and by engaging in various online learning activities. TeleWeb courses typically have three on-campus meetings. Exams may also be given on campus. A computer and access to the Internet are required for the online component of these courses. Students will need to provide three blank videotapes to receive the videotaped portion of the course. TeleWeb sections are available for a limited number of courses.

## Interactive Television (ITV) courses

Interactive television courses require regular attendance in classes taught via interactive classrooms that connect Bergen to area high schools and colleges. These classrooms are connected via video and audio to enable students from many sites to participate in a course with the same instructor at the same time.

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§ In order to be considered for admission, you must submit the following documents: Allied Health and Nursing applicant checklist, and all official academic credentials such as high school record, GED scores, and any college transcripts. International students are not eligible to apply for these programs until they have completed their first semester
*** International students are not eligible for this program.
*** These certificate programs are designed for practicing professionals in these fields.
$\dagger$ These programs are for practicing professionals whose experience in the field has gained them the equivalent of one year of study in a two-year program.

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CERT.MUS.BUS . . . . . . . . . . . . . . . . . . . . .Cert . . . .Music Business ..... 116
CERT.MUS.TECH Cert . . . .Music Technology ..... 116
CERT.NET.WEB Cert . . . .Networking and Web Development ..... 117
AS.NSM.GEN ..... 79
AS.NSM.BIO AS .... .Natural Sciences or Math - Biology ..... 79
AS.NSM.CHEM AS .... .Natural Sciences or Math - Chemistry ..... 80
AS.NSM.COMP.SCI AS ..... Natural Sciences or Math - Computer Science ..... 80
AS.NSM.MATH AS .... . .Natural Sciences or Math - Mathematics ..... 81
AS.NSM.PHYSC AS .... . Natural Sciences or Math - Physics ..... 81
AS.NSM.CHIR AS .... . Natural Sciences or Math - Pre-Chiropractic .....  82
AAS.NURS.DAY AAS ...Nursing - Day §* ..... 109
AAS.NURS.EVE AAS ...Nursing - Evening §** ..... 109
CERT.OFFICE.TECH Cert. . . Office Technology ..... 117
COA.PROF.COOK COA ...Professional Cooking ..... 119
AS.PS.GEN AS .... . Professional Studies - General .....  86
AS.PS.BRCAST AS ..... Professional Studies - Broadcasting ..... 86
AS.PS.BUS.ADM AS . .... .Professional Studies - Business Administration *** ..... 87
AS.PS.BUS.ACCT AS ..... Professional Studies - Business Administration - Accounting .....  87
AS.PS.BUS.INTL AS ..... Professional Studies - Business Administration - International Trade ..... 88
AS.PS.BUS.MGMT AS ..... Professional Studies - Business Administration - Management *** .....  88
AS.PS.BUS.MKTG AS ......Professional Studies - Business Administration - Marketing *** ..... 89
AS.PS.EDUC AS ..... Professional Studies - Education *** ..... 89
AS.PS.EXER AS ..... Professional Studies - Exercise Science ..... 90
AS.PS.JOUR AS ......Professional Studies - Journalism ..... 90
AS.PS.SOC.WK AS ......Professional Studies - Social Work ..... 91
CERT.RAD.THERAPY Cert . . . .Radiation Therapy Technology ..... 117
AAS.ST.ENV.TECH AAS ...Science Technology - Environmental Technology ..... 110
AAS.ST.HORT AAS ...Science Technology - Horticulture ..... 110
AAS.ST.SLT AAS ...Science Technology - Science Laboratory Technology ..... 111
CERT.SM.BUS.MGMT Cert . . . .Small Business Management ..... 117
COA.SPEC.IMAG.RAD COA ...Special Imaging for Radiologic Technologists $\downarrow \dagger$ ..... 119
 ..... 118
CERT.TRAVEL Cert . . . .Travel Service $\downarrow$ ..... 118
CERT.US Cert . . . .United States Studies *** ..... 118

[^1]
## COURSES APPROVED FOR GENERAL EDUCATION

The following courses approved for the purposes of general education at Bergen Community College are regarded as general education courses at many, but not all, other colleges and universities in New Jersey and other states. To determine which of the following courses will meet general education requirements at New Jersey colleges or universities, see NJ Transfer (http://www.njtransfer.org). Students interested in transferring to out-ofstate schools should consult the catalogs and websites of those institutions.

| Literature (continued) |  |
| :--- | :--- |
| LIT205 | English Literature to 1800 |
| LIT206 | English Literature, 1800 to |
|  | the Present |
| LIT215 | The Black Literary |
|  | Voice in America |
| LIT216 | European Literature to 1650 |
| LIT217 | European Literature, 1650 |
|  | to the Present |
| LIT218 | American Ethnic Literature |
| LIT220 | Social Aspects of |
|  | Literature |
| LIT224 | Topics in International |
|  | Literature |
| LIT228 | Women in Literature |
|  |  |
| PHILOSOPHY AND RELIGION |  |
| PHR101 | Introduction to Philosophy |
| PHR102 | Contemporary Moral Issues |
| PHR103 | Basic Logic |
| PHR104 | Topics in Philosophy |
| PHR105 | Ethics in Business and |
|  | Society |
| PHR106 | Eastern Philosophy |
| PHR110 | Introduction to Ethical |
|  | Theory |
| PHR120 | Introduction to Religion |
| PHR121 | Religions of the World |
| PHR122 | Women and Religion |
| PHR124 | The Christian Scriptures |
| PHR125 | The Hebrew Scriptures |
| PHR126 | The Islamic Scriptures |
| PHR203 | Intermediate Logic |

## WORLD LANGUAGES AND CULTURES

LAN170 American Sign Language I
LAN270 American Sign Language II
LAN110 Frenchl
LAN200 French II
LAN201 Intermediate French I
LAN202 Intermediate French II
LAN203 French Conversation
LAN111 German I
LAN210 German II
LAN211 Intermediate German I
LAN212 Intermediate German II
LAN213 German Conversation
LAN144 Irish I
LAN244 Irish II
LAN245 Intermediate Irish I
LAN112 Italian I
LAN220 Italian II
LAN221 Intermediate Italian I
LAN222 Intermediate Italian II
LAN223 Italian Conversation
LAN120 Japanese I
LAN260 Japanese II
LAN261 Intermediate Japanese I
LAN165 Korean I
LAN265 Korean II
LAN114 Russian I
LAN240 Russian II

The development of critical thinking and writing skills is essential to a student's success in the Bergen Community College General Education Program. Therefore, the college's general education courses provide students with the opportunity to develop these skills through a variety of appropriate critical thinking and writing assignments.
Students are advised to review the specific general education requirements in their respective programs of study.

World Languages (continued)
LAN241 Intermediate Russian I
LAN113 Spanish I
LAN230 Spanish II
LAN231 Intermediate Spanish I
LAN232 Intermediate Spanish II
LAN233 Spanish Conversation
LAN228 Elementary Spanish for Heritage Speakers
LAN229 Intermediate Spanish for Heritage Speakers
III. MATHEMATICS and COMPUTER SCIENCE

MAT130 Contemporary Mathematics
MAT150 Elementary Statistics
MAT155 Finite Mathematics
CIS158 Introduction to Computer Science
CIS163 Computer Programming: QBASIC
CIS165 C++ Programming I
MAT180 Precalculus: College Algebra and Trigonometry
MAT223 Calculus for Managerial and Social Sciences
MAT250 Statistical Analysis
MAT266 Computer Programming: Visual BASIC
MAT280 Calculus I
MAT281 Calculus II
MAT282 Calculus III

## IV. NATURAL SCIENCES

BIOLOGY
BIO101 General Biology I*
BIO103 The Human Body*
BIO104 Microbiology*
BIO107 Intro to Human Biology*
BIO108 Intro to Environmental Biology*
BIO109 Anatomy and Physiology ${ }^{*} \dagger$
BIO209 Anatomy and Physiology II ${ }^{*} \dagger$
BIO130 People-Plant Relationships
BIO131 General Botany*
BIO203 General Biology II*

## CHEMISTRY

CHM100 Introduction to Chemistry*
CHM112 College Chemistry*
CHM140 General Chemistry I*
CHM141 General Chemistry I-Lab*
CHM240 General Chemistry II*
CHM241 General Chemistry II-Lab*

## EARTH SCIENCE

ESC111 Astronomy*
ESC112 Climatology*
ESC113 Geology*
ESC114 Meteorology*

## PHYSICS

PHY185 Introduction to Physics*
PHY186 General Physics I*
PHY280 Physics ${ }^{*}$
PHY286 General Physics II*
PHY290 Physics II*
PHY291 Physics III*

## V. SOCIAL SCIENCES

## ANTHROPOLOGY

ANT101 Cultural Anthropology

## ECONOMICS

ECO101 Macroeconomics
ECO201 Microeconomics

## GEOGRAPHY

GE0101 World Geography
GE0102 Human Geography

## POLITICAL SCIENCE

POL101 American Government
POL102 International Relations
POL103 Modern Political Ideologies
POL104 State and Local
Government
POL107 Introduction to Politics

## PSYCHOLOGY

PSY101 General Psychology
PSY102 Abnormal Psychology
PSY106 Developmental Psychology
PSY201 Child Psychology
PSY207 Psychology of Women

## SOCIOLOGY

SOC101 Sociology
SOC103 Sociology of the Family
SOC120 Sociology of Gender Roles
SOC121 Changing Roles of Women
SOC201 Social Problems
SOC222 Ethnic and Minority Group Relations

## VI. WELLNESS and

EXERCISE SCIENCE
WEX101 Dynamics of Health and Fitness
WEX201 DHF-EXP-Aerobic Dance
WEX202 DHF-EXP-Body Conditioning
WEX204 DHF-EXP-Keep Young, Fit and Alive
WEX205 DHF-EXP-Swimming for Conditioning
WEX206 DHF-EXP-Weight Training
WEX208 DHF-EXP-40+Fitness

[^2]
## TRANSFER PROGRAMS

## ASSOCIATE IN ARTS (AA) DEGREE IN LIBERAL ARTS

To earn the AA degree in Liberal Arts, a student must meet the following curriculum requirements:

| Area of Study | Credits | Courses |
| :---: | :---: | :---: |
| Communications | 9 | WRT101 English Composition I (3 cr.) WRT201 English Composition II (3 cr.) SPE111 Speech Communication (3 cr.) |
| Humanities | 24 | Two general education courses (6 cr.) in History (HIS) <br> Six general education courses ( 18 cr .) to be selected from the following fields, with no more than two courses ( 6 cr .) in any one field: <br> Arts and Media (Art[ART], Mass Communication [COM], Music [MUS], Theatre Arts [THR]) Literature (LIT) <br> Philosophy and Religion (PHR) <br> World Languages and Cultures (LAN) |
| Social Sciences | 9 | Three general education courses ( 9 cr ) to be selected from the following fields, with no more than two courses ( 6 cr .) in any one field: <br> Economics (ECO) <br> Geography (GEO) <br> Political Science (POL) <br> Psychology (PSY) <br> Sociology (SOC) and Anthropology (ANT) |
| Mathematics and Computer Science | 6-8 | Two general education courses (6-8 cr.) in Mathematics/Computer Science (MAT/CIS) |
| Natural Sciences | 8 | Two general education courses ( 8 cr .) to be selected from the following fields: <br> Biology (BIO) <br> Chemistry (CHM) <br> Physics (PHY) or Earth Science (ESC) |
| Wellness and Exercise Science | 3 | WEX101 Dynamics of Health and Fitness (2 cr.) WEX... Dynamics of Health and Fitness Experience (1 cr.) * |
| Free Electives | 6 |  |
| Diversity Requirement: | In completing the BCC General Education Program, a student must take and pass at least one course in gender studies, non-Western history or thought, and/or cultural diversity.** |  |

* Choose one of the following: WEX201, WEX202, WEX204, WEX205, WEX206, WEX208.
** Choose one of the following: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.


## ASSOCIATE IN ARTS (AA) DEGREE IN LIBERAL ARTS

To fulfill the preceding requirements, a student in Liberal Arts must take the general curriculum or choose an option in Cinema Studies, Communication Arts, Economics, History, Literature, Philosophy, Political Science, Psychology, Religion, Social Sciences, Sociology, Women's Studies, or World Languages and Cultures.

## GENERAL CURRICULUM CODE AA.LA.GEN

## First Semester

HIS... History Elective* 3
...... Humanities Elective** 3
MAT/CIS... $\begin{array}{ll}\text { Mathematics/Computer } \\ \text { Science Elective }{ }^{* * *}\end{array}$
SPE111 Speech Communication 3
WEX101 Dynamics of Health and Fitness 2
WRT101 English Composition I $\frac{3}{17}$

## Second Semester

| HIS... | History Elective* | 3 |
| :---: | :---: | :---: |
|  | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective ${ }^{* * *}$ | 3 |
|  | Social Science Elective ${ }^{* * *}$ | 3 |
| WEX... | Dynamics of Health and |  |
|  | Fitness Experience*** | 1 |
| WRT201 | English Composition II | 3 |
|  |  | 16 |

## Third Semester

| $\ldots \ldots$. | Free Electives | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives** | 6 |
| $\ldots \ldots$. | Natural Sciences Elective | 4 |
| $\ldots \ldots$ | Social Science Elective ${ }^{* * *}$ | 3 |
|  |  | 16 |

## Fourth Semester

| $\ldots \ldots$. | Free Electives | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives |  |
| $\ldots \ldots$ | Natural Sciences Elective | 6 |
| $\ldots \ldots$. | Social Science Elective ${ }^{* * *}$ | 4 |
|  |  | 3 |
|  |  |  |

[^3]Diversity Requirement: In completing the BCC General Education Program, a student must take and pass at least one course in gender studies, non-Western history or thought, and/or cultural diversity. Choose from the following Humanities or Social Sciences electives: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

## CINEMA STUDIES OPTION <br> CODE AA.LA.CINST

## First Semester

$\begin{array}{ll}\text { CIN/THR... } & \begin{array}{l}\text { General Education Elective in } \\ \text { Cinema Studies* }\end{array} \\ & \text { 3 }\end{array}$
HIS... History Elective** 3
$\begin{array}{ll}\text { MAT/CIS... } & \text { Mathematics/Computer } \\ \text { Science Elective }{ }^{* * *}\end{array}$
SPE111 Speech Communication 3
WEX101 Dynamics of Health and Fitness 2
WRT101 English Composition I 3
$\begin{array}{ll}\text { Second Semester } \\ \text { CIN150 } & \text { Special Topics in Cinema I }\end{array}$
..... Humanities Elective $\dagger$ 3
MAT/CIS... Mathematics/Computer Science Elective*** 3
$\begin{array}{ll}\text { WEX... } & \text { Dynamics of Health and } \\ \text { Fitness Experience*** }\end{array}$
WRT201 English Composition II 3
..... Social Science Elective $\ddagger \quad 3$

## Third Semester

| HIS... | History Elective |  |
| :--- | :--- | :--- |
| $\ldots \ldots$ | Humanities Electives $\dagger$ | 3 |
| $\ldots \ldots$. | Natural Sciences Elective ${ }^{* * *}$ | 6 |
| $\ldots \ldots$. | Social Science Elective $\ddagger$ | 4 |
|  |  | $\frac{3}{16}$ |

Fourth Semester

| CIN250 | Special Topics in Cinema II | 3 |
| :--- | :--- | :---: |
| $\ldots \ldots$ | Humanities Electives $\dagger$ | 6 |
| $\ldots \ldots$. | Natural Sciences Elective | *** |
| $\ldots \ldots$ | Social Science Elective $\ddagger$ | 4 |
|  |  | $\frac{3}{16}$ |

* General Education Elective in Arts and Media - see page 63. Recommended: CIN140/THR140 Introduction to Cinema.
** General Education Elective in History - see page 63.
*** General Education Elective - see page 63.
$\dagger$ General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63. Recommended: LIT202, LIT228, LIT220, ART101, MUS110.
$\ddagger$ General Education Elective - see page 63. Recommended: ANT101, PSY101, SOC101, POL107.


## Diversity Requirement Applies

COMMUNICATION ARTS OPTION
CODE AA.LA.COMM

| First Semester |  |  |
| :---: | :---: | :---: |
| HIS... | History Elective* | 3 |
|  | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT101 | English Composition I | 3 |
|  |  | 17 |
| Second Semester |  |  |
| HIS... | History Elective* | 3 |
|  | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience*** | 1 |
| WRT201 | English Composition II | 3 |
|  | Social Science Elective*** | 3 |
|  |  | 16 |
| Third Semester |  |  |
| COM...... | Mass Communications Elective $\dagger$ | 3 |
| ...... | Humanities Electives** | 6 |
| ...... | Natural Sciences Elective*** | 4 |
| ...... | Social Science Elective*** | 3 |
|  |  | 16 |
| Fourth Semester |  |  |
| COM... | Mass Communications Elective $\ddagger$ | 3 |
|  | Humanities Electives** | 6 |
| . | Natural Sciences Elective*** | 4 |
| ...... | Social Science Elective*** | 3 |
|  |  | 16 |

* General Education Elective in History - see page 63.
** General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
*** General Education Elective - see page 63.
$\dagger$ COM101 Mass Media of Communication recommended. $\ddagger$ Select any Mass Communications (COM) course.
Diversity Requirement Applies

ECONOMICS OPTION
CODE AA.LA.ECON

## First Semester

| ECO... | General Education Elective in |  |
| :--- | :--- | :---: |
|  | Economics* | 3 |
| HIS... | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective |  |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | $\frac{3}{15}$ |

## Second Semester

ECO... General Education Elective in Economics $\dagger$ 3
HIS... History Elective** 3
..... Humanities Electives $\ddagger$ 6
$\begin{array}{ll}\text { MAT/CIS... } & \text { Mathematics/Computer } \\ & \text { Science Elective }{ }^{* * *}\end{array}$
WRT201 English Composition II $\frac{3}{18}$

Third Semester
ECO... Economics Elective 3
..... Humanities Electives $\ddagger$ 6
..... Natural Sciences Elective*** 4
WEX101 Dynamics of Health \& Fitness $\frac{2}{15}$

Fourth Semester
ECO... Economics Elective 3
..... Humanities Electives $\ddagger$ 6
..... Natural Sciences Elective*** 4
WEX... Dynamics of Health \& Fitness Experience*** 1
$\ldots . . \quad$ Social Science Elective $\bullet \quad \frac{3}{17}$

* See page 63. Recommended: EC0101 Macroeconomics.
** General Education Elective in History - see page 63.
*** General Education Elective - see page 63.
$\dagger$ See page 63. Recommended: ECO201 Microeconomics.
$\ddagger$ General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
- Select any Economics course.
- General Education Electives in Anthropology, Geography, Political Science, Psychology, or Sociology - see page 63.
Diversity Requirement Applies

HISTORY OPTION
CODE AA.LA.HIST

## First Semester

| HIS... | General Education Elective in History* | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$ | Humanities Elective ${ }^{* *}$ | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT101 | English Composition I | $\frac{3}{17}$ |

Second Semester

| HIS... | General Education Elective in History* | 3 |
| :---: | :---: | :---: |
|  | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience*** | 1 |
| WRT201 | English Composition II | 3 |
| . | Social Science Elective ${ }^{* * *}$ | 3 |

## Third Semester

| HIS... | History Elective $\dagger$ | 3 |
| :---: | :---: | :---: |
|  | Humanities Electives** | 6 |
| ...... | Natural Sciences Elective ${ }^{* * *}$ | 4 |
| $\ldots .$. | Social Science Elective ${ }^{* * *}$ | 3 |
|  |  | 16 |
| Fourth | ster |  |
| HIS... | History Elective $\dagger$ | 3 |
|  | Humanities Electives** | 6 |
|  | Natural Sciences Elective*** | 4 |
| ...... | Social Science Elective ${ }^{* * *}$ | 3 |
|  |  | 16 |

* See page 63. Students selecting the History option are encouraged to meet with the Head of the Department of Social and Behavioral Sciences for advisement on course selection. A one-year sequence in a single field of History is recommended (HIS101-102; HIS111-112; HIS113-114; or HIS130-131).
** General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
*** General Education Elective - see page 63
$\dagger$ Select any History course. See the Head of the Department of Social and Behavioral Sciences for advisement on course selection.
Diversity Requirement Applies

LITERATURE OPTION
CODE AA.LA.LIT

## First Semester

| HIS... | History Elective* | 3 |
| :--- | :--- | :--- |
| $\ldots .$. | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT101 | English Composition I | $\frac{3}{17}$ |

## Second Semester

| LIT... | General Education Elective in |  |
| :--- | :--- | :---: |
|  | Literature $\dagger$ | 3 |
| HIS... | History Elective* | 3 |
| MAT/CIS... | Mathematics/Computer |  |
| WEX... | Science Elective <br> Dy* <br> Dynamics of Health \& Fitness | 3 |
| WRT201 | Experience*** |  |
| $\ldots .$. | English Composition II | 1 |
|  | Social Science Elective | 3 |
|  |  | $\frac{3}{16}$ |

## Third Semester

| LIT... | General Education Elective in |  |
| :--- | :--- | ---: |
|  | Literature $\dagger$ | 3 |
| $\ldots .$. | Humanities Electives** | 6 |
| $\ldots .$. | Natural Sciences Elective |  |
| $\ldots .$. | Social Science Elective ${ }^{* * *}$ | 4 |
|  |  | $\frac{3}{16}$ |

## Fourth Semester

LIT... Literature Electives $\ddagger$ 6
...... Humanities Elective** 3
..... Natural Sciences Elective ${ }^{* * *} 4$
...... Social Science Elective ${ }^{* * *}$
$\frac{3}{16}$

[^4]
## PHILOSOPHY OPTION <br> CODE AA.LA.PHIL

## First Semester

| PHR... | General Education Elective in <br> Philosophy* |  |
| :--- | :--- | :--- |
| HIS... | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
| Science Elective*** | 3 |  |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT101 | English Composition I | $\frac{3}{17}$ |

## Second Semester

| PHR... | General Education Elective in <br> Philosophy $\dagger$ |
| :--- | :--- |

HIS... History Elective** 3
MAT/CIS... $\begin{aligned} & \text { Mathematics/Computer } \\ & \text { Science Elective }\end{aligned}$
WEX... $\quad \begin{aligned} & \text { Dynamics of Health \& Fitness } \\ & \text { Experience*** }\end{aligned}$
WRT201 English Composition II 3
...... Social Science Elective***

## Third Semester

| PHR... | Philosophy Elective $\ddagger$ | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives | 6 |
| $\ldots \ldots$. | Natural Sciences Elective*** | 4 |
| $\ldots \ldots$ | Social Science Elective |  |
|  |  | $\frac{3}{16}$ |

## Fourth Semester

| PHR... | Philosophy Elective $\ddagger$ | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives | 6 |
| $\ldots \ldots$. | Natural Sciences Elective*** | 4 |
| $\ldots \ldots$ | Social Science Elective |  |
|  |  | $\underline{16}$ |

[^5]POLITICAL SCIENCE OPTION CODE AA.LA.POLI.SCI

## First Semester

| POL... | General Education Elective in |  |
| :---: | :---: | :---: |
|  | Political Science* | 3 |
| HIS... | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 15 |
| Second Semester |  |  |
| POL... | General Education Elective in |  |
|  | Political Science* | 3 |
| HIS... | History Elective** | 3 |
|  | Humanities Electives $\dagger$ | 6 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WRT201 | English Composition II | 3 |
|  |  | 18 |
| Third Semester |  |  |
| POL... | Political Science Elective $\ddagger$ | 3 |
|  | Humanities Electives $\dagger$ | 6 |
|  | Natural Sciences Elective | 4 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
|  |  | 15 |
| Fourth Semester |  |  |
| POL... | Political Science Elective $\ddagger$ | 3 |
|  | Humanities Electives $\dagger$ | 6 |
|  | Natural Sciences Elective | 4 |
| WEX... | Dynamics of Health \& Fitness Exp | 1 |
|  | Social Science Elective $\bullet$ | 3 |
|  |  | 17 |

[^6]
## PSYCHOLOGY OPTION <br> CODE AA.LA.PSY

## First Semester

| PSY... | General Education Elective in |  |
| :--- | :--- | :--- |
|  | Psychology* | 3 |
| HIS... | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
| Science Elective*** | 3 |  |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | $\frac{3}{15}$ |

Second Semester

| PSY... | General Education Elective in |  |
| :---: | :---: | :---: |
|  | Psychology ${ }^{\dagger}$ | 3 |
| HIS... | History Elective** | 3 |
|  | Humanities Electives $\ddagger$ | 6 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WRT201 | English Composition II | 3 |
|  |  | 18 |
| Third Seme |  |  |
| PSY... | Psychology Elective | 3 |
|  | Humanities Electives $\ddagger$ | 6 |
|  | Natural Sciences Elective*** | 4 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
|  |  | 15 |
| Fourth Sem | ster |  |
| PSY.. | Psychology Elective | 3 |
|  | Humanities Electives $\ddagger$ | 6 |
|  | Natural Sciences Elective*** | 4 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience*** | 1 |
|  | Social Science Elective ${ }^{*}$ | 3 |
|  |  | 17 |
|  | ge 63. Recommended: PSY101 General <br> al Education Elective in History - see p <br> al Education Elective - see page 63. <br> ge 63. <br> Education Electives in Arts and Medi <br> ligion, or World Languages - see page <br> any Psychology course. <br> Education Elective in Anthropology, <br> Science, or Sociology - see page 63 | Philosophy <br> ography, |

[^7]
## RELIGION OPTION <br> CODE AA.LA.REL

## First Semester

| PHR... | General Education Elective in <br> Religion* |  |
| :--- | :--- | ---: |
|  | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer | 3 |
|  | Science Elective |  |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 3 |
| WRT101 | English Composition I | 2 |
|  |  | 3 |
|  |  | 17 |

## Second Semester

$\begin{array}{ll}\text { PHR... } & \text { General Education Elective in } \\ & \text { Religiont }\end{array}$
HIS... History Elective** 3
$\begin{array}{ll}\text { MAT/CIS... } & \text { Mathematics/Computer } \\ & \text { Science Elective }{ }^{* * *}\end{array}$
WEX... $\begin{aligned} & \text { Dynamics of Health \& Fitness } \\ & \text { Experience }{ }^{* * *}\end{aligned}$
WRT201 English Composition II 3
..... Social Science Elective ${ }^{* * *} \quad 3$

Third Semester

| PHR ... | Religion Elective $\ddagger$ | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives | 6 |
| $\ldots \ldots$. | Natural Sciences Elective ${ }^{* * *}$ | 4 |
| $\ldots \ldots$. | Social Science Elective ${ }^{* * *}$ | $\frac{3}{16}$ |

Fourth Semester

| PHR ... | Religion Elective $\ddagger$ | 3 |
| :--- | :--- | :---: |
| $\ldots \ldots$. | Humanities Electives | 6 |
| $\ldots \ldots$. | Natural Sciences Elective |  |
| $\ldots \ldots$. | Social Science Elective ${ }^{* * *}$ | 4 |
| $\ldots$ |  | $\frac{3}{16}$ |

[^8]
## ASSOcIATE IN ARTS (AA) DEGREE IN LIBERAL ARTS

## SOCIAL SCIENCES OPTION

CODE AA.LA.SOC.SCI

## First Semester

| $\ldots . .$. | General Education Elective in |  |
| :--- | :--- | ---: |
|  | Social Sciences* | 3 |
| HIS... | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | $\frac{3}{15}$ |

## Second Semester

|  | General Education Elective in |  |
| :---: | :---: | :---: |
|  | Social Sciences* | 3 |
| HIS... | History Elective** | 3 |
|  | Humanities Electives $\dagger$ | 6 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WRT201 | English Composition II | 3 |
|  |  | 18 |

## Third Semester

| $\ldots . .$. | General Education Elective in |  |
| :--- | :--- | ---: |
|  | Social Sciences* | 3 |
| $\ldots \ldots$. | Humanities Electives $\dagger$ | 6 |
| $\ldots .$. | Natural Sciences Elective | $4 *$ |
| WEX101 | Dynamics of Health \& Fitness | 2 |
|  |  |  |

## Fourth Semester

| $\ldots \ldots$. | Social Science Electives $\ddagger$ | 6 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives $\dagger$ | 6 |
| $\ldots .$. | Natural Sciences Elective $^{* * *}$ | 4 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience |  |
|  |  | 1 |
|  |  |  |

[^9]
## SOCIOLOGY OPTION CODE AA.LA.SOC

First Semester

| SOC... | General Education Elective in <br> Sociology* |  |
| :--- | :--- | ---: |
| HIS... | History Elective** | 3 |
| MAT/CIS... | Mathematics/Computer | 3 |
| SPE111 | Science Elective ${ }^{* * *}$ | 3 |
| WRT101 | Snglish Communication | 3 |
|  |  | $\frac{3}{15}$ |

## Second Semester

$\begin{array}{ll}\text { SOC... } & \text { General Education Elective in } \\ & \text { Sociologyt }\end{array}$
HIS... History Elective** 3
..... Humanities Electives $\ddagger$ 6
$\begin{array}{ll}\text { MAT/CIS... } & \text { Mathematics/Computer } \\ & \text { Science Elective*** }\end{array}$
WRT201 English Composition II $\quad \frac{3}{18}$

Third Semester
SOC... Sociology Elective 3
..... Humanities Electives $\ddagger$ 6
...... Natural Sciences Elective*** 4
WEX101 Dynamics of Health \& Fitness $\frac{2}{16}$

Fourth Semester
SOC... Sociology Elective 3
..... Humanities Electives $\ddagger$ 6
..... Natural Sciences Elective*** 4
WEX... Dynamics of Health \& Fitness Experience ${ }^{* * *}$ 1
$\ldots . . \quad$ Social Science Elective $\bullet \quad \frac{3}{17}$

[^10]
## ASSOcIATE IN ARTS (AA) DEGREE IN LIBERAL ARTS

## WOMEN'S STUDIES OPTION <br> CODE AA.LA.WMST

## First Semester

| HIS... | History Elective* | 3 |
| :---: | :---: | :---: |
|  | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective ${ }^{* * *}$ | 3 |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT101 | English Composition I | 3 |
|  |  | 17 |
| Second Se | ester |  |
| HIS. | History Elective* | 3 |
| ...... | Humanities Elective** | 3 |
|  | Social Science Elective $\dagger$ | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience*** | 1 |
| WRT201 | English Composition II | 3 |
|  |  | 16 |
| Third Seme |  |  |
|  | Women's Studies Elective $\ddagger$ | 3 |
|  | Humanities Electives** | 6 |
|  | Natural Sciences Elective*** | 4 |
|  | Social Science Elective | 3 |
|  |  | 16 |

## Fourth Semester

| $\ldots \ldots$. | Women's Studies Elective $\ddagger$ | 3 |
| :--- | :--- | :--- |
| $\ldots .$. | Humanities Electives |  |
| $\ldots \ldots$ | Natural Sciences Elective $^{* * *}$ | 6 |
| $\ldots .$. | Social Science Elective $^{* * *}$ | 4 |
| $\ldots$ |  | $\frac{3}{16}$ |

* General Education Elective in History - see page 63. Recommended: HIS105 Women in History or HIS116 Women in American History
** General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63. Recommended: PHR122 Women and Religion or LIT228 Women in Literature.
*** General Education Elective - see page 63.
$\dagger$ General Education Elective in Social Sciences - see page 63 Recommended: SOC120 Sociology of Gender Roles or SOC121 Changing Roles of Women.
$\ddagger$ Select from the following: PSY207 Psychology of Women; SOC120 Sociology of Gender Roles; SOC121 Changing Roles of Women; LIT228 Women in Literature.
- General Education Elective in Social Sciences - see page 63. Recommended: PSY101 General Psychology.
Diversity Requirement Applies


## WORLD LANGUAGES AND CULTURES OPTION CODE AA.LA.FORGN.LAN

## First Semester

| LAN... | General Education Elective in <br> World Languages* |  |
| :--- | :--- | :---: |
| HIS... | History Elective*** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective ${ }^{* * *}$ | 3 |
| SPE111 | Speech Communication | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT101 | English Composition I | $\frac{3}{17}$ |

## Second Semester

LAN... General Education Elective in $\quad 3$

HIS... History Elective** 3
$\begin{array}{ll}\text { MAT/CIS... } & \text { Mathematics/Computer } \\ & \text { Science Elective }{ }^{* * *}\end{array}$
WEX... $\begin{aligned} & \text { Dynamics of Health \& Fitness } \\ & \\ & \text { Experience }{ }^{* * *}\end{aligned}$
WRT201 English Composition II 3
$\ldots . . \quad$ Social Science Elective ${ }^{* * *} \quad \frac{3}{10}$

## Third Semester

| LAN... | World Languages Elective $\dagger$ | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives $\ddagger$ | 6 |
| $\ldots \ldots$. | Natural Sciences Elective |  |
| $\ldots \ldots$. | Social Science Elective $^{* * *}$ | 4 |
| $\ldots$ |  | $\frac{3}{16}$ |

## Fourth Semester

LAN... World Languages Elective $\dagger$ 3
..... Humanities Electives $\ddagger$ 6
..... Natural Sciences Elective*** 4
..... Social Science Elective ${ }^{* * *}$ $\frac{3}{16}$

* See page 63. Students selecting the World Languages option must meet with the World Languages and Cultures Program Coordinator for placement and course selection advisement. Proper placement is critical.
** General Education Elective in History - see page 63.
*** General Education Elective - see page 63.
$\dagger$ Intermediate or Advanced level language courses depending on initial placement. See the World Languages and Cultures Program Coordinator for advisement on course selection.
$\ddagger$ General Education Electives in Arts and Media, Literature, or Philosophy and Religion - see page 63.
Diversity Requirement Applies


## TRANSFER PROGRAMS

ASSOCIATE IN ARTS (AA) DEGREE IN FINE \& PERFORMING ARTS
To earn the AA degree in Fine and Performing Arts, a student must meet the following curriculum requirements:

| Area of Study | Credits | Course |
| :--- | :---: | :--- |
| Communications | 9 | WRT101 English Composition I (3 cr.) |
|  |  | WRT201 English Composition II (3 cr.) |
|  |  | SPE111 Speech Communication (3 cr.) |


| Humanities | Two general education courses (6 cr.) in History (HIS) |
| :--- | :---: | :---: |
| Five general education courses (15 cr.) to be selected from the following |  |
| fields, with no more than two courses ( 6 cr ) in any one field: |  |
| Arts and Media (Art [ART], Mass Communication [COM], Music [MUS], Theatre Arts [THR]) |  |
| Literature (LIT) |  |
| Philosophy and Religion (PHR) |  |
| World Languages and Cultures (LAN) |  |


| Wellness and | 3 | WEX101 Dynamics of Health and Fitness (2 cr.) |
| :--- | :--- | :--- |
| Exercise Science |  | WEX... Dynamics of Health and Fitness Experience ( 1 cr.$)^{*}$ |


| Restricted Courses | $18-20$ |
| :--- | :--- |
| Diversity Requirement: | In completing the BCC General Education Program, a student must take and pass at least one course in <br> gender studies, non-Western history or thought, and/or cultural diversity.** |

[^11]
## ASSOCIATE IN ARTS (AA) DEGREE IN FINE \& PERFORMING ARTS

To fulfill the preceding requirements, a student in Fine and Performing Arts must major in Art, Music, or Theatre Arts and must follow one of the programs of study outlined below:

| ART OPTION CODE AA.FPA.ART |  |  |
| :---: | :---: | :---: |
|  |  |  |
| First Semester <br> ART123 Life Drawing I |  |  |
|  | or | 3 |
| ART124 | Drawing Fundamentals |  |
| ART122 | Two-Dimensional Design | 3 |
| ART126 | Introduction to Computer |  |
|  | Graphics* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
|  |  | 17 |
| Second Semester |  |  |
| ART227 | Painting I | 3 |
|  | Humanities Electives** $\dagger$ | 6 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*** | 3 |
| WRT201 | English Composition II |  |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience*** | 1 |
|  |  | 16 |
| Third Semester |  |  |
| ART... | Studio Art Elective $\ddagger$ | 3 |
| HIS... | History Elective | 3 |
| ...... | Humanities Elective** $\dagger$ | 3 |
|  | Natural Sciences Elective*** | 4 |
| ...... | Social Science Elective*** | 3 |
|  |  | 16 |
| Fourth Semester |  |  |
| ART... | Studio Art Elective $\ddagger$ | 3 |
| HIS... | History Elective | 3 |
| ... | Humanities Electives** | 6 |
| ...... | Social Science Elective ${ }^{* * *}$ | 3 |
|  |  | 15 |
| * Course uses Macintosh computers |  |  |
| ** General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63. |  |  |
| *** General Education Elective - see page 63. |  |  |
| $\dagger$ Recommended: ART101 Art Appreciation; ART102 Art History Through the Renaissance; ART103 Art History Since the Renaissance. |  |  |
| $\ddagger$ "Studio Art" electives do not include Art Appreciation or Art History. |  |  |
| - General Education Elective in History - see page |  |  |
| Diversity Requirement Applies |  |  |

## MUSIC ARTS - GENERAL MUSIC ARTS OPTION CODE AA.FPA.MUSC

| First Semester |  |  |
| :---: | :---: | :---: |
| MUS131 | Class Piano I | 2 |
| MUS... | Music Elective | 3 |
|  | Social Science Elective* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| ...... | Humanities Elective** $\dagger$ | 3 |
|  |  | 17 |
| Second Semester |  |  |
| MUS231 | Class Piano II | 2 |
| MUS... | Music Elective | 3 |
| WRT201 | English Composition II | 3 |
|  | Humanities Elective** $\dagger$ | 3 |
| MAT/CIS | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| ...... | Social Science Elective* | 3 |
|  |  | 17 |
| Third Semester |  |  |
| MUS132 | Music Theory I | 2 |
| MUS107 | Music History I | 3 |
| HIS... | History Elective ${ }^{* * *}$ | 3 |
| ...... | Humanities Elective** | 3 |
|  | Natural Sciences Elective* | 4 |
| WEX101 | Dynamics of Health and Fitness | 2 |
|  |  | 17 |
| Fourth Semester |  |  |
| MUS232 | Music Theory II | 2 |
| MUS108 | Music History II | 3 |
| HIS... | History Elective*** | 3 |
| WEX... | Dynamics of Health and |  |
|  | Fitness Experience* | 1 |
| ...... | Humanities Electives** | 6 |
|  |  | 15 |

* General Education Elective - see page 63.
** General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
*** General Education Elective in History - see page 63.
$\dagger$ Recommended: MUS101 Music Appreciation; MUS110 Music, Art, and Drama; THR101 Introduction to Theatre
Diversity Requirement Applies


## ASSOCIATE IN ARTS (AA) DEGREE IN FINE \& PERFORMING ARTS

## MUSIC ARTS - COMPUTER-BASED RECORDING OPTION CODE AA.FPA.MUSC.COMP

| First Semester |  |  |
| :--- | :--- | :--- |
| MUS131 | Class Piano I | 2 |
| MUS151 | Computer-Based Recording I | 3 |
| $\ldots \ldots .$. | Social Science Elective* $^{*}$ | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| $\ldots . . .$. | Humanities Elective** | $\underline{3}$ |
|  |  | 17 |

## Second Semester

MUS231 Class Piano II 2
MUS251 Computer-Based Recording II 3
WRT201 English Composition II 3
…... Humanities Elective ${ }^{* *+} \quad 3$
MAT/CIS... Mathematics/Computer Science Elective* 3
Social Science Elective*

| Third Semester |  |  |
| :--- | :--- | :--- |
| MUS132 | Music Theory I | 2 |
| MUS107 | Music History I | 3 |
| HIS... | History Elective*** | 3 |
| ..... | Humanities Elective** | 3 |
| W.... | Natural Sciences Elective | 4 |
| WEX101 | Dynamics of Health and Fitness | $\underline{2}$ |
|  |  | 17 |


| Fourth Semester |  |  |
| :---: | :---: | :---: |
| MUS232 | Music Theory II | 2 |
| MUS108 | Music History II | 3 |
| HIS... | History Elective ${ }^{* * *}$ | 3 |
| WEX... | Dynamics of Health and |  |
|  | Fitness Experience* | 1 |
| Humanities Electives** |  | 6 |
|  |  | 15 |

[^12]MUSIC ARTS - ELECTRONIC MUSIC OPTION
CODE AA.FPA.MUSG.ELEC

| First Semester |  |  |
| :--- | :--- | :--- |
| MUS131 | Class Piano I | 2 |
| MUS150 | Electronic Music I | 3 |
| $\ldots . . . .$. | Social Science Elective* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| $\ldots . . .$. | Humanities Elective** | $\underline{3}$ |
|  |  | 17 |

## Second Semester

| MUS231 | Class Piano II | 2 |
| :--- | :--- | :--- |
| MUS250 | Electronic Music II | 3 |
| WRT201 | English Composition II | 3 |
| $\ldots \ldots . .$. | Humanities Elective** | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| $\ldots . . .$. | Social Science Elective* | $\frac{3}{17}$ |

## Third Semester

| MUS132 | Music Theory I | 2 |
| :--- | :--- | :--- |
| MUS107 | Music History I | 3 |
| HIS... | History Elective*** | 3 |
| ...... | Humanities Elective** | 3 |
| $\ldots$ WEX101 | Natural Sciences Elective* | 4 |
| Dynamics of Health and Fitness | $\underline{2}$ |  |
|  |  |  |

## Fourth Semester

MUS232 Music Theory II 2

MUS108 Music History II 3
HIS... History Elective*** 3
WEX... Dynamics of Health and Fitness Experience* 1
...... Humanities Electives** $\quad \frac{6}{15}$

* General Education Elective - see page 63.
** General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
*** General Education Elective in History - see page 63.
$\dagger$ Recommended: MUS101 Music Appreciation; MUS110 Music, Art, and Drama; THR101 Introduction to Theatre
Diversity Requirement Applies

MUSIC ARTS - MUSIC BUSINESS OPTION

## CODE AA.FPA.MUSC.BUS

| First Semester |  |  |
| :--- | :--- | :--- |
| MUS131 | Class Piano I | 2 |
| MUS152 | Music Business I | 3 |
| $\ldots \ldots .$. | Social Science Elective* | 3 |
| SPE111 | Spech Communication | 3 |
| WRT101 | English Composition I | $\underline{3}$ |
|  | Humanities Elective** | 17 |


| Second Semester |  |  |
| :---: | :---: | :---: |
| MUS231 | Class Piano II | 2 |
| MUS252 | Music Business II | 3 |
| WRT201 | English Composition II | 3 |
|  | Humanities Elective** $\dagger$ | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| ...... | Social Science Elective* | 3 |
|  |  | 17 |

## Third Semester

| MUS132 | Music Theory I | 2 |
| :---: | :---: | :---: |
| MUS107 | Music History I | 3 |
| HIS... | History Elective*** | 3 |
| ...... | Humanities Elective** | 3 |
|  | Natural Sciences Elective* | 4 |
| WEX101 | Dynamics of Health and Fitness | 2 |
|  |  | 17 |
| Fourth Semester |  |  |
| MUS232 | Music Theory II | 2 |
| MUS108 | Music History II | 3 |
| HIS... | History Elective ${ }^{* * *}$ | 3 |
| WEX... | Dynamics of Health and |  |
|  | Fitness Experience* | 1 |
| ..... | Humanities Electives** | 6 |
|  |  | 15 |

[^13]THEATRE ARTS - GENERAL THEATRE ARTS OPTION CODE AA.FPA.THTR

## First Semester

|  | Humanities Elective*t | 3 |
| :--- | :--- | :--- |
| SPE11.. | Speech Communication | 3 |
| THR110 | Basic Acting Techniques | 3 |
| THR131 | Introduction to Stagecraft and Lighting | 3 |
| WRT101 | English Composition I | $\frac{3}{15}$ |

## Second Semester

|  | Humanities Elective* $\dagger$ | 3 |
| :---: | :---: | :---: |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective** | 3 |
|  | Social Science Elective** | 3 |
| THR120 | Stage Makeup | 1 |
| THR113 | Movement for the Performing Artist | 2 |
|  |  |  |
| THR210 | Scene Study | 3 |
|  | or |  |
| THR124 | Dance Experience | 3 |
|  | or |  |
| COM106 | TV Production | 3 |
| WRT201 | English Composition II | 3 |

Third Semester
HIS... History Elective*** 3
...... Humanities Electives* 6
...... Natural Sciences Elective** 4

THR117 Theatre Performance and Production 2
COM105 Radio Production 3
DAN... Dance Technique Classes $\ddagger$ 1
WEX101 Dynamics of Health and Fitness $\frac{2}{16-18}$

## Fourth Semester

| HIS... | History Elective ${ }^{\text {*** }}$ | 3 |
| :---: | :---: | :---: |
| ...... | Humanities Elective* | 3 |
|  | Social Science Elective** | 3 |
| THR116 | Theatre Production Workshop | 4 |
| THR114 | Audition Techniques | 2 |
|  | or |  |
| THR136 | Stage Electrics | 3 |
|  | or |  |
| DAN... | Dance Technique Classes $\ddagger$ | 2 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience** | 1 |

[^14]
## ASSOCIATE IN ARTS (AA) DEGREE IN FINE \& PERFORMING ARTS

| THEATRE ARTS - ACTING OPTION CODE AA.FPA.THTR.ACT |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
|  | Humanities Elective* $\dagger$ | 3 |
| SPE111 | Speech Communication | 3 |
| THR110 | Basic Acting Techniques | 3 |
| THR131 | Introduction to Stagecraft and Lighting | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 15 |
| Second Semester |  |  |
|  | Humanities Elective* $\dagger$ | 3 |
| MAT/CIS.. | Mathematics/Computer |  |
|  | Science Elective** | 3 |
| THR113 | Movement for the Performing Artist | 2 |
| THR120 | Stage Makeup | 1 |
| THR210 | Scene Study | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| WRT201 | English Composition II | 3 |
|  |  | 17 |
| Third Semester |  |  |
| HIS... | History Elective ${ }^{* * *}$ | 3 |
|  | Humanities Electives* | 6 |
|  | Natural Sciences Elective** | 4 |
| THR117 | Theatre Performance and Production | 2 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience** | 1 |
|  |  | 16 |
| Fourth Semester |  |  |
| HIS... | History Elective ${ }^{* * *}$ | 3 |
| ...... | Humanities Elective* | 3 |
|  | Social Science Electives** | 6 |
| THR116 | Theatre Production Workshop | 4 |
| THR114 | Audition Techniques | 2 |
|  |  | 18 |
| * General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63. |  |  |
| *** General Education Elective in History - see page 63. <br> $\dagger$ Recommended: THR101 Introduction to Theatre; MUS110 Music, Art, and |  |  |
| Drama; THR140 Introduction to Cinema |  |  |
| Diversity Requirement Applies |  |  |

## THEATRE ARTS - DANCE OPTION CODE AA.FPA.THTR.DAN

## First Semester

|  | Humanities Elective*t | 3 |
| :--- | :--- | :--- |
| SPE111 | Speech Communication | 3 |
| THR110 | Basic Acting Techniques | 3 |
| THR131 | Introduction to Stagecraft and Lighting | 3 |
| WRT101 | English Composition I | $\frac{3}{15}$ |

## Second Semester

|  | Humanities Elective* <br> MA....CIS... <br> Mathematics/Computer | 3 |
| :--- | :--- | :--- |
|  | Science Elective** | 3 |
| ...... | Social Science Elective** | 3 |
| THR113 | Movement for the Performing Artist | 2 |
| THR120 | Stage Makeup | 1 |
| THR124 | Dance Experience | 3 |
| WRT201 | English Composition II | $\underline{3}$ |
|  |  | 18 |

Third Semester

| HIS... | History Elective*** | 3 |
| :---: | :---: | :---: |
| ...... | Humanities Electives* | 6 |
|  | Natural Sciences Elective** | 4 |
| THR117 | Theatre Performance and Production | 2 |
| WEX101 | Dynamics of Health and Fitness | 2 |

Fourth Semester

| DAN... | Dance Technique Classes $\ddagger$ | 1-2 |
| :---: | :---: | :---: |
| HIS... | History Elective ${ }^{* * *}$ | 3 |
| ...... | Humanities Elective* | 3 |
|  | Social Science Elective** | 3 |
| THR116 | Theatre Production Workshop | 4 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience** | 1 |

* General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
** General Education Elective - see page 63.
*** General Education Elective in History - see page 63.
$\dagger$ Recommended: THR101 Introduction to Theatre; MUS110 Music, Art, and Drama; THR140 Introduction to Cinema.
$\ddagger$ Dance Technique classes should be selected from those DAN classes offered each semester.
Diversity Requirement Applies


## ASSOCIATE IN ARTS (AA) DEGREE IN FINE \& PERFORMING ARTS

THEATRE ARTS - TECHNICAL PRODUCTION OPTION CODE AA.FPA.THTR.TECH

## First Semester

|  | Humanities Elective*t | 3 |
| :--- | :--- | :--- |
| SPE111 | Speech Communication | 3 |
| THR110 | Basic Acting Techniques | 3 |
| THR131 | Introduction to Stagecraft and Lighting | 3 |
| WRT101 | English Composition I | 3 |
|  |  |  |

Second Semester
COM106 TV Production 3
..... Humanities Elective ${ }^{*} \dagger$ 3

MAT/CIS... $\begin{aligned} & \text { Mathematics/Computer } \\ & \text { Science Elective** }\end{aligned}$
$\begin{array}{ll}\text { Science Elective** } & 3 \\ \text { Social Science Elective** } & 3\end{array}$
THR120 Stage Makeup 1
WRT201 English Composition II $\frac{3}{16}$

## Third Semester

| HIS... | History Elective*** | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Electives $^{*}$ | 6 |
| $\ldots \ldots$. | Natural Sciences Elective** | 4 |
| THR117 | Theatre Performance and Production | 2 |
| WEX101 | Dynamics of Health and Fitness | $\frac{2}{17}$ |

## Fourth Semester

| HIS... | History Elective*** | 3 |
| :--- | :--- | :--- |
| $\ldots . .$. | Humanities Elective | 3 |
| $\ldots .$. | Social Science Elective** | 3 |
| THR116 | Theatre Production Workshop | 4 |
| THR136 | Stage Electrics | 3 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience** | $\frac{1}{17}$ |

* General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
** General Education Elective - see page 63.
*** General Education Elective in History - see page 63.
$\dagger$ Recommended: THR101 Introduction to Theatre; MUS110 Music, Art, and Drama; THR140 Introduction to Cinema.
Diversity Requirement Applies


## ASSOCIATE IN SCIENCE (AS) DEGREES

Associate in Science (AS) degree programs are designed to prepare students for transfer into bachelor's degree programs in fouryear colleges and universities. The minimum requirement for graduation in such programs is 64 degree credits and completion of all courses and specific requirements listed within the student's chosen curriculum.

Bergen Community College offers a three-track program to students seeking to earn the Associate in Science (AS) degree:
(1) Students may pursue the AS degree with options in Natural Sciences or Mathematics by following a program of study in General Science, Biology, Chemistry, Computer Science, Mathematics, Physics, or Pre-Chiropractic.
(2) Students may pursue the AS degree with an option in Engineering Science.
(3) Students may pursue the AS degree with options in Professional Studies by following a program of study in General Professional Studies, Broadcasting, Business Administration, Education, Exercise Science, Journalism, or Social Work.

## ASSOCIATE IN SCIENCE (AS) DEGREE OPTIONS IN NATURAL SCIENCES OR MATHEMATICS

To earn the AS degree in Natural Sciences or Mathematics, a student must meet the following curriculum requirements:

| Area of Study | Credits | Courses |
| :---: | :---: | :---: |
| Communications | 9 | WRT101 English Composition I (3 cr.) WRT201 English Composition II (3 cr.) SPE111 Speech Communication (3 cr.) |
| Humanities | 12 | Four general education courses ( 12 cr .) to be selected from at least three of the following fields: <br> Arts and Media (Art[ART],Mass Communication [COM], Music [MUS], Theatre Arts [THR]) History (HIS) <br> Literature (LIT) <br> Philosophy and Religion (PHR) <br> World Languages and Cultures (LAN) |
| Social Sciences | 6 | Two general education courses ( 6 cr ) to be selected from two of the following fields: <br> Economics (ECO) <br> Geography (GEO) <br> Political Science (POL) <br> Psychology (PSY) <br> Sociology (SOC) and Anthropology (ANT) |
| Mathematics and Computer Science | 8 | Two general education courses (8 cr.) in Mathematics/Computer Science (MAT/CIS)* |
| Natural Sciences | 8 | Two general education courses ( 8 cr .) to be selected from the following fields: <br> Biology (BIO) <br> Chemistry (CHM) <br> Physics (PHY) or Earth Science (ESC) |
| Wellness and Exercise Science | 3 | WEX101Dynamics of Health and Fitness (2 cr.) <br> WEX... Dynamics of Health and Fitness Experience (1 cr.) ${ }^{* *}$ |
| Restricted Courses | 18-20 |  |
| Diversity Requirement: | In completing the BCC General Education Program, a student must take and pass at least one course in gender studies, non-Western history or thought, and/or cultural diversity.*** |  |

[^15]
## GENERAL SCIENCE CURRICULUM <br> CODE AS.NSM.GEN

## First Semester

WEX101 Dynamics of Health and Fitness
2
MAT/CIS... Mathematics/Computer Science Elective* $\dagger$

4
Natural Sciences Elective in
Biology, Chemistry, Earth Science,
or Physics*
SPE111 Speech Communication 3
WRT101 English Composition I $\frac{3}{16}$

## Second Semester

| $\ldots \ldots .$. | Humanities Elective* | 3 |
| :--- | :--- | :---: |
| $\ldots$ MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective*t | 4 |
| $\ldots \ldots$. | Natural Sciences Elective in  <br>  Biology, Chemistry, Earth Science, |  |
|  | or Physics* | 4 |
| $\ldots . .$. | Social Science Elective* | 3 |
| WRT201 | English Composition II | $\underline{3}$ |
|  |  |  |

## Third Semester

WEX... $\begin{gathered}\text { Dynamics of Health and Fitness } \\ \text { Experience* }\end{gathered}$
..... Humanities Electives* 3
Natural Sciences
and/or

MAT/CIS... Mathematics/Computer Science Electives Social Science Elective*

## Fourth Semester

| $\ldots \ldots$. | Humanities Electives* | 6 |
| :--- | :--- | :---: |
| $\ldots \ldots$ | Natural Sciences |  |
| and/or | $10-12$ |  |
| MAT/CIS... | Mathematics/Computer <br> Science Electives | $\overline{16-18}$ |

* General Education Elective - see page 63.
$\dagger$ MAT280 Calculus I is required for all students in the AS Degree in Natural Sciences and Mathematics.

Note: It is recommended that students select their advanced courses in the areas of Biology, Chemistry, Computer Science, Mathematics, or Physics.

Diversity Requirement: In completing the BCC General Education Program, a student must take and pass at least one course in gender studies, nonWestern history or thought, and/or cultural diversity. Choose from the following Humanities or Social Sciences electives: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

## BIOLOGY OPTION <br> CODE AS.NSM.BIO

## First Semester

BIO101 General Biology I 4
WEX101 Dynamics of Health and Fitness 2
MAT180 Precalculus 4
SPE111 Speech Communication 3
WRT101 English Composition I $\frac{3}{16}$

Second Semester
BIO203 General Biology II 4
MAT280 Calculus I 4
WRT201 English Composition II 3
...... Humanities Elective* 3
...... Social Science Elective* $\quad 3$

Third Semester
BIO202 Embryology 4
WEX... $\begin{aligned} & \text { Dynamics of Health and Fitness } \\ & \text { Experience* }\end{aligned}$
...... Humanities Electives* 3
...... Natural Sciences Elective** 4
..... Social Science Elective* $\quad 3$

Fourth Semester

| BIO201 | Comparative Anatomy | 4 |
| :--- | :--- | :---: |
| $\ldots \ldots$. | Humanities Electives* | 6 |
| $\ldots \ldots$. | Natural Sciences Elective** | 4 |
| $\ldots \ldots$. | Natural Sciences Elective | 4 |
| MAT/CIS... | Mathematics/Computer Science Elective |  |
|  | 3-4 |  |
|  |  |  |

[^16]
## CHEMISTRY OPTION <br> CODE AS.NSM.CHEM

| First Semester |  |  |
| :---: | :---: | :---: |
| CHM140 | General Chemistry I | 3 |
| CHM141 | Gen Chemistry I Lab | 1 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| MAT280 | Calculus I | 4 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 16 |
| Second Semester |  |  |
| CHM240 | General Chemistry II | 3 |
| CHM241 | Gen Chemistry II-Lab | 1 |
| MAT281 | Calculus II | 4 |
| WRT201 | English Composition II | 3 |
|  | Humanities Elective* | 3 |
| $\ldots$ | Social Science Elective* | 3 |
|  |  | 17 |
| Third Semester |  |  |
| CHM260 | Organic Chemistry I | 4 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience* | 1 |
| MAT282$. \ldots . .$. | Calculus III | 4 |
|  | Humanities Elective* | 3 |
| ...... | Natural Sciences Elective** | 4 |
|  |  | 16 |
| Fourth Semester |  |  |
| CHM262...... | Organic Chemistry II | 4 |
|  | Humanities Electives* | 6 |
|  | Natural Sciences Elective** | 4 |
|  | Social Science Elective* | 3 |
|  |  | 17 |

* General Education Elective - see page 63.
**PHY186 General Physics I and PHY286 General Physics II are highly recommended.


## Diversity Requirement Applies

| First Semester |  |  |
| :---: | :---: | :---: |
| CIS165 | C++ Programming ${ }^{*}$ | 3 |
| MAT280 | Calculus I | 4 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
|  | Humanities Elective** | 3 |
|  |  | 16 |
| Second Semester |  |  |
| CIS265 | C++ Programming II | 3 |
| CIS271 | Computer Organization and |  |
|  | Assembly Language I | 3 |
| MAT281 | Calculus II |  |
|  | or | 4 |
| CIS288 | Discrete Mathematics for Computer Science |  |
| WRT201 | English Composition II | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
|  | Humanities Elective** | 3 |
|  |  | 18 |
| Third Semester |  |  |
| CIS277 | Data Structures and Algorithms | 3 |
| CIS/MAT.. | Computer Science/Mathematics |  |
|  | Elective*** | 3-4 |
|  | Natural Science Elective $\ddagger$ | 4 |
|  | Humanities Elective** | 3 |
| $\ldots .$. | Social Science Elective $\dagger$ | 3 |
|  |  | 16-17 |
| Fourth Semester |  |  |
| CIS/MAT... | Computer Science/Mathematics |  |
|  | Electives*** | 4-6 |
|  | Natural Science Elective $\ddagger$ | 4 |
|  | Humanities Elective** | 3 |
|  | Social Science Elective** | 3 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience $\dagger$ | 1 |
|  |  | 15-17 |
| * By permission of the Divisional Dean, properly prepared students may instead register for CIS265 and/or CIS271. Such students will be required to complete an additional 3 or 4 credit elective to be selected from: MAT250, CIS266, CIS278, MAT281, MAT282, MAT286, CIS287, CIS288, CIS289. |  |  |
| ** General Education Elective - see page 63. PHR103 Basic Logic and PHR203 Intermediate Logic are recommended as Humanities Electives. |  |  |
| *** This elective requirement in Computer Science and/or Mathematics must total at least 8 credits to be selected from the following courses: MAT250, CIS266, CIS275, CIS278, MAT281, MAT282, MAT286, CIS287, CIS288, CIS289. |  |  |
| $\ddagger$ PHY280 Physics I and PHY290 Physics II or CHM140 General Chemistry I and CHM141 General Chemistry Lab I and CHM240 General Chemistry II and CHM241 General Chemistry Lab II are recommended. |  |  |
| Diversity Requirement Applies |  |  |

## MATHEMATICS OPTION

CODE AS.NSM.MATH

## First Semester

WEX101 Dynamics of Health and Fitness 2
MAT280 Calculus I 4

WRT101 English Composition I 3
…. Humanities Elective* 3
MAT... Mathematics Elective** or
CIS... Computer Science**
or
Natural Sciences Elective**

## Second Semester

| MAT281 | Calculus II | 4 |
| :--- | :--- | :---: |
| WRT201 | English Composition II | 3 |
| $\ldots \ldots .$. | Humanities Elective* | 3 |
| MAT... | Mathematics Elective** |  |
| CIS... | or | Computer Science Elective** |
| $\ldots .$. | Social Science Elective* $^{*}$ |  |
|  |  | $\frac{3}{16-17}$ |

## Third Semester

| WEX... | Dynamics of Health and Fitness |  |
| :---: | :---: | :---: |
|  | Experience** | 1 |
| MAT282 | Calculus III | 4 |
| MAT286 | Linear Algebra | 4 |
|  | Humanities Elective* | 3 |
| MAT... | Mathematics** |  |
|  | or |  |
| CIS...$\ldots \ldots$. | Computer Science** | 3-4 |
|  | or Natural Sciences Elective** |  |
|  |  |  |
|  |  | 15-16 |
| Fourth Semester |  |  |
| MAT283 | Differential Equations | 4 |
| SPE111 | Speech Communication | 3 |
|  | Humanities Elective* | 3 |
|  | Social Science Elective* | 3 |
| MAT... | Mathematics** |  |
|  | or |  |
| CIS... | Computer Science** | 3-4 |
|  |  |  |
|  | Natural Sciences Elective** |  |

[^17]PHYSICS OPTION
CODE AS.NSM.PHYSC
First Semester

| MAT280 | Calculus I | 4 |
| :--- | :--- | :--- |
| PHY280 | Physics I | 4 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| $\ldots .$. | Social Science Elective* | $\frac{3}{17}$ |

Second Semester
MAT281 Calculus II 4
PHY290 Physics II 4
WRT201 English Composition II 3
..... Humanities Electives* $\quad 6$

Third Semester

| WEX101 | Dynamics of Health and Fitness | 2 |
| :--- | :--- | :--- |
| MAT282 | Calculus III | 4 |
| PHY291 | Physics III | 4 |
| $\ldots \ldots$. | Humanities Elective* | 3 |
| $\ldots . .$. | Natural Sciences Elective** | $\frac{4}{17}$ |

## Fourth Semester

WEX... $\begin{aligned} & \text { Dynamics of Health and Fitness } \\ & \text { Experience* }\end{aligned}$
PHY294 Engineering Mechanics 4
...... Humanities Elective* 3
...... Natural Sciences Elective** 4
..... Social Science Elective* $\frac{3}{15}$

* General Education Elective - see page 63.
** CHM140/141 General Chemistry I and CHM240/241 General Chemistry II are recommended.
Diversity Requirement Applies


## PRE-CHIROPRACTIC OPTION

CODE AS.NSM.CHIR
First Semester
WEX101 Dynamics of Health and Fitness
MAT180 Precalculus 4
BIO101 General Biology I 4

SPE111 Speech Communication 3
WRT101 English Composition I $\frac{3}{16}$
Second Semester
MAT280
Calculus I
WRT201 English Composition II 3
BIO203 General Biology II 4
..... Humanities Elective* 3
..... Social Science Elective* ${ }^{*} \quad 3$

Third Semester

| WEX... | Dynamics of Health and Fitness <br> Experience* | 1 |
| :--- | :--- | :--- |
|  | Humanities Elective* | 3 |
| $\ldots . .$. | 3 |  |
| CHM140 | General Chemistry I | 1 |
| CHM141 | General Chemistry I Lab | 4 |
| PHY186 | General Physics I | Social Science Elective* |
| $\ldots . .$. |  | $\frac{3}{15}$ |

## Fourth Semester

..... Humanities Electives* 6
CHM240 General Chemistry II 3
CHM241 General Chemistry II Lab 1
PHY286 General Physics II 4
BIO103 The Human Body 4

* General Education Elective - see page 63.
† Students must take PSY101 General Psychology to fulfill requirements of New York Chiropractic College.

Additional requirements for admission to New York Chiropractic College: CHM260, CHM262, Science Elective (BIO104 Microbiology is recommended), and two free electives (Wellness and Exercise Science is recommended).
Diversity Requirement Applies

ASSOCIATE IN SCIENCE (AS) DEGREE OPTION IN ENGINEERING SCIENCE
To earn the AS degree with an option in Engineering Science, a student must meet the following curriculum requirements:

| Area of Study | Credits | Courses |
| :--- | :---: | :--- |
| Communications | 6 | WRT101 English Composition I (3 cr.) <br> WRT201 |
| English Composition II (3 cr.) |  |  |

[^18]
## ENGINEERING SCIENCE OPTION

CODE AS.ENGIN.SCI

## First Semester

CHM140 General Chemistry I 3
CHM141 Gen Chemistry Laboratory I 1
DFT107 Drafting I 2
MAT280 Calculus I 4
PHY280 Physics I 4
WRT101 English Composition I $\frac{3}{17}$

## Second Semester

CHM240 General Chemistry II 3
CHM241 Gen Chemistry Laboratory II 1
CIS270 Programming for Scientific Applications 3
MAT281 Calculus II 4
PHY290 Physics II 4
WRT201 English Composition II $\frac{3}{18}$
Third Semester
MAT282 Calculus III 4
PHY291 Physics III 4
...... Humanities Elective* ${ }^{\text {}}$. 3
...... Social Science Elective* $\ddagger$ 3
WEX101 Dynamics of Health and Fitness $\frac{2}{16}$
Fourth Semester
MAT283 Differential Equations 4
PHY294 Engineering Mechanics 4
...... Humanities Elective* $\dagger$ 3
...... Social Science Elective* $\ddagger$ 3
WEX... Dynamics of Health and Fitness Experience*

* General Education Elective-see page 63.
$\dagger$ HIS101 History of Western Civilization to the Reformation and HIS102 History of Western Civilization since the Reformation are recommended.
$\ddagger$ ECO101 Macroeconomics and ECO201 Microeconomics are recommended.
Note: DFT208 may also be required to satisfy the drafting requirement of your transfer institution.
Diversity Requirement Applies


## ASSOCIATE IN SCIENCE (AS) DEGREE OPTIONS IN PROFESSIONAL STUDIES

To earn the AS degree with an option in Professional Studies, a student must meet the following curriculum requirements:

| Area of Study | Credits | Courses |
| :---: | :---: | :---: |
| Communications | 9 | WRT101 English Composition I (3 cr.) WRT201 English Composition II (3 cr.) SPE111 Speech Communication (3 cr.) |
| Humanities | 15 | Five general education courses ( 15 cr .) to be selected from at least three of the following fields, with no more than two courses ( 6 cr .) in any one field: |
|  |  | Arts and Media (Art[ART], Mass Communication [COM], Music [MUS], Theatre Arts [THR]) <br> History (HIS) <br> Literature (LIT) <br> Philosophy and Religion (PHR <br> World Languages and Cultures (LAN) |
| Social Sciences | 6 | Two general education courses ( 6 cr .) to be selected from two of the following fields: |
|  |  | Economics (ECO) <br> Geography (GEO) <br> Political Science (POL) <br> Psychology (PSY) <br> Sociology (SOC) and Anthropology (ANT) |
| Mathematics and Computer Science | 6-8 | Two general education courses (6-8 cr.) in Mathematics/Computer Science (MAT/CIS) |
| Natural Sciences | 8 | Two general education courses (8 cr.) to be selected from the following fields: |
|  |  | Biology (BIO) <br> Chemistry (CHM) <br> Physics (PHY) or Earth Science (ESC) |
| Wellness and Exercise Science | 3 | WEX101 Dynamics of Health and Fitness (2 cr.) WEX... Dynamics of Health and Fitness Experience (1 cr.)* |
| Restricted Courses | 17-19 |  |
| Diversity Requirement: | In completing the BCC General Education Program, a student must take and pass at least one course in gender studies, non-Western history or thought, and/or cultural diversity.** |  |
| * Choose one of the followi <br> ** Choose at least one of the PHR122; PSY207; SOC120; | WEX201, Ilowing: A C121; SOC | EX204, WEX205, WEX206, WEX208. <br> 05; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; |

## GENERAL CURRICULUM CODE AS.PS.GEN

It is recommended that the student fulfill the preceding requirements in accordance with one of the following semester-bysemester sequence.

First Semester
WEX101 Dynamics of Health and Fitness 2
MAT/CIS... Mathematics/Computer Science Elective*
SPE111 Speech Communication 3
WRT101 English Composition I 3
..... Social Science Elective* 3
...... Elective in Professional Concentration


## Second Semester

$\begin{array}{ll}\text { WRT201 } & \text { English Composition II } \\ \text { WEX... } & \text { Dynamics of Health and } \\ & \text { Fitness Experience* }\end{array}$
MAT/CIS... Mathematics/Computer Science Elective* 3
...... Humanities Electives* 6
...... Elective in Professional Concentration

## Third Semester

| ..... | Natural Sciences Elective* | 4 |
| :---: | :---: | :---: |
|  | Social Science Elective* | 3 |
| ... | Humanities Elective* | 3 |
| $\ldots$ | Electives in Professional |  |
|  | Concentration | 6 |
|  |  | 16 |
| Fourth | ster |  |
|  | Natural Sciences Elective* | 4 |
|  | Humanities Electives* | 6 |
|  | Electives in Professional |  |
|  | Concentration | 6-7 |
|  |  | 16-17 |

* General Education Elective - see page 63.

Diversity Requirement: In completing the BCC General Education Program, a student must take and pass at least one course in gender studies, non-Western history or thought, and/or cultural diversity. Choose from the following Humanities or Social Sciences electives: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

## BROADCASTING OPTION CODE AS.PS.BRCAST

## First Semester

| WEX101 | Dynamics of Health and Fitness <br> MAT/CIS... <br> Mathematics/Computer | 2 |
| :--- | :--- | ---: |
| SPE111 | Science Elective* |  |
| Speech Communication | 3 |  |
| WRT101 | English Composition I | 3 |
| COM101 | Mass Media Communication | 3 |
| $\ldots . . .$. | Social Science Elective* | 3 |
|  |  | $\frac{3}{17}$ |

## Second Semester

| WRT201 | English Composition II | 3 |
| :--- | :--- | :---: |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| COM106 | TV Production I | 3 |
| COM105 | Radio Production | 3 |
| $\ldots . .$. | Humanities Electives* | $\frac{6}{18}$ |

## Third Semester

COM207 TV Production II 3

COM205 Advanced Radio Production
COM208 Directing for Television or
COM211 Video Post Production
WEX... Dynamics of Health and Fitness Experience*
...... Humanities Elective* 3
$\ldots .$. Natural Sciences Elective* 4
...... Social Science Elective*

Fourth Semester

| COM461 | Co-op Work Experience (Media) | 1 |
| :--- | :--- | :--- |
| $\ldots .$. | Humanities Electives* | 6 |
| $\ldots .$. | Natural Sciences Elective* $^{*}$ | 4 |
| $\ldots .$. | Social Science Elective* $^{*}$ |  |
|  |  | 3 |
|  |  |  |

[^19]
## BUSINESS ADMINISTRATION OPTION

 CODE AS.PS.BUS.ADM| First Semester |  |  |
| :---: | :---: | :---: |
| BUS101 | Introduction to Business | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| ACC110 | Financial Accounting | 3 |
|  |  | 17 |
| Second Semester |  |  |
| ACC210 | Managerial Accounting | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| WRT201 | English Composition II | 3 |
|  | Humanities Electives** | 6 |
|  | Business Administration Elective*** | 3 |

## Third Semester

| WEX... | Dynamics of Health and <br> Fitness Experience |
| :--- | :--- | :--- |
| $\ldots \ldots$ | Business Administration Elective |

* General Education Elective in Mathematics/Computer Science - see page 63. Before selecting your Mathematics/Computer Science electives, check the requirements of the schools you are considering for transfer. If you are uncertain about where you plan to transfer, the following courses are transferable to business programs at a number of local colleges: MAT150, MAT155, MAT180, MAT223.
** General Education Elective - see page 63.
*** Any BUS, or INF101, or BNF201.
$\dagger$ INF101 is recommended.


## Diversity Requirement Applies

BUSINESS ADMINISTRATION-ACCOUNTING OPTION CODE AS.PS.BUS.ACCT

| First Semester |  |  |
| :---: | :---: | :---: |
| WEX101 | Dynamics of Health and Fitness | 2 |
| MAT/CIS | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| BUS101 | Introduction to Business | 3 |
| ...... | Humanities Elective** | 3 |
|  |  | 17 |
| Second Semester |  |  |
| ACC110 | Financial Accounting | 3 |
| WRT201 | English Composition II | 3 |
| ...... | Natural Science Elective** | 4 |
| ...... | Humanities Elective** | 3 |
| $\ldots$ | Social Science Elective** | 3 |
|  |  | 16 |
| Third Semester |  |  |
| ACC210 | Managerial Accounting | 3 |
|  | Humanities Elective** | 3 |
| ...... | Natural Science Elective** | 4 |
|  | Social Science Elective** $\dagger$ | 3 |
| MAT/CIS | Mathematics/Computer |  |
|  | Science Elective* | 3 |
|  |  | 16 |
| Fourth Semester |  |  |
| ACC202 | Intermediate Accounting I | 3 |
| WEX... | Dynamics of Health and |  |
|  | Fitness Experience** | 1 |
|  | Humanities Electives** | 6 |
| BUS... | Business Elective*** | 3 |
|  | Free Electives $\ddagger$ | 3 |
|  |  | 16 |

* General Education Elective in Mathematics/Computer Science - see page 63. Before selecting your Mathematics/Computer Science electives, check the requirements of the schools you are considering for transfer. If you are uncertain about where you plan to transfer, the following courses are transferable to business programs at a number of local colleges: MAT150, MAT155, MAT180, MAT223.
** General Education Elective - see page 63.
*** Any ACC, any BUS (except BUS103), or INF101, or BNF201.
$\dagger$ ECO101 is recommended.
$\ddagger$ INF101 is recommended.

[^20]BUSINESS ADMINISTRATION-INTERNATIONAL TRADE OPTION
CODE AS.PS.BUS.INTL

| First Semester |  |  |
| :---: | :---: | :---: |
| BUS101 | Introduction to Business | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| ACC110 | Financial Accounting | 3 |
|  |  | 17 |
| Second Semester |  |  |
| ACC210 | Managerial Accounting | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| WRT201 | English Composition II | 3 |
| BUS262 | Fundamentals of International Business | 3 |
| ...... | Humanities Electives** | 6 |

Third Semester

| WEX... | Dynamics of Health and <br> Fitness Experience |  |
| :--- | :--- | :--- |
| $\ldots \ldots$ | Business Administration Elective |  |
| $\ldots * *$ | 1 |  |
| $\ldots \ldots$ | Humanities Electives** | 3 |
| $\ldots .$. | Natural Sciences Elective $^{* *}$ | 6 |
| $\ldots .$. | Social Science Elective $^{* *}$ | 4 |
|  |  | $\frac{3}{17}$ |

## Fourth Semester

| $\ldots \ldots$. | Free Electives $\dagger$ | 3 |
| :--- | :--- | :--- |
| $\ldots \ldots$. | Humanities Elective** | 3 |
| $\ldots \ldots$. | Natural Sciences Elective $^{* *}$ | 4 |
| $\ldots .$. | Social Science Elective** $^{* *}$ | $\frac{3}{13}$ |

* General Education Elective in Mathematics/Computer Science - see page 63. Before selecting your Mathematics/Computer Science electives, check the requirements of the schools you are considering for transfer. If you are uncertain about where you plan to transfer, the following courses are transferable to business programs at a number of local colleges: MAT150, MAT155, MAT180, MAT223.
** General Education Elective - see page 63.
*** Students should select BUS202, or BUS263, or BUS264.
$\dagger$ Recommended - one of the following: BUS202, BUS263, BUS264, INF101. Diversity Requirement Applies

BUSINESS ADMINISTRATION-MANAGEMENT OPTION CODE AS.PS.BUS.MGMT

## First Semester

| BUS101 | Introduction to Business | 3 |
| :--- | :--- | ---: |
| WEX101 | Dynamics of Health and Fitness | 2 |
| MAT/CIS... | Mathematics/Computer |  |
| SPE111 | Science Elective* | 3 |
| Speech Communication | 3 |  |
| WRT101 | English Composition I | 3 |
| ACC110 | Financial Accounting | $\underline{3}$ |
|  |  | 17 |

## Second Semester

ACC210 Managerial Accounting 3
MAT/CIS... $\begin{array}{ll}\text { Mathematics/Computer } \\ \text { Science Elective* }\end{array}$
WRT201 English Composition II 3
BUS207 Principles of Business Management 3
...... Humanities Electives** $\frac{6}{18}$

## Third Semester

| WEX... | Dynamics of Health and |
| :---: | :---: |
|  | Fitness Experience** |
|  | Business Administration Elective ${ }^{* * *}$ |
| ...... | Humanities Electives** |
|  | Natural Sciences Elective** |
|  | Social Science Elective** |

## Fourth Semester

| $\ldots \ldots$. | Free Electives $\dagger$ | 3 |
| :--- | :--- | :---: |
| $\ldots \ldots$. | Humanities Elective | 3 |
| $\ldots \ldots$. | Natural Sciences Elective | $3 *$ |
| $\ldots \ldots$. | Social Science Elective | 4 |
|  |  | $\frac{3}{13}$ |

* General Education Elective in Mathematics/Computer Science - see page 63. Before selecting your Mathematics/Computer Science electives, check the requirements of the schools you are considering for transfer. If you are uncertain about where you plan to transfer, the following courses are transferable to business programs at a number of local colleges: MAT150, MAT155, MAT180, MAT223.
** General Education Elective - see page 63.
*** Students should take one of the following: BUS170, BUS205, BUS208, BUS209, BUS233, BUS234, BNF201, or INF101.
$\dagger$ INF101 is recommended.
Diversity Requirement Applies

BUSINESS ADMINISTRATION-MARKETING OPTION CODE AS.PS.BUS.MKTG

## First Semester

BUS101 Introduction to Business 3

WEX101 Dynamics of Health and Fitness 2
MAT/CIS... Mathematics/Computer
Science Elective* 3
SPE111 Speech Communication 3
WRT101 English Composition I 3
ACC110 Financial Accounting $\frac{3}{17}$

## Second Semester

| ACC210 | Managerial Accounting | 3 |
| :--- | :--- | :---: |
| MAT/CIS... | Mathematics/Computer <br> Science Elective* | 3 |
| WRT201 | English Composition II | 3 |
| BUS201 | Marketing Principles | 3 |
| $\ldots . .$. | Humanities Electives** | $\frac{6}{18}$ |

## Third Semester

WEX... Dynamics of Health and Fitness Experience** 1
Business Administration Elective***

3
..... Humanities Electives** 6
...... Natural Sciences Elective** Social Science Elective**

## Fourth Semester

|  | Free Electives $\dagger$ | 3 |
| :---: | :---: | :---: |
|  | Humanities Elective** | 3 |
|  | Natural Sciences Elective** | 4 |
|  | Social Science Elective** | 3 |

* General Education Elective in Mathematics/Computer Science - see page 63. Before selecting your Mathematics/Computer Science electives, check the requirements of the schools you are considering for transfer. If you are uncertain about where you plan to transfer, the following courses are transferable to business programs at a number of local colleges: MAT150, MAT155, MAT180, MAT223.
** General Education Elective - see page 63
*** Students should take one of the following: BUS202, BUS233, BUS234, BUS271, or INF101.
$\dagger$ INF101 is recommended.
Diversity Requirement Applies

EDUCATION OPTION
CODE AS.PS.EDUC

## First Semester

| WEX101 | Dynamics of Health and Fitness <br> MAT/CIS... <br> Mathematics/Computer | 2 |
| :--- | :--- | ---: |
|  | Science Elective* |  |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
| EDU101 | Introduction to Education | 3 |
| $\ldots . .$. | Social Science Elective* | 3 |
|  |  | $\frac{3}{17}$ |

Second Semester

| WRT201 | English Composition II | 3 |
| :--- | :--- | ---: |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| $\ldots . .$. | Humanities Electives* | 6 |
| SOC102 | Introduction to Human Services | $\frac{3}{15}$ |

Third Semester
EDU103 Principles and Practices in Education 3
PSY103 Educational Psychology 3
$\begin{array}{ll}\text { WEX... Dynamics of Health and } \\ & \text { Fitness Experience* }\end{array}$
..... Humanities Elective* 3
..... Natural Sciences Elective* 4
$\ldots$. Social Science Elective ${ }^{*} \ddagger \quad \frac{3}{17}$

## Fourth Semester

SOC103 Sociology of Family 3
..... Free Electives 3
...... Humanities Electives* 6
..... Natural Sciences Elective* 4

* General Education Elective - see page 63.
$\dagger$ PSY101 General Psychology is recommended.
$\ddagger$ SOC101 Sociology is recommended.
Diversity Requirement Applies


## EXERCISE SCIENCE OPTION <br> CODE AS.PS.EXER

## First Semester

| WRT101 | English Composition I | 3 |
| :--- | :--- | :---: |
| SPE111 | Speech Communication | 3 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| WEX159 | CPR and First Aid | 3 |
| WEX164 | Exercise Science | 3 |
| WEX101 | Dynamics of Health and Fitness | $\frac{2}{17}$ |

## Second Semester

| WRT201 | English Composition II | 3 |
| :--- | :--- | :---: |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| $\ldots .$. | Humanities Electives** | 6 |
| WEX182 | Fitness Measurement | 3 |
| WEX184 | Sports Medicine I - Theory and <br>  Practice |  |
|  |  | $\frac{3}{18}$ |

Third Semester

|  | Humanities Electives** | 6 |
| :---: | :---: | :---: |
|  | Natural Sciences Elective** | 4 |
|  | Social Science Elective** | 3 |
| WEX106 | Nutrition for Exercise | 3 |
| WEX... | Dynamics of Health and Fitness Experience** | 1 |
|  |  | 17 |
| Fourth Se | ster |  |
|  | Humanities Elective** | 3 |
| $\ldots$ | Natural Sciences Elective** | 4 |
|  | Social Science Elective** | 3 |
| WEX183 | Programs and Principles of Conditioning | 3 |
|  |  | 13 |

* General Education Elective in Mathematics/Computer Science - see page 63. Recommended: MAT130, MAT150, or MAT155
** General Education Elective - see page 63.
Diversity Requirement Applies


## JOURNALISM OPTION

CODE AS.PS.JOUR

| First Semester |  |  |
| :---: | :---: | :---: |
| COM101 | Mass Media of Communication | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
| SPE111 | Speech Communication | 3 |
| WRT101 | English Composition I | 3 |
|  | Social Science Elective* | 3 |
| ..... |  | 17 |
| Second Semester |  |  |
| COM206 | Writing for the Mass Media | 3 |
| WRT201 | English Composition II |  |
| WEX... | Dynamics of Health and |  |
|  | Fitness Experience* | 1 |
| MAT/CIS... | Mathematics/Computer |  |
|  | Science Elective* | 3 |
|  | Humanities Electives* | 6 |
| ..... |  | 16 |
| Third Semester |  |  |
| COM201 | Introduction to Journalism | 3 |
| INF141 | Web Publishing with HTML |  |
|  | or | 1 |
| INF162 | Introduction to Internet |  |
| ... | Humanities Elective* $\dagger$ | 3 |
| ..... | Natural Sciences Elective* | 4 |
| ... | Social Science Elective* $\ddagger$ | 3 |
|  |  | 14 |
| Fourth Semester |  |  |
| COM210 | Public Relations | 3 |
| COM461 | Co-op Work Exp (Media) | 1 |
| ..... | Humanities Electives* | 6 |
| ..... | Natural Sciences Elective* | 4 |
| ..... | Free Electives* | 3 |
|  |  | 17 |
| * General Education Elective - see page 63. <br> $\dagger$ PHR102 Contemporary Moral Issues is recommended. <br> $\ddagger$ POL101 American Government or POL104 State and Local Government is recommended |  |  |
| Diversity Requirement Applies |  |  |

SOCIAL WORK OPTION
CODE AS.PS.SOC.WK
First Semester
WEX101 Dynamics of Health \& Fitness 2
MAT/CIS... $\begin{aligned} & \text { Mathematics/Computer } \\ & \text { Science Elective*t }\end{aligned}$
SPE111 Speech Communication 3
WRT101 English Composition I 3
.... Social Science Elective $\ddagger \square 3$
SOC101 Sociology $\frac{3}{17}$

## Second Semester

WEX... Dynamics of Health \& Fitness Exp.* 1
WRT201 English Composition II 3
MAT/CIS... $\begin{aligned} & \text { Mathematics/Computer } \\ & \text { Science Elective*t }\end{aligned}$
$\begin{array}{ll}\text { Science Elective*t } & 3 \\ \text { Humanities Electives* } & 6\end{array}$
SOC102 Introduction to Human
Services

$$
\frac{3}{16}
$$

Third Semester
...... Natural Science Elective* 4
...... Social Science Elective* 3
...... Humanities Elective* ${ }^{*}$
SOC103 Sociology of the Family 3
SOC113 Social Problems $\frac{3}{16}$
Fourth Semester

| $\ldots \ldots .$. | Natural Science Elective* <br> Humanities Electives** | 4 |
| :--- | :--- | :---: |
| $\ldots \ldots$. | 6 |  |
| SOC222 | Ethnic \& Minority Group Relations | 3 |
| or |  |  |
| SOC121 | Changing Roles of Women <br> SOC463 | Sociology/Social Work <br> Co-op Work Experience |
|  |  | 3 |

* General Education Elective - see page 63.
† Recommended: MAT150 Elementary Statistics.
$\ddagger$ Recommended: PSY101 General Psychology.
Recommended: ECO101 Macroeconomics.
$\bullet$ Recommended: LAN113 Spanish I, LAN230 Spanish II, or LAN231 Intermediate Spanish I.
Diversity Requirement Applies


## ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREES

Associate in Applied Science (AAS) degree programs are designed to prepare students for employment in their chosen fields of endeavor. Note: Under a variety of circumstances, students can transfer from these programs to four-year colleges and universities.

Career programs leading to the AAS degree are organized according to the following categories: Allied Health, Art, Business Administration, Business Technologies, Human Services, Industrial and Design Technologies, Nursing, and Science Technologies.

To receive the Associate in Applied Science (AAS) degree, a student must earn a minimum of 64 degree credits and complete all courses and specific requirements listed within the student's chosen curriculum. Each AAS curriculum must contain the following general education requirements:

| Area of Study | Credits | Course |
| :---: | :---: | :---: |
| Communications | 6 | WRT101 English Composition I (3 cr.) WRT201 English Composition II (3 cr.) |
| Humanities | 6 | Two general education courses ( 6 cr .) to be selected from the following fields: <br> Arts and Media (Art[ART], Mass Communication [COM], Music [MUS], Thearre Arts [THR]) <br> History (HIS) <br> Literature (LIT) <br> Philosophy and Religion (PHR) <br> World Languages and Cultures (LAN) |
| Social Sciences | 3 | One general education course ( 3 cr .) to be selected from the following fields: <br> Economics (ECO) <br> Geography (GEO) <br> Political Science (POL) <br> Psychology (PSY) <br> Sociology (SOC) and Anthropology (ANT) |
| Natural Sciences or Mathematics/ Computer Science | 3-4 | One general education course ( $3-4 \mathrm{cr}$.) to be selected from the following fields: <br> Mathematics/Computer Science (MAT/CIS) <br> Biology (BIO) <br> Chemistry (CHM) <br> Physics (PHY) or Earth Science (ESC) |
| Wellness and Exercise Science | 3 | WEX101 Dynamics of Health and Fitness (2 cr.) WEX... Dynamics of Health and Fitness Experience (1 cr.) * |

Restricted Courses: Minimum of $42-43 \mathrm{cr}$.**
Diversity Course Recommendation: It is recommended that, in completing the BCC General Education Program, a student take and pass at least one course in gender studies, non-Western history or thought, and/or cultural diversity.***

[^21]ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN ALLIED HEALTH


* General Education Elective - see page 63.


## DIAGNOSTIC MEDICAL SONOGRAPHY

 CODE AAS.AH.DMS
## First Semester

BIO109 Anatomy \& Physiology I 4
DMS115 Cross Sectional Anatomy 4
DMS113 Abdominal Sonography I 3
DMS101 Ultrasound Physics \& Inst. I 2
DMS102 Clinical Medicine \& Patient Care 2
WRT101 English Composition I $\frac{3}{18}$

## Second Semester

BIO209 Anatomy \& Physiology II 4
DMS218 Ultrasound Clinic I (160 hours) 1

DMS201 Ultrasound Physics \& Inst. II 2
DMS205 OB/GYN Sonography 3
DMS204 Introduction to Medical Imaging 1
WRT201 English Composition II 3
DMS213 Abdominal Sonography II $\frac{3}{17}$

Summer Session I
DMS219 Ultrasound Clinic II-Abdomen (240 hours) 2
Summer Session II
$\ldots .$. Humanities Elective* $\quad \frac{3}{5}$

## Third Semester

| WEX101 | Dynamics of Health \& Fitness | 2 |
| :--- | :--- | :--- |
| DMS226 | OB Sonography II | 3 |
| DMS229 | Vascular Imaging | 2 |
| DMS220 | Ultrasound Clinic III-OB/GYN (240 hours) | 2 |
| DMS214 | Echocardiography | 3 |
| DMS223 | Ultrasound Seminar I | $\frac{1}{13}$ |

## Fourth Semester

| DMS224 | Ultrasound Seminar II | 1 |
| :--- | :--- | :--- |
| DMS221 | Ultrasound Clinic IV-Vascular (200 hours) | 1 |
| $\ldots . .$. | Humanities Elective* | 3 |
| DMS227 | Echocardiography II | 3 |
| DMS228 | Advanced Ultrasound Practices | 1 |
| $\ldots .$. | Social Science Elective* | 3 |
| WEX... | Dynamics of Health \& Fitness Exp.* | $\frac{1}{13}$ |

Summer Session I
$\begin{array}{lll}\text { DMS222 } & \text { Ultrasound Clinic V-Cardiac (240 hours) } & 2 \\ \text { DMS225 } & \text { Ultrasound Seminar III } & \frac{1}{3}\end{array}$

* General Education Elective - see page 63.

Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## HEALTH SCIENCE <br> CODE AAS.H.HLTH.SCI

This curriculum is designed for graduates of one-year, post-secondary programs who hold current certification or licensure in an Allied Health discipline, such as dental assisting, diagnostic medical sonography, licensed practical nursing, medical office assisting, radiography, respiratory technology, and surgical technology. Certification or licensure must be recognized by the accrediting agencies of the BCC Allied Health Programs. Thirty credits for certification/licensure will be granted after completion of the degree requirements resulting in 66 credits and an AAS degree in Health Science. It is important to note that this curriculum will not confer eligibility for advanced certification nor advanced licensure within the Allied Health disciplines.

## First Semester

| WRT101 | English Composition I | 3 |
| :---: | :---: | :---: |
| BIO109 | Anatomy \& Physiology I | 4 |
|  | Humanities Elective* | 3 |
| MOA140 | Medical Terminology | 3 |
| WEX101 | Dynamic of Health \& Fitness | 2 |
| SOC101 | Sociology | 3 |
| Second Semester |  | 18 |
| WRT201 | English Composition II | 3 |
| BIO209 | Anatomy and Physiology II | 4 |
|  | Humanities Elective* | 3 |
| CHM100 | Introduction to Chemistry** | 4 |
| WEX... | Dynamics of Health \& Fitness | 1 |
|  | Experience* |  |
| PSY101 | General Psychology | 3 |

[^22]Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

MEDICAL LABORATORY TECHNOLOGY CODE AAS.AH.MLT

## First Semester*

| BIO109 | Anatomy \& Physiology | 4 |
| :--- | :--- | :---: |
| CHM112 | College Chemistry | 4 |
| MLT101 | Introduction to Lab Medicine | 1 |
| MLT102 | Hematology \& Urinalysis | 4 |
| WRT101 | English Composition I | 3 |
| MAT... | Mathematics Elective** | 3 |
|  |  | 19 |

Second Semester

| BIO209 | Anatomy \& Physiology II | 4 |
| :--- | :--- | :---: |
| CHM212 | Organic and Biochemistry | 4 |
| MLT201 | Clinical Microbiology I | 4 |
| MLT203 | Clinical Chemistry | 4 |
| WRT201 | English Composition II | 3 |
|  |  | 19 |

## Summer Session I

MLT206 Phlebotomy 1
MLT263 Medical Lab Externship I 1 ( 5 weeks @ $40 \mathrm{hrs} / \mathrm{wk}=200 \mathrm{hrs}$ ) $\quad \frac{}{2}$

Summer Session II
$\ldots . . \quad$ Humanities Elective ${ }^{* * *} \quad \frac{3}{6}$

Third Semester

| MLT202 | Clinical Microbiology II | 4 |
| :--- | :--- | :--- |
| MLT204 | Immunohematology \& Hemostasis | 4 |
| MLT218 | Immunology | 3 |
| MLT264 | Medical Laboratory Externship II | 1 |
| WEX101 | (15 weeks @ 16 hrs/wk = 240 hrs) <br> Dynamics of Health and Fitness | $\frac{2}{14}$ |

Fourth Semester

| MLT207 | Pathology \& Clinical Correlations | 3 |
| :--- | :--- | :---: |
| MLT208 | Laboratory Information Systems | 1 |
| MLT266 | Medical Laboratory Externship III | 1 |
|  | (15 weeks @ 16 hrs/wk = 240 hrs) |  |
| $\ldots . .$. | Humanities Elective | 3 |
| $\ldots .$. | Social Science Elective | 3 |
| WEX... | Dynamics of Health \& Fitness | $\frac{1}{12}$ |

[^23]Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

ASSOCIATE IN APPLIED SCIENCE (AAS) IN ALLIED HEALTH

## MEDICAL OFFICE ASSISTANT <br> CODE AAS.AH.MOA

## First Semester

| BIO109 | Anatomy \& Physiology I | 4 |
| :--- | :--- | :--- |
| WEX101 | Dynamics of Health \& |  |
|  | Fitness | 2 |
| MOA140 | Medical Terminology | 3 |
| MOA141 | Introduction to Medical Assisting | 3 |
| INF100 | Keyboarding I | 3 |
| WRT101 | English Composition I | $\frac{3}{18}$ |


| Second Semester |  |  |
| :---: | :---: | :---: |
| BIO209 | Anatomy \& Physiology II | 4 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience* | 1 |
| MOA240 | Clinical Office Practice | 4 |
| INF213 | Microsoft Word for Windows |  |
|  | Comprehensive | 3 |
| WRT201 | English Composition II | 3 |
|  | Humanities Elective* | 3 |
|  |  | 18 |
| Third Semester |  |  |
| WEX159 | CPR \& Emergency |  |
|  | First Aid | 3 |
| M0A218 | Medical Economics | 2 |
| MOA241 | Clinical Lab Technology | 4 |
| M0A243 | Medical Office Assistant Externship I ( $8-12$ hours per week) | 1 |
| MOA203 | Medical Assistant Administrative |  |
|  | Procedures I | 3 |
|  | Humanities Elective* | 3 |



[^24]Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## PHYSICAL THERAPIST ASSISTANT

CODE AAS.AH.PTA
First Semester
BIO109 Anatomy and Physiology I 4
PHY185 Introduction to Physics 4
PTA101 $\begin{aligned} & \text { Introduction to Physical Therapist } \\ & \text { Assistant }\end{aligned}$
PTA122 Physical Therapist Assistant Procedures I

## Second Semester

BIO209 Anatomy and Physiology II 4
WRT101 English Composition I 3
WEX101 Dynamics of Health \& Fitness 2
PTA201 Kinesiology 4
PTA222 Physical Therapist Assistant Procedures II

## Summer Session

PTA245 Disease and Impairment 3
Third Semester
...... Humanities Elective* 3
WEX... $\quad \begin{aligned} & \text { Dynamics of Health \& Fitness } \\ & \text { Experience* }\end{aligned}$
WRT201 English Composition II 3
PTA223 Physical Therapist Assistant Procedures III 6
PTA231 Clinical Education I 2
(16 lab x 14 wks)
PTA241 Clinical Seminar I $\frac{1}{16}$
Fourth Semester

|  | Humanities Elective* | 3 |
| :---: | :---: | :---: |
| PSY101 | General Psychology | 3 |
| PTA224 | Physical Therapist Assistant |  |
|  | Procedures IV | 5 |
| PTA232 | Clinical Education II | 2 |
|  | ( 24 lab x 12 wks ) |  |
| PTA242 | Clinical Seminar II | 1 |
|  |  | 14 |
| Summer Session |  |  |
| PTA233 | Clinical Education III | 2 |
|  | (40 hrs/wk x 6 wks) |  |
| PTA243 | Clinical Seminar III | 1 |
|  |  | 3 |

* General Education Elective - see page 63.

Students in the PTA Program are required to achieve a grade of "C" or better in Science courses and PTA courses.

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.


## First Semester

| BIO109 | Anatomy \& Physiology I | 4 |
| :--- | :--- | :---: |
| RAD180 | Introduction to Radiography | 2 |
| RAD181 | Radiography I | 5 |
| RAD182 | Radiography Clinical I | 1 |
| WRT101 | English Composition I | $\frac{3}{15}$ |
|  |  |  |
| Second |  | Semester |
| BIO209 | Anatomy \& Physiology II | 4 |
| RAD276 | Radiographic Health \& |  |
|  | Protection | 3 |
| RAD281 | Radiography II | 4 |
| RAD282 | Radiography Clinical II | 1 |
| WRT201 | English Composition II | $\frac{3}{15}$ |
|  |  |  |

## Summer Session I

RAD283 Intermediate Radiography Clinical, 12 weeks at 32 hours per week (384 hours) $=2$ credits.

## Third Semester

| WEX101 | Dynamics of Health \& |  |
| :---: | :---: | :---: |
|  | Fitness | 2 |
| RAD183 | Radiographic Pathology | 2 |
| RAD184 | Special Procedures \& Imaging |  |
|  | Modalities I | 3 |
| RAD280 | Image Production \& Evaluation | 3 |
| RAD285 | Radiography III | 4 |
| RAD286 | Radiologic Clinical III | 1 |
|  | Humanities Elective* | 3 |
|  |  | 18 |
| Fourth Semester |  |  |
| WEX... | Dynamics of Health \& Experience* | 1 |
| RAD275 | Special Procedures \& Imaging |  |
|  | Modalities II | 2 |
| RAD288 | Radiography IV | 4 |
| RAD289 | Radiologic Clinical IV | 2 |
|  | Humanities Elective* | 3 |
| $\ldots$ | Social Science Elective* | 3 |
|  |  | 15 |

Summer Session II

RAD290 | Senior Student Seminar, 15 weeks |
| :--- |
| at 32 hours per week |
| $(480$ hours $)=3$ credits |

* General Education Elective - see page 63.

1,834 clinical hours are required for certification eligibility.
Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

RESPIRATORY THERAPY CODE AAS.AH.RESP

## First Semester

| BIO109 | Anatomy \& Physiology I | 4 |
| :--- | :--- | :---: |
| MAT/CIS... | Mathematics/Computer Science <br>  <br> Elective* $\dagger$ | $3-4$ |
| RSP119 | Introduction to Respiratory Therapy | 4 |
| RSP121 | Clinical Externship I | 2 |
| RSP200 | Pharmacology for Respiratory <br> Therapists | 2 |
| WRT101 | English Composition I | $\frac{3}{18-19}$ |

Second Semester
BIO209 Anatomy \& Physiology II
CHM112 College Chemistry 4
$\begin{array}{ll}\text { RSP222 } & \text { Cardiopulmonary Anatomy } \\ & \text { \& Physiology }\end{array}$
RSP225 Clinical Externship II 2

WEX101 Dynamics of Health \& Fitness 2
WRT201 English Composition II $\frac{3}{19}$

| Summer Session |  |
| :--- | :--- |
| (Based on 6 weeks) <br> RSP226 Clinical Externship III |  |
|  | 40 hrs/wk $=240 \mathrm{hrs}$ |

Third Semester
BIO104 Microbiology 4
$\begin{array}{lll}\text { RSP240 } & \text { Diagnostic Monitoring } \\ & \text { \& Patient Assessment }\end{array}$
RSP229 Mechanical Ventilation 4
RSP122 Clinical Medicine 3
RSP231 Clinical Externship IV 2
WEX... Dynamics of Health and Fitness
Experience* $\frac{1}{18}$

Fourth Semester
RSP227 Management in Health Care 2
RSP241 Pediatric/Neonatal Respiratory Care 3
RSP235 Clinical Externship V 2
..... Humanities Electives* 6
$\ldots . . \quad$ Social Science Elective ${ }^{*} \quad \frac{3}{16}$

[^25]Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

| VASCULAR TECHNOLOGY |
| :--- | :--- | :--- |
| CODE AAS.AH.VAS |

## VETERINARY TECHNOLOGY CODE AAS.H.VET

## First Semester

| WRT101 | English Composition I | 3 |
| :--- | :--- | :--- |
| VET102 | Introduction to Veterinary Technology | 1 |
| VET103 | Veterinary Medical Technology | 1 |
| BIO115 | Vertebrate Anatomy \& Physiology I | 4 |
| CHM1122 | College Chemistry | 4 |
| WEX101 | Dynamics of Health and Fitness | $\frac{2}{15}$ |

## Second Semester

WRT201 English Composition II 3
VET110 Nutrition \& Principles of Feeding 2
VET112 Veterinary Pharmacology 3
BIO215 Vertebrate Anatomy \& Physiology II 4
VET104 Research Animal Technology $\frac{3}{15}$
Summer
BIO104 Microbiology 4
Humanities Elective

## Third Semester

VET203 Veterinary Nursing I 3
VET207 Diagnostic Imaging 3
VET205 Clinical Laboratory Procedures I 3
VET216 Veterinary Office Management 3
...... Humanities Elective*
Fourth Semester
VET214 Veterinary Nursing II 3
VET219 Surgical Assistance \& Anesthesia 3
VET217 Clinical Laboratory Procedures II 3
...... Social Science Elective* 3
WEX... Dynamics of Health and Fitness Experience*

Summer
VET218
Farm Animal Nursing
VET220 Veterinary Technology Externship I 1
VET221 Veterinary Technology Externship II $\frac{1}{5}$
*General Education Elective - see page 63.
Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test. Note: Students who wish to pursue a career in the pharmaceutical or biomedical industries may wish to take VET290 (Applied Transgenics and Microinjection Techniques) when the course is offered. Students who fulfill the requirements of this course will receive a certificate of completion.

## CAREER PROGRAMS

ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN ART

| COMPUTER ANIMATION CODE AAS.IDT.ANIM |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| ART122 | Two-Dimensional Design | 3 |
| ART126 | Introduction to Computer Graphics* | 3 |
| ART124 | Drawing Fundamentals |  |
|  | or | 3 |
| ART123 | Life Drawing I |  |
| ART105 | History of Animation | 3 |
| WRT101 | English Composition I | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| Second Semester |  |  |
| ART226 | Letterform and Type | 3 |
| ART292 | Computer 3D Animation I** | 3 |
| ART289 | Computer 2D Illustration* | 3 |
| ART297 | Computer Imaging* | 3 |
| WRT201 | English Composition II | 3 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience*** | 1 |
| Third Semester |  |  |
| ART290 | Computer 2D Animation I** | 3 |
| ART293 | Computer 3D Animation II** | 3 |
| ART260 | Graphic Design I | 3 |
| ...... | Humanities Elective ${ }^{* * *} \dagger$ | 3 |
|  | Natural Sciences*** |  |
|  | or | 3-4 |
| MAT/CIS... | Mathematics/Computer Science Elective*** |  |
|  |  | $\overline{15-16}$ |
| Fourth Semester |  |  |
| ART298 | Interactive Multimedia* | 3 |
| ART291 | Computer 2D Animation II** | 3 |
| ART271 | Portfolio Presentation | 2 |
| ART... | Studio Art Elective $\ddagger$ |  |
|  | or | 2-3 |
| ART462/463 | Co-op Work Experience |  |
|  | Social Science Elective*** | 3 |
|  | Humanities Elective*** | 3 |
|  |  | 16-17 |

[^26]Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## GRAPHIC DESIGN/COMPUTER GRAPHICS CODE AAS.IDT.GRPH

## First Semester

ART122 Two-Dimensional Design 3
ART126 Introduction to Computer Graphics* 3
ART124 Drawing Fundamentals or3

ART123 Life Drawing I
WRT101 English Composition I 3
...... Humanities Elective** $\frac{3}{15}$

## Second Semester

ART226 Letterform and Type 3
ART... Studio Art Elective*** 3
ART289 Computer 2D Illustration* 3
ART297 Computer Imaging* 3
WRT201 English Composition II 3
WEX101 Dynamics of Health \& Fitness $\frac{2}{17}$
Third Semester
ART287 Computer Layout I* 3
ART260 Graphic Design I 3
ART... Studio Art Elective*** 3
..... Humanities Elective ${ }^{* *} \dagger$ 3
Natural Sciences**
or
MAT/CIS... Mathematics/Computer Science
Elective**
WEX... Dynamics of Health \&
Fitness Experience** 1

## Fourth Semester

ART261 Graphic Design II 3
ART271 Portfolio Presentation 2
ART288 Computer Layout II* 3
ART... Studio Art Elective*** 3
ART... Studio Art Elective ${ }^{* * *}$ or 2-3
ART462/463 Co-op Work Experience
...... Social Science Elective**
3
$\overline{16-17}$

* Course uses Macintosh computers
** General Education Elective - see page 63.
*** "Studio Art" Electives do not include Art Appreciation and Art History. Recommended in 2nd semester: ART181 Photo I
Recommended in 3rd: ART259 Computer Graphics for the Web Developer Recommended in 4th: ART290 and/or ART292
$\dagger$ Recommended: ART101 Art Appreciation, ART102 Art History Through the Renaissance, ART103 Art History Since the Renaissance, or MUS110 Music, Art, and Drama

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

CAREER PROGRAMS

## ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN BUSINESS ADMINISTRATION

| ACCOUNTING CODE AAS.BUS.ACCT |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| ACC101 | Accounting I | 3 |
| BUS101 | Introduction to Business | 3 |
| WRT101 | English Composition I | 3 |
| ACC120 | Computerized Accounting | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| INF... | Information Technology Elective* | 3 |
|  |  | 17 |
| Second Semester |  |  |
| WEX... | Accounting II | 3 |
|  | Dynamics of Health \& |  |
|  | Fitness Experience** | 1 |
| WRT201 | English Composition II | 3 |
|  | Social Science Elective** $\dagger$ | 3 |
| BUS233 | Business Law I | 3 |
|  | Humanities Elective** | 3 |
|  |  | 16 |
| Third Semester |  |  |
| ACC202 | Intermediate Accounting I | 3 |
| INF124 | Microcomputer Spreadsheet - Excel | 1 |
| BNF201 | Principles of Finance*** | 3 |
| SPE111 | Speech Communication | 3 |
|  | Natural Sciences ** |  |
|  |  | 3-4 |
| MAT/CIS... | Mathematics/Computer Science Elective** |  |
| BUS... | Business Elective $\ddagger$ | 3 |
|  |  | $\overline{\text { 16-17 }}$ |
| Fourth Semester |  |  |
| ACC. | Restricted Accounting Elective * | 3 |
| ACC204 | Cost Accounting I | 3 |
|  | Humanities Elective** | 3 |
| BUS... | Business Elective $\ddagger$ | 3 |
| ACC462 | Co-op Work Exp (Accounting) | 2 |
| INF228 | Advanced Excel | 1 |
|  |  | 15 |

[^27]Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## BANKING, CREDIT AND FINANCE <br> CODE AAS.BUS.BANK

## First Semester

ACC101 Accounting I 3
BUS101 Introduction to Business 3
BUS103 Business Mathematics 3
BNF101 Principles of Bank Operations* 3
WEX101 Dynamics of Health \& Fitness 2
WRT101 English Composition I $\frac{3}{17}$
Second Semester
ACC201 Accounting II 3
BNF204 Trust Functions \& Services* 3
WEX... $\begin{aligned} & \text { Dynamics of Health \& } \\ & \text { Fitness Experience** }\end{aligned}$
SPE111 Speech Communication 3
WRT201 English Composition II 3
...... Humanities Elective** $\quad \frac{3}{16}$

## Third Semester

BUS233 Business Law I 3
BNF201 Principles of Finance* 3
BNF205 Credit \& Collection I* 3
ECO101 Macroeconomics 3
Natural Sciences**
or
3-4
MAT/CIS... Mathematics/Computer Science Elective**

$$
\overline{15-16}
$$

Fourth Semester

| BUS234 | Business Law II | 3 |
| :---: | :---: | :---: |
| BNF206 | Credit \& Collection II* | 3 |
| INF101 | Introduction to Information |  |
|  | Technology | 3 |
| ...... | Free Electives | 2-3 |
| $\ldots$ | Humanities Elective** | 3 |
|  | Social Science Elective** | 3 |

* Specialized course that may be offered only in the evening.
**General Education Elective - see page 63.
$\dagger$ ECO201 Microeconomics is recommended.
Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.


## ASSOCIATE IN APPLIED SCIENCE (AAS) IN BUSINESS ADIVINISTRATION

| LEGAL NURSE CONSULTANT CODE AAS.BUS.LGL.NUR |  |  | PARALEGAL STUDIES CODE AAS.BUS.PARLGL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| First Semester |  |  | First Semester |  |  |
| WEX101 | Dynamics of Health \& Fitness | 2 | WEX101 | Dynamics of Health \& Fitness | 2 |
| LGL101 | Fundamentals of Law I | 3 | LGL101 | Fundamentals of Law | 3 |
| LGL103 | Legal Research \& Writing | 3 | LGL103 | Legal Research and Writing | 3 |
| WRT101 | English Composition I | 3 | WRT101 | English Composition I | 3 |
| LGN105 | Principles of Legal Nurse Consulting | 3 | REA101 | Principles of Real Estate I | 3 |
| LGL165 | Elder Law* | 1 | ..... | Social Science Elective* | 3 |
| LGL237 | Rules of Evidence* | 1 |  |  | 17 |
|  |  | 16 |  |  |  |
|  |  |  | Second Semester |  |  |
| Second Semester |  |  |  | Humanities Elective* $\dagger$ | 3 |
|  | Humanities Elective** | 3 | LGL200 | Business Communications for Paralegals $\ddagger$ | 3 |
| WRT201 | English Composition II | 3 | LGL203 | Paralegalism and Legal Procedure $\ddagger$ | 3 |
| LGL220 | Computer Assisted Legal Research | 3 | LGL220 | Computer Assisted Legal Research | 3 |
| LGL203 | Paralegalism \& Legal Procedure* | 3 | WRT201 | English Composition II | 3 |
| LGL201 | Health Law* | 3 |  |  | 15 |
| LGL200 | Business Communications for Paralegals* | 3 |  |  | 15 |
|  |  | 18 | Third Semester |  |  |
|  |  |  |  | Humanities Elective** | 3 |
| Third Semester |  |  | LGL202 | New Jersey and Federal Courts $\ddagger$ | 3 |
| LGL234 | Personal Injury and Product Liability* | 3 | LGL205 | Mechanics of Property Transactions $\ddagger$ | 3 |
| LGN204 | Medical Legal Ethics, Records and Writing* | 3 | LGL208 | Mechanics of Family Law $\ddagger$ | 3 |
| LGL202 | New Jersey and Federal Courts* | 3 | LGL207 | Wills and Administration $\ddagger$ | 3 |
|  | Humanities Elective** | 3 |  | Natural Science Elective* |  |
|  | Natural Sciences Elective** |  |  | or | 3-4 |
|  |  | 3-4 | MAT/CIS... | Mathematics/Computer Science |  |
| MAT/CIS... | Mathematics/Computer Science Elective** |  | Elective* |  | 18-19 |
|  |  | 15-16 |  |  | 18-19 |
|  |  |  | Fourth Semester |  |  |
| Fourth Semester |  |  | LGL234 | Personal Injury and Product Liability $\ddagger$ | 3 |
| LGN210 | Advanced Medical Legal Research* | 3 | ACC207 | Legal Accounting $\ddagger$ | 3 |
| LGN462 | Legal Nurse Internship* | 2 | SPE111 | Speech Communication | 3 |
| SPE111 | Speech Communication | 3 | LGL206 | Mechanics of Commercial Transactions $\ddagger$ | 3 |
| LGL207 | Wills and Administration* | 3 | LGL462 | Co-op Work Experience (Legal Assistant) | 2 |
|  | Social Sciences Elective** $\dagger$ | 3 | ...... | Dynamics of Health \& Fitness Experience* |  |
| WEX... | Dynamics of Health \& Fitness Experience** | 1 |  |  | 15 |
|  |  | 15 |  |  |  |
|  |  |  | * General Ed | cation Elective - see page 63. |  |
| Required for Admission: 2,000 hours of clinical experience plus a current New Jersey RN License. <br> * Specialized course which may be offered only in the evening. <br> ** General Education Elective - see page 63. <br> † PSY101 General Psychology recommended |  |  | $\dagger$ Select a General Education Elective: LIT202 American Literature 1880 to the Present recommended. <br> $\ddagger$ Specialized course which may be offered only in the evening. |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  | - Select a General Education Elective: PHR102 Contemporary Moral Issues recommended. |  |  |
| Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test. |  |  | Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Placement Test. |  |  |

## ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN BUSINESS TECHNOLOGIES

## HOTEL/RESTAURANT/HOSPITALITY <br> CODE AAS.BT.HR.CATER

## CATERING/BANQUET MANAGEMENT OPTION

## First Semester

BUS101 Introduction to Business 3
BUS103 Business Mathematics 3
HRM101 Intro to Hospitality Management 3
HRM102 Food Protection 3
HRM106 Menu Planning \& Nutrition 1
WRT101 English Composition I $\frac{3}{16}$

## Second Semester

ACC206 Hospitality Accounting 3
WEX101 Dynamics of Health \& Fitness 2
HRM103 Professional Food Preparation Techniques 3
HRM205 Restaurant Service Management 3
WRT201 English Composition II 3
HRM462 Co-op Work Experience (Hotel/Restaurant/Hospitality)

$$
\frac{2}{16}
$$

## Third Semester

| WEX... | Dynamics of Health \& Fitness |
| :--- | :--- |
|  | Experience $^{*}$ |

HRM214 Banquet/Catering Management 2
HRM202 Quantity Food Production Service** 3
HRM203 Beverage Management 2
HRM204 Food Purchasing 2
...... Humanities Elective* 3
$\ldots . . \quad$ Social Science Elective* $\quad \frac{3}{16}$

Fourth Semester
HRM213 Classical Garde-Manger** 3
HRM201 Food \& Beverage Cost Control 1
HRM206 Commercial Restaurant Operation*** 3
HRM207 Hotel Sales \& Convention Planning 1
HRM110 Introduction to Baking 3
...... Natural Sciences Elective*
or 3-4
MAT/CIS... Mathematics/Computer Science Elective* Humanities Elective*

[^28]Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test. Students who enter this program in the Spring should reverse the THIRD and FOURTH semester, that is, take the FOURTH semester before the THIRD semester.

## HOTEL/RESTAURANT/HOSPITALITY <br> CODE AAS.BT.HR.HOSP <br> HOSPITALITY MANAGEMENT OPTION

## First Semester

BUS101 Introduction to Business 3
BUS103 Business Mathematics 3
HRM101 Introduction to Hospitality Management 3
HRM102 Food Protection 3
HRM106 Menu Planning \& Nutrition 1
WRT101 English Composition I 3

## Second Semester

ACC206 Hospitality Accounting 3
WEX101 Dynamics of Health \& Fitness 2
$\begin{array}{ll}\text { HRM103 } & \text { Professional Food Preparation } \\ & \text { Techniques }\end{array}$
HRM205 Restaurant Service Management 3
WRT201 English Composition II 3
HRM462 Co-op Work Exp (H/R/H) $\frac{2}{16}$

## Third Semester

WEX... Dynamics of Health \& Fitness Experience* 1
HRM104 Front Office Procedures 2
HRM202 Quantity Food Production Service** 3
HRM203 Beverage Management 2
HRM204 Food Purchasing 2
..... Humanities Elective* 3
$\ldots$ Social Science Elective* 3

## Fourth Semester

BUS233 Business Law I 3
HRM201 Food and Beverage Cost Control 1
$\begin{array}{ll}\text { HRM206 } & \begin{array}{l}\text { Commercial Restaurant } \\ \text { Operation*** }\end{array} \\ & \end{array}$
HRM207 Hotel Sales \& Convention Planning 1
HRM... Elective 3
...... $\quad$ Natural Sciences Elective*
MAT/CIS... Mathematics/Computer Science Elective*
..... Humanities Elective* $\frac{3}{17-18}$

[^29]Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test. Students who enter this program in the Spring should reverse the THIRD and FOURTH semester, that is, take the FOURTH semester before the THIRD semester.

## First Semester

INF101 Introduction to Information Technology 3
INF150 Business Programming Logic 3
BUS101 Introduction to Business 3
WEX101 Dynamics of Health and Fitness 2
WRT101 English Composition I 3
INF... Programming Language Fundamentals 3

Second Semester

| INF... | Advanced Programming Languages | 3 |
| :--- | :--- | :--- |
| INF114 | Microsoft Office | 3 |
| INF160 | Networking Technologies and |  |
|  | $\quad$ Data Communications | 3 |
| INF161 | Internet Research and Data Handling | 1 |
| WRT201 | English Composition II | 3 |
| WEX... | Dynamics of Health \& Fitness Experience* | 1 |
| $\ldots .$. | Social Sciences Elective* | $\frac{3}{17}$ |

Third Semester
ACC101 Accounting I 3
INF208 Systems Analysis and Design 3
INF217 Database for Business Applications 3
INF228 Excel for Problem Solving 1
INF253 Technical Communications 3
..... Humanities Elective* 3

Fourth Semester
ACC201 $\begin{aligned} & \text { Accounting II } \\ & \text { or }\end{aligned}$
BUS271 E-Commerce
INF239 Applications Development 3
INF... Restricted INF Elective 3
...... Natural Science Elective* or 3-4
MAT/CIS... Mathematics/Computer Science Elective* ...... Humanities Elective*

$$
\frac{3}{15-16}
$$

*General Education Elective - see page 63.
Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

Programming Language Electives: Fundamentals INF145 Introduction to Visual Basic for Business
INF152 C/C++ Programming for Business
INF153 Java for Business Applications
INF242 RPG/400 Programming
Programming Language Electives: Advanced (Part 2 of continuing sequence)
INF224 Advanced C/C++ Programming for Business
INF243 Advanced RPG/400 Programming
INF246 Advanced Visual Basic for Business
INF268 Advanced Java for Business Applications

## Restricted INF Electives

Programming Language courses cannot duplicate as Restricted INF Electives when selected as Programming
Language Electives
INF145 Introduction to Visual Basic for Business
INF146 Web Development Using HTML
INF152 C/C++ Programming for Business
INF153 Java for Business Applications
INF224 Advanced C/C++ Programming for Business
INF240 Client-side Scripting Using JavaScript
INF246 Advanced Visual Basic for Business
INF249 Visual C++ for Windows with MFC
INF263 Server Side Internet Programming

## Mathematics or Natural Science Elective

One of the following mathematics electives is strongly recommended.

MAT150 Elementary Statistics
MAT180 Precalculus: College Alg and Trig
MAT223 Calculus for Managerial and Soc Sciences
MAT280 Calculus I

NETWORKING ADMINISTRATION CODE AAS.BT.NET.ADM

## First Semester

| INF101 | Introduction to Information Technology | 3 |
| :--- | :--- | :--- |
| BUS101 | Introduction to Business | 3 |
| INF163 | Internet Concepts and Applications | 3 |
| INF160 | Networking Technologies and |  |
|  | Data Communications | 3 |
| WRT101 | English Composition I | $\frac{3}{15}$ |

## Second Semester

| INF108 | PC Upgrade, Maintenance and Diagnosis | 3 |
| :--- | :--- | :--- |
| INF114 | Microsoft Office | 3 |
| INF232 | Windows Client | 3 |
| WRT201 | English Composition II | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| INF267 | Network Security | $\frac{3}{17}$ |


| Third Semester |  |  |
| :--- | :--- | :--- |
| INF228 | Excel for Problem Solving | 1 |
| INF252 | Windows Server | 3 |
| INF253 | Technical Communications | 3 |
| INF254 | UNIX for the Network Administrator | 3 |
| WEX... | Dynamics of Health \& Fitness Experience* | 1 |
| $\ldots \ldots$ | Social Sciences Elective* | 3 |
| $\ldots \ldots$ | Humanities Elective* | $\frac{3}{7}$ |


| Fourth Semester |  |  |
| :---: | :---: | :---: |
| INF256 | Topics in Networking | 3 |
| INF257 | Network Troubleshooting | 3 |
| INF258 | TCP/IP | 3 |
| ...... | Humanities Elective* | 3 |
| $\ldots .$. | Natural Sciences Elective* |  |
|  | or | 3-4 |
| MAT/CIS... | Mathematics/Computer Science Elective* $\dagger$ |  |

* General Education Elective - see page 63.
$\dagger$ Taking one of the following mathematics electives is strongly recommended:

MAT150 Elementary Statistics
MAT155 Finite Mathematics
MAT223 Calculus for Managerial \& Social Sciences
MAT280 Calculus I
NOTE: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## OFFICE TECHNOLOGY

CODE AAS.BT.OFF.TECH

## First Semester

| INF100 | Keyboarding I* | 3 |
| :--- | :--- | :---: |
| INF101 | Introduction to Information Technology | 3 |
| INF120 | PowerPoint | 1 |
| INF161 | Internet Research and Data Handling | 1 |
| BUS101 | Introduction to Business | 3 |
| WRT101 | English Composition I | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
|  |  | 16 |
|  |  |  |
| Second | Semester |  |
| INF124 | Microcomputer Spreadsheet: Excel | 1 |
| INF140 | Introduction to Multimedia |  |
| INF147 | Web Development Using Dreamweaver | 3 |
| INF213 | Microsoft Word -Comprehensive | 3 |
| BUS103 | Business Mathematics |  |
| BUS105 | Business Communications | 3 |
| WEX... | Dynamics of Health \& Fitness Experience** | 1 |

## Third Semester

| INF151 | Microcomputer Database: Access | 1 |
| :--- | :--- | ---: |
| INF216 | Document Processing | 3 |
| ACC120 | Computerized Accounting | 3 |
| WRT201 | English Composition II | 3 |
| $\ldots . .$. | Humanities Elective** | 3 |
| $\ldots .$. | Natural Sciences** |  |
|  | or | $3-4$ |
| MAT/CIS | Mathematics/Computer Science Elective** |  |

Fourth Semester

| INF214 | Administrative Technology | 2 |
| :--- | :--- | :--- |
| INF215 | Office Simulation | 3 |
| INF228 | Excel for Problem Solving | 1 |
| BUS271 | E-Commerce | 3 |
| $\ldots .$. | Humanities Elective | 3 |
| $\ldots .$. | Social Sciences Elective** | 3 |

* Credit-by-exam tests are available for Keyboarding I
** General Education Elective - see page 63.

NOTE: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## TRAVEL AND TOURISM

CODE AAS.BT.TRAVL

## First Semester

| TRV101 | Introduction to Travel and Tourism | 3 |
| :--- | :--- | :--- |
| TRV103 | Travel Area Studies | 3 |
| WRT101 | English Composition I | 3 |
| INF100 | Keyboarding I* | 3 |
| BUS105 | Business Communications | 3 |
|  |  | 15 |

## Second Semester

| BUS101 | Introduction to Business | 3 |
| :--- | :--- | :--- |
| TRV104 | Travel-Electronic Ticketing SABRE | 3 |
| TRV204 | Travel Planning and Marketing | 3 |
| WRT201 | English Composition II | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| INF213 | Microsoft Word Comprehensive | $\frac{3}{17}$ |


| Third Semester |  |
| :---: | :---: |
| TRV210 | Corporate Travel |
| BUS103 | Business Mathematics |
| BUS233 | Business Law 1 |
| WEX... | Dynamics of Health of Fitness Experience** |
| ...... | Humanities Elective** |
| ...... | Social Sciences Elective** |

## Fourth Semester

| TRV206 | Travel and Tourism Management-Electronic | 3 |
| :--- | :--- | :--- |
| ACC101 | Accounting I | 3 |
| $\ldots \ldots$. | Natural Science** |  |
|  | or | $3-4$ |
| MAT/CIS... | Mathematics/Computer Science Elective** |  |
| $\ldots \ldots$. | Humanities Elective | 3 |
| $\ldots \ldots$ | Restricted Elective ${ }^{* * *}$ | 1 |
| $\ldots .$. | Free Electives | 3 |

[^30]Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## WEB DEVELOPMENT AND MANAGEMENT CODE AAS.BT.WEB.MGMT

## First Semester

INF101 Introduction to Information Technology 3
INF146 Web Development Using HTML 3
INF163 Internet Concepts and Applications 3
BUS101 Introduction to Business 3
WRT101 English Composition I $\frac{3}{15}$

## Second Semester

INF114 Microsoft Office 3
INF140 Introduction to Multimedia 3
INF145 Introduction to Visual Basic for Business 3
INF150 Business Programming Logic 3
WEX101 Dynamics of Health and Fitness 2
WRT201 English Composition II $\underline{3}$

Third Semester

| I..... | Social Sciences Elective* | 3 |
| :--- | :--- | :--- |
| INF160 | Networking Technologies and Data |  |
|  | Communications | 3 |
| INF228 | Excel for Problem Solving | 1 |
| INF246 | Advanced Visual Basic for Business | 3 |
| INF253 | Technical Communications | 3 |
| WEX... | Dynamics of Health \& Fitness Experience* | 1 |
| $\ldots . .$. | Humanities Elective | $\frac{3}{17}$ |

## Fourth Semester

INF240 | Client-side Scripting Using JavaScript |
| :--- |
| or |

| INF153 | Java for Business Applications |
| :--- | :--- | :--- |
| INF251 Advanced Access |  |

INF263 Server-Side Internet Programming 3
BUS271 E-Commerce 3
..... Humanities Elective* 3
..... Natural Sciences* or
MAT/CIS... Mathematics/Computer Science* $\dagger$

[^31]Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN HUMAN SERVICES

## CORRECTIONAL STUDIES CODE AAS.HS.CORR

## First Semester

| CRJ101 | Introduction to Criminal Justice |
| :--- | :--- |
| CRJ102 | Introduction to Corrections |
| WEX101 | Dynamics of Health and Fitness |
| WRT101 | English Composition I |
| $\ldots . .$. | Humanities Elective* |
| $\ldots .$. | Social Sciences Elective* $\dagger$ |


| 3 |
| :---: |
| 3 |
| 2 |
| 3 |
| 3 |
| 3 |
| 17 |

## CRIMINAL JUSTICE (FULL-TIME SEOUENCE) CODE AAS.HS.CRIMJ.FT

## First Semester

| CRJ101 | Introduction to Criminal Justice | 3 |
| :--- | :--- | :--- |
| SOC101 | Sociology | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
| WRT101 | English Composition I | 3 |
| $\ldots . .$. | Humanities Elective* | 3 |
| $\ldots .$. | Social Science Elective* $\dagger$ | 3 |
| ${ } &{17}$ |  |  |

## Second Semester

CRJ103 Criminal Law $\ddagger$ 3
CRJ113 The Juvenile Justice Process 3
POL104 State and Local Government 3
SOC103 Sociology of the Family 3
WEX... $\begin{aligned} & \text { Dynamics of Health and Fitness } \\ & \text { Experience* }\end{aligned}$
WRT201 English Composition II $\quad 3$

Third Semester
CRJ105 Police Administration 3
CRJ107 Criminology 3
LIT220 Social Aspects of Literature 3
SOC113 Social Problems 3
$\ldots . . \begin{aligned} & \text { Natural Sciences Elective* } \\ & \text { or }\end{aligned}$
MAT/CIS... Mathematics/ Comp. Science Elective*

Fourth Semester
CRJ109 Contemporary Issues in Policing 3
CRJ111 Criminal Investigation 3
PSY102 Abnormal Psychology 3
PSY104 Psychology of Human Relations
SPE111 Speech Communication 3
..... Free Elective 2
$\ldots .$. Humanities Elective* ${ }^{*}$. 3

17

> * General Education Elective - see page 63. $\dagger$ PSY101 Highly Recommended $\ddagger$ CRJ101 Highly Recommended Before Taking CRJ103 CRJ101 Highly Recommended Before Taking CRJ105 \& SOC101 Highly Recommended Before Taking CRJ107

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

CRIMINAL JUSTICE (PART-TIME SEQUENCE)
CODE AAS.HS.CRIMJ.PT

## EARLY CHILDHOOD EDUCATION

CODE AAS.HS.EARLY.CHILD

## FIRST YEAR

$\begin{array}{lll}\text { Fall Semester } & \\ \text { CRJ101 } & \text { Introduction to Criminal Justice } & 3 \\ \text { WEX101 } & \text { Dynamics of Health \& Fitness } & 2 \\ \text { WRT101 } & \text { English Composition I } & 3 \\ \end{array}$

| Spring | Semester |  |
| :--- | :--- | :--- |
| CRJ103 | Criminal Law $\ddagger$ | 3 |
| WRT102 | English Composition II | 3 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience* | 1 |
|  |  | 7 |

## Summer I

|  | Social Science Elective* ${ }^{*}$ |
| :---: | :---: |
| Summer II SOC101 |  |
|  | Sociology |
| SECOND YEAR |  |
| Fall Semester |  |
| CRJ105 | Police Administration * |
| SOC103 | Sociology of the Family |
|  | Humanities Elective**** |
| Spring Semester |  |
| POL104 | State and Local Government |

## THIRD YEAR

Fall Semester
CRJ107 Criminology * 3
SPE111 Speech Communication
Free Electives

## Spring Semester



## FOURTH YEAR

Fall Semester
CRJ111 Criminal Investigation 3
PSY102 Abnormal Psychology or
PSY104 Psychology of Human Relations
Spring Semester
CRJ113 The Juvenile Justice Process
LIT220 Social Aspects of Literature

## First Semester

PSY101 General Psychology 3
SOC102 Introduction to Human Services 3
WRT101 English Composition I 3
...... Humanities Elective* 3
...... Natural Sciences*
or 3-4

MAT/CIS... Mathematics/Computer Science Elective*

## Second Semester

EDU101 Introduction to Education 3
EDU120 Early Childhood Education I 3
WEX101 Dynamics of Health \& Fitness 2
SPE111 Speech Communication 3
WRT201 English Composition II 3
$\ldots \quad$..... Social Science Elective* $\quad \frac{3}{17}$
Third Semester
EDU124 Curriculum Materials \& Methods 3
EDU130 Infants and Toddlers in Early Childhood Education 3
EDU220 Early Childhood Education II 3
EDU222 Supervised Field Work Experience I 2
EDU223 Field Work Seminar I 2
WEX... Dynamics of Health \& Fitness Experience*1

PSY201 Child Psychology $\frac{3}{17}$
Fourth Semester
EDU126 Developing \& Implementing Curriculum 3
EDU132 Parenting of Very Young Children 3
EDU224 Supervised Field Work Experience II 2
EDU225 Field Work Seminar II 2
SOC103 Sociology of the Family or
SOC120 Sociology of Gender Roles Humanities Elective* $\frac{3}{16}$
*General Education Elective - see page 63.
Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## CAREER PROGRAMS

ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN INDUSTRIAL and DESIGN TECHNOLOGIES

## DRAFTING AND DESIGN TECHNOLOGY CODE AAS.IDT.DRFT

## First Semester

| DFT107 | Drafting I | 2 |
| :--- | :--- | :--- |
| TEC180 | Problem Solving Using Technology | 4 |
| WRT101 | English Composition I | 3 |
| $\ldots \ldots$. | Humanities Elective* | 3 |
| $\ldots . .$. | Social Science Elective* | 3 |
| DFT210 | Computer Aided Drafting I | 3 |
| ${ } &{18}$ |  |  |

## Second Semester

| DFT207 | Drafting II | 3 |
| :--- | :--- | ---: |
| DFT208 | Engineering Graphics I | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| WRT201 | English Composition II | 3 |
| $\ldots . .$. | Humanities Elective*† | 3 |
| $\ldots .$. | Natural Sciences* |  |
| MAT/CIS... | or | Mathematics/Computer Science <br> Elective* |
|  |  | $3-4$ |
|  |  | $17-18$ |

## Third Semester

| DFT209 | Engineering Graphics II | 3 |
| :--- | :--- | :--- |
| DFT215 | Mechanical Building Systems I | 3 |
| DFT262 | Architectural Drafting | 3 |
| DFT265 | Architectural Practice \& Planning | 3 |
| HRT104 | Landscape Plants \& Materials I | 2 |
| WEX... | Dynamics of Health \& Fitness <br> Experience* |  |
|  |  | $\frac{1}{15}$ |

Fourth Semester

| DFT216 | Mechanical Building Systems II <br> or |
| :--- | :--- |

$\begin{array}{ll}\text { DFT462 } & \text { Co-op Work Exp (Drafting) } \\ \text { DFT263 } & \text { Architectural Design }\end{array}$
DFT266 Materials \& Methods of Construction or
MFG119 Manufacturing Design I
DFT282 Technical Illustration
HRT113 Principles of Landscaping

ELECTRONICS TECHNOLOGY
CODE AAS.IDT.ELECT.TECH

## First Semester

ELC101 DC-Circuit Analysis 4
TEC180 Problem Solving Using Technology 4
ELC100 Introduction to Electronics Technology 2
WRT101 English Composition I 3
WEX101 Dynamics of Health \& Fitness $\frac{2}{15}$

## Second Semester

ELC201 AC-Circuit Analysis 4
ELC203 Electronics I 4
WRT201 English Composition II 3
WEX... $\begin{aligned} & \text { Dynamics of Health \& Fitness } \\ & \text { Experience* }\end{aligned}$
...... Natural Sciences*
or 3-4
MAT/CIS... Mathematics/Computer Science Elective* $\dagger \overline{15-16}$

## Third Semester

ELC204 Electronics II 4
ELC214 Communication Systems I 4
PHY186 General Physics I 4
...... Humanities Elective* 3
$\ldots . . \quad$ Social Science Elective* $\quad \frac{3}{18}$

Fourth Semester
ELC215 Communication Systems II
PHY286 General Physics II 4
CHM100 Intro to Chemistry 4
..... Humanities Elective* 3
$\begin{array}{ll}\text { WRT202 } & \text { Technical Writing } \\ \text { or }\end{array}$
ELC462 Co-op Work Experience (Electronics)

* General Education Elective - see page 63.
$\dagger$ MAT150 Elementary Statistics is recommended.

Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

* General Education Elective-see page 63.
† ART103 Art History since the Renaissance is recommended.
Note: Students enrolled in this program ARE REQUIRED to successfully com-
plete a course in basic algebra if indicated by the Basic Skills Placement Test.

GENERAL ENGINEERING TECHNOLOGY CODE AAS.IDT.ET.GEN

| First Semester |  |  |
| :---: | :---: | :---: |
| DFT107 | Drafting I | 2 |
| ELC101 | DC-Circuit Analysis | 4 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| TEC180 | Problem Solving Using Technology | 4 |
| WRT101 | English Composition I | 3 |
|  | Social Science Elective* | 3 |
|  |  | 18 |
| Second Semester |  |  |
| DFT207 | Drafting II | 3 |
| ELC201 | AC-Circuit Analysis | 4 |
| MAT180 | Precalculus | 4 |
| CHM100 | Intro to Chemistry | 4 |
| WRT201 | English Composition II | 3 |
|  |  | 18 |
| Third Semester |  |  |
| DFT210 | CAD I | 3 |
| ELC203 | Electronics I | 4 |
| PHY186 | General Physics I | 4 |
|  | Humanities Elective* | 3 |
| WEX... | Dynamics of Health \& Fitness Experience* | 1 |
|  |  | 16 |
| Fourth Semester |  |  |
| ELC204 | Electronics II | 4 |
| PHY286 | General Physics II | 4 |
| . | Humanities Elective* | 3 |
| ... | Restricted Electives** | 3-5 |
|  |  | 14-16 |

[^32]Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

MANUFACTURING TECHNOLOGY CODE AAS.IDT.MFG.TECH

First Semester
MFG122 Machine Tool Principles I 3
MFG123 Quality and Measurements I 3
DFT107 Drafting I 2
WRT101 English Composition I 3
...... Social Science Elective* $\dagger \quad \frac{3}{14}$

## Second Semester

| MFG222 | Machine Tool Principles II | 3 |
| :--- | :--- | :--- |
| MFG223 | Quality and Measurements II | 3 |
| TEC180 | Problem Solving Using Technology | 4 |
| WRT201 | English Composition II | 3 |
| SPE111 | Speech Communication | $\frac{3}{16}$ |

Summer (Combined Summer Sessions)
MFG464 Co-op Work Experience (Manufacturing Technology)

Third Semester

| MFG224 | Advanced Tooling, Materials, <br> and Automation | 4 |
| :--- | :--- | ---: |
| MFG225 | Process Improvement | 2 |
| DFT210 | Computer Aided Drafting I | 3 |
| MFG119 | or | Manufacturing Design I |
| $\ldots .$. | Humanities Elective* $\ddagger$ | 3 |
| WEX101 | Dynamics of Health \& Fitness | $\underline{2}$ |
|  |  | 14 |

## Fourth Semester

MFG226 Methods, Fixture Design, and Estimating 3
MFG227 CNC Programming 4
...... Natural Sciences* 3-4

MAT/CIS

|  | Elective <br> Humanities Elective* |
| :--- | :--- |
| WEX... | Dynamics of Health \& Fitness Experience* |
|  | $\frac{1}{14-15}$ |

* General Education Elective - see page 63.
$\dagger$ SOC101 recommended
$\ddagger$ PHR103 or PHR105 recommended
- LAN113 recommended

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN NURSING

| NURSING CURRICULUM (DAY SESSION) CODE AAS.NURS.DAY |  |  |
| :---: | :---: | :---: |
| Fall Semester |  |  |
|  |  |  |
| PSY101 | General Psychology | 3 |
| WRT101 | English Composition I | 3 |
| NUR181 | Physical Assessment | 1 |
| NUR182 | Pharmacology for Nurses | 1 |
| NUR183 | Basic Concepts \& Skills of Nursing | 6 |
| Spring Semester |  |  |
| Bl0209 | Anatomy and Physiology II | 4 |
| PSY106 | Developmental Psychology | 3 |
| WRT201 | English Composition II | 3 |
| NUR281 | Adult Health Nursing A | 4 |
| NUR282 | Adult Health Nursing B | 4 |
|  |  | 18 |
| Fall Semester |  |  |
| BIO104 | Microbiology | 4 |
| SOC101 | Sociology | 3 |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| NUR284 | Maternal-Child Health Nursing | 5 |
| NUR285 | Mental Health Nursing | 4 |
|  |  | 18 |
| Spring Semester |  |  |
|  | Humanities Electives* | 6 |
| WEX... | Dynamics of Health \& Fitness |  |
|  | Experience* | 1 |
| NUR290 | Adult Health Nursing C | 4 |
| NUR291 | Adult Health Nursing D | 4 |
|  |  | 15 |

* General Education Elective - see page 63.

The day nursing program accepts students for fall only.
The total number of credits required for the AAS degree is 69 : 33 nursing credits and 36 general credits.

Exit Examination: A nationally standardized examination will be given in the fourth level of the nursing curriculum. Only those students who achieve a passing score and have met all other degree requirements will be certified by the Director to take the NCLEX-RN. There is no fee for this test. There will be a fee for repeat exams.

Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## NURSING CURRICULUM (EVENING SESSION) CODE AAS.NURS.EVE

## Spring Semester

| BIO109 | Anatomy and Physiology I* | 4 |
| :--- | :--- | :---: |
| PSY101 | General Psychology* | 3 |
| WRT101 | English Composition I* | $\frac{3}{10}$ |

## Summer Semester

WEX101 Dynamics of Health and Fitness* 2
SOC101 Sociology* 3

Fall Semester
BIO209 Anatomy and Physiology II* 4
PSY106 Developmental Psychology* 3
WRT201 English Composition II* 3

## Spring Semester

NUR181 Physical Assessment 1
NUR182 Pharmacology for Nurses 1
NUR183 Basic Concepts \& Skills of Nursing $\frac{6}{8}$

## Summer Semester

WEX... Dynamics of Health and Fitness
Experience** 1
BIO104 Microbiology 4
Fall Semester
NUR281 Adult Health Nursing A 4
NUR282 Adult Health Nursing B $\quad \frac{4}{8}$
Spring Semester

| NUR284 | Maternal-Child Health Nursing | 5 |
| :--- | :--- | :--- |
| NUR285 | Mental Health Nursing | 4 |

Summer Semester
..... Humanities Electives** 6
Fall Semester
NUR290 Adult Health Nursing C 4
NUR291 Adult Health Nursing D $\quad \frac{4}{8}$

[^33]
## ASSOCIATE IN APPLIED SCIENCE (AAS) PROGRAMS IN SCIENCE TECHNOLOGY

| ENVIRONMENTAL TECHNOLOGY CODE AAS.ST.ENV.TECH |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| WRT101 | English Composition I | 3 |
| CHM100 | Introduction to Chemistry | 4 |
| BIO101 | General Biology | 4 |
| ENV112 | Environmental Health | 3 |
| WEX101 | Dynamics of Health \& |  |
|  | Fitness | 2 |
|  |  | 16 |
| Second Semester |  |  |
| WRT201 | English Composition II | 3 |
| MAT150 | Elementary Statistics | 3 |
| ENV121 | Environmental Microbiology | 4 |
| ...... | Science Elective* | 3-4 |
| ...... | Humanities Elective** | 3 |
|  |  | 16-17 |
| Third Semester |  |  |
| TEC180 | Problem Solving Using Technology | 4 |
| ENV109 | Environmental Policy Compliance \& |  |
|  | Regulation | 3 |
| BIO227 | Principles of Ecology | 4 |
| ...... | Humanities Elective** | 3 |
|  | Social Science Elective** | 3 |
|  |  | 17 |
| Fourth Semester |  |  |
| ENV122 | Environmental Chemistry | 4 |
| WEX201 | Dynamics of Health \& Fitness |  |
|  | Experience** | 1 |
| TEC190 | Introduction to Geographic Information |  |
|  | Systems | 4 |
| ENV113...... | Human Environment | 3 |
|  | General Electives (see below) | 4 |
| ...... |  | 16 |
| * Recommended Sciences Electives: |  |  |
| B10203 | General Biology II | 4 |
| BIO107 | Introduction to Human Biology |  |
| ESC113 | Geology | 4 |
| PHY185 | Introducation to Physics |  |
| ESC112 | Climatology | 4 |
| ESC114 | Meteorology | 4 |
| ** General Education Elective - see page 63. |  |  |
| General Electives |  |  |
| ENV461 | Co-op Work Experience | 1-4 |
| ENV114 | Field Lab Experience | 1 |
| ANT101 | Cultural Anthropology | 3 |
| BUS101 | Introduction to Business | 3 |
| DFT107 | Drafting I | 2 |
| GE0101 | Geography | 3 |
| LGL101 | Fundamentals of Law |  |
| COM210 BUS105 | Public Relations Business Communications | 3 3 |
| POL107 | Introduction to Politics | 3 |
| PHR102 | Contemporary Moral Issues |  |
| PSY104 | Psychology of Human Relations |  |
| PSY122 | Ethology and Environmental Psychology | 3 |
| WEX125 | Urban Sociology | 3 3 |
| WRT202 | Technical Writing | 3 |

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

HORTICULTURE

## CODE AAS.ST.HORT

| First Semester |  |  |
| :---: | :---: | :---: |
| HRT101 | Fundamentals of Horticulture | 3 |
| HRT102 | Plant Science | 4 |
| HRT104 | Landscape Plants and Materials I | 2 |
| WRT101 | English Composition I | 3 |
|  | Natural Sciences Elective* $\dagger$ |  |
|  | or | 3-4 |
| MAT/CIS... | Mathematics/Computer Science Elective* |  |
|  |  | 15-16 |
| Second Semester |  |  |
| HRT120 | Interior Plantscaping | 3 |
| HRT232 | Plant Propagation | 4 |
| HRT233 | Landscape Plants \& Materials II | 4 |
| WRT201 | English Composition II | 3 |
| .... | Social Science Elective* | 3 |
|  |  | 17 |
| Third Semester |  |  |
| WEX101 | Dynamics of Health \& Fitness | 2 |
| HRT103 | Turf and Grounds Management | 3 |
| HRT112 | Pests of Ornamental Plants | 4 |
| HRT204 | Landscape Graphics | 2 |
| HRT236 | Horticulture Marketing \& Sales | 3 |
| ..... | Humanities Elective* | 3 |
|  |  | 17 |
| Fourth Semester |  |  |
| BUS101 | Introduction to Business Administration | 3 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience* ${ }^{*}$ | 1 |
| HRT113 | Principles of Landscaping | 3 |
| HRT... | Restricted HRT Elective $\ddagger$ | 3-4 |
| HRT462 | Co-op Work Exp (Hort) | 2 |
| ..... | Humanities Elective* | 3 |
|  |  | 15-16 |

* General Education Elective - see page 63.
$\dagger$ Recommended Natural Sciences/Mathematics Elective: BIO108 Introduction to Environmental Biology
$\ddagger$ Restricted HRT Elective:

| HRT115 | Floral Design | 3 |
| :--- | :--- | :--- |
| HRT119 | Greenhouse Operation and Production | 3 |
| HRT235 | Landscape Site Analysis and Construction | 3 |
| HRT237 | Arboriculture/Plant Health Care | 3 |

Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## ASSOCLATE IN APPLIED SCIENCE (AAS) IN SCIENCE TECHNOLOGY

SCIENCE LABORATORY TECHNOLOGY
CODE AAS.ST.SLT

| First Semester |  |  |
| :---: | :---: | :---: |
| BIO101 | General Biology | 4 |
| CHM140 | General Chemistry I | 3 |
| CHM141 | General Chemistry I-Lab | 1 |
| DFT107 | Drafting I | 2 |
| WRT101 | English Composition I | 3 |
| MAT116 | Technical Mathematics I | 3 |
|  |  | 16 |
| Second Semester |  |  |
| BIO104 | Microbiology | 3 |
| CHM212 | Organic and Biochemistry | 4 |
|  | Humanities Elective* | 3 |
| WRT201 | English Composition II | 3 |
| MAT222 | Technical Mathematics II | 4 |
|  |  | 17 |
| Third Semester |  |  |
| PHY186 | General Physics I | 4 |
| TEC201 | Science Laboratory Technology I | 4 |
| ENV108 | Hazardous Waste Site Operations | 3 |
|  | Social Science Elective* | 3 |
| WEX101 | Dynamics of Health and Fitness | 2 |
|  |  | 16 |
| Fourth Semester |  |  |
| PHY286 | General Physics II | 4 |
| TEC202 | Science Laboratory Technology II | 4 |
| SPE119 | Effective Speaking for Business and Professional Personnel | 3 |
|  | Humanities Elective* | 3 |
| TEC203 | Work Based Learning in Science and Technology | 1 |
| WEX... | Dynamics of Health and Fitness |  |
|  | Experience* | 1 |
|  |  | 16 |

*General Education Elective - see page 63
Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## CAREER PROGRAMS

## ONE-YEAR CERTIFICATES

To receive a Certificate in one of the programs listed on the following pages, a student must complete all courses and specific requirements listed within the chosen program of study.

## COMPUTER AIDED DRAFTING (CAD) <br> CODE CERT.CAD

| First Semester |  |  |
| :--- | :--- | :--- |
| DFT107 | Drafting I | 2 |
| DFT210 | CAD I | 3 |
| TEC180 | Problem Solving Using Technology | 4 |
| WRT101 | English Composition I | $\frac{3}{12}$ |


| Second |  |  |
| :--- | :--- | :--- |
| DFT207 |  |  |
| DFTer |  |  |
| DFT211 | Drafting II | 3 |
| DFT208 | Engineering Graphics I | 5 |
|  |  | $\underline{3}$ |
|  |  |  |

Third Semester
DFT282 $\quad$ Technical Illustration
DFT212 CAD III 3
...... General Education Elective*

* General Education Elective - see page 63.

Note: Students enrolled in this program ARE REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## COMPUTER SCIENCE <br> CODE CERT.COMP.SCI

## First Semester

CIS165 C++ Programming I* 3
WRT101 English Composition I 3
..... General Education Elective** $\quad 3$

Second Semester

| CIS265 | C++ Programming II | 3 |
| :--- | :--- | :--- |
| CIS271 | Computer Organization and <br>  <br> $\ldots . .$. | Assembly Language I |$\quad 3$| General Education Elective ${ }^{* *}$ |
| :--- |

## Third Semester

CIS277 Data Structures \& Algorithms 3
MAT/CIS... Mathematics/Computer Science Electives***
$\frac{9}{12}$

* By permission of the Department Head, properly prepared students may instead register for CIS265 and/or CIS271. Such students will be required to complete an additional 3 or 4 credit elective to be selected from: MAT250, CIS266, CIS278, MAT280, MAT281, MAT282, MAT286, CIS287, CIS288, CIS289.
** General Education Elective - see page 63. PHR103 Basic Logic or PHR203 Intermediate Logic is recommended for the General Education Elective.
*** The elective requirement in Computer Science and/or Mathematics must total at least 9 credits to be selected from the following courses: MAT250, CIS266, CIS278, MAT280, MAT281, MAT282, MAT286, CIS287, CIS288, CIS289.

Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## ONE-YEAR CERTIFICATES

The Computer Animation and the Computer Graphics Certificates are designed for practicing professionals in these fields or for students who have already completed substantial college level work. Entry level commercial art students should consider one of the Associate of Applied Science art programs. Students may choose only those courses for which prerequisites have been met.
Returning professionals may request that prerequisites be waived by submitting a portfolio for review by a member of the art faculty. To request a portfolio review, please contact the Department of Arts and Communications at 201-447-7143. To avoid registration problems, please contact the department prior to registering for classes for which you have not taken the required prerequisites.

## COMPUTER ANIMATION CODE CERT.COMP.ANIM

| First Semester |  |  |
| :--- | :--- | :--- |
| ART290 | Computer 2D Animation I* | 3 |
| ART292 | Computer 3D Animation I* | 3 |
| ART... | Restricted Elective (see below) | 3 |
| WRT101 | English Composition I | 3 |
| $\ldots . .$. | General Education Elective |  |
|  |  | 3 |
| Second | Semester |  |
| ART291 | Computer 2D Animation II* |  |
| ART293 | Computer 3D Animation II* | 3 |
| ART297 | Computer Imaging *** | 3 |
| ART... | Restricted Electives (see below) | 3 |
| ...... | General Education Elective** | 6 |
|  |  | $\frac{3}{18}$ |

## Restricted Electives:

ART126 Introduction to Computer Graphics***
ART181 Photography I
ART226 Letterform and Type
ART260 Graphic Design I
ART261 Graphic Design II
ART271 Portfolio Presentation
ART281 Photography II
ART287 Computer Layout I ${ }^{* * *}$
ART288 Computer Layout II***
ART289 Computer 2D Illustration***
ART298 Interactive Multimedia***

[^34]Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## COMPUTER GRAPHICS CODE CERT.COMP.GRAPH

## First Semester

ART287 Computer Layout I* 3
ART289 Computer 2D Illustration* 3
ART... Restricted Electives (see below) 6
WRT101 English Composition I 3

Second Semester
ART288 Computer Layout II* 3
ART297 Computer Imaging* 3
ART... Restricted Electives (see below) 6
...... General Education Elective** $\quad 3$

Restricted Electives:
ART181 Photography I
ART226 Letterform and Type
ART260 Graphic Design I
ART261 Graphic Design II
ART271 Portfolio Presentation
ART281 Photography II
ART290 Computer 2D Animation I***
ART291 Computer 2D Animation II***
ART292 Computer 3D Animation I***
ART293 Computer 3D Animation II***
ART298 Interactive Multimedia*

* Course uses Macintosh computers.
${ }^{* *}$ General Education Elective - see page 63.
*** Course uses Intergraph NT computers.
Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.


## ONE-YEAR CERTIFICATES

## COMPUTER TECHNICAL/HELP DESK SUPPORT CODE CERT.COMP.HELP.DESK

| First Semester |  |  |
| :---: | :---: | :---: |
| INF101 | Introduction to Information Technology | 3 |
| INF108 | PC Upgrade, Maintenance and Diagnosis | 3 |
| INF114 | Microsoft Office | 3 |
| INF160 | Networking Technologies and |  |
|  | Data Communications | 3 |
| INF163 | Internet Concepts and Applications | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 18 |
| Second Semester |  |  |
| BUS101 | Introduction to Business | 3 |
| INF260 | Technical Support Operations | 3 |
| INF253 | Technical Communications | 3 |
| INF... | Operating System Restricted Elective* |  |
|  | General Education Elective** | 3 |
|  |  | 15 |
| *Operating System Restricted Elective |  |  |
| INF232 Windows Client |  |  |
| INF235 Advanced PC Upgrade, Maintenance, and Diagnosis |  |  |
| INF254 | Unix for the Network Administrator |  |
| ${ }^{* *}$ General Education Elective - see page 63. |  |  |

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## E-COMMERCE: BUSINESS EMPHASIS CODE CERT.ECOMM.BUS

## First Semester



[^35]Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## CULINARY ARTS

CODE CERT.CULN.ARTS

## First Semester

HRM102 Food Protection 3
HRM103 Professional Food Preparation Techniques 3
HRM110 Introduction to Baking 3
HRM106 Menu Planning and Nutrition 1
HRM108 Computer Applications for
WRT101 English Composition I 3
..... General Education Elective ${ }^{* *} \quad 3$

Second Semester
HRM202 Quantity Food Production Service*** 3
HRM206 Commercial Restaurant Operation* 3
HRM212 International Cuisine* 3
HRM213 Classical Garde-Manger*** 3
HRM220 Advanced Baking Techniques* 3
General Education Elective**

| 3 |
| :---: |
| 18 |

* Class offered only during spring semester
** General Education Elective - see page 63.
*** Class offered only during fall semester
Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

The Culinary Arts Certificate Program is designed to aid those working food service professionals who wish to increase their job value or refresh their culinary preparation and leadership skills. Typically, students do not complete the certificate program in two semesters. In those instances where a student MUST complete the curriculum in one year or two successive semesters, the student MUST obtain written permission from the Divisional Dean to waive or otherwise adjust pre-requisites where indicated.

## ENVIRONMENTAL TECHNOLOGY CODE CERT.ENV.TECH

| First Semester |  |  |
| :---: | :---: | :---: |
| ENV108 <br> ENV109 | Hazardous Waste Site Operations | 3 |
|  | Environmental Policy Compliance |  |
|  | and Regulation | 3 |
| ENV112 | Environmental Health | 3 |
| WRT101 | English Composition I | 3 |
| ...... | General Education Elective* $\dagger$ | 3-4 |
|  |  | 15-16 |
| Second Semester |  |  |
| ENV121 | Environmental Microbiology | 4 |
| ENV113 | Human Environment | 3 |
| TEC180 | Problem Solving Using Technology | 4 |
| TEC190 | Introduction to GIS | 3 |
| ...... | General Education Elective* $\ddagger$ | 3-4 |
|  |  | $\overline{17-18}$ |
| * General Education Elective - see page 63. <br> $\dagger$ BIO101 General Biology I is recommended |  |  |
| Note: Stude plete a cour | nrolled in this program ARE NOT REQUIRED to basic algebra if indicated by the Basic Skills Pla | ully comTest. |


| EXERCISE SCIENCECODE CERT.EXER.SC |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| BUS101 | Introduction to Business | 3 |
| BIO103 | The Human Body | 4 |
| WEX159 | Cardiopulmonary Resuscitation \& |  |
|  | Emergency First Aid | 3 |
| WEX164 | Exercise Science | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 16 |
| Second Semester |  |  |
| PSY101 | General Psychology | 3 |
| WEX106 | Nutrition for Exercise and Fitness | 3 |
| WEX182 | Fitness Measurement | 3 |
| WEX183 | Programs \& Principles of Conditioning | 3 |
| WEX184 | Sports Medicine I-Theory \& Practice | 3 |

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## GROUNDS MANAGEMENT CODE CERT.GRND.MGT

## First Semester

## HRT102 Plant Science <br> 4

HRT104 Landscape Plants and Materials I ..... 2
HRT112 Pests of Ornamental Plants ..... 4
HRT130 Landscaping Contracting ..... 1
HRT103 Turf and Grounds ManagementWRT101 English Composition I3
Second Semester
HRT125 Equipment Management ..... 2
HRT235 Landscape Site Analysis and Construction ..... 3
HRT237 Arboriculture/Plant Health Care ..... 3
HRT124 Irrigation Technology ..... 2
...... General Education Elective* ..... 3
...... Restricted Elective**

[^36]Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## FLORAL DESIGN <br> CODE CERT.FLORAL

## First Semester

HRT102 Plant Science4
HRT115 Floral Design ..... 3
HRT232 Plant Propagation ..... 4
WRT101 English Composition I ..... 3
..... General Education Elective* ..... $\frac{3}{17}$
Second Semester
HRT119 Greenhouse Operation and Production ..... 3
HRT120 Interior Plantscaping ..... 3
HRT234 Commercial Floral Design \& Management ..... 4
HRT462 Co-op Work Experience (Horticulture) ..... 2
..... Business Elective** ..... 3
..... General Education Elective* ..... $\frac{3}{18}$

* General Education Elective - see page 63.
** Three credits from any course(s) with ACC, BUS, or INF prefixes.
Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.


## HOSPITALITY MANAGEMENT CODE CERT.HOSP.MGMT

## First Semester

HRM101 Introduction to Hospitality Management 3
HRM102 Food Protection
HRM103 Professional Food Preparation Techniques ..... 3
HRM104 Front Office Procedures ..... 2
HRM108 Computer Applications for the Hospitality Industry* ..... 1
WRT101 English Composition I ..... 3
..... General Education Elective** ..... $\frac{3}{18}$
Second Semester
HRM201 Food and Beverage Cost Control ..... 1
HRM203 Beverage Management ..... 2
HRM204 Food Purchasing ..... 2
HRM205 Restaurant Service Management ..... 3
HRM207 Hotel Sales and Convention Planning ..... 1
HRM214 Banquet \& Catering Management ..... 2
HRM217 Issues in the Hospitality Industry ..... 2
HRM462 Co-op Work Experience (Hotel/Restaurant/Hospitality) ..... 2
..... General Education Elective ${ }^{* *}$ ..... $\frac{3}{18}$

* Class only offered during spring semester.
** General Education Elective - see page 63.

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.
The Hospitality Management Certificate Program is designed to aid those working professionals who wish to increase their job value or refresh their leadership skills. Typically, students do not complete the certificate program in two semesters. In those instances where a student MUST complete the curriculum in one year or two successive semesters, the student MUST obtain written permission from the Divisional Dean to waive or otherwise adjust pre-requisites where indicated.

## ONE-YEAR CERTIFICATES

## LANDSCAPING CODE CERT.LAND

| $l$ |  |  |
| :--- | :--- | :---: |
| First Semester |  |  |
| BUS101 | Introduction to Business | 3 |
| DFT107 | Drafting I | 2 |
| HRT103 | Turf and Grounds Management | 3 |
| HRT104 | Landscape Plants and Materials I | 2 |
| HRT130 | Landscaping Contracting | 1 |
| HRT... | Restricted HRT Elective (see below) | $3-4$ |
| WRT101 | English Composition I | $\frac{3}{17-18}$ |

## Second Semester

INF101 Introduction to Information Technology 3
HRT113 Principles of Landscaping 3
HRT204 Landscape Graphics 2
HRT233 Landscape Plants and Materials II 4
HRT235 Landscape Site Analysis \& Construction 3
..... General Education Elective* $\quad 3$

## Restricted HRT Electives:

HRT101 Fundamentals of Horticulture
HRT102 Plant Science
HRT112 Pests of Ornamental Plants
HRT120 Interior Plantscaping
HRT236 Horticulture Marketing and Sales

* General Education Elective - see page 63.

Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## MUSIC BUSINESS <br> CODE CERT.MUSC.BUS

## First Semester

| MUS131 | Class Piano I | 2 |
| :--- | :--- | :--- |
| MUS152 | Music Business I | 3 |
| MUS103 | Fundamentals of Music | 2 |
| WRT101 | English Composition I | 3 |
| MUS133 | Music Dictation and Sight Reading | 2 |
| MUS... | Performance Ensemble Elective* | 1 |
| $\ldots . .$. | General Education Elective** | 3 |
|  |  | 16 |

## Second Semester

MUS231 Class Piano II
MUS252 Music Business II
MUS134 Ear Training and Musicianship
MUS... Performance Ensemble Elective*
MUS... Restriced Elective (3-4 credits) ${ }^{* * *}$
...... General Education Elective**

* Instrumental or vocal ensembles: MUS121, MUS122, MUS123, MUS124, MUS125, MUS126, MUS127, MUS128, MUS140, MUS141, MUS142, MUS143
** General Education Elective - see page 63.
*** Restricted Electives: MUS132, MUS150, MUS118, all MUA courses
Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

MEDICAL OFFICE ADMINISTRATIVE ASSISTANT CODE CERT.MOAA

## First Semester

MOA140 Medical Terminology 3

MOA141 Introduction to Medical Assisting 3
WRT101 English Composition I 3
INF213 Microsoft Word for Windows Comprehensive* 3
MOA218 Medical Economics 2
MOA203 Medical Assistant Administrative Procedures I

Second Semester
ACC104 Medical Accounting 3
MOA201 Diagnostic \& Procedural Coding 4
MOA204 Medical Assistant Administrative
PSY101 General Psychology 3
WEX159 CPR \& Emergency First Aid $\frac{3}{16}$

* Applicants must complete keyboarding skills prior to registering for INF213 either through credit-by-exam testing or taking INF100 Keyboarding I.

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## MUSIC TECHNOLOGY <br> CODE CERT.MUSC.TECH

## First Semester

MUS150 Electronic Music I 3
MUS131 Class Pianol 2
MUS132 Music Theory I 2

MUS151 Computer-Based Recording I 3
WRT101 English Composition I 3
MUS... Performance Ensemble Elective* 1
...... General Education Elective** $\qquad$
Second Semester
MUS250 Electronic Music II 3
MUS231 Class Piano II 2
MUS251 Computer-Based Recording II 3
MUS232 Music Theory II 2
MUS... Performance Ensemble Elective* 1
..... General Education Elective** 3
MUS... Restricted Elective (3-4 credits)*** 3-4
18-19

[^37]Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## NETWORKING AND WEB DEVELOPMENT CODE CERT.NET.WEB

| First Semester |  |  |
| :---: | :---: | :---: |
| INF101 | Introduction to Information Technology | 3 |
| INF140 | Introduction to Multimedia | 3 |
| INF147 | Web Development Using Dreamweaver | 3 |
| INF160 | Networking Technologies and |  |
|  | Data Communications | 3 |
| INF163 | Internet Concepts and Applications | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 18 |
| Second Semester |  |  |
| INF114 | Microsoft Office | 3 |
| INF161 | Internet Research and Data Handling | 1 |
| INF232 | Windows Client |  |
|  | or | 3 |
| INF254 | Unix for the Network Administrator |  |
| BUS271 | E-Commerce | 3 |
| INF... | Restricted Elective (See Below) | 3 |
|  | General Education Elective* | 3 |
|  |  | 16 |

* General Education Elective - see page 63.

Restricted Electives: Courses cannot duplicate as Restricted Electives when selected as requirements in the second semester.

| INF107 | Minicomputer Operations |
| :--- | :--- |
| INF146 | Web Development Using HTML |
| INF232 | Windows Client |
| INF252 | Windows Server |
| INF254 | UNII for the Network Administrator |
| INF255 | Network Planning and Design |
| INF258 | TCP/IP |

Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

| RADIATION THERAPY TECHNOLOGY CODE CERT.RAD.THERAPY |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
|  | Introduction to Radiotherapy and |  |
|  | Patient Care Management | 3 |
| RTT120 | Radiation Therapy Practices I | 3 |
| RTT130 | Radiation Biology and Safety | 3 |
| RTT150 | Principles of Diagnostic Radiation Physics | 3 |
| RTT121 | Radiation Therapy Clinical Practicum I | 2 |
| WRT101 | English Composition I | 3 |
|  |  | 17 |
| Second Semester |  |  |
| RTT200 | Survey of Diseases | 3 |
| RTT210 | Dosimetry and Treatment Practices | 3 |
| RTT220 | Radiation Therapy Practices II |  |
| RTT230 | Quality Control and Instrumentation | 3 |
| RTT221 | Radiation Therapy Clinical Practicum II | 2 |
|  | General Education Elective* | 3 |

## Third Semester

RTT222 Radiation Therapy Clinical Practicum III $\frac{2}{2}$

* General Education Elective - see page 63.


## OFFICE TECHNOLOGY CODE CERT.OFFTECH

Prior to Semester I or by Credit-By-Exam
INF100 Keyboarding I*
3
First Semester
INF101 Introduction to Information Technology 3
INF120 PowerPoint 1
INF124 Microcomputer Spreadsheet: Excel 1
INF151 Microcomputer Database: Access 1
INF161 Internet Research and Data Handling 1
INF213 Microsoft Word -Comprehensive 3
BUS101 Introduction to Business 3
WRT101 English Composition I 3

## Second Semester

| INF228 | Excel for Problem Solving | 1 |
| :--- | :--- | :--- |
| INF147 | Web Development Using Dreamweaver | 3 |
| INF214 | Administrative Technology | 2 |
| INF216 | Document Processing | 3 |
| BUS103 | Business Mathematics | 3 |
| $\ldots . .$. | General Education Elective** | $\frac{3}{15}$ |

* Credit-by-exam tests are available for Keyboarding I
** General Education Elective - see page 63.
Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.


## SMALL BUSINESS MANAGEMENT CODE CERT.SM.BUS.MGMT

## First Semester

| BUS101 | Introduction to Business | 3 |
| :--- | :--- | :---: |
| BUS103 | Business Mathematics | 3 |
| BUS170 | Small Business Management I* | 3 |
| INF101 | Introduction to Information Technology | 3 |
| BUS105 | Business Communications | 3 |
| WRT101 | English Composition I | 3 |
|  |  | 18 |

## Second Semester

ACC120 Computerized Accounting 3
BUS201 Marketing Principles 3
BUS205 Entrepreneurship* 3
BUS233 Business Law I 3
BUS271 E-Commerce 3
$\begin{array}{ll}\text { BUS204 } & \begin{array}{l}\text { Principles of Salesmanship } \\ \text { General Education Elective** }\end{array}\end{array}$

[^38]Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

| SUREICAL TECHNOLOGY CODE CERT.SURG |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| BIO109 | Anatomy \& Physiology I | 4 |
| SUR101 | Principles of Surgical Technology I | 6 |
| SUR102 | Surgical Technology Externship I | 2 |
|  | 2 days or $16 \mathrm{hrs} / \mathrm{wk} \times 15 \mathrm{wks}$ |  |
| WRT101 | English Composition I | 3 |
| SUR103 | Surgical Terminology | 1 |
| SUR104 | Microbiological Application in Surgery | 2 |
|  |  | 18 |
| Second Semester |  |  |
| BIO209 | Anatomy and Physiology II | 4 |
| SUR201 | Principles of Surgical Technology II | 5 |
| SUR202 | Surgical Technology Externship II | 2 |
|  | 3 days or $24 \mathrm{hrs} / \mathrm{wk} \times 15 \mathrm{wks}$ |  |
|  | General Education Elective* | 3 |
|  |  | 14 |
| Summer Session |  |  |
| SUR203 | Surgical Technology Externship III, 4 weeks at 40 hours per week for a total of 160 hours. |  |
| * General Education Elective - see page 63. |  |  |
| Note: Students enrolled in this program ARE NOT REQUIRED to successfully complet course in basic algebra if indicated by the Basic Skills Placement Test. |  |  |

## TRAVEL SERVICE

CODE CERT.TRAVEL

## First Semester

BUS101 Introduction to Business 3
INF100 Keyboarding I* 3
TRV101 Introduction to Travel and Tourism 3
TRV103 Travel Area Studies 3
TRV104 Travel-Electronic Ticketing-SABRE 3
WRT101 English Composition I $\frac{3}{18}$

## Second Semester

BUS103 Business Math 3
BUS233 Business Law I 3
SPE111 Speech Communication 3
TRV204 Travel Planning and Marketing 3
..... General Education Elective ${ }^{* *} \dagger$
$\cdots .$. Elective $^{* * *} \quad \frac{2}{17}$

* Credit-by-exam tests are available for Keyboarding I
** General Education Elective - see page 63 .
*** Foreign Language for Tourists is recommended.
† GE0101 Geography is recommended.

Note: Students enrolled in this program ARE NOT REOUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## UNITED STATES STUDIES

CODE CERT.US

## First Semester

| WRT101 | English Composition I | 3 |
| :--- | :--- | :--- |
| SPE111 | Speech Communication | 3 |
| HIS111 | U.S. History to Reconstruction | 3 |
| POL101 | American Government | 3 |
| $\ldots . .$. | Restricted Elective (see below) | 3 |


\section*{Second Semester <br> | WRT201 | English Composition II |
| :--- | :--- |
| LIT201 | American Literature I |
| LIT202 | American Literature II |
| HIS112 | U.S. History Since Reconstruction |
| $\ldots . . .$. | Restricted Elective (see below) |}


| Restricted Electives: |  |
| :--- | :--- |
| BUS101 | Introduction to Business |
| CRJ101 | Introduction to Criminal Justice |
| ECO101 | Macroeconomics |
| ECO201 | Microeconomics |
| EDU101 | Introduction to Education |
| WEX101 | Dynamics of Health and Fitness |
| WEX201 | Aerobic Dance (Dynamics of Health \& Fitness Experience) |
| HIS113 | History of 20th Century U.S. to W.W.II |
| HIS114 | History of 20th Century U.S. Since W.W.II |
| HIS116 | Themes in U.S. History (Women in American History) |
| HIS117 | Themes in U.S. History (N.J. \& Bergen County) |
| HS144 | Contemporary American Issues \& Problems |
| LIT215 | Black Literary Voice in America |
| COM101 | Mass Media of Communications |
| MUS105 | A History of Jazz in America |
| MUS110 | Music, Art and Drama |
| POL104 | State \& Local Government |
| POL106 | Themes in U.S. History (Modern American Presidency) |
| PHR102 | Contemporary Moral Issues |
| PHR105 | Ethics in Business and Society |
| PSY101 | General Psychology |
| PSY121 | Comparative Psychology |
| PSY201 | Child Psychology |
| SOC105 | Urban Sociology |
| SOC120 | Sociology of Gender Roles |
| SOC121 | The Changing Roles of Women |
| SOC222 | Ethnic \& Minority Group Relations |
| THR101 | Introduction to Theatre |

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## COMMERCIAL MUSIC PRODUCTION CODE COA.MUSC.COMM.PROD

| First Semester |  |  |
| :--- | :--- | :--- |
| MUS131 | Class Piano I | 2 |
| MUS150 | Electronic Music I | 3 |
| MUS152 | Music Business I | 3 |
| MUS... | Performance Ensemble Elective* | 1 |
| Second | Semester | 9 |
| MUS231 | Class Piano II | 2 |
| MUS151 | Computer-Based Recording I | 3 |
| MUS252 | Music Business II | 3 |
| MUS... | Performance Ensemble Elective* | 1 |

*Instrumental or vocal ensembles: MUS121, MUS122, MUS123, MUS124, MUS125, MUS126, MUS127, MUS128, MUS140, MUS141, MUS142, MUS143

Note: Students enrolled in this program ARE NOT REOUIRED to successfully com plete a course in basic algebra if indicated by the Basic Skills Placement Test.

## GEOGRAPHIC INFORMATION SYSTEMS (GIS) CODE COA.GIS

## First Semester

TEC190 Introduction to Geographic Information Systems
TEC191 Introduction to Mapping and Cartography $\frac{3}{6}$

## Second Semester

TEC293 Advanced Geographic Information Systems
TEC292 Introduction to Remote Sensing

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

| PROFESSIONAL COOKING CODE COA.PROF.COOK |  |  |
| :---: | :---: | :---: |
| HRM102 | Food Protection | 3 |
| HRM103 | Professional Food Preparation |  |
|  | Techniques | 3 |
| HRM110 | Introduction to Baking | 3 |
| HRM220 | Advanced Baking Techniques* | 3 |
| HRM213 | Classical Garde Manger** | 3 |
| HRM212 | International Cuisine* | 3 |
|  |  | 18 |

[^39]**Offered only in the fall
NOTE: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.
NOTE: Students will not complete the Professional Cooking program in one semester.

## ENVIRONMENTAL TECHNOLOGY CODE COA.ENV

## First Semester



Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## MANUFACTURING DESIGN CODE COA.MFTG.DESIGN

First Semester
MFG119 Manufacturing Design I 3
Second Semester
MFG219 Manufacturing Design II 3
Third Semester
MFG220 Manufacturing Design III
3
Fourth Semester
MFG221 Manufacturing Design IV

$$
\frac{3}{12}
$$

Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

## SPECIAL IMAGING FOR RADIOLOGIC TECHNOLOGISTS CODE COA.SPEC.IMAG.RAD

## First Semester

RAD250 Cross Sectional Anatomy 4
RAD251 Computer Tomography 3
RAD252 Magnetic Resonance Imaging $\frac{3}{10}$

## Second Semester

| RAD253 | Magnetic Resonance Imaging <br> Clinical Practicum | 1 |
| :--- | :--- | :---: |
| RAD254 | Computerized Tomography <br> Clinical Practicum | 1 |
|  |  | 2 |

[^40]This section contains an alphabetical listing by course letter code of all courses offered at the college.

| ACC ACCOUNTING | LAN WORLD LANGUAGES \& CULTURES |
| :---: | :---: |
| ALH AlLIED HEALTH | LGL PARALEGAL STUDIES |
| ALP AMERICAN LANGUAGE PROGRAM | LGN LEGAL NURSE CONSULTANT |
| ANT ANTHROPOLOGY | LIT LITERATURE |
| ART ART | MAT(CIS) MATHEMATICS \& COMPUTER SCIENCE |
| BIO BIOLOGICAL SCIENCES | Also see courses listed under the Information Technology (INF) designation. |
| BNF BANKING, CREDIT \& FINANCE | MFG MANUFACTURING TECHNOLOGY |
| BUS BUSINESS ADMINISTRATION | MLT MEDICAL LABORATORY TECHNOLOGY |
| CHM CHEMISTRY | MOA MEDICAL OFFICE ASSISTANT |
| CINTHR CINEMA | MUA APPLIED MUSIC |
| CIS(MAT) COMPUTER SCIENCE | MUS MUSIC |
| Also see courses listed under the Information | Mus Music |
| Technology (INF) designation. | NUR NURSING |
| COM MASS COMMUNICATION | PHR PHILOSOPHY \& RELIGION |
| CRJ CRIMINAL JUSTICE | PHY PHYSICS |
| DAN DANCE | POL POLITICAL SCIENCE |
| DFT DRAFTING \& DESIGN | PSY PSYCHOLOGY |
| DHY DENTAL HYGIENE | PTA PHYSICAL THERAPIST ASSISTANT |
| DMS ULTRASOUND/DIAGNOSTIC | RAD RADIOGRAPHY |
| MEDICAL SONOGRAPHY | REA REAL ESTATE |
| EBS ENGLISH BASIC SKILLS | RSP RESPIRATORY THERAPY |
| ECO ECONOMICS | RTT RADIATION THERAPY |
| EDU EDUCATION | SOC SOCIOLOGY |
| ELC ELECTRONICS TECHNOLOGY | SPE SPEECH COMMUNICATION |
| ENV ENVIRONMENTAL TECHNOLOGY | SUR SURGICAL TECHNOLOGY |
| ESC EARTH SCIENCES | TEC TECHNOLOGICAL SCIENCES |
| GEO GEOGRAPHY | THR THEATRE |
| HIS HISTORY | TRV TRAVEL \& TOURISM |
| HRM HOTEL/RESTAURANT/HOSPITALITY | VAS VASCULAR TECHNOLOGY |
| HRT HORTICULTURE | VET VETERINARY TECHNOLOGY |
| INF INFORMATION TECHNOLOGY Also see courses listed under Computer Science and Mathematics (CIS/MAT) designations. | WEX WELLNESS \& EXERCISE SCIENCE WRT WRITING |

IST INTERDISCIPLINARY STUDIES

## ACC - ACCOUNTING

## ACC-100 Introduction to

Accounting explores the need and use of accounting information in the business world, as well as provides an overview of accounting careers. The course is designed to give students a user's perspective of accounting and also to provide them with the necessary communication and analytical skills needed to succeed in future accounting courses.
2 lectures, 2 labs, 3 credits
ACC-101 Accounting I introduces the student to the accounting principles and accounting cycle of proprietorships. Topics considered include financial statement preparation, inventories, receivables, payables, plant assets, accruals, deferrals, accounting systems, and cash control. 2 lectures, 2 labs, 3 credits

ACC-104 Medical Accounting is an introduction to basic accounting procedures as they apply to a medical practice. Topics considered include cash and payroll records, patient billing and collections, and the preparation of financial statements. 2 lectures, 2 labs, 3 credits

ACC-107 Federal Taxation reviews the history and background of federal taxation. Students learn the tax definitions of gross income, deductions, and gains and losses, and they examine accounting methods approved by the IRS. The preparation of federal income tax returns is also covered. 2 lectures, 2 labs, 3 credits

## ACC-110 Financial Accounting is

 an introduction to the theory of accounting and the procedures necessary to produce financial statements. This course focuses on the classification, valuation and communication of financial information. An emphasis will be placed on the usefulness of financial accounting concepts. 2 lectures, 2 labs, 3 credits
## ACC-120 Computerized

Accounting provides the student with the skills necessary to use popular computerized accounting packages such as Quickbooks or Peachtree for Windows. The student will obtain a theoretical accounting background. The student, using basic accounting concepts, will prepare and analyze various accounting documents, reports and statements. It is recommended that this course be taken concurrently with ACC-101 Accounting I. 2 lectures, 2 labs, 3 credits

## ACC-140 Federal Income Tax

 Return Preparation will enable average taxpayers to complete their federal income tax returns using tax software. Topics include filing status, gross income, itemized deductions and tax credits.2 labs, 1 credit
ACC-201 Accounting II extends the accounting principles learned in Accounting I to financial and managerial areas of corporations. Areas discussed are liabilities, statement of cash flows, financial statement analysis and interpretation, manufacturing operations, and budgeting.
2 lectures, 2 labs, 3 credits
Prerequisite: ACC-101
ACC-202 Intermediate Accounting I is an in-depth study of accounting principles and their application to the preparation of financial statements. Students participate in a detailed study of current assets and current liabilities. The analysis and preparation of a statement of cash flows are also taught.
2 lectures, 2 labs, 3 credits Prerequisite: ACC-201 or ACC-210 with a grade of $C$ or better.

## ACC-203 Intermediate Accounting II

 is an in-depth study of accounting principles as they relate to non-current assets, long-term liabilities, paid-in capital, retained earnings, accounting changes, and error analysis. Earnings per share and financial statement analysis are also covered in this course. 2 lectures, 2 labs, 3 credits Prerequisite: ACC-202
## ACC-204 Cost Accounting I will

 introduce the student to the process of cost analysis and will show how it can be an aid to management in deci-sion-making. The development of standard costs and the variances of actual from standard are taught, in addition to job order and process cost systems. The cost behavior of material , labor, and manufacturing overhead is also covered.2 lectures, 2 labs, 3 credits Prerequisite: ACC-201 or ACC-210 with a grade of C or better.

ACC-205 Cost Accounting II will continue the study of the process of cost development with an analysis of lost units and FIFO costing. The student is introduced to joint product, break-even, and gross profit analysis. Differential analysis, budgeting, inventory planning, and other cost areas are also covered in this course. 2 lectures, 2 labs, 3 credits Prerequisite: ACC-204

ACC-206 Hospitality Accounting is an introduction to basic accounting principles and procedures, which includes the preparation of financial statements, specifically designed for the hospitality industry.
2 lectures, 2 labs, 3 credits
Prerequisite: HRM-101
ACC-207 Legal Accounting is a study of accounting concepts for the legal assistant. The trust and escrow accounting reporting rules of the New Jersey Supreme Court are discussed. Hourly records, billing procedures, and accounting concepts are studied as they relate to legal situations. 2 lectures, 2 labs, 3 credits Prerequisites: LGL-101, LGL-103, and LGL-203

## ACC-210 Managerial Accounting

explores accounting information as a tool used in decision making by management. Emphasis will be placed on cost behaviors as they relate to the planning, control and evaluation of a business entity.
2 lectures, 2 labs, 3 credits
Prerequisite: ACC-110

## ACC-220 Peachtree

Accounting/Excel Applications will provide students with the skills required to use the Peachtree accounting software. Students will use Peachtree software to perform basic accounting functions.
Accounting reports and statements will be generated using Excel.
2 lecture, 2 lab, 3 credits
Prerequisite(s): ACC-101 or ACC-110

## ACC-462 Co-op Work Experience

(Accounting) requires part-time student employment in a business organization in order to permit the student to gain knowledge of accounting practices. Co-op job placement assistance is available through the Co-op office. 1 lecture, plus 179 minimum hours work experience distributed over the semester, 2 credits
Prerequisite: ACC-201 or ACC-210

## ALH - ALLIED HEALTH

ALH-100 Introduction to Health Careers explores the health care delivery system and provides an overview of health careers. The course is designed to give the student accurate insight into the roles that the various practitioners contribute to the health care delivery system. Opportunity for on campus observational experiences will be provided. 1 lecture, 1 credit

ALH-463 Co-op Work Experience (Allied Health) is an elective for students pursuing careers in health related occupations. These work experiences may be available in health care settings such as hospitals, extended care facilities, clinics, medical or dental offices. The student will have the opportunity to utilize and broaden skills in the health care delivery system as they interact with health care professionals in a college approved work environment supervised by a faculty member. Student appointments must be approved by the Co-op Coordinator. 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: Satisfactory completion of one semester of an allied health certificate program or one year of an allied health degree program or by permission of the Department Head.

## ALP - AMERICAN LANGUAGE PROGRAM

## ALP-004 American Language

 Foundations: Grammar (Part A) is a course for international students with little or no exposure to English. It introduces students to the most basic grammar of English with emphasis on the simplest tenses, structures, and forms. 3 lectures, 3 non-degree credits Corequisite: ALP-005
## ALP-005 American Language

 Foundations: Grammar (Part B) provides students with continued work on the most basic structures of English. 3 lectures, 3 non-degree credits Corequisite: ALP-004
## ALP-006 American Language

 Foundations: Reading is a course for international students with little or no exposure to English. It provides them with instruction in pronouncing written words and understanding simple written texts. It also introduces students to the most common vocabulary of English and develops their ability to use this vocabulary in basic structures. 3 lectures, 3 non-degree credits Prerequisite or Corequisite: ALP-005Alp-ART

## ALP-007 American Language

 Foundations: Writing is a course for international students with little or no exposure to English. It provides students with instruction in the spelling of English and in writing simple sentences using the structures and vocabulary learned in American Language Foundations: Grammar and Reading. 3 lectures, 3 non-degree credits Prerequisite or Corequisite: ALP-005
## ALP-041 American Language I:

Grammar (Part A) introduces students to the basic grammar of the English simple sentence, with emphasis on verb tenses.
3 lectures, 3 non-degree credits
Prerequisite: ALP-005
Pre- or Corequisites: ALP-042, ALP006, ALP-007

## ALP-042 American Language I:

 Grammar (Part B) provides students with continued work on the basic grammar of the English simple sentence, with emphasis on nouns, adjectives, and adverbs.3 lectures, 3 non-degree credits Prerequisite: ALP-005
Pre- or Corequisites: ALP-041, ALP006, ALP-007

## ALP-043 American Language I:

Writing provides students with carefully guided exercises in the writing of English sentences and paragraphs. 3 lectures, 3 non-degree credits Prerequisites: ALP-007
Pre- or Corequisites: ALP-042

## ALP-044 American Language I:

Reading helps students with their vocabulary development and gives them practice in reading for comprehension with material up to the 1,000 word vocabulary level.
3 lectures, 3 non-degree credits Prerequisites: ALP-006
Pre- or Corequisites: ALP-042

## ALP-045 Directed Studies in

 American Language I is a course for students in the American Language Program who need intensive, supplemental instruction in grammar and writing skills. This computer assisted learning program is provided on an individual, prescriptive basis. 1 lecture, 1 non-degree credit Prerequisite: Permission of the Department Head
## ALP-051 American Language II:

 Grammar (Part A) continues the study of the English simple sentence begun in American Language I and introduces the compound sentence. The emphasis is on infinitives, modal verbs, and adverbs, and students are introduced to dependent clauses. 3 lectures, 3 non-degree credits Pre- or Corequisites: ALP-052, ALP043, ALP-044
## ALP-052 American Language II:

 Grammar (Part B) gives students work on perfect tenses and compound sentences, provides an introduction to the passive voice and to participial forms, and continues the study of dependent clauses.3 lectures, 3 non-degree credits Pre- or Corequisites: ALP-051, ALP043, ALP-044

## ALP-053 American Language II:

Writing gives students work on both guided and free writing exercises at the paragraph level. 3 lectures, 3 non-degree credits Prerequisite: ALP-043 Pre- or Corequisite: ALP-052

## ALP-054 American Language II:

Reading emphasizes reading for content and helps students develop their inferential skills on reading material up to the 3,000 word vocabulary level. 3 lectures, 3 non-degree credits Prerequisite: ALP-044
Pre- or Corequisite: ALP-052

## ALP-055 Directed Studies in

 American Language II is a course for students in the American Language Program who need intensive, supplemental instruction in grammar and writing skills. This computer-assisted learning program is provided on an individual, prescriptive basis. 1 lecture, 1 non-degree credit Prerequisite: Permission of the Department Head
## ALP-061 American Language III:

 Grammar (Part A) completes the study of the passive voice, of modal verbs, and compound sentences and begins a complete survey of dependent clauses in the English sentence. 3 lectures, 3 non-degree credits Pre- or Corequisites: ALP-062, ALP053, ALP-054
## ALP-062 American Language III:

 Grammar (Part B) completes the study of all the phrasal and clausal structures normally used in English sentences. 3 lectures, 3 non-degree credits Pre- or Corequisites: ALP-061, ALP053, ALP-054ALP-063 American Language III:
Writing provides students with intensive practice in the writing of paragraphs and provides a transition to college-level writing with an introduction to the essay.
3 lectures, 3 non-degree credits
Prerequisites: ALP-053 Pre or
Corequisite: ALP-062
ALP-064 American Language III: Reading emphasizes reading for content, making inferences, distinguishing main and subordinate points, and evaluating the ideas and presentation of reading material at and beyond the 4,000 word vocabulary level. 3 lectures, 3 non-degree credits Prerequisites: ALP-054 Pre- or Corequisite: ALP-062

## ALP-065 Directed Studies in

 American Language III is a course for students in the American Language Program who need intensive, supplemental instruction in grammar and writing skills. This computer-assisted learning program is provided on an individual, prescriptive basis. 1 lecture, 1 non-degree credit Prerequisite: Permission of the Department Head
## ANT - ANTHROPOLOGY

ANT-101 Cultural Anthropology is a comparative study of human cultures. Attention is given to the various ways in which people cope with their natural settings and their social environments and to the ways in which customs are learned and handed down from one generation to the next. Topics of discussion include the family, social change, religion and magic, economic and political systems, the arts, and urban anthropology. 3 lectures, 3 credits
\}General Education Course
\}Diversity Course

## ART - ART

ART-101 Art Appreciation is an introduction to the visual arts. The meaning of form and imagery in architecture, sculpture, painting, and other media are examined. The course offers opportunities for creative activities.
3 lectures, 3 credits
\}General Education Course

ART-102 Art History through the
Renaissance is a study of major works of art from prehistoric times through the Renaissance. Students analyze artistic styles and examine the relationships between art, history, and culture.
3 lectures, 3 credits
\}General Education Course

## ART-103 Art History since the

Renaissance is a study of major works of art produced during the modern era. Students analyze postRenaissance artistic styles and examine the relationships between art, history, and culture.
3 lectures, 3 credits
\}General Education Course
ART-104 20th Century Art is a class recommended for both fine and commercial artists as well as the general public interested in how art evolved into the contemporary, experimental forms of expression. Topics to be covered include: The Fauves and Expressionism, Cubism and Abstract Art, Constructivism, Dada and Surrealism, Abstract Expressionism, Op and Pop Art, Earth Art and Site Art, Conceptual and Performance Art. 3 lectures, 3 credits

## ART-105/CIN-150 History of

Animation focuses on the history and development of animation as an art form, with particular attention to works of significant innovation and expression. Topics include: the earliest cinematic practices; the first animated films, 1898-1928; sociological trends such as censorship and blacklisting of American animators; Japanese animation; the commerce of animation, including discussion of the studio system; involvement of the avant-garde with animation; animation from Europe; and the development of computer animation techniques. 3 lectures, 3 credits

ART-122 Two-Dimensional Design is an introduction to the studio skills, concepts, and language applicable to the problems of two-dimensional design as related to the visual arts. 2 lectures, 2 labs, 3 credits

* Macintosh computers are used in these courses.
** Intergraph NT computers are used in these courses.

ART-123 Life Drawing I is an intensive study of the anatomy and structure of the human figure as rendered in pencil, brush, charcoal, and ink. Emphasis is placed upon line perspective, form, value, and space relationships.
2 lectures, 2 labs, 3 credits

## ART-124 Drawing Fundamentals

 teaches free and schematic drawing skills necessary for advanced studio applications in the visual arts.2 lectures, 2 labs, 3 credits

## * ART-126 Introduction to

 Computer Graphics for the VisualArts is a class in the use of the computer as a visual tool. Emphasis is placed on creative visual output. No knowledge of mathematics or programming is required.
2 lectures, 2 labs, 3 credits
ART-181 Photography I introduces camera handling and basic b \& w darkroom techniques. Studies include camera operations, principles of exposures, basic understanding of light, film development, printing, picture content and compositional design. Technical and aesthetic possibilities of photography are explored through hands-on visual shooting assignments, photo exhibitions, slide presentations and critiques. A 35 mm SLR camera with manual override is required. 2 lectures, 2 labs, 3 credits

ART-223 Life Drawing II further advances the study of the human figure by refining the studio skills and ideas explored in Life Drawing I.
2 lectures, 2 labs, 3 credits Prerequisite: ART-123

ART-226 Letterform and Type is the study of typographic design, history, and function.
2 lectures, 2 labs, 3 credits
Prerequisites: ART-122, ART-126
ART-227 Painting I is an introduction to oil, acrylic, watercolor, and mixed media painting techniques. Students work with plastic form and color to develop the artistic image.
2 lectures, 2 labs, 3 credits
Prerequisites: ART-122, and either
ART-123 or ART-124
ART-228 Painting II engages the student in the solving of painting problems. The course includes analysis of traditional and contemporary styles of painting.
2 lectures, 2 labs, 3 credits
Prerequisite: ART-227

## ART-259 Computer Graphics for

 the Web Developer is an introduction to select software packages that increase a Web developer's ability to refine electronic images and text. Areas covered include aesthetic application; creating graphics using basic bitmap editing and vector based illustration; optimizing graphics in JPEG and GIF formats; using fonts; working with animations and video for the Web utilizing GIF, Quicktime and Flash animations; and troubleshooting technical problems.2 lectures, 2 labs, 3 credits Prerequisite: ART-126

ART-260 Graphic Design I enables students to develop proficiency in the graphic communication processes. Emphasis is on creative design solutions for commercial art problems. Students apply their knowledge in preparing graphics for publication and sales promotion.
2 lectures, 2 labs, 3 credits
Prerequisites: ART-226, and either ART-289 or ART-297

ART-261 Graphic Design II is a continuation of the problem solving approach to design previously explored in Graphic Design I. 2 lectures, 2 labs, 3 credits Prerequisites: ART-260, ART-287

## ART-271 Portfolio Presentation is

 a class in the selection, arrangement and presentation of visual communication material. From designing a how to get your foot in the door resume/cover letter to a how-to in visual arts business practices. This class is a must for freelancers and transfer/graduate aspirants alike. Includes: current portfolio and presentation types, interview techniques, writing resume and cover letters, how artwork is priced, business and legal practices for commissioned artwork, employment issues, salaries and freelance prices.1 lecture, 2 labs, 2 credits
Prerequisite: Minimum of 18 of credits 200-level ART courses or 15 credits of 200 -level ART courses and ART-181

ART-281 Photography II refines and further explores techniques and ideas presented in Photography I. Emphasis is on the relationship between exposure, film development and the finished print. Course work focuses on enhanced darkroom skills and experimentation with toners, different photographic papers, advanced lighting situations, and exposure techniques. A 35mm SLR camera with manual override is required.
2 lectures, 2 labs, 3 credits
Prerequisite: ART-181

## ART-284 Digital Photography

is designed for students with a basic understanding of both computer graphics and chemical photography to gain knowledge of digital photography and photographic manipulation. Digital cameras, scanners, printers, and computers will be available for classroom use. A student in this course will create art using a variety of photographic processes. Through hands-on assignments, slide presentations, critiques, readings, and exhibitions, students will engage with and build upon the artistic, technical, and theoretical possibilities created by extending photography into the digital realm.
2 lectures, 2 lab, 3 credits
Prerequisites: ART-181 and ART-126, or equivalent
*ART-287 Computer Layout I is a course designed for students knowledgeable in typography wishing to expand their skills in a hands-on creative manner. Students design and set type for advertising, publishing and corporate business problems. 2 lectures, 2 labs, 3 credits Prerequisite: ART-226
*ART-288 Computer Layout II is a course which trains persons familiar with traditional layout procedures in the computer and its applications. This advanced class stresses the combining of computer-set type with visuals for brochures, magazines, newspapers and other media.
2 lectures, 2 labs, 3 credits
Prerequisite: ART-287, ART-289 or ART-297

## *ART-289 Computer 2D Illustration

 explores the essential techniques for creating two-dimensional illustrations, logos and charts using the drawing tools and functions. This course emphasizes the basic operations and functions of object-oriented computer graphics using both spot and process color on the computer.2 lectures, 2 labs, 3 credits
Prerequisite: ART-126
**ART-290 Computer 2D Animation I introduces the fundamental skills and concepts of 2D computer animation, motion graphics, and digital video. The focus is twofold: technical and aesthetic. Technical study is comprehensive, from operating systems and software interface, to audio/video capture, to special effects, editing, and output. Aesthetic issues emphasize innovative approaches to sequential organization of thematic materials. 2 lectures, 2 labs, 3 credits Prerequisites: ART-126
**ART-291 Computer 2D Animation II
follows ART-290 as an advanced level studio experience in computer animation design and production. Technical and aesthetic issues in masking,
keyframing, interlacing, and compression are explored. Students learn to incorporate illustrations, photographs, video, and audio into their animations, as works progress from storyboard to completion. For students familiar with 3D animation techniques explored in ART-292 and/or ART-293, the possibilities for incorporating 3D animations into their projects also exist. 2 lectures, 2 labs, 3 credits Prerequisite: ART-290
**ART-292 Computer 3D Animation I concentrates on the use of state-of the-art 3D animation software. Students become familiar with animation in a 3 D environment using proper lighting, camera setup, design and rendering capabilities. Recording peripherals are also introduced. Class discussion and direct application of techniques focus on the use of desktop animation workstations in today's working environment.
2 lectures, 2 labs, 3 credits
Prerequisite: ART-126
**ART-293 Computer 3D
Animation II continues the study of state-of-the-art 3D animation, while concentrating on advanced technique and the integration of other computer graphic hardware/software in producing student work. Course work emphasizes the development of realistic and/or stylized visuals, as well as eyecatching special effects. Demo reels and business practices are included in the class work and discussion.
2 lectures, 2 labs, 3 credits Prerequisite: ART-292

## *ART-297 Computer Imaging

 teaches the basic principles of digital image processing and manipulation, including scanning, editing, color correction, color separations, special effects and transformation techniques. This course emphasizes the methods used to scan images from photographs, to retouch and alter these images, and to create bitmapped illustrations.2 lectures, 2 labs, 3 credits
Prerequisite: ART-126

## ART-BIO

*ART-298 Interactive Multimedia
teaches the principles of building illustrations and photographs into time-based computer visuals with sound. Students will create, assemble, and animate interactive media for distribution on CD-ROM and the Web. 2 lectures, 2 labs, 3 credits
Prerequisite: ART-126

## ART-462-463 Co-op Work Experience (Commercial Art)

places students as assistants in commercial art establishments. Students must work a minimum number of hours for the semester and will also attend a weekly one-hour seminar at BCC. Student's work experiences are supervised by BCC faculty members. Co-op job-placement assistance is available through the Co-op office. ART-462 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits Prerequisite: ART-260
ART-463 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: ART-260

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    these courses.
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## BIO - BIOLOGICAL SCIENCES

BIO-101 General Biology I is the
first course in a two-semester sequence in general biology. It is designed to explain the fundamental principles of biology and to promote an awareness of their significance to society. Lecture topics include: Introduction to biology, review of basic chemistry, cell biology, genetics, and a survey of Kingdoms Monera, Protista, and Fungi. Laboratory exercises develop proficiency in the use of laboratory equipment and guide students in investigations of cell biology, genetics, and microbiology.
3 lectures, 3 labs, 4 credits
\}General Education Course

BIO-103 The Human Body is a one-semester course that is concerned with basic chemistry, the human cell, tissues, and the musculoskeletal, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. The course includes a survey of metabolism and fluid/electrolyte balance. Lectures are supplemented by writing assignments and discussions. Laboratory exercises include microscopy, dissection, and anatomical and physiological experiments that complement the lecture. 3 lectures, 3 labs, 4 credits \}General Education Course

BIO-104 Microbiology is a laboratory science course that emphasizes the principles of biology as they apply to microorganisms. The morphology, anatomy, physiology, growth, metabolism, nutrition, control, and identification of the various microbes, genetics including recombination technology, industrial and clinical case studies in microbiology are discussed.
Representative laboratory exercises include staining procedures, media preparation, pure culture techniques, culture identification, and serology. 3 lectures, 3 labs, 4 credits \}General Education Course

## BIO-106 Field Studies in Biology

is designed to introduce students, in an outdoor setting, to the diversity of living organisms and to the environments in which they exist. Field trips include the New Jersey Pine Barrens, Catskills, swamps, marshes and bogs, Harriman State Park, Wawayanda State Park, Norvin Green State Forest and numerous short trips. Emphasis is on basic taxonomic principles for identifying the local flora and fauna. 2 lectures, 3 labs, 3 credits.
(Offered only in Summer Session II)

## BIO-107 Introduction to Human

Biology is a one-semester course on basic human anatomy and physiology focusing on present-day biological issues including cancer, heart disease, AIDS, nutrition and emerging infectious diseases. Laboratory exercises include various experiments that deal with the human body and case studies, which will foster a fundamental understanding of wellness and disease states. 3 lectures, 3 labs, 4 credits \}General Education Course

## BIO-108 Introduction to

 Environmental Biology deals with humans and their interactions with the environment. Topics covered include fundamental aquatic and terrestrial ecology, air and water pollution, world population problems, loss of biodiversity, pesticides, solid waste problems and an extensive review of energy problems and their solutions. Laboratories include measurements of various environmental pollutants, analyses of environmental parameters and descriptive and practical reinforcement of lecture material. 3 lectures, 3 labs, 4 credits \}General Education Course
## BIO-109 Anatomy and Physiology I

 is an introduction to the basic principles of human anatomy and physiology that emphasizes some common diseases in relation to the various body systems. Among the topics considered are the basic plan of the body, tissues, the skeletal system, the muscular system, articulations, cardiovascular system, and the respiratory system. Lectures are supplemented by writing assignments, discussion, and laboratory sessions that include dissection and elementary physiology experiments.3 lectures, 3 labs, 4 credits
\}General Education Course

## BIO-115 Vertebrate Anatomy and

 Physiology I focuses on the structures and functions of vertebrate organ systems, with primary emphasis on mammals. After a brief overview of vertebrate development and evolutionary history, the major portion of the course reviews each system, across all principal groups. Study of basic cellular biology and of skeletal, muscle, and nervous systems is included. Normal homeostatic mechanisms and pathophysiological conditions are emphasized, as well as the interrelationships of organs and organ systems. Dissection is required. 3 lectures, 3 labs, 4 credits
## BIO-119 Intensive Wolf Study

 deals with an organism that represents the conflicts between humans and wildlife management issues. Taught at the International Wolf Center in Ely, Minnesota, during the winter semester break, students will study captive wolves as well as wolves in their natural habitat. Lecture topics include the biology and ecology of the gray wolf, Canis lupus. Afternoon and evening sessions involve field work and independent study.BIO-130 People-Plant
Relationships explores the effects of plants on biological organisms that influence human economic, social and psychological behavior. The course will focus on two major themes: 1) plants as sources of food, shelter, clothing, drugs, and industrial raw material; and 2) the influence of plant life on human cultural diversity, biotechnology, medicine, and conversation efforts.
3 lectures, 3 labs, 4 credits
\}General Education Course
BIO-131 General Botany is an introduction to the biology of plants. The course includes an analysis of plant structure and function, an explanation of the principles of plant genetics, an exploration of plant evolution, and an examination of plant ecology. The importance of plants to people will be illustrated through discussions of people's ecological and economic dependence upon plants. The course content will be presented through lectures, demonstrations, and laboratory exercises. 3 lectures, 3 labs, 4 credits \}General Education Course

## BIO-137 Ecology of the North

Woods is taught during Summer Session I at the International Wolf Center in Ely, Minnesota. It is designed to expose the student to the unique environment of the North Woods, where the boreal forest intergrades with the temperate deciduous forest. Both the abiotic and biotic components of this ecosystem will be taught during five intensive days in the North Woods. Emphasis will be on the flora and fauna of the ecosystem, both in formal lecture and in extensive field work. 45 hours, 3 credits

## BIO-201 Comparative Anatomy is

 a study of the body structures of some representative vertebrate animals and of their functional and evolutionary relationships. Laboratory exercises include detailed dissection of the lamprey eel, the dogfish, the mudpuppy, the cat, and other animals. 3 lectures, 3 labs, 4 credits Prerequisite: Any college-level Biology course.BIO-202 Embryology is the study of vertebrate embryonic development from gametogenesis and fertilization to the development of the body organs. Laboratory exercises include experiments with living sea urchins, Japanese madeka fish, frogs, and chick embryos, as well as microscopic examination of the various sections of the embryos.
3 lectures, 3 labs, 4 credits
Prerequisite: Any college-level Biology course.

BIO-203 General Biology II is the second course of a two-semester sequence of general biology. This course explores the diversity of the plant and animal kingdoms and provides an understanding of their evolution. Major aspects of the structure, function, and life cycles of representative organisms are explained. The students will examine the complexity of roots, stems, and leaves, analyze reproduction in flowering plants, and investigate the biology of invertebrate and vertebrate animals. Laboratory exercises are provided to complement the lectures. 3 lectures, 3 labs, 4 credits Prerequisite: BIO-101
\}General Education Course
BIO-209 Anatomy and Physiology II continues the study of human anatomy and physiology. Among the topics considered are the digestive system, metabolism, urinary system, fluid and electrolyte balance, the nervous system, the endocrine system, and the reproductive system. Lectures are supplemented by writing assignments, discussion and laboratory sessions that include dissection and elementary physiology experiments.
3 lectures, 3 labs, 4 credits
Prerequisite: BIO-109
\}General Education Course

## BIO-215 Vertebrate Anatomy and

 Physiology II is a continuation of Vertebrate Anatomy and Physiology I. The endocrine, circulatory, respiratory, renal, reproductive and digestive systems will be studied. Normal homeostatic mechanisms and pathophysiological conditions are emphasized, as well as the interrelationships of organs and organ systems. Dissection is required as part of the laboratory syllabus.3 lectures, 3 labs, 4 credits
Prerequisite: BIO-115

## BIO-227 Principles of Ecology

 deals with terrestrial and aquatic ecology. Topics covered include abiotic characteristics of ecosystems as well as detailed discussions of populations, communities, ecosystems and biomes. Discussions also include such topics as ecological succession and paleoecology. Qualitative and quantitative data of ecosystems is gathered during the early part of the semester in which ecological data will be collected during field experiences. These data will be analyzed during the second half of the semester in the laboratory. Statistical analyses and report writing will also be stressed. 3 lectures, 3 labs, 4 creditsPrerequisites: BIO-101, BIO-203

## BIO-228 Introduction to Marine

Biology deals with a basic introduction to marine environments, emphasizing ecological principles governing marine life throughout the world. Topics include basic oceanography, marine ecological systems, planktonic communities, deep-sea biology, subtidal and intertidal ecology, estuarine and coral reef communities, human impact, mariculture and pollution. Lab sessions will include in-house lab exercises, field experiences, analysis of data, group projects and report writing. 3 lectures, 3 labs, 4 credits
Prerequisites: BIO-101, BIO-203

## BIO-229 Tropical Marine Ecology

deals with characteristics of populations, communities, and ecosystems found in tropical regions. Taught at the Keys Marine Laboratory in Long Key, Florida, during the spring semester break, students study coral reef structure and ecology, the intertidal zone, mangrove and terrestrial communities, interstitial organisms, and atrophic relationships. Lab sessions include field experiences, group projects and report writing. 45 hours, 3 credits
Prerequisites: BIO-101, BIO-203

## BIO-240 Biomedical

 Technologies: Issues \& Impacts examines the effect of the new technologies in biology and medicine upon society. Issues such as genetic engineering, abortion, invitro fertilization and euthanasia will be analyzed from the biological, technical, moral and political perspectives. Through class discussions and the use of case studies, students will confront the questions raised by the new technologies and assess their impact upon individuals and upon society.3 lectures, 3 credits
Prerequisite: WRT-101

## BNF - BANKING, CREDIT \& FINANCE

## BNF-101 Principles of Bank

Operations presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad and operational perspective.
3 lectures, 3 credits
BNF-102 Personal Finance and Money Management provides students with a basic understanding of personal finance so that they may properly manage their own financial affairs. Topics include: financial planning, budgeting and income taxes; managing savings plans, credit cards and debt problems; renting vs. buying; health, disability and life insurance; investing in stocks, bonds and mutual funds; and retirement planning, wills and estate planning. 3 lectures, 3 credits

## BNF-201 Principles of Finance

provides the beginning student with an awareness and a basic conceptual understanding of financial theory and practice. Topics considered include financial analysis and control, working capital management, capital budgeting, long term financing, financial leverage, and financial ratios. 3 lectures, 3 credits Prerequisite: ACC-101 or ACC-110, BUS-101, or by permission of the Department Head

## BNF-204 Trust Functions and

Services presents a complete picture of the services rendered by institutions engaged in the trust business. It provides an introduction to the services and duties involved in trust operations, with an emphasis on the business and legal aspects of the trust function.
3 lectures, 3 credits
Prerequisite: BNF-101

## BNF-205 Credit and Collection

Principles I is an introduction to the importance of credit in business and presents the basic principles of credit. Emphasis is placed on the general uses made of credit and the critical need of the business world for credit. 3 lectures, 3 credits
Prerequisite: BUS-101

BNF-206 Credit and Collection Principles II considers the use of financial statements, financial ratios, and the balance sheet relationships related to the making of credit decisions. Policies and procedures for handling collections are studied. Other topics such as bankruptcy, factors, finance companies, and banks are studied.
3 lectures, 3 credits
Prerequisite: BNF-205
BNF-207 Principles of Investment and Portfolio Management examines investment instruments, the investment process and markets and investment strategies. Students will explore the characteristics of stocks, bonds, options, futures, and other investment vehicles. Portfolio theory will be studied. 3 lectures, 3 credits Prerequisite: BUS-101 and ACC-101, or by permission of the Department Head

## BNF-462 Co-op Work Experience

 (Banking, Credit and Finance) is a recommended elective for all students who are pursuing an Associate in Applied Science degree in the Banking, Credit and Finance curriculum. It is designed to provide practical banking and/or credit management experience in a college-approved work environment. All job situations are monitored by the college for their conformity to established guidelines for such courses. Job placement assistance is available through the Co-op Office.1 lecture; plus 120 minimum hours work experience distributed over the semester, 2 credits.
Prerequisites: BNF-101 or by permission of the Department Head

## BUS - BUSINESS <br> ADMINISTRATION

## BUS-101 Introduction to Business

is a study of the activities that make up the field of business. Some of the topics covered are the ownership, organization, and management of business; finance; marketing; unions; and government regulations. 3 lectures, 3 credits

## BUS-103 Business Mathematics

 provides a background in the principles and problems related to banking, interest, depreciation, and the pricing of merchandise. Attention is also given to commercial paper, consumer credit, and various taxes. 3 lectures, 3 credits Prerequisite: MAT-011, or equivalent by an appropriate placement as a result of the New Jersey College Basic Skills Placement Test (computational sections only), or by permission of the Department HeadBUS-105 Business
Communications covers the communications skills of writing, speaking and listening, with particular application to the field of business. Emphasis is placed on effective techniques to be used in interviews and meetings. Students learn how to prepare business letters, memos, and reports. Oral presentations are included.
3 lectures, 3 credits

## BUS-170 Small Business

Management introduces the student to the basic knowledge and skills necessary for managing or owning a small business. Topics include getting started, planning and managerial skills, inventory, finance, risk management, marketing, taxation, and community responsibility. Students will analyze a variety of cases. 3 lectures, 3 credits
(Offered only in the evening of the fall semester)

BUS-201 Marketing Principles is a study of all the decision variables facing marketing managers of all goods or services. Product, pricing, promotion, and distribution problems are studied in the context of the commodity, functional, institutional, and environmental aspects of the marketplace. This course takes a managerial approach to the study of marketing. 3 lectures, 3 credits
Prerequisite: BUS-101

## BUS-202 International Marketing

introduces the student to the global marketing environment and to the diverse factors which shape it. Topics of discussion include product, pricing, promotion, and distribution decisions as they relate to the international marketplace for goods and services. 3 lectures, 3 credits Prerequisite: BUS-101 or by permission of the Department Head

## BUS-204 Principles of

Salesmanship is a study of current theories and practices for salespersons of both consumer and industrial goods. Topics covered include evaluation of customer needs, importance of product data, buying motives, and the development of sales presentations. Personal qualifications of the salesperson and career opportunities are also examined.
3 lectures, 3 credits
Prerequisite: BUS-101

BUS-205 Entrepreneurship is an overview of the concepts and principles of business development and management. The use of case study analysis facilitates practical understanding and appreciation of business concepts. In addition, students gain further practical knowledge through the use of the Internet. The course provides a comprehensive perspective of ownership and management of a small business or new venture. 3 lectures, 3 credits Prerequisite: BUS-101 or at least one-year of business experience.

## BUS-207 Principles of Business

 Management is an introduction to the process through which an organization coordinates the activities of people to reach a common objective. These activities include planning, organizing, staffing, leading, and controlling, and involve the effective utilization of the economic resources of land, labor, capital, and entrepreneurship.3 lectures, 3 credits
Prerequisite: BUS-101

## BUS-208 Human Resources

Management examines procedures to be followed in supervising workers under applicable legal and contractual agreements. Techniques of hiring, training, evaluation, promotion, remedial action, and dismissal are examined. Special attention is devoted to relations with unions. Case studies are emphasized, and student participation is encouraged through role playing, visual aids, and personal projects.
3 lectures, 3 credits Prerequisite: BUS-101 or by permission of the Department Head (Offered only in the evening of the fall semester)

## BUS-209 Purchasing and

 Materials Management provides an overview of the functions and fundamentals of purchasing and materials management. Among the topics to be covered are specifications and standardization, sources of supply, negotiations, quality control, inventory management, traffic, receiving, storage, and other requirements of the Certified Purchasing Management Association. 3 lectures, 3 credits Prerequisite: BUS-101 or by permission of the Department HeadBUS-210 E-Marketing explores the impact of information technology, specifically, the Internet and World Wide Web, on the marketing of goods and services. Topics include: identification of web-based marketing goals; selection of the appropriate web-based marketing strategy; conducting primary and secondary marketing research; webdesign criteria; web-based advertising techniques; revenue streams. Students will develop an integrated Internet marketing plan, including development of a web presence, for an organization.
3 lecture, 3 credits Prerequisites:
(BUS-101 or BUS-170 or BUS-201) and INF-163

BUS-211 Internet Law introduces the student to the complexities of the legal environment in the information age with a special focus on E-commerce. Topics include: basic contract law; current and future contract law for E-commerce; contracting and licensing software; torts and cybertorts; privacy and government regulations; intellectual property laws including patents, trade secrets, copyrights and trademarks; and Internet agreements. Students will review and analyze actual cases.
3 lecture, 3 credits
Prerequisites: (BUS-101 or BUS-170) and INF-163

BUS-233 Business Law I is a survey of the law as it applies to business. It covers the law of contracts, torts, crimes, and commercial paper and anaIyzes the New Jersey Court System.
3 lectures, 3 credits
Prerequisite: BUS-101
BUS-234 Business Law II continues
the survey of business law and covers sales, consumers rights, bailments, insurance, partnerships, and corporations. 3 lectures, 3 credits
Prerequisite: BUS-233
BUS-250 Advertising is designed to give the student a broad view of advertising principles and their relationship to product marketing. The student will select and use different media, conduct market research, write copy and prepare advertising layouts. An advertising campaign will be completed as a term project. 3 lectures, 3 credits Prerequisite: BUS-201

## BUS-262 Fundamentals of

 International Business is designed to familiarize the student with the institutional and practical aspects of international business. Principal topics include global business environments, strategies for international management, marketing, finance, and relevant legal and political considerations. 3 lectures, 3 creditsPrerequisite: BUS-101 or by permission of the Department Head

## BUS-263 International Trade Documentation and

Transportation provides the student with an understanding of the terminology and mechanics of the movement of goods from one country to another. Among the topics covered are selling terms and conditions, in land documentation to port of exit, foreign documentation, and ocean and air transportation strategies. 3 lectures, 3 credits
Prerequisite: BUS-101 or by permission of the Department Head

## BUS-264 International Finance

provides students with an understanding of international financial transactions. Topics covered include balance of payment problems with their attendant trade barriers and restrictions, methods of payment and their inherent risks, and strategies to optimize export financing and foreign capital investment yields. 3 lectures, 3 credits
Prerequisite: (BUS-202 or BUS -262) AND (ACC -101 or ACC-110) OR permission of the department head.

## BUS-265 Food Marketing and

 Merchandising provides an introduction of the food industry. Topics include the structure of the food industry, product and service categories, and regulations affecting food merchandising. Students will be introduced to store layout, buying and price management, advertising and promotion, profitability, and potential career options.3 lectures, 3 credits
Prerequisite: BUS-201
BUS-266 Sanitation and Regulatory Issues and Problems in Food Industry Management provides techniques and procedures for employing hygienic practice in the food service industry. Topics include food sanitation and microbiology, food spoilage and food borne illnesses, and education and sanitation for food service personnel. Government regulations as they pertain to the food industry are discussed throughout the course.
3 lectures, 3 credits
Prerequisite: BUS-265

BUS-267 Food Distribution, Sales and Production focuses on the structure and formulation of the channels of distribution, sales strategies, and marketing logistics in the food industry. Customer service, logistical costs, system planning and management are all analyzed. Topics also include transportation, warehouse operations, sales management and the application of information systems.
3 lectures, 3 credits
Prerequisite: BUS-265

## BUS-268 Strategic Issues and Problems in Food Industry

Management discusses the strategic basic aspects of food marketing and management. As the capstone course, it draws upon a variety of business administration fields to include management and marketing 3 lectures, 3 credits Prerequisites: BUS-265, BUS-266, and BUS-267

BUS-271 E-Commerce explores how small and large businesses use the Internet to increase or create their market presence. Students will design and develop a prototype of an electronic enterprise suitable for the Web.
2 lectures, 2 Lab, 3 credits Prerequisite: (INF-161 or INF-162 or INF-163) AND BUS-101 or permission of the Department Head

## BUS-463 Co-op Work Experience

(Business Administration) provides the student with practical, supervised experience in various areas of business, management, marketing, or international business. Through on the job experience, students acquire some of the practical expertise and knowledge needed to pursue a career in these fields. Students are supervised by a faculty member and job placement assistance is available through the Co-op Office. 1 lecture, plus 225 minimum hours work experience distributed over the semester. 3 credits
Prerequisite: BUS-201 or BUS-202 or BUS-207 or BUS-208

## BUS-473-474 Co-op Work Experience (Food Marketing)

 enables the student to learn and practice food marketing skills under professional guidance in a college approved work environment. The student's work is supervised by a trained faculty member. Students must work a minimum number of hours for the semester and attend the weekly seminar.BUS-473 1 lecture, Plus 180 minimum hours work experience, 3 credits Prerequisite or Corequisite: BUS-268
BUS-474 1 lecture, Plus 240 minimum hours work experience, 4 credits Prerequisite or Corequisite: BUS-268

## CHM - CHEMISTRY

CHM-100 Introduction to Chemistry is designed to give nonscience majors an awareness and an understanding of the fundamental concepts of modern chemistry. Topics covered include measurement, atomic theory, chemical bonding, the periodic table, chemical reactions, and stoichiometry. The course includes a writing and communications requirement that relates the topics covered to a broad historical, social, and cultural context.
3 lectures, 3 labs, 4 credits
Prerequisite: MAT-011 or a passing score on the New Jersey Basic Skills
Placement Test (Computational Sections Only).
\}General Education Course
CHM-110 Basic Biochemistry is a course for Dental Hygiene students. Principles of atomic theory, chemical bonding, and chemical reactions are studied with an emphasis on acids and bases. The structure and function of the major groups of organic compounds are studied in order to provide a basis for understanding the nature and role of the major classes of biochemical compounds such as carbohydrates and proteins. The study of enzymes is also included. This course does not substitute for CHM-112.
3 lectures, 3 labs, 4 credits
Prerequisite: MAT-011 or equivalent by appropriate placement as a result of the NJ Basic Skills Placement Test (Computational sections only) Recommended Prerequisite: CHM100 or a recent college-prep high school chemistry course.

CHM-112 College Chemistry is a survey of the fundamentals of inorganic chemistry, organic chemistry, and biochemistry. Topics in inorganic chemistry include atomic theory, chemical bonding, chemical reactions, nomenclature, gas laws, and acid-base buffers. The structure and function of the major classes of organic compounds are studied. Topics in biochemistry include proteins, carbohydrates, lipids, nucleic acids, and enzymes. The course includes a writing and communications requirement that relates the topics covered to a broad historical, social, and cultural context.
3 lectures, 3 labs, 4 credits Prerequisites: MAT-011 or equivalent by appropriate placement as a result of the NJ Basic Skills Placement Test (Computational sections only). Recommended Prerequisite: CHM100 or a recent college-prep high school chemistry course. \}General Education Course

CHM-140 General Chemistry I is a
study of the fundamental laws and theories of chemistry. Topics covered include units of measurement, dimensional analysis, stoichiometry, aqueous reactions, thermochemistry, electronic structure of the atom, periodicity, chemical bonding, molecular geometry and properties of gases.
3 lectures, 3 credits
Prerequisite: MAT-032 or MAT-035 or equivalent by an appropriate place-
ment as a result of the New Jersey Basic Skills Placement Test and
CHM-100, or a passing score on the CHM-100 challenge exam.
Recommended Corequisite: CHM 141 and MAT-045
\}General Education Course

## CHM-141 General Chemistry

Laboratory I is a course designed to familiarize the student with chemical laboratory techniques through problem solving experiments. It complements material covered in CHM-140. Written lab reports are required. 3 labs, 1 credit
Prerequisite or Corequisite: CHM-140 \}General Education Course

CHM-212 Organic and Biochemistry is designed to give students an understanding of the principles of Organic Chemistry and of Biochemistry. The study of Organic Chemistry will emphasize a functional group approach. Topics studied will include hydrocarbons, alcohols, carbonyl compounds, and amines. Topics in Biochemistry will include carbohydrates, proteins, lipids, nucleic acids, bioenergetics, enzymes, and biosynthetic pathways. Acid-base chemistry will also be studied. 3 lectures, 3 labs, 4 credits Prerequisites: MAT-011 or equivalent by appropriate placement as a result of the NJ Basic Skills Placement Test (Computational sections only), CHM112 or CHM-140 or by permission of the Department Head

## CHM-240 General Chemistry II is

the second course of a two-semester sequence of general chemistry. Topics covered include intermolecular forces, properties of solutions, chemical kinetics, equilibrium, thermodynamics, acids and bases, and electrochemistry. 3 lectures, 3 credits
Prerequisite: CHM-140
Recommended Prerequisite: CHM-141 Recommended Corequisite: CHM-241 \}General Education Course

CHM-241 General Chemistry
Laboratory II is a continuation of CHM-141, with greater emphasis on more sophisticated experiments and equipment. It complements the material covered in CHM-240. Written lab reports are required.
3 labs, 1 credit
Prerequisite: CHM-140 and CHM-141.
Prerequisite or Corequisite: CHM-240
\}General Education Course
CHM-260 Organic Chemistry I is a study of the fundamental classes of organic compounds, with emphasis on the relationship of structure and reactivity. Electronic theory, energy relationships, stereochemistry, and reaction mechanisms are used to explain reactivity. Practical applications, including syntheses, are studied and carried out in the laboratory.
3 lectures, 3 labs, 4 credits
Prerequisites: CHM-240 and CHM-241
CHM-262 Organic Chemistry II is a continuation of CHM-260 and includes aromatic and organometallic chemistry, spectroscopy, and the chemistry of carbonyl compounds. The laboratory emphasizes more sophisticated experimental techniques and synthetic sequences, and includes a unit on the use of the chemical literature.
3 lectures, 3 labs, 4 credits
Prerequisite: CHM-260

## CIN - CINEMA

CIN-140/THR-140 Introduction to the Cinema is a study of film as an art form. The course is designed to awaken a more sensitive and critical response to the cinema through an understanding of its form, content, development, and criticism. Films are screened to demonstrate these elements.
2 lectures, 2 labs, 3 credits
\}General Education Course

## CIN-150 Special Topics in Cinema

I permits specialized topics in cinema to be studied as a part of more general courses. Students may repeat this course for separate credit. Topics may include, but are not limited to, Women in Cinema, History of Animation, and World Cinema. 3 hours, 3 credits

## CIN-240/THR-240 The Classic

Cinema is an in-depth study of the style, philosophy, and significance of selected directors and films.
3 lectures, 3 credits
Prerequisite: CIN-140/THR-140

## CIN-CIS

CIN-250 Special Topics in Cinema II permits specialized topics in cinema to be studied as a part of more general courses. These courses require that students have had some experience using basic cinema terminology (e.g., shot structure, camera movement) through a 100 Level Cinema course. Students may repeat this course for separate credit. Topics may include, but are not limited to, Major Filmmakers, Documentary Cinema, Avant-Garde Cinema, Classic Cinema and Film Noir. 3 hours, 3 credits Prerequisite: CIN-140/THR-140 or CIN-150

## CIS - COMPUTER SCIENCE

Also see courses listed under INF (Information Technology)

## CIS-158 Introduction to Computer

Science is intended for students who are interested in an algorithmic approach to problem solving using computers and their applications. Topics include terminology used in the computer field, introduction to computer systems and their applications. Students will work with various software packages on a microcomputer. 2 lectures, 2 labs, 3 credits Prerequisite: MAT-032 (Algebra B) or MAT-035 (Algebra).
(Business students should take INF101)
\}General Education Course

## CIS-163 Computer Programming:

OBASIC is an introduction to programming techniques using the QBASIC language. Students learn how to develop programs for various applications, and they obtain extensive hands-on experience in the operation and use of a microcomputer. The course is intended for students in the liberal arts and sciences. Students with prior programming experience should take CIS-266 Computer Programming: Visual BASIC.
2 lectures, 2 labs, 3 credits
Prerequisite: MAT-031/032 or MAT-035 or MAT-045 or equivalent by testing. \}General Education Course

CIS-165 C++ Programming I is an introduction to computer systems and structured programming techniques. Topics considered include an introduction to the components of a computer system; problem solving and algorithm design; standard data types and declarations; input and output techniques; operators; library functions; fundamental control statements; arrays and strings; data sorting; and files. Applications are selected from various fields of study. 2 lectures, 2 labs, 3 credits Prerequisite: MAT-031/032 or MAT035 or MAT-045
\}General Education Course By permission of the Department Head or the Computer Science Coordinator, properly prepared students may instead register for CIS-265 and/or CIS-271.

CIS-265 C++ Programming II is a continuation of CIS-165 C++ Programming I. Topics considered include functions; structured programming principles; pointer arithmetic; multidimensional arrays; fundamental sorting and searching algorithms; structures; unions; sequential and random access file processing algorithms; and the runtime behavior of programs. 3 lectures, 1 lab, 3 credits Prerequisite: CIS-165 or by permission of the Department Head or the Computer Science Coordinator.

## CIS-266 Computer Programming:

 Visual BASIC is an introduction to a programing tool for developing userfriendly Windows applications in the QBASIC programming language. It is intended for the student who has already learned the fundamental programming structures of a computer language. After a review of the fundamentals of QBASIC, Visual BASIC tools will be studied and incorporated into applications using modular programming techniques, arrays, sorting and searching techniques, and sequential and random access files. 3 lectures, 1 lab, 3 credits Prerequisite: CIS-163 or CIS-165 or by permission of the Department Head or the Computer Science Coordinator. \}General Education Course
## CIS-270 Programming for

 Scientific Applications is a computer programming language course with emphasis on mathematical, scientific, and engineering applications using structured programing principles. Topics include data types, specifications, fixed and floating point arithmetic, input and output techniques, multidimensional arrays, external functions and subroutines. 2 lectures, 2 labs, 3 credits Prerequisites: MAT-180 or by permission of the Department Head or the Computer Science Coordinator.
## CIS-271 Computer Organization

 and Assembly Language is a study of the interactions between hardware and software necessary for understanding the organization and application of computer systems. Topics to be considered include data representation, Boolean algebra and computer logic, the central processing unit and program execution, main memory, classes of machine language instructions, addressing formats, addressing modes, and the fundamentals of assembly language programming. 2 lectures, 2 labs, 3 credits Prerequisites: CIS-165 or by permission of the Department Head or the Computer Science Coordinator.
## CIS-277 Data Structures and

Algorithms is a study of the representation and implementation of abstract data types and related algorithms that a reused in computer science. Topics considered include lists, strings, stacks, queues, trees, graphs, networks, file structures, recursive functions, sorting techniques, searching techniques, hashing, and analysis of algorithms. 3 lectures, 1 lab, 3 credits Prerequisite: CIS-265 with a grade of C or better.

CIS-278 Database Systems is an introduction to the design and implementation of database systems. Topics considered include database architecture, physical data organization, the Entity-Relationship model, the hierarchical, network, and relational models of data, normalization theory, data definition languages and query facilities, data integrity and security, and programming language interfaces. Students use a DBMS to develop an actual database. 3 lectures, 1 lab, 3 credits Prerequisite: CIS-265 or CIS-266 or by permission of the Department Head or the Computer Science Coordinator.

## CIS-287 Object-Oriented

## Programming in $\mathbf{C + +}$ is an introduc-

 tion to the object-oriented approach to program development. Topics considered include classes and their implementation, static members, friend functions, composite classes, functions and operator overloading, inheritance, polymorphism and an introduction to object-oriented analysis and design. 3 lectures, 1 lab, 3 credits Prerequisite: CIS-265 or by permission of the Department Head or the Computer Science Coordinator.CIS-288 Discrete Mathematics for Computer Science is a study of the mathematical theory and techniques that underlie computer science. Topics considered include set theory, induction, counting techniques, relations and functions, recurrence relations, trees, graphs, Boolean algebra and circuits, grammars and an introduction to automata theory. Applications of these topics in computer science are included in the course. 4 lectures, 4 credits
Prerequisite or Corequisite: CIS-265 or by permission of the Department Head or the Computer Science Coordinator.

## CIS-289 Systems Analysis and Design for Computer Science is

 an introduction to the terminology, concepts, and tools for these two phases of the system development life cycle. Topics considered include preliminary investigation, information requirements analysis, project management, data specification, data flow diagrams, logical data modeling, process specification, structure charts, design techniques, design criteria, and packaging. 3 lectures, 3 creditsPrerequisite or Corequisite: CIS-277 (Business students take INF-208) or by permission of the Department Head or the Computer Science Coordinator.

## CIS-461-463 Co-op Work Experience

(Computer Science) are elective courses designed to provide the student with part-time work experience in the field of computer science. The courses offer students opportunities to gain additional expertise and knowledge under professional guidance in industrial or business settings. In addition, students are required to attend a weekly one-hour seminar. The courses are supervised by a faculty member who must approve all student placements. Co-op job placement assistance is available through the Co-op office.
CIS-461 1 lecture plus 60 minimum hours work experience distributed over the semester, 1 credit CIS-462 1 lecture plus 160 minimum hours work experience distributed over the semester, 2 credits CIS-463 1 lecture plus 220 minimum hours work experience distributed over the semester, 3 credits Prerequisites: CIS-274 and MAT-281

## COM - MASS <br> COMMUNICATION

## COM-101 Mass Media of

Communication is a study of the print and broadcast media. The roles of media in society, a history of media, and the legal control of media are explored.
3 lectures, 3 credits
\}General Education Course
COM-105 Radio Production is a hands-on course designed to give the student experience in writing, directing and producing a variety of radio formats. Radio commercials, dramas, musical programs, and actualities are considered in this course. 2 lectures, 2 labs, 3 credits

COM-106 TV Production is a practical, hands-on course that is designed to give the student experience in writing, directing, and producing a variety of television programs. Students apply theories, principles and skills of TV and videotape techniques through camera usage, control room operations, and videotape editing.
2 lectures, 2 labs, 3 credits

## COM-140 Introduction to

Multimedia is a course that introduces the student to the various applications of computer-based Multimedia in industry, government, education, and entertainment. Hardware systems, videodisc design, flow charts, software tools, scripts, and production will be covered. Students will work in groups to design and prepare a multimedia presentation.
2 lectures, 2 labs, 3 credits

## COM-201 Introduction to

Journalism is a study of the fundamentals of reporting with emphasis on the modern news story. Elements of news style, structure of news stories, news sources, ethics, and the mechanics of newspaper production is considered.
3 lectures, 3 credits
Prerequisite: WRT-101

## COM-203 Print Journalism

Production is a hands-on course in which students apply principles and skills necessary for the production of newspapers and magazines. This course covers such topics as formatting, layout design and printing techniques.
2 lectures, 2 labs, 3 credits
Prerequisite: COM-201

## COM-205 Advanced Radio

Production is a hands-on course designed to produce broadcast quality programs. Directing, writing, technical, editing and voice utilization skills will be emphasized. 3 lectures, 3 credits
Prerequisite: COM-105 or by permission by the Department Head

## COM-206 Writing for the Mass <br> Media provides a survey of media

 formats and writing techniques for print and broadcast. Students are introduced to the forms and methods used to prepare information for the various mass media including magazines, newspapers, radio, television and the Web. Public relations writing and preparing advertising copy are also covered.3 lectures, 3 credits
Prerequisite: WRT-101
Corequisite: COM-101
COM-207 TV Production II is a course that provides the student with an opportunity to refine existing skills through the production of a regularly scheduled public affairs program. A functional awareness of all factors involved in the production of a series on a regular basis is developed.
3 lectures, 3 credits
Prerequisite: COM-106 or by permission by the Department Head

## COM-208 Directing for Television

is an introduction to television directing and to the pre-production steps necessary to the creation of a television program. The theoretical development of formats, lighting, set determinations, and crew selection are considered. Students are required to direct a variety of television program formats.
3 lectures, 3 credits
Prerequisite: COM-106 or by permission by the Department Head

COM-210 Public Relations is a study of the basic principles and practices of promotion including history, development, ethics, and media selection. Emphasis will be placed on preparing news releases, advisement for coverage, and press kits for target audiences.
3 lectures, 3 credits
Prerequisite: WRT-101

## COM-211 Video Post-Production

is a hands-on course designed to train students in advanced post-production techniques utilizing interformat, time code and $A / B$ Roll editing. Audio sweetening, computer graphics, and animation will be discussed. 3 lectures, 3 credits
Prerequisite: COM-106 or by permission by the Department Head

## COM-461-464 Co-op Work

Experience (Media) is a field work course in media production, planning, or programming on an individual basis. The student must attend weekly seminars and/or prepare reports or other projects as required by the departmental staff. Credit is based on work with an approved broadcast or non-broadcast organization, including television and radio stations, networks, production houses, and cable TV operations. Available for 1 to 4 credits. Job placement assistance is available through the Co-op office.
COM-461 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit COM-462 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits COM-463 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits COM-464 1 lecture, plus 240 minimum hours work experience distributed over the semester, 3 credits Prerequisites: COM-105 or COM-106 or by permission of the Department Head

## COM-471-473 Co-op Work

 Experience (Journalism) gives students work experience in a newspaper office and thereby gives them the opportunity to acquire and apply skills in news writing, photojournalism, layout and/or newspaper production. Work sites must be approved by the faculty coordinator. Co-op job placement assistance is available through the Co-op office. COM-471 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit COM-472 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits COM-473 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: COM-201 or by permission of the Department HeadCRJ-101 Introduction to Criminal Justice analyzes the history, development, and function of the police in a free society. A primary concern in the course is the relationship between the various components of the criminal justice system and the effectiveness of the system as a mechanism for social control. 3 lectures, 3 credits

## CRJ-102 Introduction to

## Corrections is an overview of the

 history and philosophical foundations of the American correctional system. This course examines the organization and operation of the correctional system and correctional treatment programs ranging from pre-trial diversion to post-incarceration procedures. The course analyzes current issues and problems in corrections such as social control within prisons, legal rights of prisoners, and alternatives to imprisonment. 3 lectures, 3 creditsCRJ-103 Criminal Law is a study of the philosophy and development of the law and development of law of criminal procedure and its constitutional provisions. Topics included in the course are principles of criminal law and the adversary system, police authority, relative to the laws of arrest, search and seizure, and a review of relevant U.S. Supreme Court decisions. CRJ-101 Introduction to Criminal Justice is highly recommended before taking this course.
3 lectures, 3 credits

## CRJ-105 Police Administration

 provides a review, analysis, and synthesis of the proactive, traditional scientific, and human relations approaches to police management. The basic of administering a police organization such as recruitment and selection of personnel, training, fiscal and planning operations, and auxiliary and staff functions are reviewed. Changes relative to socioeconomic, political, and technological realities are explored. CRJ-101 Introduction to Criminal Justice is highly recommended before taking this course.3 lectures, 3 credits


CRJ-107 Criminology explores the criminal justice system with an emphasis on the structure and operation of its components and on the modes of societal responses to crime and criminals. It reviews the development, philosophy, and concepts of criminal law and analyzes the leading theoretical perspectives on criminal behavior and criminal typologies. SOC-101 Introduction to Sociology is highly recommended before taking this course. 3 lectures, 3 credits

## CRJ-108 Topics in Criminal

Justice is an introductory study of major topics in policing, corrections, and the courts, concentrating on such topics as judicial misconduct, law enforcement stress management, terrorism, criminalistics, prison gangs, sex offenders, domestic violence, and suicide by police. 3 lectures, 3 credits

## CRJ-109 Contemporary Issues in

Policing explores the history and scope of the relationship between the police and the community. Community relationships are examined from psychological and sociological perspectives. The course analyzes police issues such as media relations; citizen grievances; civilian review boards; selection, training, and education of personnel; police professionalism; discretionary use of police authority; police unionism; crime prevention; and the role of women in police agencies. 3 lectures, 3 credits

## CRJ-110 Basic Supervision

 (Criminal Justice) examines the first line supervisor as an integral part of the total management team and as one of the cornerstones upon which successful operations rest. The course analyzes the role of the supervisor as a problem solver and as a key link in the communication process. Topics explored in the course are the supervisor's expanded responsibilities for planning, training, developing, and motivating employees; counseling, performance appraisal; decision making; and leadership.3 lectures, 3 credits

## CRJ-111 Criminal Investigation

 analyzes the essential elements of investigation as a science of inquiry with an emphasis on the legal significance of evidence. Methods of searching for, collecting, preserving, and evaluating physical evidence and the techniques for locating and interviewing witnesses are explored. Organizational investigative functions and the development of an understanding of the crime laboratory and its role in a criminal investigation are also discussed.3 lectures, 3 credits

CRJ-112 Crime Prevention examines opportunity reduction strategy as a predictable and controllable variable in addressing the crime problem. The course emphasizes the role of police as community leaders and explores practical concepts and methods through which community involvement can deter crime. The limitations of the criminal justice system are analyzed and a variety of professional, occupational, and voluntary roles in crime prevention are explored. 3 lectures, 3 credits

## CRJ-113 The Juvenile Justice

Process examines the history, philosophy, and structure of the juvenile justice system with emphasis on changes fostered by US Supreme Court decisions. The course includes an analysis of the nature and the scope of delinquency in terms of causal theories; issues affecting dependent, neglected, and abused children; juvenile crime prevention programs; and the strategic role of the police in developing community resources to serve as alternatives to formal court referral. 3 lectures, 3 credits

## CRJ-114 Correctional

Administration is an introduction to the organization and administration of correctional institutions. The course examines both theoretical and practical aspects of correctional administration and focuses on such issues as decision-making, ethical values, human relations, and authority. CRJ102 Introduction to Corrections is highly recommended before taking this course.
3 lectures, 3 credits
CRJ-115 Correctional Law is an overview of the policies and practices that govern correctional institutions. The cource examines current legal issues and many court cases that directly impact on prisons and prisoners. CRJ102 Introduction to Corrections is highly recommended before taking this course. 3 lectures, 3 credits

## CRJ-125 Introduction to Security

 is an examination of the historical, philosophical, and legal bases of security. The course analyzes the role of security in today's society, the concept of professionalism, and the relationship between security and law enforcement functions. Such security concerns as unlawful intrusion, retail theft, internal theft, and other crimes, which seriously threaten the business community, are also discussed. The scope and nature of fire prevention and safety are reviewed in a non-technical manner. 3 lectures, 3 credits
## CRJ-127 Principles of Loss

 Prevention examines the application of the concepts and procedures that serve to prevent losses due to waste, accidents, error, crime, and unethical practices. The emerging professional status of the loss-control manager and his/her attendant responsibilities are discussed. home loss-control technology, electronic security systems, disaster planning, and fire protection and safety are also reviewed.3 lectures, 3 credits

## CRJ-461-463 Co-op Work

 Experience (Criminal Justice) provides the student with practical, supervised work experience in the various areas of criminal justice work: police agencies, prosecutors offices, courts, sheriff's offices, and the correction field. Through on-thejob experience, students can acquire the practical expertise and knowledge needed to pursue a career in this field. Students are supervised by a faculty member, and job placement assistance is available through the Cooperative Education Office. CRJ-461 1 lecture; plus 60 minimum hours work experience distributed over the semester, 1 credit CRJ-462 1 lecture; plus 120 minimum hours work experience distributed over the semester, 2 credits CRJ-463 1 lecture; plus 180 minimum hours work experience distributed over the semester, 3 credits
## CRJ-473 Co-op Work Experience (Security and Loss Prevention)

 provides the student with practical, supervised experience in various areas of business and institutional security work. Through on-the-job experience, students acquire some of the practical expertise and knowledge needed to pursue a career in this field. Students are supervised by a faculty member, and job placement assistance is available through the Cooperative Education Office. 1 lecture; plus 180 minimum hours work experience distributed over the semester, 3 credits. Prerequisite: CRJ-125
## DAN - DANCE

DAN-102 Ballet is a study of the language of ballet as an art form with emphasis on traditional, academic, and technical steps and vocabulary. 3 labs, 1 credit

DAN-103 Modern Dance is a study of the technical and choreographic skills of modern dance. Students are assisted in being individually creative through movement.
2 labs, 1 credit
DAN-104 Tap Dance is an introduction to elementary tap skills, terminology and rotation, and beginning combinations and simple routines. Purchase of tap shoes is required. 2 labs, 1 credit

DAN-105 Jazz Dance is a study of various styles, techniques, and vocabulary in the idiom of jazz dance. 2 labs, 1 credit

DAN-108 Dance Improvisation is a guided discovery of the freedom of movement in a medium for the expression and development of ideas. Through the emphasis of space, rhythm, and quality, pieces of choreography are designed.
2 labs, 1 credit

## DATA PROCESSING

See Information Technology

## DHY - DENTAL HYGIENE

Starting in September 2003, dental hygiene applicants will be required to pass the HOBET exam for admittance into the program.

DHY-101 Oral Hygiene I is a study of the services a dental hygienist renders to patients. Scaling and polishing techniques on typodonts and classmates are utilized. Medical and dental history taking, patient education methods, and office procedures are introduced. 1 lecture, 6 labs, 3 credits Corequisite: BIO-104

## DHY-108 Dental and Oral Anatomy

and Physiology is a study of the oral cavity, with emphasis on the functions of the teeth and related structures, including muscles, nerves, and blood vessels. Laboratory sessions include tooth carving, anatomy of the skull, and the study of occlusion.
1 lecture, 4 labs, 2 credits

## DHY-109 Oral Embryology and

Histology is a study of the structure of body cells, tissues, and organs as they relate to the oral cavity. The embryology of the oral apparatus will be studied, and the relationship between structure and function will be stressed.
2 lectures, 2 credits

## DHY-200 Pharmacology for Dental

Hygiene introduces medications that are routinely prescribed for medical and dental conditions. Chemical and physical properties of drugs will be examined as well as indications for use, dosage, and adverse reactions. Local and general anesthetic agents used in dentistry will be emphasized. 2 lectures, 2 credits
Prerequisites: DHY-101, DHY-201, and DHY-207

DHY-201 Oral Hygiene II is a study of the procedures a dental hygienist uses with patients in a clinical setting. These procedures are scaling and polishing of the teeth, patient education, general medical and dental history taking, sterilization procedures, and appointment desk duties and procedures.
1 lecture, 8 labs, 3 credits
Prerequisites: BIO-104, BIO-109, DHY101, DHY-108, and DHY-109

DHY-202 Oral Hygiene III is a study of the clinical procedures introduced in Oral Hygiene II. It is a continuation and refinement of the clinical procedures a dental hygienist uses with patients, with emphasis on radiological procedures.
1 lecture, 12 labs, 4 credits
Prerequisites: BIO-104, BIO-209, DHY-
201, DHY-205, and DHY-207
DHY-203 Oral Hygiene IV is an advanced study of the clinical services the dental hygienist renders to the patient. The course is conducted in cooperation with national, state, county, and city agencies.
1 lecture, 12 labs, 4 credits
Prerequisites: DHY-200, DHY-202,
DHY-204, and DHY-209
DHY-204 Dental Materials is a comprehensive study of the science, technology, and application of dental materials. Various dental materials and their specific uses, along with related fundamental and specialty clinical dental hygiene skills, are presented through didactic, laboratory, and clinical components.
2 lectures, 4 labs, 3 credits
Prerequisites: BIO-209, DHY-108, DHY-
109, DHY-201, DHY-207 and CHM-110

## DHY-205 Dental Radiology is a

study of the basic principles of general and dental radiology.
Radiography equipment, techniques, the hazards of radiation and dental landmarks are studied.
2 lectures, 3 labs, 3 credits
Prerequisites: BIO104, BIO-109, DHY-
101, DHY-108, and DHY-109

## DHY-206 Public Health and

 Community Dentistry is a study of the history, development and present practice of public health procedures as they relate to dentistry, including epidemiological study. Opportunity will be provided for practice teaching in alternating health care settings.3 lectures, 3 credits
Prerequisites: BIO-209, DHY-108, and DHY-109

## DHY-207 General and Oral

Pathology is a study of diseases affecting the oral cavity and the responsibilities of the dental hygienist in the detection of abnormal conditions.
3 lectures, 3 credits
Prerequisites: BIO-109, DHY-108, and DHY-109

DHY-209 Periodontology I is a detailed study of the principles and concepts of periodontal disease, including the tissues surrounding the teeth in both healthy and diseased states. Preventive therapies will be introduced.
1 lecture, 1 credit
Prerequisites: BIO-209, DHY-108, and DHY-205

## DHY-210 Oral Hygiene - Special

Clinic is designed to provide clinical experience for either the student who returns after an absence from the dental hygiene program or for the student in need of further development of clinical skills.
3 hours, 1 credit
Prerequisites: DHY-108, DHY-109,
DHY-201, and BIO-109

## DHY-214 Nutrition in Dental

Health explores basic nutrition as it applies to general and oral health. Nutritional concepts are applied to the science of preventive dentistry. 2 lectures, 2 credits
Prerequisites: CHM-110 and DHY-202
DHY-219 Periodontology II is an
advanced study of the disease process and treatment modalities for periodontal disease. Emphasis will be placed on the dental hygienist's role in initial therapy and in the maintenance of oral health.
1 lecture, 1 credit
Prerequisite: DHY-209

## DFT - DRAFTING \& DESIGN



Premier provider with the American Institute of Architects, Continuing Education System (AIA/CES). We are committed to offering quality education in accordance with the AIA/CES criteria.
(Provider \#F162). These programs meet the AIA/CES criteria for Quality Level III. AIA members will receive the appropriate Learning Units, which will be reported directly to the AIA/CES.

DFT-107 Drafting I offers the student a theoretical basis for the development of drafting skills necessary to work in drafting, design, engineering, and technical professions. Emphasis is placed on terminology and procedures used in multiview projection, auxiliary and sectional views, intersections and developments, dimensioning, and pictorial drawing. Students are encouraged to develop an awareness of proper drafting techniques, the geometry of technical drawing, and new technological advancements in the field of drafting. Computer aided drafting (CAD) is introduced. 1 lecture, 3 labs, 2 credits

DFT-207 Drafting II introduces the student to basic theory and design techniques used in industrial drafting with emphasis on the development of the drafting skills necessary for producing drawings used by industry for the design, production, and promotion of various products. Computer aided drafting (CAD) is included. A semester project is undertaken in which the student produces all necessary drawings for the manufacture of a product. Topics covered include gears, threads, tolerancing, inking, perspectives, and advanced isometrics.
2 lectures, 2 labs, 3 credits Prerequisite: DFT-107

## DFT-208 Engineering

Graphics I is designed to acquaint the student with various types of graphic solutions to engineering and drafting problems. Special attention is given to orthographic projection as it relates to solving graphical space problems. Extensive problem-solving involving points, lines, and planes, and aids to students' visualization process for advanced drafting, engineering design, and computer graphics applications are covered.
2 lectures, 2 labs, 3 credits
1 Prerequisite: DFT-107

## DHY-DF-

## DFT-209 Engineering Graphics II

offers the student the opportunity to apply the techniques introduced in Engineering Graphics I. Topics include revolution, developments, mining and civil engineering, and contour maps. CAD is used extensively in the solution of many engineering and design problems. On-site visits to local industry are designed to show practical applications of the topics discussed. Special attention is given to advanced drafting, design, and engineering problems.
2 lectures, 2 labs, 3 credits
Prerequisite: DFT-207, DFT-208

## DFT-210 Computer Aided

Drafting I introduces the use of computer aided drafting (CAD) on a PC computer using AutoCAD software. This course is intended to familiarize the user with the skills necessary to use CAD as an effective drafting and design tool for mechanical, architectural, electrical, and other drafting and design professionals. Topics covered including drawing setup, line drawing, editing, layer creation, display features, and dimensioning. 2 lectures, 2 labs, 3 credits Prerequisite or Corequisite: DFT-107

## DIVT-211 Computer Aided

Drafting II continues the work of CAD I and covers intermediate and advanced level CAD skills. Included in this course will be file management, blocks, attributes, isometric drawings, 3D with AutoShade, menu customization, LISP programming and architectural drawings using AEC software. At the conclusion of this course the individual should have the general skills necessary to adapt to most CAD software.
3 lectures, 5 labs, 5 credits
Prerequisite: DFT-210

DFT-212 Computer Aided
Drafting III provides continued study of advanced CAD technologies, giving students a complete hands-on experience with three dimensional photorealistic and presentation graphics.
2 lectures, 2 labs, 3 credits
Prerequisite: DFT-211


DFT-215 Mechanical Building Systems I is an introduction to plumbing and HVAC equipment and systems. Nomenclature, specifications, layout drawings, plans, details, sections, elevations, and isometric drawings are developed.
2 lectures, 2 labs, 3 credits Prerequisites: DFT-207 and DFT-208

Systems II continues the work of Mechanical Building Systems I from the design point of view, with a study of the design procedures for a wide range of plumbing and HVAC systems.
2 lectures, 2 labs, 3 credits
Prerequisite: DFT-215

## DFT-220 Electrical Drafting and

Design is intended for the student interested in the specialized field of electrical drafting. The course introduces, from the design side, those considerations necessary to prepare drawings for the construction of electrical systems over a broad range of applications.
2 lectures, 2 labs, 3 credits
Prerequisite: DFT-262

## DI DFT-262 Architectural

Drafting is an introductory course that develops drafting procedures and detailing techniques using a residential project. Students will complete a set of architectural residential working drawings, which will include floor plans, elevations and detail drawings. Topics will include basic house framing, dimensions and specifications used in architectural drawing, cost estimating, building materials, and detailing structural aspects of a building. The use of architectural, engineering, and construction CAD packages will be covered.
2 lectures, 2 labs, 3 credits Prerequisites: DFT-207 and DFT-208 Corequisite: DFT-265

Design discusses design theory and principles. Commercial building and site design, analysis and development are stressed and explored through case studies and building design projects. 2 lectures, 2 labs, 3 credits Prerequisites: DFT-262 and DFT-265


DFT-265 Architectural Practice and Planning is designed to provide the student with basic practical and technical guidelines for working in a professional architectural and construction environment. Topics covered include design process, design development, site analysis and planning, zoning and building codes, and contracts and construction practices. 2 lectures, 2 labs, 3 credits Prerequisites: DFT-207 and DFT-208 Corequisite: DFT-262

DINT-266 Materials and Methods of Construction introduces and discusses the construction process and its role in architecture and design. Major building component systems and methods and structural design theory are explored. 2 lectures, 2 labs, 3 credits Prerequisite: DFT-262

DFT-282 Technical Illustration details the techniques used in the preparation of pictorial technical material for illustration and publication. Advanced drawing techniques in axonometric, oblique, and perspectives are covered, as well as basic shading methods used in illustration, including line shading, stipple shading, airbrush, and cast shadows. 2 lectures, 2 labs, 3 credits Prerequisite: DFT-207

## DFT-461-463 Co-op Work

 Experience (Drafting and Design) are designed to provide drafting and design students with part-time work experiences so that they may learn and practice under professional guidance in college approved work environments. In addition, weekly seminars are conducted by a college faculty member. Students must apply for these courses through the Co-op Office, which offers job placement assistance; this application must precede registration for Co-op courses.DFT-461 1 lecture, Plus 60 minimum hours work experience distributed over the semester, 1 credit
DFT-462 1 lecture, Plus 120 minimum hours work experience distributed over the semester, 2 credits DFT-463 1 lecture, Plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: DFT-207 or by permission of the Department Head

## DMS - ULTRASOUND/DIAGNOSTIC MEDICAL SONOGRAPHY

DMS-101 Ultrasound Physics and Instrumentation I will provide the student with the relevant fundamental physical principles as well as the basic instrumentation used in diagnostic ultrasound. Modes of operation, imaging and display techniques that relate to high-frequency sound production will be stressed. 1 lecture, 3 labs, 2 credits Corequisites: DMS Program: DMS-102, DMS-113, DMS-115; Vascular Program: DMS-102, VAS-101, VAS-102

## DMS-102 Clinical Medicine \&

Patient Care will enable the student to provide quality patient care while demonstrating the application of technical skills needed to perform ultrasound procedures. Medical term definitions will also be presented and practical applications of medical terminology will be covered. An understanding of pertinent emergency care, patient psychology, medical ethics and management skills will be presented. 2 lectures, 2 credits
Corequisites: DMS Program: DMS-102, DMS-113, DMS-115; Vascular Program: DMS-101, VAS-101, VAS-102

## DMS-113 Abdominal Sonography

$\mathbf{I}$ is a comprehensive study of abdominal structures with an emphasis on specialty organ examinations. A knowledge of the diagnosis, history and physical findings, as they pertain to the pathophysiology of abdominal organs and systems is presented. Normal and abnormal tissue patterns are included within the discussions. Students will practice scanning in the lab in preparation for objectives required in Ultrasound Clinic I. 2 lectures, 3 labs, 3 credits Corequisites: BIO-109, DMS-101, DMS-102, DMS-115

## DMS-115 Cross-Sectional

Anatomy involves the study of the structure and function of human anatomy in the cross sectional mode. Topics will include the circulatory system, abdomen, thorax, cranium, pelvis, reproductive system and retroperitoneum. Fetal crosssectional anatomy will also be presented. The course content will be presented through lectures, discussion, and laboratory exercises.
3 lectures, 3 labs, 4 credits
Prerequisites: Vascular Program:
DMS-201, BIO-209
Corequisites: DMS Program: BIO-
109, DMS-101, DMS-102, DMS-113;
Vascular Program: VAS-210, VAS-
$132^{211, ~ V A S-212, ~ D M S-214 ~}$

DMS-201 Ultrasound Physics
and Instrumentation II is a contin-
uance of the study of the physical principles of diagnostic ultrasound. Emphasis will be placed on hemodynamics, Doppler ultrasound, image artifacts, bioeffects, safety, and quality assurance. Advanced instrumentation will also be presented. 1 lecture, 3 labs, 2 credits Prerequisites: DMS Program: DMS101, DMS-102, DMS-113, DMS-115; Vascular Program: DMS-101, DMS102, BIO-109
Corequisites: DMS Program: DMS204, DMS-205, DMS-213, DMS-218 Vascular Program: BIO-209, VAS-201, VAS-202, VAS-203

DMS-204 Introduction to Medical Imaging is a comprehensive course pertaining to different procedures that exist in the Radiology Department. It is an introduction to different modalities and how they interrelate to one another. Special tests will be introduced in each modality with strong emphasis on correlation with ultrasound exams. The course will be divided into certain organ systems and the modalities that are useful in determining certain abnormalities. Students will be shown how different modalities utilize patient testing and the importance of the modality. Topics are chosen according to certain ultrasound procedures.
1 lecture, 1 credit.
Prerequisites: DMS-102, DMS-113, DMS-115;
Corequisites: DMS-201, DMS-205,
DMS-213, DMS-218

## DMS-205 Obstetric and

 Gynecological Sonography is a course designed to familiarize students with the pathophysiology of the female reproductive system, gynecological anomalies and normal and abnormal first trimester pregnancy. Pelvic scanning protocol will also be discussed and sonographic interpretation will be utilized. Recognizing the normal and abnormal sonographic patterns in gynecology and first trimester pregnancy will be covered.Pathological and/or physiological data for the interpretation by physicians is stressed. The sonographic criteria for evaluation of the gravid uterus and fetus will be demonstrated.
2 lectures, 3 labs, 3 credits
Prerequisites: BIO-109, DMS-102,
DMS-113, DMS-115
Corequisites: DMS-201, DMS-204,
DMS-213, DMS-218

## DMS-213 Abdominal Sonography

II is a continuance of Abdominal
Sonography I in studying abdominal structures where an emphasis is placed on specialty organ examinations. A knowledge of the diagnosis, history, and physical findings as they pertain to the pathophysiology of abdominal and small organs is presented. Normal and abnormal tissue patterns are included within this course. Students will practice and master a full abdominal procedure in the lab to prepare them for Ulltrasound Clinic II-Abdomen rotation.
2 lectures, 3 labs, 3 credits
Prerequisites: BIO-109, DMS-102, DMS-113, DMS-115;
Corequisites: DMS-201, DMS-204, DMS-205, DMS-218

DMS-214 Echocardiography I is an introduction to cardiovascular principles. Topics covered will be anatomy and physiology, pathophysiology, patient assessment that includes palpation and auscultation of the heart and arteries, cardiovascular medications, surgical intervention and interpretation of electrocardiograms. Students will also learn how to perform a limited echo procedure in an attempt to prepare them for Vascular Practicum IV.
2 lectures, 3 labs, 3 credits
Prerequisites: DMS Program: BIO-209, DMS-201, DMS-219; Vascular Program: DMS-201, VAS-204 Corequisites: DMS Program: DMS-220, DMS-229; Vascular Program: DMS115, VAS-210, VAS-211, VAS-212

## DMS-218 Ultrasound Clinic I

requires the student to spend two days a week in an approved hospital Ultrasound Department. Students will perform limited abdominal and pelvic procedures under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation. Progress is evaluated according to a competencybased clinical education system.
1 credit, 160 hours
Prerequisites: DMS-101, DMS-102,
DMS-113, DMS-115
Corequisites: DMS-201, DMS-204,
DMS-205, DMS-213

## DMS-219 Ultrasound Clinic II-

 Abdomen requires the student to spend five days a week in an approved hospital Ultrasound Department. Students will perform complete abdomen procedures under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation. Progress is evaluated according to a competency-based clinical education system.2 credits, 240 hours Prerequisites: DMS-204, DMS-205, DMS-213, DMS-218

## DMS-220 Ultrasound Clinic III-

OB/GYN requires the student to spend two days a week in an approved hospital Ultrasound Department. Students will perform pelvic and obstetrical procedures under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation. Progress is evaluated according to a competen-cy-based clinical education system. 2 credits, 240 hours Prerequisites: DMS-219, DMS-205 Corequisite: DMS-226

## DMS-221 Ultrasound Clinic IV-

Vascular requires the student to spend two days a week in an approved hospital Ultrasound Department. Students will perform venous and arterial procedures under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation. Progress is evaluated according to a competency-based clinical education system.
1 credit, 200 hours
Prerequisites: DMS-214, DMS-220,
DMS-226, DMS-229
Corequisite: DMS-227

## DMS-222 Ultrasound Clinic V-

Cardiac requires the student to
spend five days a week in an approved hospital Ultrasound Department. Students will perform a complete echocardiography procedure under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation. Progress is evaluated according to a competency based clinical education system.
2 credits, 240 hours
Prerequisites: DMS-221, DMS-227
Corequisite: DMS-225

DMS-223 Ultrasound Seminar I is
a course that will cover ultrasound instrumentation and the physical principles of sound, ultrasound, and Doppler pertinent to Sonography. Emphasis will be placed on propagation principles, transducer parameters, interactive properties of ultrasound with human tissues and quality control procedures. The matrix of the ARDMS exam for General Physics Principles and Instrumentation and Cardiac Principles and Instrumentation will be followed. All of the General Physics will be reviewed. Fifty percent of the Cardiac matrix will be reviewed. The remaining $50 \%$ of the Cardiac matrix will be reviewed in Echocardiography and Ultrasound Seminar III.
1 lecture, 1 credit
Prerequisites: DMS-201, DMS-213
Corequisites: DMS-214, DMS-226
DMS-224 Ultrasound Seminar II is
a course that will cover Abdomen and Obstetrics and Gynecology pertinent to Sonography. Emphasis will be placed on normal and abnormal sonographic patterns of the liver, biliary tree, pancreas, urinary tract, scrotum, prostate, spleen and retroperitoneum. Superficial structures will be discussed to include the thyroid and GI tract. Obstetrics and gynecology content will include normal and abnormal gynecology, and normal obstetrical anatomy. Special emphasis will be placed on fetal abnormalities and high-risk pregnancy techniques. Infertility and postpartum sonographic findings will be discussed. The matrix of the ARDMS exam for Abdomen and Obstetrics and Gynecology will be followed. Seventy percent of the Abdomen matrix will be reviewed. The remaining $30 \%$ will be reviewed in Abdomen Sonography I and II. Seventy percent of the Obstetrics and Gynecology will be followed. The remaining $30 \%$ will be reviewed in OB/GYN Sonography and OB Sonography II.
1 lecture, 1 credit
Prerequisites: DMS-223, DMS-226

DMS-225 Ultrasound Seminar III
is a course that will cover Adult Echocardiography. Emphasis will be placed on normal anatomy and physiology of the adult heart.
Physiology/hemodynamics of the heart chambers and muscles are emphasized. Doppler flow patterns and cardiac measurements are included. The matrix of the ARDMS exam for Adult Echocardiography will be followed. Seventy percent of the Echocardiography matrix will be reviewed. The remaining $30 \%$ will be reviewed in Echocardiography and Echocardiography II.
1 lecture, 1 credit
Prerequisites: DMS-224, DMS-227, DMS-228, DMS-229.
Corequisite: DMS-222

## DMS-226 OB Sonography II is a

 continuance of OB/GYN Sonography designed to familiarize the students with the pathophysiology of the female reproductive pelvic scanning protocol will also be discussed and sonographic interpretation will be utilized in the labs. Normal and abnormal obstetrical pattens will be taught, and emphasis is placed on recognizing the essential sonographic appearance when doing an obstetrical exam in 2nd and 3rd trimester. Chromosomal and congenital anomalies are discussed and the importance of the differential diagnosis. Level II and high risk OB ultrasound are presented. Pathological and/or physiological data for the interpretation by physicians is stressed. The sonographic criteria for evaluation of the gravid uterus, postpartum uterus and the fetus will be demonstrated. 2 lectures, 3 labs, 3 credits;Prerequisites: BIO-209, DMS-205, DMS-219.
Corequisites: DMS-214, DMS-220
DMS-227 Echocardiography II is a continuance of Echocardiography, explaining the normal anatomy and physiology of the adult heart. A more in-depth analysis of the physiology/hemodynamics of the heart chambers and muscles are emphasized. Doppler flow patterns and sonographic evaluation of the abnormal heart will be stressed. New techniques as an adjunct tool to Echocardiography will be discussed. Students will perform a complete echo exam in lab in preparation for Vascular Practicum IV. Cardiac measurements of the chambers and muscles will be covered.
2 lectures, 3 labs, 3 credits Prerequisites: DMS Program: DMS226, DMS-229; Vascular Program: DMS-201,VAS-204
Corequisites: DMS Program: DMS221, DMS-228;
Vascular Program: DMS-115, VAS-210,
VAS-211, VAS-212

DMS-228 Advanced Ultrasound Practices is a course that is designed to explore new specialty techniques in the areas of Abdomen, Obstetrics and Gynecology and Echocardiography. Intraoperative procedures will be discussed in all specialties. Specialized equipment will also be emphasized. The course will also focus on legal and ethical issues in sonography. Review of case presentations will be discussed. Independent learning assignments and various lecture formats will enhance the course. Journal articles will be introduced. Neurosonography will be stressed to include normal and abnormal sonographic findings.
1 credit, 3 labs
Prerequisites: DMS-226, DMS-229
Corequisites: DMS-221, DMS-227
DMS-229 Vascular Imaging introduces the use of diagnositc imaging with the use of Doppler for examing the vasculature of the human body. In this class the student will learn about diseases that affect the circulatory system. The course provides a history of diagnosis and treatment of vascular conditions. In addition, the course gives the student an awareness of alternative diagnostic tools used in conjunction with ultrasound. The student will learn how to perform vascular tests commonly performed in vascular laboratories and develop an awareness of tests that are routinely performed. 1 lecture, 3 labs, 2 credits
Prerequisites: BIO-209, DMS-201, DMS-213
Corequisites: DMS-214, DMS-220, DMS-223

EBS - ENGLISH
BASIC SKILLS
EBS-014 Developmental Skills I is the first course of a two course basic skills sequence designed to improve fundamental academic skills in the areas of reading and writing. Class instruction emphasizes the development of literal comprehension, sentence structure, grammar and punctuation, and vocabulary. This course requires concurrent enrollment in EBS015 Skills Practicum.
3 lectures, 3 non-degree credits Corequisite: EBS-015

EBS-015 Skills Practicum I is the corequisite of Developmental Skills I. The objective of this course is to provide an opportunity for the student to apply the skills learned in Developmental Skills I. Instruction is individualized and lessons are drawn from the class activities of Developmental Skills I. This course requires concurrent enrollment in EBS014 Developmental Skills.
2 lectures, 2 non-degree credits
Corequisite: EBS-014

## EBS-016 Developmental Skills II is

 the final course of a two course basic skills sequence designed to improve fundamental academic skills in the areas of reading and writing. Class instruction emphasizes inferential and critical reading, paragraph organization and development, and vocabulary development through reading activities. Successful completion of this course permits enrollment in English Composition I. This course requires concurrent enrollment in EBS-017 Skills Practicum II.3 lectures, 3 non-degree credits Corequisite: EBS-017

EBS-017 Skills Practicum II is the corequisite of Developmental Skills II. The objective of this course is to provide an opportunity for the student to apply the skills learned in Developmental Skills II. Instruction is individualized and lessons are drawn from the class activities of Developmental Skills II. This course requires concurrent enrollment in EBS016 Developmental Skills II. 2 lectures, 2 non-degree credits Corequisite: EBS-016

EBS-023 English Skills is a one semester developmental skills course designed to improve fundamental academic skills in the areas of reading, writing, and study skills. Class instruction emphasizes inferential and critical reading, paragraph organization and development, and vocabulary development through reading activities. Opportunities for word processing and individualized instruction in the Directed Studies Center in grammar, mechanics, and punctuation are provided. Successful completion of this course permits enrollment in English Composition I. This course requires concurrent enrollment in EBS-024 English Skills Practicum. 3 lectures, 3 non-degree credits Corequisite: EBS-024

## EBS-024 English Skills Practicum

 is the corequisite of English Skills. The objective of this course is to provide an opportunity for the student to apply the skills learned in English Skills. Instruction is individualized and lessons are drawn from the class activities of English Skills. This course requires concurrent enrollment in EBS023 English Skills.2 lectures, 2 non-degree credits Corequisite: EBS-023

EBS-031 Directed Studies in Writing is a required course for students whose scores on the New Jersey Basic Skills Placement Test indicate a need for intensive instruction in writing. Personalized instruction designed to support the student's activities in English Composition I is offered in this course.
1 lecture, 1 non-degree credit Corequisite: WRT-101

## EBS-032 Directed Studies in

 Academic Skills reinforces reading, writing and study skills. Skills addressed in this course are: how to use the library and do research, how to take notes, how to write essays for exams and take tests, how to approach college reading assignments, and how to use a variety of study aids. Instruction will occur through classroom lecture, discussion, and computer-assisted instruction. 3 lectures, 3 non-degree credits
## ECO-ECONOMICS

ECO-101 Macroeconomics is the study of resources, scarcity, income, employment, banking, government involvement, international trade and international payments in the economy of the United States. This course explores the different macroeconomic theories that seek to explain economic behavior and the economic tools available to the government in its efforts to achieve full employment, stable prices, and economic growth, and the equitable distribution of income. 3 lectures, 3 credits
\}General Education Course

## ECO-103 Consumer Economics is

 the study of the consumer's role in the market, their relationship with suppliers, and consumer sovereignty. Emphasis is placed on analytic thinking and rational decision making in a market economy.3 lectures, 3 credits
ECO-105 Labor Economics is an analysis of the United States labor market. The course examines labor market theory; the imperfections, structures, institutions, and programs that are part of the labor market today; and trends and innovations related to market performance and its matching of people with jobs. Topics discussed include employment, unemployment, government policy, labor and management interaction, and the relationship of the labor market to the performance of the larger economy. 3 lectures, 3 credits

ECO-201 Microeconomics is the study of price theory, elasticity, factor markets, market power, competition, pollution, and international trade.
3 lectures, 3 credits
Prerequisite: ECO-101
\}General Education Course

## ECO-461-463 Co-op Work

Experience (Economics) provides
the student with practical work experience in the area of economics.
Students are supervised by a faculty member, and job placement assistance is available through the Cooperative Education Office. Prerequisite: ECO-101
ECO-461 1 lecture; plus 60 minimum hours work experience distributed over the semester, 1 credit
ECO-462 1 lecture; plus 120 minimum hours work experience distributed over the semester, 2 credits ECO-463 1 lecture; plus 180 minimum hours work experience distributed over the semester, 3 credits

## EDU - EDUCATION

EDU-101 Introduction to Education
is a study of the social, historical, and philosophical principles and foundations of American education. 3 lectures, 3 credits

## EDU-103 Principles and

Practices in Education is an application of educational theory and research to classroom teaching situations. Group dynamics techniques, learning theories, methods of measurement and evaluation, and problem solving strategies are studied. 3 lectures, 3 credits

## EDU-120 Early Childhood

Education I provides an overview of the basic principles and concepts of early childhood education. The needs and abilities of young children are analyzed, and directed observations are made in early childhood education programs.
3 lectures, 3 credits

## EDU-124 Curriculum Materials

 and Methods is designed to assist the student in the creation, evaluation, and organization of curriculum materials appropriate for young children. Students plan and develop curricula in the languages and creative arts. 3 lectures, 3 creditsEDU-126 Developing and Implementing Curriculum is designed to provide students with the experience of planning a total curriculum in early childhood education. Students plan and develop curricula in mathematics, science, and social studies.
3 lectures, 3 credits

## EDU-130 Infants and Toddlers in

 Early Childhood Education Settings surveys the psychological and educational development of infants and toddlers. Program development in the child care setting is explored. Existing program models in infant-toddler education are studied.3 lectures, 3 credits

## EDU-132 The Parenting of Very Young Children (Birth to 6 Years Old)

 is a study of parental involvement with children, the amount and quality of par-ent-child interaction, the psycho-social development of young children, personnel placement in early childhood programs, and school-home communication. 3 lectures, 3 credits
## EDU-220 Early Childhood

Education II examines current and critical issues in the field of early childhood education. These issues are explored via current readings and specialized projects.
3 lectures, 3 credits
Prerequisite: EDU-120

## EDU-222 Supervised Field Work

Experience $I$ is a weekly three-hour placement intern at an assigned school site. Training and supervision occur in basic curricular areas. The student intern assists the teacher with daily routines and assumes responsibility for planning curricular activities. This course must be taken in conjunction with Field Work Seminar I.
3 lectures, 2 credits
Corequisite: EDU-124 and EDU-223

## EDU-223 Field Work Seminar I

serves as a forum for the discussion of student's field experience. Field experiences are critically evaluated by both students and supervising teachers. Attention is given to the necessary components of classroom management. 2 lectures, 2 credits
Corequisite: EDU-124 and EDU-222

## EDU-224 Supervised Field Work

 Experience II is a continuation of Supervised Field Work Experience I. The field placement is at a different site with a different age group than that assigned in Supervised Field Work Experience I. This course must be taken in conjunction with Field Work Seminar II.3 hours, 2 credits
Prerequisite: EDU-222
Corequisite: EDU-225

EDU-225 Field Work Seminar II is
a continuation of Field Work
Seminar I. Additional areas considered are certification, job placement, and educational options beyond the A.A.S. Degree.

2 lectures, 2 credits
Prerequisite: EDU-223
Corequisite: EDU-224

## ELC - ELECTRONICS <br> TECHNOLOGY

## ELC-100 Introduction to

 Electronics Technology presents an orientation to the various subspecialties within the field, their interrelationships, and their range of applications. The course also covers introductory topics in electrical and electronics drafting, computer-aided circuit analysis, and electronic fabrication.1 lecture, 2 labs, 2 credits

## ELC-101 DC-Circuit Analysis

includes Ohm's and Kirchoff's laws for analysis of series, parallel, and series/parallel circuits, and Thevenin's and Norton's theorems for multipleloop circuits. Capacitance and inductance transient behavior is also studied, as well as branch, mesh and node analysis.
3 lectures, 3 labs, 4 credits

## ELC-201 AC-Circuit Analysis

 introduces sinusoidal inputs and time response of RL, RC, and RLC circuits. Network theorems for ACcircuits are covered, as well as resonance, filters, and pulse response of reactive circuits.3 lectures, 3 labs, 4 credits
Prerequisite: ELC-101
ELC-203 Electronics I is an introduction to the fundamental concepts and applications of solid-state devices.
3 lectures, 3 labs, 4 credits
Corequisite: ELC-201
ELC-204 Electronics II is the second course in a two-course sequence in electronics. It builds upon the first course with a study of solid-state voltage and power amplifiers, emitter followers, field-effect transistors and circuits, thyristors, frequency effects, and op-amps. 3 lectures, 3 labs, 4 credits Prerequisite: ELC-203

ELC-214 Communication Systems I emphasizes the application of electronic communication theory to practical systems. This first course of a twocourse sequence covers AM and FM systems, television, and telephone. Digital and data communication will be introduced, and continued in Communication Systems II.
3 lectures, 3 labs, 4 credits
Corequisite: ELC-204

## ELC-215 Communication Systems

II follows the first course in this sequence, continuing work in digital and data communication, and then covers transmission lines, radiowave propagation, antennas, microwave systems, satellite communications, fiber-optic systems, and cellular communication systems. 3 lectures, 3 labs, 4 credits
Prerequisite: ELC-214

## ELC-462 Co-op Work Experience

(Electronics) provides the student with practical, supervised work experience in the field of electronic engineering technology. Through on-thejob experience, students can acquire valuable practical knowledge and skills to pursue a related career. Students are supervised by a faculty member and job placement assistance is available through the Co-op Office. 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits Prerequisite: ELC-214 or by permission of the Department Head

## ENV - ENVIRONMENTAL TECHNOLOGY

## ENV-108 Hazardous Waste Site

Operations is a course that combines classroom and hands-on field work to teach the student how to operate safely and within the OSHA 1910.120 (HAZWOPER) regulations. The course examines occupational health and safety issues, medical surveillance programs, site health and safety plans, emergency response plans, adequate illumination and sanitation, hazard communication, and rights and responsibilities of employers and employees under OSHA and EPA laws. 3 lectures, 3 credits

ENV-109 Environmental Policy Compliance and Regulation deals with environmental policy compliance, environmental studies, and public policy. This course provides insight into the workings of government that are necessary for the formation of public policy. The course examines environmental policy in the United States in air, water, land use, agriculture, industry, energy, waste disposal, and other areas and provides an introduction to the policy and decision making process. 3 lectures, 3 credits

## ENV-112 Environmental Health

addresses a wide range of environmental issues, including prediction and management of environmental impacts, management of renewable resources, protection or restoration of species and ecosystems and use of generic ecological studies to promote understanding of classes of environmental problems. Case studies will exemplify how laws, regulations and treaties impact with decisions made concerning environmental quality.
3 lectures, 3 credits

## ENV-113 Human Environment

 enables students to understand human interaction and impact on their environment. Students apply their skills and knowledge to understand more practical information about their environment. The context and interdisciplinary content of this hands-on course will be powerful and can be used in a variety of ways. Students are able to apply practical knowledge of the environment to everyday personal, business and government related decisions. 3 lectures, 3 credits
## ENV-114 Field Laboratory

Experience is a planned educational experience held at a regional Environmental Education Field Center. This course supports and supplements the theoretical and scientific foundations communicated in the Environmental Technology Program. Specific environmental issues or problems are addressed, experienced and analyzed on site.
The course contributes to the development of more positive attitudes and values towards the environment. 1 credit, 15 hours

ENV-121 Environmental
Microbiology is a course concerning bacteria and other microorganisms and their role in the environment. Topics include an introduction to microorganisms and their physiology, soil microbiology, cycles of the elements, aquatic microbiology, sewage treatment, bioremediation, and applied microbiology encompassing food microbiology, industrial microbiology and biotechnology. 3 lectures, 3 labs, 4 credits

## ENV-122 Environmental

Chemistry introduces students to the fundamental principles in air pollution technology, water and wastewater technology, and solid/hazardous waste technology. Each area of study will be presented with an emphasis on the following operations: EPA/NJDEP protocol in data collection and analysis, and the application of modern instrumentation to environmental systems. Current trends in environmental technology, such as natural attenuation, waste reduction and environmental engineering are discussed. 3 lectures, 3 labs, 4 credits Prerequisites: CHM-100 or by permission of instructor

## ENV-461-464 Co-op Work

 Experience (Environmental Technology) provides the student with practical, supervised work experience in the various fields of environmental technology. Through on-the-job experience, students can acquire the practical expertise and knowledge needed to pursue a career in this field. Students are supervised by a faculty member, and job placement assistance is available through the Co-op office. Prerequisites: WRT-101, BI0-101, CHM-100, TEC-180, or by permission of the Department HeadENV-461 1 lecture; plus 60 minimum hours work experience distributed over the semester, 1 credit
ENV-462 1 lecture; plus 120 minimum hours work experience distributed over the semester, 2 credits
ENV-463 1 lecture; plus 180 minimum hours work experience distributed over the semester, 3 credits
ENV-464 1 lecture; plus 240 minimum hours work experience distributed over the semester, 4 credits

## ESC - EARTH SCIENCE

ESC-111 Astronomy is a survey of the universe. Light, astronomica instruments and the historical development of Astronomy are topics studied to initiate a tour of the heavens, which includes the Earth as a planet, the Moon, the solar system, stars, galaxies, quasars, black holes, and scientific theories of the creation of the universe. The possibility of life else where is discovered throughout. Labs supplement the course material and include a visit to a local observatory. (Not open to students who have taken PHY-107 or the equivalent.) 3 lectures, 3 labs, 4 credits \}General Education Course

ESC-112 Climatology is a study of the Earth's climate. Climate elements and atmospheric heat transfer processes will be studied and applied to climate classification schemes. The effects of climate on human activities will be considered. Special attention will be given to the greenhouse effect, El Niño, Ice Age theories, climate explanations for the extinction of the dinosaurs, and past and future climates. Laboratory work features simple analytical and statistical analysis of climate data. 3 lectures, 3 labs, 4 credits \}General Education Course

ESC-113 Geology is a study of the solid Earth. Topics include minerals and rocks, weathering and soils, groundwater, glaciers, deserts, earthquakes, and volcanism. Special attention will be given to mining and oil prospecting and their environmental effects, fossils and rocks, plate tectonics, analysis of the structure of the Earth's interior, and geologic time and Earth history. Laboratory work includes mineral and rock analysis, soil and vegetation studies, topographic mapping, and review of the geologic calendar. (Not open to students who have taken PHY-106 or the equivalent.) 3 lectures, 3 labs, 4 credits \}General Education Course

ESC-114 Meteorology is a study of weather. It begins with the origin, evolution, present composition, and vertical structure of the atmosphere. This leads to a comprehensive analysis of the weather elements - temperature, humidity, fog, clouds, pressure, rain, snow and the development of air masses, fronts, anticyclones, cyclones, hurricanes, and severe storms. Special topics include pollution and lightning. Labs emphasize sun-weather relationships, weather maps, and forecasting techniques. (Not open to students who have taken PHY-106 or the equivalent.) 3 lectures, 3 labs, 4 credits \}General Education Course

## GEO - GEOGRAPHY

GEO-101 World Geography is a detailed study of topography, land usage, and natural resources as they directly and indirectly affect human, economic, historical and political interaction.
3 lectures, 3 credits
\}General Education Course

## GEO-102 Human Geography

 is an introduction to the spatial patterning of human activities and the role of human affairs. This course explores some of the main issues in human/cultural geography including: economic development, industrialization, population distribution, organization of urban and non-urban societies, agriculture, nationalism, meaning of new spaces, and cultural expressions in order to better understand the contemporary world. In addition, the class provides an introduction to various concepts and techniques used by geographers. 3 lecture, 3 credits
## HIS - HISTORY

## HIS-101 History of Western

 Civilization to the Reformation is a study of the Western world from ancient times to the Renaissance and Reformation. Major cultural, social, economic, political, and religious developments in the history of the West are surveyed.3 lectures, 3 credits
\}General Education Course

## HIS-102 History of Western

 Civilization since the Reformation is a study of the Western world from the sixteenth century to the contemporary period. Major cultural, social, economic, political, and religious developments in modern Western history are surveyed.3 lectures, 3 credits
\}General Education Course
HIS-105 Women in History is a study of women's roles from the classical age to the present. Various past societies are examined to determine their attitudes towards women as well as the causes and consequences of these attitudes. Particular attention is placed on studying women's roles in 19th and 20th century Europe and America. 3 lectures, 3 credits \}General Education Course \}Diversity Course

## HIS-106 History of Modern Europe to the French Revolution

 is an analysis of western European history from the late Middle Ages to 1815. The course provides an overview of the major political, economic, and cultural developments which molded early modern Europe and culminates with an intensive examination of the FrenchRevolution and the Napoleonic era. 3 lectures, 3 credits
\}General Education Course

## HIS-107 History of Modern Europe

 Since the French Revolution is an analysis of western European history from 1815 to present. The course provides an overview of the major political, economic, and cultural developments which characterize modern Europe and concludes with a comparative study of postwar Europe and America.3 lectures, 3 credits
\}General Education Course

## HIS-111 United States History to

Reconstruction is a survey of the history of America from the colonial era to the Civil War and Reconstruction period. Emphasis is placed on the origins of American political system and on the social, cultural, economic, and diplomatic development of the United States. 3 lectures, 3 credits
\}General Education Course

## HIS-112 United States History

 since Reconstruction is a survey of the history of the United States from the Reconstruction period to the present. Emphasis is placed on the American political system and on the social, economic, and diplomatic development of the United States. 3 lectures, 3 credits\}General Education Course

## HIS-113 History of 20th Century

 United States to World War II is a study of the United States from the beginning of the 20th Century through the New Deal Era of the 1930s. Topics covered include Industrialism, Progressivism, the Great Depression, the New Deal, United States involvement in world affairs, World War I, and the political, social, economic, and cultural development of the United States during this period. 3 lectures, 3 credits \}General Education Course
## HIS-114 History of 20th Century United States since World War II

 is a study of the United States from the Second World War to the present. Topics covered include World War II diplomacy, the Cold War, containment, the Vietnam era, détente, domestic reforms including Civil Rights, and the Great Society, Watergate, and other political, social, economic, and cultural developments in the United States from the 1940s to the present.3 lectures, 3 credits
\}General Education Course

## HIS-115 Themes in U.S. History

 (Recent American Foreign Policy) is an analysis of the way World War II altered the relationships between world and national powers and of how the turbulence of the period led to international tensions and conflict. The course examines the Cold War; its underlying forces and trends, its principal events, and its participants.3 lectures, 3 credits

## HIS-116 Themes in U.S. History

 (Women in American History) is a survey of the history of women from the colonial period to the present. Feminism, women's suffrage, and the advocacy of social and economic equality are the unifying themes of the course.3 lectures, 3 credits
\}General Education Course
\}Diversity Course

## HIS-117 Themes in U.S. History

 (New Jersey and Bergen County) is a study of New Jersey from the earliest recorded times to the present. The course examines suburban development, ethnic and minority groups, transportation, political and economic history, and the social and cultural heritage of the county and state. 3 lectures, 3 credits
## HIS-121 Modern Asian History is

 a study of modern China, India, and Japan. The course focuses on these societies' traditional cultures and world views and on the alterations and disruptions in these societies as a result of the introduction of Western values and ideas in the 19th and 20th centuries.3 lectures, 3 credits
\}General Education Course
\}Diversity Course
HIS-126 Modern African History is a survey of African History from 1750 to the present. Emphasis is placed on the impact of slavery and western imperialism, the emergence of the new African states since the Second World War, and the social, cultural, political, and economic development of Africa.
3 lectures, 3 credits
\}General Education Course
\}Diversity Course

## HIS-130 Latin American History to

 Independence is a study of the European and Indian heritage of Latin American civilization. The course examines the development of colonial culture, with special emphasis on its government and economy, and concludes with an analysis of the wars of independence.3 lectures, 3 credits
\}General Education Course
\}Diversity Course

## HIS-131 Latin American History

 since Independence is a study of Latin America since 1850. The course analyzes the development of the region's principal countries: Argentina, Brazil, Chile, Colombia, Cuba, and Mexico. Regionalism, cultural development, the impact of American and world politics, dictatorships, land reforms, and constitutional issues peculiar to these countries are considered.3 lectures, 3 credits
\}General Education Course
\}Diversity Course

## HIS-135 History of the Middle

East analyzes the rise of Islam with an emphasis on its cultural, intellectual, and scientific contributions to Middle Eastern civilization. Islam is examined as a religion, as a vast imperial political system, and as an advanced culture. Special attention is given to current Mideast conflicts and to the role of the United Nations in the region. International confrontation and collaboration in the region are examined.
3 lectures, 3 credits

## HIS-140 History of the Labor

Movement is an introductory study of the history of the American labor movement. The course examines the origins, growth, structure, and goals of craft and industrial union; the struggles that went into creating them; their impact on the contributions to society; their political roles; and their present-day efforts and concerns.
3 lectures, 3 credits
HIS-144 Contemporary American
Issues and Problems is a study in an historical context of selected political, social, economic, and diplomatic issues and problems facing the United States in the contemporary world.
3 lectures, 3 credits
\}General Education Course
HIS-145 Anatomy of Peace is a study in an historical context of peace and war, particularly in the 20th century. Topics considered include diplomacy and peacemaking, arms control, world organizations, nonviolence, conflict, and conflict resolution. Relevant ethical, economic, biological, social, political, and psychological issues are examined.
3 lectures, 3 credits
HIS-195 Vietnam is a 13 -hour television course on the history of American and French involvement in Indochina. Interviews with major figures and ordinary individuals are interspersed with the film footage from a dozen countries (including France and Vietnam) as well as from US news and government archives. 3 credits

HIS-461-463 Co-op Work
Experience (History) offers students an opportunity for supervised work in the field of history. Job assistance is available through the Co-op office.
HIS-461 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit
HIS-462 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits HIS-463 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: Any History course

## HRM - HOTEL / RESTAURANT HOSPITALITY

## HRM-101 Introduction to

Hospitality Management is a study of the fundamental principles of hotel, restaurant, and food service operations. Basic managerial and operating functions prevalent in the industry are considered in conjunction with the various job opportunities available.
3 lectures, 3 credits
HRM-102 Food Protection introduces the principles involved in identification and prevention of food contamination; the role of state, federal and local Public Health regulations; accident prevention; and the safety practices and control measures used in the various food service operations. Students will take the FDA Food Protection Certification exam as part of the course.
2 lectures, 2 labs, 3 credits
HRM-103 Professional Food Preparation Techniques is the study of the techniques used in the preparation of such basic foods as vegetables, potatoes, eggs, fish, shellfish, and meats. Theories of grilling, frying, broiling, and sauteing, as well as demonstrations, lectures, and laboratory work on meat cuts and their utilization are included in the course.
1 lecture, 4 labs, 3 credits
HRM-104 Front Office
Procedures is a study of the principles of the organization and operation of public lodging facilities. Front office management and procedures covering duties of the manager, assistant manager, room clerk, night auditor, and cashier are discussed. 1 lecture, 2 labs, 2 credits

HRM-106 Menu Planning and
Nutrition is a study of the principles of menu planning for a variety of food service operations. The preparation of balanced menus to meet differing nutritional needs, the human digestive system, the importance of food and diet to health, and the values of nutrients and calories in maintaining good health are some of the subjects covered in the course.
1 lecture, 1 lab, 1 credit
HRM-108 Computer Applications for the Hospitality Industry introduces students to computerized recording, forecasting and other analytical procedures used by management to control food and beverage costs.
2 labs, 1 credit
HRM-110 Introduction to Baking is a study of the basic theory of baking and the skill of producing baked products. The content of the course includes types of flour, leavening agents, scaling, and icings. Handson baking in a laboratory setting includes the production of breads, cakes, pastries, and cookies. 2 lectures, 2 labs, 3 credits

## HRM-201 Food and Beverage

 Cost Control is a detailed study of the cost control procedures found within the hospitality industry. The content of the course includes the factors affecting purchasing, storage, issuing, receiving, and preparation.1 lecture, 1 lab, 1 credit
Prerequisite: HRM-101

## HRM-202 Quantity Food

Production and Service is a
course concentrating upon the student operation of a cafeteria-type food service facility under an instructor's supervision and includes the preparation and service of various menu items. Students experience all phases of an institutional food service operation through rotation laboratory assignments.
1 lecture, 4 labs, 3 credits
Prerequisite: HRM-103
HRM-203 Beverage Management is a study of the history, sources, production, uses, control, and legislation pertaining to alcoholic beverages. Bartending skills and mixology in hands-on laboratory settings are studied.
1 lecture, 2 labs, 2 credits
Prerequisite: HRM-101

HRM-204 Food Purchasing is the study of the types and kinds of meat, poultry, fish, shellfish, fruits and vegetables. An analysis of specifications and techniques in purchasing fresh, frozen, and canned products from commercial purveyors is presented. 1 lecture, 2 labs, 2 credits Prerequisite: HRM-101

## HRM-205 Restaurant Service

 Management introduces the principles and techniques of waiting tables and doing table setups, and the course includes an analysis of the service management responsibilities associated with the operation of restaurants. 2 lectures, 2 labs, 3 credits Prerequisite: HRM-101HRM-206 Commercial Restaurant Operation is a course concentrating upon the preparation and service of complete menus by students under the direction of program instructors. Students participate fully in the management and operation of a full-service formal restaurant.
1 lecture, 4 labs, 3 credits
Prerequisite: HRM-202

## HRM-207 Hotel Sales \&

Convention Planning is a study of the principles and techniques of group sales in the lodging industry. Topics of discussion include feasibility studies, advertising procedures, market development, identification of selling objectives, maximizing room occupancy, long term sales planning, and convention operations. 1 lecture, 1 lab, 1 credit
Prerequisite: HRM-101
HRM-212 International Cuisine is a study of the recipes for the preparation of foods from various countries a round the world. French, Italian, German, Chinese, Japanese, Mexican, and American cuisine are considered. 2 lectures, 2 labs, 3 credits Prerequisite: HRM-103

## HRM-213 Classical Garde-

Manger is a study of a wide variety of food decorating and garnishing techniques. Laboratory work includes fruit and vegetable decoration and the preparation of aspic, chaud, froid, hors d'oeuvre, and gelatin. 2 lectures, 2 labs, 3 credits Prerequisite: HRM-103

HRM-214 Banquet \& Catering
Management introduces students to the skills necessary to be qualified, competent and creative food service specialists.
2 lectures, 2 credits
Prerequisites: HRM-101

## HRM-217 Issues in the Hospitality

Industry includes the evaluation of selected food service units; a discussion of current concerns and issues common to all food services; and contemporary trends in the application of advanced technology, menu implementation strategies, marketing strategies, beverage management, and personnel management.
2 lectures, 2 credits
Prerequisite: HRM-101

## HRM-220 Advanced Baking

Techniques continues the theory of baking and the skill of producing baked products. Laboratory work includes elaborate cake and pastry making, showpiece desserts, and delicate marzipan, sugar and chocolate presentations.
2 lectures, 2 labs, 3 credits
Prerequisite: HRM-110

## HRM-462 Co-op Work Experience

 (Hotel/Restaurant/Hospitality) requires part-time employment by the student in a college-approved business organization to help the student gain insight into marketing and administrative practices of the industry. This paid work experience is supervised and coordinated by a faculty member. Hospitality industry related jobs are required and must be approved by a faculty coordinator. Job assistance is available through the Co-op office.1 lecture, plus 179 minimum hours work experience distributed over the semester, 2 credits.
Prerequisite: HRM-101

## HRT - HORTICULTURE

HRT-101 Fundamentals of
Horticulture is designed to acquaint the student with the multifaceted field of ornamental horticulture. Topics for examination include the historical role of horticulture from both the artistic and scientific perspectives, as well as its commercial and aesthetic significance and applications for the future. Discussion of current employment opportunities, trends and practices will be emphasized. Noted guest lecturers from all fields of horticulture will share their views and experiences.
2 lectures, 3 labs, 3 credits

HRT-102 Plant Science is designed to familiarize the student with the horticultural relationship of plants to botanical anatomy and function, including the limiting factors that influence plant growth such as light, temperature, water and nutrients. The characteristics of soils, soil nutrient deficiencies, fertilizers and soil amendments, as well as their relationship to plant growth will be covered.
3 lectures, 3 labs, 4 credits

## HRT-103 Turf and Grounds

Management is the study of turf and plant practices on the residential and commercial sites. Emphasis is placed on the structure and growth habit of commonly used species and cultivars including installation, renovation and maintenance practices. Exposure to grounds maintenance equipment commonly utilized in the installation and maintenance of the landscape is included.
2 lectures, 3 labs, 3 credits

## HRT-104 Landscape Plants and

Materials I is an introduction to the basic genera of the most commonly utilized trees, shrubs and ground covers in the landscape. In addition to identification, growth form, color, texture and habitat requirements, and their uses in the residential and commercial sites will be studied. 1 lecture, 2 labs, 2 credits

## HRT-112 Pests of Ornamental

Plants introduces the student to the insects, diseases, and environmental disorders that affect plants. Identification of pests and methods of controlling them are emphasized. 3 lectures, 3 labs, 4 credits

## HRT-113 Principles of

Landscaping is a study of the design and development of landscape plans from plot plans and site analysis studies. Instruction in drafting and mechanical skills is included. 2 lectures, 3 labs, 3 credits Prerequisite: HRT-104

HRT-115 Floral Design is a study of the plants, supplies, and design skills used in flower arranging. Laboratory experiences include seasonal and non-seasonal arrangements for a variety of occasions.
2 lectures, 3 labs, 3 credits

## HRT-119 Greenhouse Operation

 and Production is a study of the management practices of field and greenhouse production of foliage and floral crops. Emphasis is placed on the commercial practices of purchasing, programming, cultural production, storage, handling, and sales of cut flowers and potted plant crops. The chain-of-life concept is discussed as it relates to the consumer's aesthetic use of cut flowers and plants. 2 lectures, 3 labs, 3 credits
## HRT-120 Interior Plantscaping

 acquaints the student with interior plant materials, with emphasis on their cultural requirements, maintenance practices and key ornamental aspects. Basic business applications regarding installation and maintenance contracts are covered.Emphasis will be placed on selection of appropriate plants in environments calling for a balance of human needs and plant culture.
2 lectures, 2 labs, 3 credits
HRT-124 Irrigation Technology is a course designed to expose students to landscape and turf equipment technology, system designs, installation and maintenance of a variety of irrigation types. Students will be involved with reading irrigation blueprints, troubleshooting potential problems and repair techniques. 1 lecture, 2 labs, 2 credits

HRT-125 Equipment Management introduces the student to the selection, proper use, maintenance and repair of power tools that are used in the lawn and tree care industries. Lecture topics will focus on the necessary information needed to make purchasing decisions as well as safety and proper use practices. The lab section provides the student with a hands-on approach to troubleshooting engine problems and a variety of repair options. Students will be required to present projects relating to their industry's equipment needs. 1 lecture, 2 labs, 2 credits

## HRT-130 Landscaping Contracting

is a study of the basic requirements for developing landscape contracts and the writing of detailed specifications. Ethical practices and professional relationships among the client, consultant, contractor, other allied professions, and employees are also studied. Project costs and fee determination procedures a represented and simulated in the labs.
1 lecture, 1 lab, 1 credit

## HRT-204 Landscape Graphics

 emphasizes the techniques for formulating, presenting, and drafting landscape designs. In addition, the basic design elements of planting, including form, texture, color, and sequence of bloom, and ecological associations will be studied.1 lecture, 2 labs, 2 credits
Prerequisite: HRT-113

## HRT-232 Plant Propagation is

designed to familiarize the student with the techniques, facilities and materials needed for plant propagation in the greenhouse. Techniques of both vegetative and sexual reproduction of herbaceous and woody plants, as well as greenhouse crops and crops for the interior landscape will be covered.
3 lectures, 3 labs, 4 credits
Prerequisite: HRT-102

## HRT-233 Landscape Plants and

 Materials II places emphasis on the identification, culture and use of both native and cultivated herbaceous materials used in the landscape and further continues with the identification and use of more specialized and unique woody plant materials. Laboratory and field exercises include studies and demonstrations of their applications and uses in both natural and designed settings.3 lectures, 3 labs, 4 credits
Prerequisite: HRT-104 or by permission of Department Head

## HRT-234 Commercial Floral Design and Management intro-

 duces the student to the production methods encountered in a commercial floral operation. Flower selection, basic and specialized supplies and their uses in all phases of the commercial operation will be discussed and demonstrated. In addition to designs of special occasion arrangements, students will be exposed to various marketing aspects of the floral industry including purchasing, sales and profitability.3 lectures, 3 labs, 4 credits Prerequisite: HRT-115 or by permission of Department Head

HRT-235 Landscape Site Analysis and Construction acquaints the student with the different sites encountered by the landscape contractor, emphasizing appropriate planning in the development of both residential and commercial properties.
Construction considerations will include drainage, irrigation, structures and the selection of materials. The integration of site analysis and construction materials in student projects will be stressed.
2 lectures, 3 labs, 3 credits
Prerequisite: HRT-104

## HRT-236 Horticulture Marketing

and Sales introduces the student to concepts relating to preparation for a career in horticulture. Field studies into horticultural businesses, group discussions and consultations with industry professionals assist in formulating effective strategies and planning for a profitable business. Included are discussions of basic principles of marketing, current industry trends and sales.
3 lectures, 3 credits
Prerequisite: HRT-101
HRT-237 Arboriculture/Plant Health
Care is the study of the care of trees and woody plants. Emphasis is placed on pruning, pest control and proper cultural practices including planting procedures and fertilization schedules. Other important topics to be covered are the safety practices involved with tree climbing, pesticide application and tree removal. The course will provide an understanding of the basic functions of woody plant systems.
2 lectures, 3 labs, 3 credits

## HRT-462 Co-op Work Experience

(Horticulture) is a supervised work experience program which includes paid employment at an approved horticultural establishment and attendance at a weekly seminar. The course is designed to provide students with opportunities to learn and to practice skills under professional guidance. The area of placement will depend upon the students backgrounds and interests. Job assistance is available through the Co-op office. 1 lecture, plus 168 minimum hours work experience distributed over the semester, 2 credits.
Prerequisite: any HRT course

INF - INFORMATION TECHNOLOGY

Also see courses listed under CIS (Computer Science).

INF-100 Keyboarding I provides introductory instruction on the computer keyboard. Speed and accuracy is developed through use of the touch method. The course content introduces memos, e-mail, letters, reports, and manuscripts; the timed writing component requires at least 25 words a minute with three or less errors in order to pass the course. This course can be waived for students who demonstrate proficiency in a credit-byexamination test.
2 lectures, 2 lab, 3 credits

## INF-101 Introduction to

 Information Technology is an overview of the principles and procedures of processing data using computers. Topics include principles of computer operations, input/output devices, storage facilities, computer systems, networking terminology, programming concepts, computerized business applications and the Internet. Labs will provide hands-on reinforcement of topics covered in lecture. 2 lectures, 2 labs, 3 credits. Credit by exam available. (Students in Liberal Arts and Sciences should consider CIS-158 and CIS-165.)
## INF-107 Minicomputer

Operations prepares the student to use the IBM AS/400 System. Topics include database concepts, display files control language commands, and source entry utility. 2 lectures, 2 labs, 3 credits

## INF-108 PC Upgrade,

 Maintenance and Diagnosis provides instruction in the infrastructure, configuration, upgrade, troubleshooting and repair of PC systems. Students will partially assemble and upgrade a PC. Topics include diagnosing problems; preventative maintenance; safety and environmental issues; motherboards (components and architecture); computer memory; input/output (I/O) interfaces; printer classes; basic networking and data communications concepts and components. This course assists with preparation for the CompTIA A+ Certification.2 lectures, 2 labs, 3 credits

INF-113 Microsoft Word -
Fundamentals provides basic-level hands-on instruction in this popular word processing program. The course entails preparation of documents such as letters, reports, and tables. This course is not intended to train one for a position in word processing; students who desire a more comprehensive course and who have a keyboarding skill should take INF213 instead.
2 labs, 1 credit
INF-114 Microsoft Office uses project based exercises to teach the fundamentals of the Microsoft Office suite - specifically, Word (word processing), Excel (spreadsheet), Access (database), PowerPoint (presentation), and Outlook (e-mail and calendar). Labs will include exposure to web development using the suite.
2 lectures, 2 labs, 3 credits
INF-115 Desktop Publishing is a hands-on experience integrating text and graphics to design, edit, and produce a variety of business documents. Knowledge of word processing is helpful.
2 labs, 1 credit
INF-120 PowerPoint is an introduction to electronic presentations. Students will learn to create professional looking, computer-generated presentations that include use of design templates, graphics, sounds, animations, OLE and web links. Students will work in outline and slide views.
2 labs, 1 credit

## INF-124 Microcomputer

 Spreadsheet: Excel is a hands-on experience of a state-of-the-art electronic spreadsheet. The course will provide step-by-step instruction in the various commands necessary for spreadsheet creation and the manipulation and management of spreadsheets. All lab work is done on a Microsoft Windows processing platform.2 labs, 1 credit

## INF-140 Introduction to

Multimedia is a course that introduces the student to the various applications of computer-based multimedia in industry, government, education, and entertainment. Hardware systems, distribution media, flowcharts, software tools, scripts, and production will be covered. Students will work in groups to design and prepare a multimedia presentation. 2 lectures, 2 labs, 3 credits

INF-141 Web Publishing with HTML introduces the basic concepts and techniques for developing World Wide Web (WWW) pages using Hypertext Markup Language. Students learn the principles of the WWW including presentation, site, web page, and homepage as well as developing a storyboard. HTML instruction will include generating web pages, creating links, using images, animation, sound and video files. More advanced HTML concepts, such as frames, tables, and linked windows, may also be discussed. 2 labs, 1 credit
Recommended corequisite: INF-101
(To be successful in this course, students should adhere to the recommendation.)

## INF-143 Web Publishing with

 FrontPage introduces the student to the principles involved in creating Web home pages and Web sites. Students learn how to use the various tools to make exciting and informative Web pages applying this popular Microsoft package. Exercises are given that allow students to design, develop and upload their Web pages onto the Internet without Web-based programming. Web site management strategy is also discussed.2 labs, 1 credit
Recommended corequisite: INF-101
(To be successful in this course, students should adhere to the recommendation.)

## INF-144 Windows Desktop

Operations introduces the student to the basics of the Microsoft Windows desktop. Topics include working with files, organizing files with Windows Explorer, personalizing your Windows environment, bringing the Web to the desktop, searching for information, working with graphics, object linking and embedding, exploring your network, working with hardware, and managing Windows. Credit by exam available.
2 labs, 1 credit

## INF-145 Introduction to Visual

 Basic for Business provides effective hands-on instruction in an eventdriven, high level programming language, using a series of tools to design and control object-oriented graphical user interfaces in an integrated development environment. All lab work is done on a Microsoft Windows processing platform. 2 lectures, 2 labs, 3 credits. Recommended corequisite: INF-150 (To be successful in this course, students should adhere to the recommendation.)INF-146 Web Development Using HTML uses Hypertext Markup Language in the development and composition of Web pages. Students author pages that meet XHTML specifications outlined by the WWW Consortium. Topics includes tables, forms, links, lists, objects of various types including graphic and sound, style sheets, and issues sorrounding cross-platform viewing. The student will develop and upload a completed Web site. This course assists in preparation for Foundations Level CIW certification.
2 lectures, 2 labs, 3 credits
Recommended corequisite: INF-101.
(To be successful in this course, students should adhere to the recommendation.)

## INF-147 Web Development Using

Dreamweaver introduces students to Web page authoring using a What-You-See-Is-What-You-Get editing environment. This course will focus on technical mastery of the software tools and techniques used to create Web pages with Dreamweaver, and on an understanding of the technical and environmental issues that affect Web page design, performance, and effectiveness. Graphic design issues will be addressed in this context.
2 lectures, 2 labs, 3 credits.
Recommended corequisite: INF-101. (To be successful in this course, students should adhere to the recommendation.)

## INF-150 Business Programming

Logic develops and reinforces the student's logical thought processes using proper design techniques and tools, especially flowcharting. Topics include exploration of business programming considerations, such as input of data, output of information, accuracy and reliability, the use of objects and object-oriented programming, as well as data structures. Topics under data structures include linked-lists, hyperlinking, stacks, queues, trees, and traditional file structures.
2 lectures, 2 labs, 3 credits. Credit by exam available.
Prerequisite: MAT-035 or by Mathematics testing.
Recommended corequisite: INF-101 (To be successful in this course, students should adhere to the recommendation.)

## INF-151 Microcomputer

 Database: Access is a hands-on experience of a relational database management system. The course entails developing database management projects starting with the design of the structure of a database, entering and editing data, designing multitable queries, and creating forms and reports. Various techniques of database applications development will be implemented. All work will be done on a Microsoft Windows processing platform.2 labs, 1 credit

## INF-152 C/C++ Programming for

Business provides the foundations for programming in the C and $\mathrm{C}++$ languages. Students code business application programs applying $\mathrm{C} / \mathrm{C}++$ operators, constructs, and functions. Topics covered include language version differences, definition of variables; math, relational, and logical operators; decisions; while and for loops; C/C++ functions, user written functions, and scope and passing values. 2 lectures, 2 labs, 3 credits Recommended corequisite: INF-150 (To be successful in this course, students should adhere to the recommendation.)

## INF-153 Java for Business

Applications provides effective hands-on instruction in this powerful and versatile object-oriented language. Students develop standalone business applications as well as applets that run in Java-enabled environments. Topics include fundamental syntax and Java programming tools, working with objects, arrays, conditionals and loops, creating classes, threads, graphics, fonts, and color. Some advanced concepts such as animation, images, and sound may also be included.
2 lectures, 2 labs, 3 credits Recommended Corequisite: INF-150 and (INF-161 or INF-162 or INF-163). (To be successful in this course, students should adhere to the recommendation.)

## INF-155 UNIX Operating System

 presents a complete overview of the UNIX system. Students learn the concepts of UNIX-processes, multiprogramming, and interactive computing. By using a standard UNIX text editor with hands on practice, students learn major UNIX commands and how to interact with the UNIX command processor.2 labs, 1 credit

## INF-160 Networking

 Technologies and Data Communications offers a comprehensive coverage of networking and data transmission key terms, concepts, and development strategies. Topics include: the history of network development; network media; network protocols; network/data transmission theory (OSI layers and IEEE standards); network types; network design; server/client configuration; network administration; network remote access; wide area networks; and network troubleshooting. The course assists in preparing the student for the MCSE certification exams offered by Microsoft and the Foundations Level CIW certification. 3 lectures, 3 credits
## INF-161 Internet Research and

 Data Handling provides an in-depth view of the Internet and is designed to meet both professional and research needs. Topics include advanced searching strategies and techniques, data mining, information integrity and intellectual property, FTP sites, downloads, file types and their integration into applications, and connectivity issues.2 labs, 1 credit

## INF-162 Introduction to the

Internet introduces the necessary skills to access the Internet using leading Internet browsers. Topics covered include the Web, its components and organization; URLs; browsing Web pages; Web management techniques; saving and printing; fundamental techniques for searching using various search engines; sending and receiving electronic mail; mail management techniques; reading and posting newsgroup articles, conversing and chatting; and popular Web sites. Credit by exam available. 2 labs, 1 credit

## INF-163 Internet Concepts and

Applications provides comprehensive coverage of the Internet. Topics include the Internet's history; its composition and technologies; protocols; electronic mail systems; browser and Web concepts; source integrity; searching the Web for research and gaining market intelligence; commanding FTP, newsgroups, gopher, and Telnet; and objects, plug-ins and viewers. This course assists in preparation for Foundations Level CIW certification
2 lectures, 2 labs, 3 credits

INF-164 Networking Fundamentals I exposes students to the skills needed to design, build, and maintain small to medium-sized networks. Students are provided with classroom and laboratory experience in curent and emerging networking technology. Focus is on the theory behind LANs. Topics include safety, networking, network terminology and protocols, network standards, LANs, WANs, OSI models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol addressing, network standards, safety and environment issues. This course assists in preparation towards the CISCO CCNA certification. 3 lectures, 2 labs, 4 credits Prerequisites: None; Helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics.

## INF-165 Introduction to Linux

 provides a hands-on introduction to this open-source operating system. Students learn to configure a graphical desktop environment, install and configure office-suite applications, create a Linux server environment, configure basic services, and use Linux commands.2 lab, 1 credit

## INF-166 Introduction to

StarOffice provides hands-on experience using an office-suite product to perform common tasks such as basic word-processing, spreadsheet development and presentation graphics preparation. Students also gain exposure to fundamental vec-tor-drawing tools. This project-based course will include preparation of documents such as letters, memos, flyers, reports, tables, charts, singlepage spreadsheets and short screenbased presentations.
2 lab, 1 credit
INF-200 Keyboarding II offers continued development of previously acquired computer keyboarding skills. Students apply their keyboarding skills to the preparation of business letters, memos, e-mail, tables, reports, manuscripts, and preparing mailable copy from rough draft; the timed writing component requires at least 40 words a minute with three or less errors in order to pass the course. This course can be waived for students who demonstrate proficiency in a credit-by-examination test.
2 lec., 2 lab, 3 credits
Prerequisite: INF-100

INF-208 Systems Analysis and Design addresses the effective use of equipment and management techniques in meeting the information needs of the contemporary business world. The techniques of analysis, specifications, selection, and implementation lead to the design of an optimal information system. 3 lectures, 3 credits
Prerequisites: BUS-101 and (INF-145 or INF-152 or INF-202 or INF-242) or permission of the Department Head. (Computer Science students should take CIS-289)

## INF-213 Microsoft Word -

Comprehensive provides hands-on instruction in this popular word processing program. Topics include the creation, modification, and printing of documents that include text and graphics. Students will work with text, paragraph, and page formatting; tabs, tables, and mail merge. Students who do not have the prerequisite keyboarding skill should consider INF-113 instead.
2 lectures, 2 labs, 3 credits
Prerequisite: INF-100

## INF-214 Administrative

Technology focuses on the organizational requirements necessary to be productive in a modern office.Topics include scheduling, electronic communications, records management, travel and conference planning, research and organization of business data, use of electronic office equipment, and general office procedures.
1 lecture, 2 labs, 2 credits Prerequisite: INF-101

INF-215 Office Simulation requires students to apply software products to perform general office functions. Students will prepare a variety of documents integrating multiple office software applications. Critical thinking and personal time management will be used to organize work and make effective decisions. 2 lectures, 2 lab, 3 credits Prerequisites: (INF-120 and INF-124 and INF-151 and INF-213) or by permission of Department Head

## INF-216 Document Processing

delves into advanced word processing features while providing practice to increase keyboarding speed and accuracy. Emphasis will be given to proper formatting of documents and the rules of punctuation. Additional topics include automating features of word processing and production of office publications.
2 lectures, 2 lab, 3 credits
Prerequisites: INF-100 and INF-213

INF-217 Database for Business Applications focuses on database design, implementation, and administration. Topics of discussion include database development, database design, fundamentals of input/output, processing using SOL commands, file organization, as well as interfacing between application programming languages and a database management system (DBMS). Students will spend time in the lab working with database software. 2 lectures, 2 labs, 3 credits Prerequisites: INF-101 and INF-114 or by permission of the Department Head

## INF-224 Advanced C++

Programming for Business is a continuation of $\mathrm{C} / \mathrm{C}++$ Programming for Business. Students code business application programs in a complete object-oriented environment applying advanced concepts such as templates, inheritance, polymorphism, C style input/output streams, object-pointers, functions, the persistence of objects, and attributes. 2 lectures, 2 labs, 3 credits Prerequisite: INF-152 or permission of the Department Head

INF-226 Advanced UNIX will present an in-depth view of UNIX. Topics include advanced shell programming, filters, advanced commands, communications, networking concepts, with discussions on the internal aspects of the UNIX operating system.
2 labs, 1 credit
Prerequisite: INF-155 or by permission of the Department Head

## INF-228 Excel for Problem

Solving focuses on the practical applications of Excel. Business applications will be analyzed and developed. Topics may include creating and using macros, linking among worksheets and between files, importing and exporting, databases, graphics, advanced functions, and other advanced spreadsheet topics as needed to develop applications. 2 labs, 1 credit
Prerequisite: INF-124 or INF-114 or by permission of the Department Head

INF-232 Windows Client will introduce students to Microsoft Windows XP Professional through lectures, demonstrations, discussions, and hands-on lab exercises. Students will learn about and use the various tools for administering and configuring Windows XP including the Microsoft Management Console, Task Scheduler, Control Panel and the Registry Editor. Students will learn how to install and administer TCP/IP; install, share and administer print devices; and manage data storage. The course will also assist in preparing to sit for Windows XP MCP exams.
2 lectures, 2 lab, 3 credits.
Prerequisite: INF-101 and INF-160 or by permission of the Department Head

## INF-235 Advanced PC Upgrade, Maintenance and Diagnosis

 focuses on basic operating systems technologies necessary for a PC support technician. Course content includes fundamentals of operating systems; installation, configuration, and upgrading; diagnosing and troubleshooting PC problems; and connecting and configuring computers to work on a network. This course assists with preparation for the CompTIA A+ Certification. 2 lectures, 2 labs, 3 creditsPrerequisite: INF-108 or by permission of the Department Head

## INF-237 Introduction to Business

 Applications of Expert Systems is an overview of the concepts and business applications of expert systems. Topics include expert systems' characteristics, components of expert systems, and methods of knowledge acquisition. Emphasis is placed on business applications and implementation issues. One or more microcomputer-based expert system shells will be demonstrated and used by students to create an expert system prototype(s) in the labs 2 lectures, 2 labs, 3 credits Prerequisite: INF-208 or by permission of the Department HeadINF-239 Applications Development is a capstone course using the case study approach to the design and implementation of an automated business system. Students work in groups or individually to develop a physical design for a contemporary application, from which the solution is coded and tested. The final project contains the full scope of systems and programming documentation. 2 lectures, 2 labs, 3 credits Prerequisites: INF-217 and (INF-224 or INF-243 or INF-246 or INF-268) or permission of the Department Head

## INF-240 Client-side Scripting

 Using JavaScript provides experience in building interactive and dynamic Web pages. Topics include variables, data types, objects, operators, control structures, functions, cookies, and browser issues. Examples will include interactive forms and visual effects such as animation. 2 lectures, 2 labs, 3 credits. Prerequisites: INF-101 and (INF-141 or INF-146) or by permission of the Department Head.Recommended corequisite: INF-150 (To be successful in this course, students should adhere to the recommendation.)

## INF-242 RPG/400 Programming

 acquaints the student with the fundamental skills of a beginning RPG programmer. Students write programs using screen processing and structured programs using DO, DOU, DOW, and IF/ELSE.2 lectures, 2 labs, 3 credits
Prerequisite: INF-107
Recommended corequisite: INF-150 (To be successful in this course, students should adhere to the recommendation.)

## INF-243 Advanced RPG/400

Programming is a continuation of RPG/400. Topics include data validation, disk file maintenance, direct and add files, AS/400 files, and interactive processing.
2 lectures, 2 labs, 3 credits Prerequisite: INF-242 or by permission of the Department Head.

## INF-245 Database: SOL,

 Structured Query Language, is a hands-on experience in a state-of-the-art database management system. The course entails designing a data management project using techniques including entering and updating data; data retrieval; queries and subqueries; joining files; sorting; and using built-in database functions.2 labs, 1 credit
Prerequisite: INF-101 or INF-124 or INF-151

## INF-246 Advanced Visual Basic

 for Business continues effective hands-on instruction in the eventdriven, high level programming language Visual Basic. Emphasis is on programming, using object-oriented graphical user interfaces in an integrated development environment. All work is done on a Microsoft Windows processing platform: 2 lectures, 2 labs, 3 credits Prerequisite: INF-145 or by permission of the Department Head
## INF-248 ActiveX Control

 Development Using Visual Basic provides the Visual Basic programmer with effective hands-on instruction in developing Active X controls and programming them for Web page applications and active documents. Topics include creating ActiveX clients, ActiveX code components and controls.2 labs, 1 credit
Prerequisites: (INF-161 or INF-162 or INF-163), and INF-246

## INF-249 Visual C++ for Windows

 with MFC provides the C++ programmer with effective hands-on instruction in developing Visual $\mathrm{C}_{++}$ applications using Microsoft Foundation Class Library (MFC). This course introduces Windows programming concepts using Windows resource identifiers, dialog boxes, and controls. In addition, the course will cover the use of Visual C++ for developing stand-alone interactive applications.2 lectures, 2 labs, 3 credits Prerequisite: INF-224 or by permission of the Department Head

INF-251 Advanced Access will focus on using the more powerful features of Microsoft Access including the organization of multiple databases, advanced methods of query, programming, and data manipulation. All work will be done on a Microsoft Windows processing platform. 2 labs, 1 credit Prerequisite: INF-151 or INF-114 or by permission of the Department Head

INF-252 Windows Server will introduce students to Microsoft Windows 2003 server through lectures, demonstrations, discussions and hands-on labs. Students will install Windows 2003 server, and will learn about the various file systems supported by Windows 2003. Students will use Microsoft Management Console, learn how to administer print services and install and administer network protocols and services. The course will also assist in preparing to sit for Windows 2003 MCP exams. (Completion of INF-232 is recommended before taking INF-252) 2 lectures, 2 labs, 3 credits. Prerequisites: INF-101 and INF-160 or by permission of the Department Head.

## INF-253 Technical

Communications employs comput-er-assisted methods for planning and presenting technical information in a clear and concise manner. Emphasis is placed on designing effective methods for determining the structure of oral, written, and graphic communications in a technical environment. Topics will include preparation of end-user documentation; presenting technical information to nontechnical individuals; reporting, extracting, charting, and summarizing data.
2 lectures, 2 labs, 3 credits
Prerequisite: INF-101 and INF-114 or by permission of the Department Head Recommended corequisite: INF-161 or INF-162 or INF-163 (To be successful in this course, students should adhere to the recommendation.)

## INF-254 UNIX for the Network

Administrator provides comprehensive coverage of the UNIX operating system. Following an introduction to this operating system and its file system, focus is placed on providing a network administrator's perspective to develop and manipulate operating system file pathways. Topics include the UNIX shell; its variables, command line interpretation, and creating Shell procedures; UNIX utilities; process control; Regular Expression (RE) pattern matching; and the X Windowing system. An introduction to shell programming may also be included.
2 lectures, 2 labs, 3 credits
Prerequisite: INF-160 or permission of the Department Head

## INF-255 Network Planning and

 Design provides students with a vendor-neutral approach to designing and implementing local and wide area networks. Topics include developing a network plan for the organization; LAN/WAN interconnectivity issues; physical transmission equipment and options; bandwidth considerations; TCP/IP and its relationship to the network design; and the advantages and disadvantages of network protocol architecture implementation.3 lectures, 3 credits
Prerequisites: INF-160 and INF-163 or permission of Department Head

## INF-256 Topics In Networking

focuses on the latest advances in networking theory and administration. Students study topics that are of current relevance within this dynamic and fast growing field. As the topics will change each semester, emphasis will be on identifying changes in networking standards and protocols; media, architecture and hardware; network security; shifts in vendor product and market share; and future technologies. Students are expected to use the Internet as a key fact-finding resource. 3 lectures, 3 credits
Prerequisites: INF-160 and (INF-161 or INF-162 or INF-163) or by permission of the Department Head

## INF-257 Network Troubleshooting

establishes the methodologies and tools necessary to proactively troubleshoot computer networks. Topics covered include: methods for identification and repair strategies for network faults caused by user, hardware, and software problems; disaster recovery and backup plans; network management record keeping; configuration management; and patch/service release installation procedures. 2 lectures, 2 labs, 3 credits Prerequisite: INF-232 and INF-252 or by permission of the Department Head

## INF-258 TCP/IP examines

Transmission Control Protocol/ Internet Protocol (TCP/IP) concepts with emphasis on planning, deploying and managing a TCP/IP network.
Topics include the configuration and logistics of TCP/IP networks; IP addressing and subnetting; Multicast IP; Mobile IP; IPv6; FTP and Remote Access Protocol (PPP and SLIP). Students will learn how to troubleshoot and manage TCP/IP networks using a packet sniffer, TCP/IP utilities, and protocols such as Internet Control Message Protocol (ICMP).
2 lectures, 2 labs, 3 credits.
Prerequisite: INF-160 or permission of the Department Head

## INF-260 Technical Support

Operations introduces students to both the methodological and hands-on customer-service related world of end user support. Course topics include understanding the support profession and models; customer service; mission statements and service level agreements; implementing a help desk; troubleshooting; procurement; outsourcing; evaluation measurements; help desk certification. Lab topics include application installation; software and virus troubleshooting; call tracking; remote support; and support documentation. Students will complete an individual support project with documentation.
2 lectures, 2 labs, 3 credits. Prerequisites: INF-108 and INF-144 and (INF 161 or INF-162 or INF-163) or by permission of the Department Head

## INF-263 Server-Side Internet

Programming focuses on tools and techniques to create dynamic, interactive, and portable Web applications using server-side programming technologies. Students will learn to write server-side programs and build datadriven server-side Web applications. Topics include architecture, serverside objects and their object model, programming techniques, creation of basic server-generated Web pages, validation of form data, creation of XML documents, managing data sources, and, configuring, troubleshooting, and deploying serverside applications. 2 lectures, 2 labs, 3 credits Prerequisites: INF-101 and (INF-141 or INF-146) or permission of the Department Head. Recommended Corequisite: INF-150

## INF-264 Networking

Fundamentals II continues to build skills needed to design, build, and maintain small to medium-sized networks. The combination of laboratory and lectures focus on a more detailed understanding of the Open System Interconnection (OSI) models, Wide Area Networks (WANs), routers and using the routers and associated router components. Students will learn how to start and set up routers while developing configurations consistent with the various operating systems and topologies. This course assists in preparation towards the CISCO CCNA certification. 3 lectures, 2 labs, 4 credits Prerequisite: INF-164; Helpful: A+ Certification; Microsoft Office skills; introductory programming or multimedia courses; introductory electronics.

INF-265 Network Configuration I
applies the concept and techniques acquired during prior coursework to perform LAN switching and LAN segmentation using routers, switches and bridges. Topics include Ethernet, Fast Ethernet, the benefits of segmentation, and LAN performance. Students will work with the IPX protocol and configure interfaces as well as monitor the operation of the router. Benefits of the Spanning Tree Protocol and virtual LANs will be explored. This course assists in preparation towards the CISCO CCNA certification. 3 lectures, 2 labs, 4 credits Prerequisite: INF-264; Helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics.

## INF-266 Network Configuration II

 seeks to differentiate among the following WAN services: LAPB, Frame Relay, ISDN/LAPD, HDLC, PPP and DDR. Key Frame Relay terms and features will be acquired to configure Frame Relays, LMls, maps and subinterfaces. Skills for identification of PPP operations to encapsulate WAN data on CISCO routers will be acquired. ISDN concepts and techniques will be introduced to enable identification of ISDN protocols, function groups, reference points, and channels. This course assists in preparation towards the CISCO CCNA certification. 3 lectures, 2 labs, 4 credits Prerequisite: INF-265; Helpful: A+ Certification; Microsoft Office Skills; introductory programming or multimedia courses; introductory electronics.
## INF-267 Network Security

provides a foundation level course that focuses on securing an enterprise's systems and networks. Topics include email security; web security; system hardening; incident response; public key infrastructure; disaster recovery; basics of cryptography; and methods for combating Spam, securing a server, and preventing denial of service attacks.
3 lecture, 3 credits
Prerequisite: INF-160 or permission of the Department Head.

## INF-268 Advanced Java for

 Business Applications is a continuation of Java for Business Applications. Students code business application programs in a complete object-oriented environment applying advanced concepts such as advanced GUI and graphics programming (Swing and 2D Graphics), collections, exception handling, multithreading, multimedia, file input/output, database connectivity (JDBC), internationalization, and networking. 2 lecture, 2 lab, 3 credits Prerequisite: INF-153 or by permission of the Department Head
## INF-461-464 Co-op Work Experience

 (Information Technology) are recommended electives designed to provide the INF student with part-time paid work experience in an office of his/her specialty. The student has the opportunity to learn and practice data processing skills under professional guidance in a collegeapproved work environment. Evaluation visitations are performed by a trained faculty member. All student appointments must be approved by the Co-opCoordinator. Job placement assistance is available through the Co-op office.
Prerequisite: INF-101 or by permission of the Department Head
INF-461 1 lecture; plus 60 minimum hours work experience distributed over the semester, 1 credit
INF-462 1 lecture; plus 120 minimum hours work experience distributed over the semester, 2 credits
INF-463 1 lecture; plus 180 minimum hours work experience distributed over the semester, 3 credits
INF-464 1 lecture; plus 240 minimum hours work experience distributed over the semester, 4 credits

## IST - INTERDISCIPLINARY STUDIES

## IST-101 Introduction to

 Technological and Information Literacy (TIL) (A) introduces students to the history and use of contemporary computer technology and to the retrieval, evaluation, and management of electronic and print information. The course covers various types of computer systems, college library systems, the Internet and its applications, networked information systems, traditional scholarly resources, central concepts underlying the research process, the social impact of developments in information technology ( $T$ ), and ethical, legal, and political aspects of technology and information utilization. 2 labs, 1 credit
## IST-102 Introduction to

Technological and Information Literacy (TIL) (B) introduces students to the history and use of contemporary computer technology and to the retrieval, evaluation, and management of electronic and print information. The course covers various types of computer systems, college library systems, the Internet and its applications, networked information systems, traditional scholarly resources, central concepts underlying the research process, the social impact of developments in IT, and ethical, legal, and political aspects of technology and information utilization. (Must be taken with a TlL-intensive section of a General Education course such as SPE-111 or WRT-101) 1 lab, 1 credit

IST-LAN

IST-121 Introduction to the College Experience is a freshman year experience course which combines academic subject matter and substantial writing assignments in a discipline context established by the individual instructor. This course provides a learning opportunity for the new student which includes communication skills, critical reasoning, problem solving, study skills, time management, and goal setting. The objective of this course is to help students understand the value and benefits of higher education as a life experience. 3 lectures, 2 credits

## IST-201 Patterns of Leadership

explores the aspects of effective leadership. Students employ critical reasoning skills, problem solving, and communications in order to identify and develop their own leadership philosophy. Topics of study include the concepts of leadership, historical perspectives, personal skill development, leadership in organizations, and contemporary leadership.
3 lectures, 3 credits
Prerequisites: SPE-111 and WRT-101

## IST-461-464 Internship-Disney

 College Training Program (CTP) is a work experience at Walt Disney World in Orlando, Florida. Students reside on the Disney property, attend weekly seminars, and are employed at Walt Disney World. Students will be assigned positions at various attractions, hotels, or restaurants. Students are responsible for journals, attending class, and assignments as required by Bergen Community College faculty coordinator.Prerequisite: Acceptance to program by Walt Disney World
IST-461 1 lecture; plus 60 minimum hours work experience distributed over the semester, 1 credit
IST-462 1 lecture; plus 120 minimum hours work experience distributed over the semester, 2 credits
IST-463 1 lecture; plus 180 minimum hours work experience distributed over the semester, 3 credits
IST-464 1 lecture; plus 240 minimum hours work experience distributed over the semester, 4 credits

IST-471 Co-op Work Experience (Interdisciplinary Studies) provides the student with practical, supervised work experience in a professional environment. Through on-the-job experience, students can acquire knowledge and skills to pursue a career in their area of interest. A faculty member supervises students, and job placement assistance is available through the Co-op Office.
1 lecture; plus 60 minimum hours work experience distributed over the semester, 1 credit
Prerequisite: To be determined by individual departments

## IST-472 Co-op Work Experience

 (Interdisciplinary Studies) provides the student with practical, supervised work experience in a professional environment. Through on-the-job experience, students can acquire knowledge and skills to pursue a career in their area of interest. A faculty member supervises students, and job placement assistance is available through the Co-op Office. 1 lecture; plus 120 minimum hours work experience distributed over the semester, 1 credit Prerequisite: To be determined by individual departments
## IST-473 Co-op Work Experience (Interdisciplinary Studies) pro-

 vides the student with practical, supervised work experience in a professional environment. Through on-the-job experience, students can acquire knowledge and skills to pursue a career in their area of interest. A faculty member supervises students, and job placement assistance is available through the Co-op Office. 1 lecture; plus 180 minimum hours work experience distributed over the semester, 1 credit Prerequisite: To be determined by individual departments
## IST-474 Co-op Work Experience

 (Interdisciplinary Studies) provides the student with practical, supervised work experience in a professional environment. Through on-the-job experience, students can acquire knowledge and skills to pursue a career in their area of interest. A faculty member supervises students, and job placement assistance is available through the Co-op Office. 1 lecture; plus 240 minimum hours work experience distributed over the semester, 1 creditPrerequisite: To be determined by individual departments

## LAN - WORLD LANGUAGES

 \& CULTURESPlacement Policy for Students of World Languages and Cultures Students interested in studying a world language at Bergen Community College may choose to either begin a new one or continue the language studied previously. Students who have studied a world language in high school and have received a grade of B or better, should enroll in the appropriate BCC course as follows:

## Years of study Register In

Up to one year Level I courses (e.g., French I)

Two years Level II courses (e.g., French II)

Three or more Level III courses (e.g., Intermediate French I)

Check the BCC registration booklet for current course offerings.

Native or near native speakers of Spanish must enroll in special courses designed for their needs:
Elementary Spanish for Heritage
Speakers and/or Intermediate Spanish for Heritage Speakers. Admission is by permission of the Academic Coordinator or the Dean of Arts and Humanities.

## LAN-011 Directed Studies in

French is a program of computerassisted individualized instruction allowing the student to concentrate on grammatical structures, vocabulary, syntax, orthography, and sentence structure. The course is designed for students who wish to supplement regular classroom instruction in French and may be taken prior to, concurrently with, or after basic courses.
1 hour, 1 non-degree credit

## LAN-104 French for Tourists is

 designed to equip the tourist with the basic vocabulary and idiomatic expressions essential to travel in France and French-speaking countries. Conversations develop audiolingual skills and do not concentrate on formal grammatical problems. The course offers insight into the culture of French-speaking countries in an effort to familiarize the tourist with the customs of these countries. 2 lectures, 2 creditsLAN-106 Spanish for Tourists is designed to equip the tourist with the basic vocabulary and idiomatic expressions essential to travel in Spanishspeaking countries. Conversations develop audio-lingual skills and do not concentrate on formal grammatical problems. The course offers insight into the culture of Spanish-speaking countries in an effort to familiarize the tourist with the customs of these countries.
2 lectures, 2 credits

## LAN-107 Italian for Tourists is

 designed to equip the tourist with the basic vocabulary and idiomatic expressions essential to travel in Italy. Conversations develop audio-lingual skills and do not concentrate on formal grammatical problems. The course offers insight into the culture of Italy in an effort to familiarize the tourist with the customs of the country. 2 lectures, 2 creditsLAN-109 Culinary French provides initiation into authentic French pronunciation, practical vocabulary, and the technical terminology of the fine art of French cuisine. Students explore the cultural and theoretical foundations of the French way of preparing and serving food. The course offers guidance in reading cookbooks and menus to the aspiring French or continental cook. 2 lectures, 2 credits

LAN-110 French I is an introduction to the pronunciation, basic comprehension, and communication of French through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance. 3 lectures, 1 lab, 3 credits \}General Education Course

LAN-111 German I is an introduction to the pronunciation, basic comprehension, and communication of German through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures
Discipline for course placement guidance. 3 lectures, 1 lab, 3 credits \}General Education Course

LAN-112 Italian I is an introduction to the pronunciation, basic comprehension, and communication of Italian through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance. 3 lectures, 1 lab, 3 credits
\}General Education Course
LAN-113 Spanish I is an introduction to the pronunciation, basic comprehension, and communication of Spanish through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance. 3 lectures, 1 lab, 3 credits
\}General Education Course
LAN-114 Russian I is an introduction to the pronunciation, basic comprehension, and communication of Russian through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance. 3 lectures, 1 lab, 3 credits \}General Education Course

## LAN-117 French for Business and

 Industry is designed for students, secretaries, and other personnel in the fields of international business and industry. It emphasizes practical vocabulary, technical terminology, and oral and written communication in the world of commerce and industry. Students learn professional translating techniques and the proper use of specialized dictionaries and other reference materials in English and French. 3 lectures, 3 creditsLAN-118 German for Business and Industry is designed for students, secretaries, and other personnel in the fields of international business and industry. It emphasizes practical vocabulary, technical terminology, and oral and written communication in the world of commerce and industry. Students learn professional translating techniques and the proper use of specialized dictionaries and other reference materials in English and German. 3 lectures, 3 credits

LAN-120 Japanese I is an introduction to the pronunciation, basic comprehension, and communication of Japanese through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance.
3 lectures, 1 lab, 3 credits
\}General Education Course
LAN-144 Irish I is an introduction to the pronunciation, basic comprehension, and communication of Irish through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including) no years of previous high school study of this Gaelic language. Students with more than two years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance.
3 lectures, 1 lab, 3 credits
\}General Education Course

## LAN-150 Spanish for the Health

Professions is designed to enable those people in health career programs/professions and members of the public to communicate in Spanish with healthcare personnel, patients, and clients. 3 lectures, 3 credits

## LAN-151 Spanish for Public

 Service Personnel is a study of the fundamentals of Spanish and of practical Spanish vocabulary and technical terminology. The course is intended for students in criminal justice, social work, and civil service programs. 3 lectures, 3 creditsLAN-152 Spanish for Commerce and Business is a course in basic Spanish for students in business and commercial studies programs. The course emphasizes practical vocabulary, technical terminology, and oral and written communication in the world of commerce and industry. 3 lectures, 3 credits

LAN-165 Korean I is an introduction to the pronunciation, basic comprehension, and communication of Korean through active class use of simple vocabulary, grammar, and syntax. This course is recommended for students who have had two or less (including no) years of previous high school study of this language. Students with more than 2 years prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course placement guidance. 3 lectures, 1 lab, 3 credits \}General Education Course

## LAN-170 American Sign

Language $\boldsymbol{I}$ is an introduction to the expressive and receptive skills required for communication in American Sign Language [ASL]. Through active class use of basic vocabulary, grammar, and syntax, students will begin exploration of Deaf Culture and begin to learn the language of that culture. This course is recommended for students who have had lass than one year of previous study of this language. Students with more than two years of prior study should consult with the Academic Coordinator of the World Languages and Cultures Discipline for course 3 lectures, 1 lab, 3 credits
\}General Education Course
LAN-200 French II offers students an opportunity to enhance their skills in the speaking, reading, writing, and comprehension of French through active class use of vocabulary, grammar, and syntax.
3 lectures, 1 lab, 3 credits
Prerequisite: LAN-110 with a grade of $C$ or better, or equivalent placement
\}General Education Course

LAN-201 Intermediate French I expands students French vocabulary and enhances their conversational ability. The course is conducted entirely in French and features extensive discussion of contemporary France and some grammar review.
3 lectures, 3 credits
Prerequisite: LAN-200 or equivalent placement
\}General Education Course
LAN-202 Intermediate French II is conducted entirely in French and develops students French communication skills through a study of the cultural history of France.
3 lectures, 3 credits
Prerequisite: LAN-201
\}General Education Course

## LAN-203 French Conversation

 emphasizes the spoken language, stressing fluency and correctness of structure, pronunciation, and vocabulary. Topics of discussion may include current cultural, social, and literary events. Students receive individualized instruction in syntax and vocabulary. This course is con-ducted in the target language.
3 lectures, 3 credits
Prerequisite: LAN-201- French II with a minimum grade of C or by permission of the Academic Coordinator
\}General Education Course
LAN-206 French Literature of the 19th Century is a study of the literary and theatrical works of the French symbolists, the pre-
Romantics, Baudelaire, and other 19th century French writers. 3 lectures, 3 credits
Prerequisite: LAN-201 or equivalent placement

## LAN-207 French Culture and

 Civilization surveys the unique geography, pertinent history, significant literary, and artistic movements, and the current sociopolitical role of France in the world. The course discusses contributions to world agriculture, industry and international trade. The course is taught in French using a variety of media and may provide out-of-class learning opportunities. 3 lectures, 3 creditsPrerequisite: LAN-200 or equivalent placement

LAN-210 German II offers students an opportunity to enhance their skills in the speaking, reading, writing, and comprehension of German through active class use of vocabulary, grammar, and syntax.
3 lectures, 1 lab, 3 credits
Prerequisite: LAN-111 with a grade of $C$ or better, or equivalent placement \}General Education Course

## LAN-211 Intermediate German I

expands students German vocabulary and enhances their conversational ability. The course is conducted entirely in German and features extensive discussion of contemporary Germany and some grammar review. 3 lectures, 3 credits
Prerequisite: LAN-210 or equivalent placement
\}General Education Course

## LAN-212 Intermediate German II is

conducted entirely in German and develops students' German communication skills through a study of the cultural history of Germany.
3 lectures, 3 credits
Prerequisite: LAN-211
\}General Education Course

## LAN-213 German Conversation

emphasizes the spoken language, stressing fluency and correctness of structure, pronunciation, and vocabulary. Topics of discussion may include current cultural, social, and literary events. Students receive individualized instruction in syntax and vocabulary. This course is conducted in the target language. 3 lectures, 3 credits Prerequisite: LAN-210 German II with a minimum grade of C or by permission of the Academic Coordinator \}General Education Course

## LAN-217 German Culture and

 Civilization surveys the unique geography, pertinent history, significant literary and artistic movements, and the current sociopolitical role of Germany in the world. The course discusses Germany's contributions to world agriculture, industry and international trade. The course is taught in German using a variety of media and may provide out-of-class learning opportunities. 3 lectures, 3 creditsPrerequisite: LAN-210
LAN-220 Italian II offers students an opportunity to enhance skills in the speaking, reading, writing, and comprehension of Italian through active class use of vocabulary, grammar, and syntax. 3 lectures, 1 lab, 3 credits
Prerequisite: LAN-112 with a grade of C or better, or equivalent placement \}General Education Course

LAN-221 Intermediate Italian I
expands students Italian vocabulary and enhances their conversational ability. The course is conducted entirely in Italian and features extensive discussion of contemporary Italy and some grammar review.
3 lectures, 3 credits
Prerequisite: LAN-220 or equivalent placement
\}General Education Course
LAN-222 Intermediate Italian II is conducted entirely in Italian and develops students Italian communication skills through a study of the cultural history of Italy.
3 lectures, 3 credits
Prerequisite: LAN-221
\}General Education Course

## LAN-223 Italian Conversation

 emphasizes the spoken language, stressing fluency and correctness of structure, pronunciation, and vocabulary. Topics of discussion may include current cultural, social, and literary events. Students receive individualized instruction in syntax and vocabulary. This course is conducted in the target language.3 lectures, 3 credits
Prerequisite: LAN-220 Italian II with a minimum grade of C or by permission of the Academic Coordinator
\}General Education Course

## LAN-224 Advanced Italian

Composition develops the students ability to write in Italian and emphasizes the relationship between the spoken and written idiom. Letters, reports, creative writing, and expository forms serve as the basis for an indepth study of advanced Italian grammar.
3 lectures, 3 credits
Prerequisite: LAN-221 or equivalent placement

## LAN-227 Survey of Italian

Literature is a study of the development of Italian literature from the Middle Ages through the 20th Century.
3 lectures, 3 credits
Prerequisite: LAN-221

LAN-228 Elementary Spanish for Heritage Speakers is designed to address the needs of Hispanic/Latino students who can communicate in Spanish but need to develop and/or improve their reading and writing skills. It addresses specific linguistic issues such as diction, orthography, and sentence structure. The course is conducted in Spanish and includes cultural discussions. Recommended for students with some previous Spanish language instruction. 4 lectures, 3 credits
Prerequisite: Permission of Academic Coordinator
\}General Education Course
LAN-229 Intermediate Spanish for Heritage Speakers is a continuation of Elementary Spanish for Heritage Speakers. It continues to develop reading and writing skills, and to address linguistic issues. The course is conducted in Spanish and includes cultural discussions.
3 lectures, 3 credits
Prerequisite: LAN-228, equivalent placement, or by permission of the Academic Coordinator. \}General Education Course

LAN-230 Spanish II offers students an opportunity to enhance their skills in the speaking, reading, writing, and comprehension of Spanish through active class use of vocabulary, grammar, and syntax.
3 lectures, 1 lab, 3 credits
Prerequisite: LAN-113 with a grade of C or better, or equivalent placement \}General Education Course

## LAN-231 Intermediate Spanish I

expands students' Spanish vocabulary and enhances their conversational and reading ability. The course is conducted entirely in Spanish and focuses upon more complex grammatical structures as well as upon discussions about the Hispanic culture.
3 lectures, 3 credits
Prerequisite: LAN-230 or equivalent placement
\}General Education Course
LAN-232 Intermediate Spanish II is
conducted entirely in Spanish and develops students Spanish communication skills through a study of the cultural history of Spain and Latin
America.
3 lectures, 3 credits
Prerequisite: LAN-231
\}General Education Course

LAN-233 Spanish Conversation emphasizes the spoken language, stressing fluency and correctness of structure, pronunciation, and vocabulary. Topics of discussion may include current cultural, social, and literary events. Students receive individualized instruction in syntax and vocabulary. This course is conducted in the target language.
3 lectures, 3 credits
Prerequisite: LAN-230 Spanish II
with a minimum grade of C or by permission of the Academic Coordinator
\}General Education Course

## LAN-234 Advanced Spanish

Composition develops the students
ability to write in Spanish and emphasizes the relationship between the spoken and written idiom. Letters, reports, creative writing, and expository forms serve as the basis for an in-depth study of advanced Spanish grammar.
3 lectures, 3 credits
Prerequisite: LAN-231 or equivalent placement

## LAN-235 Survey of Spanish

Peninsular Literature is a study of
Spanish literature from the 12th century to the present.
3 lectures, 3 credits
Prerequisite: LAN-231 or equivalent placement

## LAN-236 Survey of Spanish-

 American Literature is a study of Spanish American literature from 1492 to the present.3 lectures, 3 credits
Prerequisite: LAN-231 or equivalent placement

## LAN-237 Mexican Culture and

Civilization surveys the unique geography, pertinent history, significant literary and artistic movements, and the current sociopolitical role of Mexico in the world. The course discusses Mexico's contributions to world agriculture, industry and international trade. The course is taught in Spanish using a variety of media and may provide out-of-class learning opportunities.
3 lectures, 3 credits
Prerequisite: LAN-231

## LAN-238 Spanish Culture and

 Civilization surveys the unique geography, pertinent history, significant literary and artistic movements, and the current sociopolitical role of Spain in the world. The course discusses Spain's contributions to world agriculture, industry, and international trade. The course is taught in Spanish using a variety of media and may provide out-of-class learning opportunities. 3 lectures, 3 creditsPrerequisite: LAN-231

## LAN-239 Italian Culture and

 Civilization surveys the unique geography, pertinent history, significant literary and artistic movements, and the current sociopolitical role of Italy in the world. The course discusses Italy's contributions to world agriculture, industry, and international trade. The course is taught in Italian using a variety of media and may provide out-ofclass learning opportunities.3 lectures, 3 credits
Prerequisite: LAN-221
LAN-240 Russian II offers students an opportunity to enhance their skills in the speaking, reading, writing, and comprehension of Russian through active class use of vocabulary, grammar, and syntax.
3 lectures, 1 lab, 3 credits
Prerequisite: LAN-114 with a grade of C or better, or equivalent placement \}General Education Course

## LAN-241 Intermediate Russian I

 expands students Russian vocabulary and enhances their conversational ability. The course is conducted entirely in Russian and feature s extensive discussion of contemporary Russia and some grammar review. 3 lectures, 3 creditsPrerequisite: LAN-240 or equivalent placement
\}General Education Course
LAN-244 Irish II offers students an opportunity to enhance their skills in the speaking, reading, writing, and comprehension of Irish, one of the Gaelic languages, through active class use of vocabulary, grammar, and syntax. 3 lectures, 1 lab, 3 credits Prerequisite: LAN-144 with a grade of C or better, or equivalent placement
\}General Education Course

## LAN-245 Intermediate Irish I

expands students Irish vocabulary and enhances their conversational ability in this Gaelic language. The course is conducted entirely in Irish and features extensive discussion of contemporary lrish-speaking regions in Ireland and some grammar review. 3 lectures, 3 credits
Prerequisite: LAN-244 or equivalent placement
\}General Education Course

## LAN-250 Hispanic Society is a

 study of the social, economic, political, and cultural histories of a variety of Spanish-speaking nations in Europe, America, and Africa.3 lectures, 3 credits
Prerequisite: Fluency in Spanish as determined by the World Languages faculty.

LAN-260 Japanese II offers students an opportunity to enhance their skills in the speaking, reading, writing, and comprehension of Japanese through active class use of vocabulary, grammar, and syntax.
3 lectures, 1 lab, 3 credits Prerequisite: LAN-120 with a grade of C or better, or equivalent placement \}General Education Course

LAN-261 Intermediate Japanese I expands students Japanese vocabulary and enhances their conversational ability. The course is conducted entirely in Japanese and features extensive discussions of contemporary Japan and some grammar review.
3 lectures, 3 credits
Prerequisite: LAN-260
\}General Education Course
LAN-265 Korean II offers students an opportunity to enhance their skills in the speaking, reading, writing and comprehension of Korean through active class use of vocabulary, grammar and syntax.
4 lectures, 3 credits
Prerequisite: LAN-165 with a grade of C or better, or equivalent placement \}General Education Course

## LAN-270 American Sign

Language II is a continuation of American Sign Language I designed to further develop competency in ASL. Students will be given the opportunity to enhance both expressive and receptive skills by increasing vocabulary and knowledge of grammar.
Students will be expected to interact with the deaf community in real-life settings thereby enhancing their awareness of and sensitivity to various aspects of Deaf Culture and ASL. 3 lectures, 1 lab, 3 credits
Prerequisite: LAN-170 or permission of the Program Coordinator
\}General Education Course

## LGL PARALEGAL STUDIES

LGL-101 Fundamentals of Law is an introduction to the principles of substantive law in the fields of contracts, sales, torts, and secured transactions. 3 lectures, 3 credits

## LGL-103 Legal Research and

Writing is an introduction to legal practice. Topics covered include law office systems, legal research, legal forms, and briefs. Research problems and case memo term papers are assigned.
2 lectures, 2 labs, 3 credits
Corequisite: WRT-101
LGL-150 School Law is a study of New Jersey school laws, the rules and regulations of the New Jersey State Board of Education, the functions of the State Commissioner of Education, and the relationship of school district organization to other units of government.
3 lectures, 3 credits
LGL-165 Elder Law is a survey of the emerging law concerning the rights, duties, and responsibilities of persons over the age of 60 . Topics covered include incompetency procedures, guardianships and other protective arrangements, Medicare and Medicaid, long-term planning and strategies, protection of the home from creditors and family members, health benefits, social security, and special estate planning for the remarried elderly.
1 lecture, 1 credit
(Offered only in the evening)

LGL-200 Business Communications for Paralegals covers the communications skills of writing, speaking, and listening, with particular applications to paralegals. Emphasis is placed on effective techniques to be used in interviews and meetings. Students learn how to prepare letters, memos, and reports.
Oral presentations are included.
3 lectures, 3 credits
Prerequisites: LGL-101 and LGL-103

## LGL-202 New Jersey and Federal

Courts is a study of the Rules of Court for the New Jersey Court System as they relate to pleadings, depositions, interrogatories, summary judgment, appellate practice, and rules of evidence.
3 lectures, 3 credits
Prerequisites: LGL-101, LGL-103,
LGL-203, LGL-220
(Offered only in the evening of the fall semester)

## LGL-203 Paralegalism and Legal

Procedure is a study of the role of a legal assistant in the public sector. Topics of discussion include methods of investigating cases and of preparing legal memoranda and other legal documents.
2 lectures, 2 labs, 3 credits
Prerequisites: LGL-101 and LGL-103 Corequisite: WRT-201
(Offered only in the evening of the spring semester)

## LGL-205 Mechanics of Property

Transactions is a study of New Jersey real estate legal practice and procedures concentrating on such topics as conveyancing, forms, and the theory and practice of real estate transactions. Sample cases are used to illustrate the legal assistant's role in a real property conveyance. Students examine case studies and prepare a sample problem from contract to closing.
3 lectures, 3 credits
Prerequisites: LGL-101, LGL-103,
LGL-220, and REA-101
(Offered only in the evening of the fall semester)

## LGL-206 Mechanics of Commercial Transactions is a

study of legal forms, procedure and practice for organizing a business
entity, sale of a business, equipment leasing, and other commercial transactions. Students examine case studies and prepare a sample problem for sale of a business.
3 lectures, 3 credits
Prerequisites: LGL-101 and LGL-103 and LGL-220
(Offered only in the evening of the spring semester)

LGL-207 Wills and Administration
is a study of the New Jersey law of wills, probate, and estate administration. Topics of discussion include the preparation of wills, probate procedures, and the preparation of New Jersey Inheritance and Federal
Estate Tax forms.
3 lectures, 3 credits
Prerequisites: LGL-101 and LGL-103 and LGL-220
(Offered only in the evening)

## LGL-208 Mechanics of Family

Law is an introduction to New Jersey family law. Topics of discussion include divorce, annulment, equitable distribution of assets, child custody, alimony, and support and visitation of children. New Jersey forms and procedures are reviewed. Students examine case studies and prepare matrimonial pleadings and pretrial memoranda. 3 lectures, 3 credits
Prerequisites: LGL-101 and LGL-103 and LGL-220
(Offered only in the evening of the fall semester)

## LGL-220 Computer Assisted Legal

Research introduces the student to modern technologies which allow efficient and accurate legal research. The course incorporates Westlaw, CD-ROM, and the Internet into the legal research process and requires students to complete assigned computer research projects.
2 lectures, 2 labs, 3 credits
Prerequisites: LGL-101 and LGL-103
LGL-230 Bankruptcy Law teaches paralegals the procedures, forms, and schedules used in bankruptcy cases. 1 lectures, 1 credit
Prerequisites: LGL-202 and LGL-203 or permission of the Department Head (Offered only in the evening)

## LGL-231 Environmental Claims

teaches paralegals the practice and procedures in the specialized field of environmental claims-tort liability. 1 lecture, 1 credit
Prerequisites: LGL-203 and LGL-205 or permission of the Department Head (Offered only in the evening)

LGL-232 Immigration Law teaches paralegals the practices and procedures in the emerging specialty of immigration law.
1 lectures, 1 credit
Prerequisite: LGL-203 or by permission of the Department Head
(Offered only in the evening)

LGL-233 Intellectual Property
teaches paralegals the practices and procedures used in the emerging specialty of filing and protecting intellectual property such as trade names, patents and copyrights.
1 lectures, 1 credit Prerequisites: LGL-203 and LGL-206 or permission of the Department Head (Offered only in the evening)

## LGL-234 Personal Injury and

 Product Liability teaches paralegals the practice and procedures used in the developing specializations of personal injury and product liability torts. Students will examine case studies and will prepare legal forms for sample case problems. 2 lectures, 2 labs, 3 credits Prerequisites: LGL-203 and LGL-220 (Offered only in the evening of the spring semester)LGL-235 Tax Law teaches paralegals the tax implications of common problems faced in law offices. Topics include business acquisitions and IRS employment regulations.
1 lectures, 1 credit
Prerequisites: LGL-203 and ACC-103 or permission of Department Head

## LGL-236 Employment Law is a

 course for employees and employers concerning hiring, managing, and terminating employees and special protections available to employers and employees under statutes and cases. The course emphasizes recent developments in the law.2 lectures, 2 credits
Prerequisite: LGL-101 or by permission of the Department Head

## LGL-237 Rules of Evidence is a

 review of the rules of evidence in court which include competency to testify, best evidence, hearsay, relevancy, impeachment of a witness, and other evidence rules.1 lecture, 1 credit
Prerequisite: LGL-101 or by permission of the Department Head (Offered only in the evening)

LGL-462 Co-op Work Experience
(Legal Assistant) requires part-time student employment in a law office, banking institution, court or other law-related position and aims at giving students insight into the methods and procedures used by legal assistants. Job assistance is available through the Co-op office.
1 lecture; plus 179 minimum hours work experience distributed over the semester, 2 credits
Prerequisites: LGL-101, LGL-202, LGL205, LGL-208, LGL-220, WRT-101, and WRT-201. Student must have attained a C or better grade in English Composition I and II and all paralegal specialty courses.
(Offered only in the evening of the spring semester)

## LGN - LEGAL NURSE CONSULTANT

LGN-105 Principles of Legal Nurse Consulting examines the history and evolution of nurse consulting and legal theories. The role of the legal nurse consultant is explored as it relates to the review and analysis of medical records, litigation process, trial and witness preparation, standards of care, risk management insurance issues, and alternative forms of dispute resolution. Business principles for legal nurse consultants are also covered. 3 lectures, 3 credits

LGN-201 Health Law provides an overview of the American health care system, examining its historical origins and the interplay of competing interests; examination of managed care organizations (MCOs) including (HMOs, PPOs, PHOs, IPAs, etc.); and MCO regulatory issues, such as licensing and certificate-ofneed requirements and patient rights legislation; legal implications of the transactions engaged in by MCOs; fraud and abuse in the health care system; managed care contracting including contract drafting and analysis; legal issues concerning hospitals; Medicare and Medicaid; interaction health law with medical malpractice.
3 lectures, 3 credits
Prerequisites: LGN-105, LGL-101, LGL-103

LGN-204 Medical Legal Ethics,
Records and Writing requires the production and preparation of medical records summaries which includes identifying standards of care; accessing, interpreting and summarizing medical records; interviewing clients; medical witnesses and preparation of the legal nurse consultant's report. Additionally, the course covers legal and medical ethics.
3 lectures, 1 lab, 3 credits
Prerequisites: LGL-101, LGL-103, LGL-
203, LGL-234, LGN-105 and LGN-201

## LGN-210 Advanced Medical

 Legal Research develops advanced research skills employing Westlaw, Medicine and Internet research. Students will become facile users of legal and medical databases online, including the Internet. Course focuses on medical and legal research used in determining appropriate standards of care. 2 lectures, 2 labs, 3 credits Prerequisites: LGL-101, LGL-103, LGN-105, LGN-204
## LGN-462 Legal Nurse Internship

requires that the student complete all legal nurse specialty courses with a grade of " $C$ " or better. This course can only be taken in the last semester of the Legal Nurse Program. The student must meet with the instructor and jointly prepare an agreed 179 hour lab for the course which will include on site study and assignments in a legal nurse setting such as a hospital, HMO, doctor's office or law office plus sample medical-legal research and document assignments from the instructor. In addition, the course will meet one (1) hour each week. Two or more class absences will require repeat of the course.

## 2 credits

Prerequisite: A "C" grade or better in each paralegal nurse specialty course; internship must be taken in last semester of program.

## LIT - LITERATURE

Literature courses need not be taken in sequential order.
LIT-201 American Literature to
1880 is a study of representative American literature from its origins to the late nineteenth century. Students read selections from such areas as exploration narratives and Native American poetry, and from such authors as Bradstreet, Edwards,
Douglass, Emerson, Hawthorne,
Melville, Dickinson, and Whitman.
3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course

LIT-202 American Literature 1880 to the Present is a study of representative American literature from the late nineteenth century to the present. Students read works by such authors as Twain, O'Neill, Hurston, Hemingway, Faulkner, Frost,
Wright, Ginsberg, and Rich.
3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course

## LIT-203 World Literature to 1650

is a study of world authors to the sixteenth century. Students read works such as Gilgamesh; selections from the Old and New Testaments, the Ramayana; and writings of such authors as Homer, Aeschylus, Li Po, Dante, Shakespeare, and Sor Juana. 3 lectures, 3 credits Prerequisite: WRT-101
\}General Education Course
\}Diversity Course

## LIT-204 World Literature 1650 to

the Present is a study of world authors from the sixteenth century to the present. Students read works by such authors as Wu Ch'Eng-En, Racine, Goethe, Flaubert, Tolstoy, Eliot, Mahfouz, and Achebe.
3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course
\}Diversity Course
LIT-205 English Literature to 1800 is a study of British literature from Anglo-Saxon times to the late eighteenth century. Students read works such as Beowulf and such authors as Chaucer, Kempe, Shakespeare, Milton, Dryden, Pope, and Swift. 3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course
LIT-206 English Literature 1800 to the Present is a study of British literature from the Romantic period to the present. Students read works by such authors as Blake, Wordsworth, Austen, Hardy, Dickens, Yeats, Lawrence, Woolf, and Thomas. 3 lectures, 3 credits Prerequisite: WRT-101
\}General Education Course

LIT-215 The Black Literary Voice
in America is a study of major African-American authors. The course provides a literary, historical, and sociological survey of the African-American experience. Students read works by such authors as Wheatley, Douglass, Ellison, Hurston, Baldwin, Malcolm X, Morrison, and Walker. 3 lectures, 3 credits Prerequisite: WRT-101
\}General Education Course \}Diversity Course

## LIT-216 European Literature to

1650 is a study of European authors from Greco-Roman times to the Renaissance. Representative works are studied in their historical context. The course includes selections from such works as the Bible, ancient Greek tragedies and comedies, medieval epics and dramas, and such authors as Sappho, Plato, Virgil, Dante, Marie de France, Shakespeare, and Milton.
3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course

## LIT-217 European Literature 1650

to the Present is a study of European literature from the Neoclassical period to the present. Representative works are studied in their historical context. The course includes selections from such areas as Romantic and Victorian poetry, the nineteenth century novel, and existentialism, and such authors as Racine, Voltaire, Austen, Goethe, Dostoyevsky, the Symbolists, Kafka, Woolf, Mann, and the Post-Moderns. 3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course
LIT-218 American Ethnic Literature examines the literature of America's ethnic groups. The course draws upon significant works of fiction, poetry, drama, and autobiography written by representatives of such groups as Native Americans, Hispanics, Irish, Jews, Asians, Blacks, and Italians. 3 lectures, 3 credits Prerequisite: WRT-101 \}General Education Course \}Diversity Course

## LIT-220 Social Aspects of

 Literature examines various concerns and issues that exist within human communities. The course allows students to explore social structures and the role of the individual within a larger social context, with the aim of developing a greater understanding of the interaction of self and society. Literary texts provide the foundation for discussion and analysis.3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course

## LIT-224 Topics in International

Literature is an exploration of major themes in the literature of various cultures. Each semester a specific theme is developed through the study of literary works that are representative of a number of nations and cultures. 3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course
\}Diversity Course
LIT-225 Modern Irish Literature is a study of the Irish literary revival of the nineteenth and twentieth centuries. The works of such major Irish authors as Synge, Yeats, O'Casey and Joyce are discussed, with special emphasis upon their adaptation of Celtic mythological material and their reactions to the political, cultural, and social conditions of modern lrish society. 3 lectures, 3 credits
Prerequisite: WRT-101

## LIT-228 Women in Literature is a

study of representative works by women writers in a variety of forms. The course provides a literary, historical , and sociological context for the study of this literature. Students read works by such authors as Julian of Norwich, Dickinson, Chopin, Woolf, Emecheta, Morrison, and Tan. 3 lectures, 3 credits Prerequisite: WRT-101 \}General Education Course \}Diversity Course

## MAT - MATHEMATICS \&

 COMPUTER SCIENCECIS courses are listed under CIS-Computer Science.

## MAT-010 Basic Mathematics

Support is a recitation class designed to provide additional instructional time for students enrolled for students enrolled simultaneously in MAT-011. 1 lecture, 1 credit (non-degree) Corequisite: MAT-011

MAT-011 Basic Mathematics is a study of the fundamental operations of arithmetic, intended for students whose placement examination indicates a need for review of arithmetic skills.
3 lectures, 3 credits (non-degree)

## MAT-030 Algebra Review is

designed for students who want a brief review of algebra. Students take practice tests. Review topics include: first and second degree equations, rational expressions, polynomials, factoring, graphing, systems of equations, and radicals. This course is intended for students with previous experience in high school level algebra. While MAT-030 may help prepare students for placement testing, it does not replace the remedial algebra required of students once they fall below the cutoff scores on the placement exam. 1 lecture, 1 credit (non-degree)

## MAT-031 Algebra A; MAT-032

Algebra B is a two-semester basic algebra course equivalent in content to and satisfying the requirements of MAT-035. These courses are designed for the student who has not studied algebra previously, or for the student who has found algebra to be a difficult subject. Students who are placed in MAT-035 may elect to enroll in the MAT-031 and MAT-032 sequence.
MAT-031: 3 lectures, 3 credits (nondegree) Prerequisite: MAT-011 or equivalent by testing
MAT-032: 3 lectures, 3 credits (nondegree) Prerequisite: MAT-031

MAT-033 Algebra A Support is a recitation class designed to provide additional instructional time for students enrolled for students enrolled simultaneously in MAT-011.
1 lecture, 1 credit (non-degree) Corequisite: MAT-031

MAT-034 Algebra B Support is a recitation class designed to provide additional instructional time for students enrolled for students enrolled simultaneously in MAT-011.
1 lecture, 1 credit (non-degree) Corequisite: MAT-032

MAT-035 Algebra is a basic algebra course for students whose placement examination indicates a need for review in algebra. Topics include signed numbers, variables, literal equations and formulas, square roots, exponents, polynomials, linear and quadratic equations, and rational expressions.
4 lectures, 4 credits (non-degree) Prerequisite: MAT-011 and appropriate placement scores

MAT-045 Intermediate Algebra is the study of polynomial and rational expressions, integral and fractional exponents, roots and radicals, linear and quadratic equations, functions, elementary curve sketching, inequalities. 4 lectures, 4 credits (non-degree) Prerequisite: MAT-031/032 sequence or MAT-035 or by proficiency examination.

## MAT-116 Technical Mathematics I

is designed to increase students mathematical knowledge and skills with an emphasis on applications in technological occupations. The course covers measurement analysis, algebraic and geometric topics, graphics, problem solving, logarithms, and an introduction to trigonometry and to computer techniques.
3 lectures, 3 credits
Prerequisite: MAT-032 or MAT-035 or equivalent by testing.

MAT-130 Contemporary Mathematics is a study of some of the fundamental concepts in mathematics and computers. Topics considered include number systems, symbolic logic, set theory, principles of counting, probability, and an introduction to computers and computer programming. Applications of these concepts in various fields of study are included in the course.
3 lectures, 3 credits
Prerequisite: MAT-031/032 sequence or MAT-035 or equivalent by testing. \}General Education Course

## MAT-150 Elementary Statistics is

 a study of frequency distributions, measures of central tendency and dispersion, probability, the normal distribution, sampling and sampling distributions, the central limit theorem, confidence interval estimation, and hypothesis testing.3 lectures, 3 credits
Prerequisite: MAT-031/032 sequence or MAT-035 or equivalent by testing. \}General Education Course

MAT-155 Finite Mathematics is an introduction to the solution of problems in the management, natural, behavioral, and social sciences. Topics covered include mathematical models, matrices and linear systems, and linear programming. 3 lectures, 3 credits Prerequisite: MAT-031/032 sequence or MAT-035 or equivalent by testing. \}General Education Course

## MAT-180 Precalculus: College

 Algebra and Trigonometry is a study of coordinate geometry; functions and graphing; polynomial and rational functions; exponential, logarithmic, trigonometric, and inverse trigonometric functions; analytic geometry, and applications. 4 lectures, 4 credits Prerequisite: MAT-045 with a grade of C or better or by proficiency examination. \}General Education Course
## MAT-222 Technical Mathematics

II is an applied calculus course with emphasis in the technical areas.
Topics include inequalities, limits, derivatives, differentials, antiderivatives, definite integrals, and derivative and integral properties of transcendental functions.
4 lectures, 4 credits
Prerequisite: MAT-116 or MAT-180.

## MAT-223 Calculus for the Managerial and Social Sciences

 covers the essential ideas of the Calculus: functions, limits, continuity, differentiation and integration. The course includes applications to problems in business, economics, psychology, the social sciences and mathematical modeling.3 lectures, 3 credits
Prerequisite: MAT-045 or by proficiency examination.
\}General Education Course
MAT-250 Statistical Analysis is an introduction to methods for the design of research studies and the interpretation of data that result from these studies. Topics considered include a brief review of elementary statistical concepts, additional cases of hypothesis testing and estimation, analysis of variance, analysis of enumerative data, linear regression and correlation, and nonparametric statistics. Laboratory assignments using a statistical software package are included in the course.
2 lectures, 2 labs, 3 credits Prerequisite: MAT-150 or by permission of the Department Head \}General Education Course

MAT-280 Calculus I is a study of limits, continuity, the derivative of a function, differentiation of algebraic functions, sine and cosine functions, applications of a derivative, antidifferentiation, area under a curve, the definite integral, the fundamental theorem of calculus, and applications.
4 lectures, 4 credits
Prerequisite: MAT-180 with a grade of C or better or by permission of the Department Head \}General Education Course

MAT-281 Calculus II is a study of differentiation and integration of transcendental functions, methods of integration, applications of the integral, indeterminate forms, improper integrals, infinite series, and applications. 4 lectures, 4 credits
Prerequisite: MAT-280 with a grade of C or better or by permission of the Department Head
\}General Education Course
MAT-282 Calculus III is a study of vectors, parametric equations, polar coordinates, partial differentiation, directional derivatives, gradients, line integrals, multiple integrals and applications. 4 lectures, 4 credits
Prerequisite: MAT-281 with a grade of C or better or by permission of the Department Head
\}General Education Course
MAT-283 Differential Equations covers equations of order 1 , linear equations with constant coefficients, non-homogeneous equations, variation of parameters, series solutions, equations with variable coefficients, Laplace transforms, convolutions, boundary value problems, Fourier transforms and applications. 4 lectures, 4 credits
Prerequisite: MAT-282 with a grade of C or better or by permission of the Department Head

MAT-286 Linear Algebra is a study of finite dimensional vector spaces. Topics considered include vectors and vector spaces, matrices, determinants, systems of linear equations, linear transformations, quadratic forms, eigenvalues and eigenvectors, and applications. 4 lectures, 4 credits Prerequisite: MAT-280 or by permission of the Department Head

## MFG - MANUFACTURING TECHNOLOGY

MFG-119 Manufacturing Design I
is a study of the basic functionality and use of Parametric Technology Corporation's Pro/ENGINEER 3D solid modeling software. Emphasis will be placed on the technology as well as the terminology in relation to this advanced tool. Lecture and lab will be used to teach not only how to use specific features of the software but also how to use it in design.
2 lectures, 2 labs, 3 credits

MFG-122 Machine Tool Principles I
introduces students to the basic hands-on theoretical skills necessary of a machinist. Machining processes such as drilling, milling, turning, and grinding will be studied and developed. Theoretical skills such as machine terminology, speeds and feeds, uses of machinery handbook, and safety issues are also included. It would be beneficial if incoming students had some exposure to basic machining principles and equipment. 2 lectures, 2 labs, 3 credits

## MFG-123 Quality and

 Measurements I is a study of the fundamental skills used by machinists such as blueprint reading and drafting standards used to create and interpret drawings. Student will also study and use precision measuring equipment such as calipers, dial indicators, gauges, and hole measuring devises in a practical laboratory. Basic machinist math topics such as fractions, decimals, metrics, and algebra will also be addressed. 2 lectures, 2 labs, 3 credits Prerequisite: MAT-011 or a passing score on the MAT-011 placement exam
## MFG-219 Manufacturing Design II

is a study of the intermediate to advanced functionality of Parametric Technology Corporation's Pro/ENGINEER 3D solid modeling software. Emphasis will be placed on the technology as well as the various design techniques in relation to this advanced tool. Lecture and lab will be used to teach not only how to use specific features of the software but also how to use it in design.
2 lectures, 2 labs, 3 credits
Prerequisite: MFG-119

## MFG-220 Manufacturing Design III

is a study of the design and analysis techniques using Parametric
Technology Corporation's Pro/ENGINEER 3D solid modeling software and Pro/MECHANICA. Emphasis will be placed on the technology as well as the techniques available in relation to this advanced tool. Lecture and lab will be used to teach how to use specific features of the software in relation to product design.
2 lectures, 2 labs, 3 credits
Prerequisite: MFG-219

## MFG-221 Manufacturing Design IV

is a study of the basic functionality and use of the manufacturing module of Parametric Technology Corporation's Pro/ENGINEER 3D solid modeling software. Emphasis will be placed on the technology as well as the terminology in relation to this advanced tool to manufacture products. Lecture and lab will be used to teach not only how to use specific features of the software but also how to use it in design.
2 lectures, 2 labs, 3 credits
Prerequisite: MFG-220

## MFG-222 Machine Tool

Principles II continues the work of Machine Tool Principles I by broadening the basic skills of a machinist by introducing intermediate and advanced topics such a milling and turning tools and their geometry, tool inserts, coolants and basic metallurgy. Students will experience these topics both in theory and hands-on in a practical laboratory setting.
2 lectures, 2 labs, 3 credits
Prerequisite: MFG-122

## MFG-223 Quality and

Measurements II continues the work of Quality and Measurements I by expanding the skills of quality control with the introduction of statistical process control. Advanced measuring tools and techniques such as coordinate measuring, surface roughness, calibration, and optical comparators will be used in a practical laboratory. Geometric dimensioning and tolerancing as applied to engineering drawings will be studied. Intermediate machinist math topics such as algebra, geometry, and trigonometry will be addressed in context.
2 lectures, 2 labs, 3 credits
Prerequisite: MFG-123

## MFG-224 Advanced Tooling, Materials, and Automation

includes an overview of materials and processes used in the manufacture of precision products and an advanced study of metal cutting tooling. A comparative study of casting, welding, heat-treating, stamping, cutting, EDM, CNC machining, grinding, etc., will be undertaken, with emphasis on precision machining equipment and automation. The relationship between tooling, cutting lubricants, and material properties will be explored. The interaction of machine and tool cutting factors in determining production rates will be investigated.
2 lectures, 4 labs, 4 credits
Prerequisites: MFG-222, MFG-223, DFF-107

MFG-225 Process Improvement will provide students with the skills necessary for evaluating, documenting, and improving manufacturing and other business processes. Students will gain hands-on experience using techniques such as process mapping, value stream mapping, and systems diagramming to identify both existing processes and for modeling potential improvements. The course will also cover both the technical and human issues associated with the implementation of changes as well as strategies for their remediation. 1 lecture, 2 labs, 2 credits Prerequisite: TEC-180
Corequisite or Prerequisite: MFG-224
MFG-226 Methods, Fixture Design, and Estimating will explore and develop the skills necessary to mentally visualize how to effectively and economically make precision-machined parts. Students will learn how to select materials, type of process, type of equipment, sequence of operations, fixtures, tools, etc. Methods development and documentation will be demonstrated and practiced. Jig and fixture types and design criteria will be reviewed. 2 lectures, 2 labs, 3 credits Prerequisites: MFG-224 and DFT-210 or MFG-119

## MFG-227 CNC Programming pro-

 vides the fundamentals of programming Computer Numerical Control equipment with a heavy concentration on CNC turning and machining centers. Included in this course will be language and graphics based programming, automated features and capabilities, advanced CNC applications and integration. Students will receive hands-on programming experience using industry preferred software and controllers. 2 lectures, 4 labs, 4 credits Prerequisites: MFG-224 and DFT-210 or MFG-119MFG-254 Robotics is an introduction to the principles and capabilities of modern robot technology. Topics considered include the evolution and future of computerized robots; robot intelligence; geometric sensors; computer controllers; and the design, assembly, adaptation, programming maintenance, operation and applications of robots in industry. Laboratory assignments on robotic activities are included in the course. 2 lectures, 2 labs, 3 credits
Prerequisite: CIS-163 or by permission of the Department Head

## MFG-257 Introduction to

 Manufacturing Systems utilizing high-tech hardware (CNC lathe and milling machines, vision inspection system, robotic arms, conveyors, etc.) and industrial software (CAM) in order to control, manage, operate and monitor manufacturing processes. 2 lectures, 2 labs, 3 credits Prerequisite: By permission of the Department Head
## MFG-464 Co-op Work Experience (Manufacturing) provides the stu-

 dent with practical, supervised work experience within the broad field of manufacturing technology. Through on-the-job experience, students can acquire the practical expertise and knowledge needed to pursue a career in this field. Students are supervised by a faculty member, and job placement assistance is available through the Co-op Office.1 lecture, plus 240 minimum hours work experience distributed over the semester or over combined summer sessions. 4 credits
Prerequisites: MFG-222 and MFG-123

## MLT - MEDICAL LABORATORY TECHNOLOGY

## MLT-160 Medical Laboratory

Technology I is an in-depth study of the sciences of hematology and urinalysis. It deals with the morphology of blood and blood-forming tissues, the composition of urine, and the functions of the urinary system. The physiology and pathology of both subjects are also studied. The laboratory component of the course is utilized to develop the skills and competencies required to perform laboratory analysis with instruction in the proper use of the various instrumentations involved in these studies. 3 lectures, 6 labs, 5 credits Corequisite: CHM-100, MAT-130 or MAT-150 or MAT-155 or MAT-180

MLT-201 Clinical Microbiology I is a study of microorganisms and their relationship to diseases. Discussion is centered on laboratory cultivation, methods of identification, antimicrobial susceptibility tests and serological diagnosis of microorganisms.
Clinically significant aerobic bacteria are emphasized. The laboratory component of the courses develops the skills and competencies required to perform the diagnostic procedures. 3 lectures, 3 labs, 4 credits Prerequisites: CHM-140, CHM-141, and MLT-263
Corequisites: CHM-240, CHM-241, MLT-261, and MLT-264

MFG-MMLT
MLT-202 Clinical Microbiology II is
a continuation of study of microorganisms and their relationship to disease.
The emphasis of this course is on anaerobic bacteria, mycobacteria, viruses, human parasites and fungi. The laboratory component is designed to develop the skills and competencies to isolate, identify and test for antimic robial susceptibility of the microorganisms. 3 lectures, 3 labs, 4 credits Prerequisites: CHM-240, CHM-241, MLT-201, MLT-261, and MLT-264
Corequisites: MLT-262 and MLT-266

## MLT-260 Medical Laboratory

Technology II is designed to provide the student with a concise and thorough guide to transfusion practices and immunohematology. A problem-oriented approach to the subject matter is incorporated to provide the student with a working knowledge of modern, routine blood banking. The laboratory component of the course is utilized to develop the skills and competencies required to perform blood banking procedures and to maintain records for the efficient operation of a blood bank. 3 lectures, 6 labs, 5 credits
Prerequisites: CHM-100, MAT-130 or MAT150 or MAT-155 or MAT-180, MLT-160 Corequisites: CHM-140 and CHM-141

## MLT-261 Medical Laboratory

Technology III is an in-depth study of analytical techniques utilized to measure the biochemical entities of blood and various body fluids. The correlation of test results to the body's physiology and pathology is also stressed. The laboratory segment of the course is used to develop the skills and competencies required to operate, standardize, and understand the instruments utilized in performing the analysis. The use of quality control procedures is emphasized.
3 lectures, 6 labs, 5 credits Prerequisites: CHM-140, CHM-141, and MLT-263 Corequisites: CHM-240, CHM-241, MLT-201, and MLT-264

## MLT-262 Medical Laboratory

Technology IV is a continuation of the in-depth study of clinical chemistry started in MLT-261. More advanced and sophisticated procedures utilizing automated sequential multiple analysis instruments are studied. 3 lectures, 6 labs, 5 credits Prerequisites: CHM-240, CHM-241, MLT-261, and MLT-264
Corequisites: MLT-202 and MLT-266

MLT-263 Medical Laboratory
Externship I is designed to intro-
duce students to the medical laboratory in hospital setting. This externship takes place at the end of the freshman year, during Summer Session I. The experience provides students with an orientation to each department of the laboratory and with an opportunity to demonstrate and develop their skills and competencies. Each student rotates through each department of the laboratory and functions under the direct supervision and instruction of the laboratory staff instructors. 40 hours per week, 1 credit Prerequisite: MLT-260

## MLT-264 Medical Laboratory

Externship II is practiced at an affiliated hospital laboratory. This is the first half of the MLT-264/MLT266 two-semester sequence. This experience enables students to practice the skills they have learned and to learn new skills and competencies under the direction and supervision of the laboratory staff instructors. The student rotates through the blood bank, clinical chemistry, hematology, immunology/serology; microbiology and body fluid departments of the laboratory.
16 hours per week, 1 credit
Prerequisites: CHM-140, CHM-141, and MLT-263
Corequisites: CHM-240, CHM-241, MLT-201, and MLT-261

## MLT-266 Medical Laboratory

Externship III is the second half of the MLT-264/MLT-266 two-semester sequence. Emphasis is placed on the development in students of confidence in their competencies so they can function with minimal supervision of the laboratory staff instructors. Students rotate through the laboratory departments which were not covered in the first semester. 16 hours per week, 1 credit Prerequisites: CHM-240, CHM-241, MLT-261, and MLT-264
Corequisites: MLT-202 and MLT-262

## MOA - MEDICAL OFFICE ASSISTANT

## MOA-140 Medical Terminology

 provides an introduction to the basic structure of medical words, including prefixes, suffixes, roots, combining forms, and the formation of plurals. Emphasis is placed on the correct pronunciation, spelling, and definition of medical terms, allowing the student to build a professional vocabulary for working in the medical field. 3 lectures, 3 creditsMOA-141 Introduction to Medical Assisting is a study of the professional attitudes and behavior required of medical assistants. The fundamentals of meeting the special needs of patients are also studied. The fundamental principles of human relations and the importance of professional growth and communication skills are stressed. Additional emphasis is placed on development of medical science, health agencies, medical specialties, and common disease processes. 3 lectures, 3 credits

## MOA-145 Medical Office Assisting:

An Overview is offered to candidates for the Certified Medical Assistant Examination administered by the American Association of Medical Assistants. Subjects to be covered in the course are medical terminology, human relations, medical law and ethics, anatomy and physiology, administrative procedures, and clinical procedures. 3 lectures, 3 credits

## MOA-200 Pharmacology for

 Medical Office Assistants introduces the student to drug practices, procedures, and preparations utilized in ambulatory care settings. Topics include legislation, drug sources, classifications, and actions. Emphasis is placed on function of drugs, vitamins and minerals, and substance abuse, as well as the effects of medications on the various body systems. 2 lectures, 2 creditsPrerequisite: MOA-140

## MOA-201 Diagnostic and

Procedural Coding enables the student to develop competence in coding systems, diagnoses, and procedures for data collection and processing. The student will follow federal regulations and guidelines for sequencing of diagnoses and processing activities. The laboratory component of the course is utilized to develop the skills and competencies to perform coding through both manual and computer-based methods. 3 lectures, 3 labs, 4 credits Prerequisite: MOA-140

## MOA-203 Medical Assistant

 Administrative Procedures I provides a comprehensive medical office simulation. Students are trained in machine transcription and are given basic instruction in word processing operations 2 lectures, 2 labs, 3 credits Corequisites: MOA-140 and INF-213 (Restricted to Medical Office Assistant curriculum students).MOA-204 Medical Assistant Administrative Procedures II provides advanced training in medical office procedures and management. Special emphasis placed on medical transcription and medical written communications.
2 lectures, 2 labs, 3 credits
Prerequisite: MOA-203 (Restricted to Medical Office Assistant curriculum students).

MOA-218 Medical Economics is a study of various types of medical practice and medical care, fee determination, health and accident insurance programs, and government medical care programs. Medical law and ethics are also emphasized.
2 lectures, 2 credits
Corequisite: MOA-141

## MOA-240 Clinical Office Practice

enables the student to develop competence in examination room techniques. Special emphasis is placed on preparing the patient for examination, taking vital signs, preparing for sterilization and injection procedures, taking electrocardiograms, performing first aid and emergency procedures including CPR, and caring for supplies and equipment in the physician's office. 2 lectures, 4 labs, 4 credits Prerequisites: MOA-140 and MOA-141

## MOA-241 Clinical Laboratory

Technology enables the student to develop competence in the techniques of laboratory procedure commonly performed in a physician's office. Procedures studied include urinalysis, hematology, bacteriology, immunology, and basal metabolism. 3 lectures, 3 labs, 4 credits
Prerequisite: MOA-240

## MOA-243 Medical Office

Assistant Externship I provides the student with 120 hours of directed experience in a physician's office or other relevant medical facility. Attendance is required at scheduled seminars.
1 credit
Prerequisite: MOA-141
Corequisites: MOA-203 and MOA-241

## MOA-244 Medical Office

 Assistant Externship II enables the student to continue with 120 hours of directed experience in an assigned physician's office or other relevant medical facility. Emphasis is on refinement of skills and performance of all administrative and clinical tasks. Attendance is required at scheduled seminars.1 credit
Prerequisite: MOA-243

MUA - APPLIED MUSIC
MUA-101 Bass I provides instruction in bass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes. 1 lecture, 1 lab, 1 credit

MUA-102 Guitar I provides instruction in guitar designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
MUA-103 Percussion I provides instruction in percussion designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes. 1 lecture, 1 lab, 1 credit

MUA-104 Piano I provides instruction in piano designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
MUA-105 Strings I provides instruction in string instruments designed to develop the student's level of proficiency. The student attends one lesson per week. Halfhour individual lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
MUA-106 Voice I provides instruction in voice designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes. 1 lecture, 1 lab, 1 credit

MUA-107 Woodwinds/Brass I provides instruction in woodwinds and brass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes. 1 lecture, 1 lab, 1 credit

MUA-231 Bass II provides instruction in bass designed to develop the student's level of proficiency. The student attends one lesson per week.
Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-101

MUA-232 Bass III provides instruction in bass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-231
MUA-233 Bass IV provides instruction in bass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-232
MUA-234 Guitar II provides instruction in guitar designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-102
MUA-235 Guitar III provides instruction in guitar designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-234
MUA-236 Guitar IV provides instruction in guitar designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-235
MUA-237 Percussion II provides instruction in percussion designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-103
MUA-238 Percussion III provides instruction in percussion designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-237

MUA-239 Percussion IV provides instruction in percussion designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-238
MUA-240 Piano II provides instruction in piano designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-104
MUA-241 Piano III provides instruction in piano designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-240
MUA-242 Piano IV provides instruction in piano designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-241
MUA-243 Strings II provides instruction in string instruments designed to develop the student's level of proficiency. The student attends one lesson per week. Halfhour individual lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-105
MUA-244 Strings III provides instruction in string instruments designed to develop the student's level of proficiency. The student attends one lesson per week. Halfhour individual lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-243

## MUA-245 Strings IV provides

 instruction in string instruments designed to develop the student's level of proficiency. The student attends one lesson per week. Halfhour individual lesson times are arranged during the first week of classes.1 lecture, 1 lab, 1 credit
Prerequisite: MUA-244

MUA-246 Voice II provides instruction in voice designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-106
MUA-247 Voice III provides instruction in voice designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-246
MUA-248 Voice IV provides instruction in voice designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-247
MUA-249 Woodwinds/Brass II
provides instruction in woodwinds and brass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-107
MUA-250 Woodwinds/Brass III provides instruction in woodwinds and brass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes. 1 lecture, 1 lab, 1 credit
Prerequisite: MUA-249
MUA-251 Woodwinds/Brass IV provides instruction in woodwinds and brass designed to develop the student's level of proficiency. The student attends one lesson per week. Lesson times are arranged during the first week of classes.
1 lecture, 1 lab, 1 credit
Prerequisite: MUA-250

## MUS - MUSIC

MUS-101 Music Appreciation is
a study of the materials and basic components of music, primary musical forms and major musical styles, and of the development of music from the pre-Baroque period to the present.
3 lectures, 3 credits
\}General Education Course

MUS-103 Fundamentals of Music is a study of such rudiments of music as notation, the structure of scales, intervals, keys, triads, and simple harmonic progressions. 3 lectures, 3 credits

MUS-105 A History of Jazz in America is a study of the historical development of jazz from its origin as a form of Black American folk music to its acceptance as a major expression of American art. 3 lectures, 3 credits

MUS-107 Music History I is a study of the historical and stylistic development of music from the Gothic period through the Baroque period.
3 lectures, 3 credits
\}General Education Course
MUS-108 Music History II is a study of the historical and stylistic development of music from the Classical period to the present. 3 lectures, 3 credits
\}General Education Course
MUS-110 Music, Art and Drama is designed to promote an understanding and appreciation of the human cultural heritage and concentrates upon major developments in music, art and drama during the Baroque, Classical,
Romantic, and Contemporary periods. 3 lectures, 3 credits
\}General Education Course
MUS-118 Vocal Workshop is an introduction to the basic principles of vocal production. Application of correct vocal techniques is introduced through a series of group and solo singing activities.
1 lecture, 2 lab, 2 credits
MUS-119 Songwriting Workshop
provides students with a solid background in the art and craft of songwriting. Students will study the elements of songwriting: lyrics, rhythm, melody, harmony, and song structure. Students will work on their original compositions through a series of group and solo activities. 1 lecture, 2 labs, 2 credits

MUS-120 Pop/Rock Ensemble I requires students to study and to perform in a variety of popular music styles. Special attention will be given to the development of creative skills and reading pop charts. Students are expected to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit

MUS-121 Chorus I requires students to study and to perform standard and contemporary choral literature for mixed voices and to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit
MUS-125 Orchestra I requires students to study and to perform standard and contemporary instrumental literature and to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit
MUS-131 Class Piano I is an introductory course designed to provide fundamental piano instruction. 1 lecture, 2 labs, 2 credits

MUS-132 Music Theory I is a study of elementary diatonic harmony. It includes the study of major scales, natural, harmonic, and melodic forms of minor scales. Also included is the study of interval and triad construction, the figured bass, cadences, plus bass and soprano harmonizations.
1 lecture, 2 labs, 2 credits
MUS-133 Music Dictation and Sight Reading is an introduction to score reading, the rudiments of conducting, musical dictation, and other are as essential to an understanding of music.
1 lecture, 2 labs, 2 credits

## MUS-134 Ear Training and

 Musicianship is a basic course designed to develop a comprehension of musical structure and styles through sight singing and musical dictation.1 lecture, 2 labs, 2 credits

## MUS-137 Guitar in the

Classroom is a systematic approach to basic guitar technique and an introduction to contemporary music.
1 lecture, 2 labs, 2 credits

## MUS-140 Jazz Ensemble I

requires students to study and to perform in a variety of jazz styles. Special attention will be given to the development of improvisational skills and reading jazz charts. Students are expected to participate in concerts for college ceremonies and functions. 1 lecture, 1 lab, 1 credit

MUS-150 Electronic Music I introduces students to the concepts of computer utilization in the manipulation of music. These concepts include composing, arranging, editing and gaining understanding of and developing skills in electronic music from theoretical, aesthetic and practical perspectives. Essential topics to be included when exploring the use of computers and music will be music sequencing and MIDI (Musical Instrument Digital Interface); creating sounds and music with digital audio; computer music and the Internet; and desktop music notation.
3 lectures, 3 credits

## MUS-151 Computer-Based

Recording I is a systematic approach to sound, music, and multimedia production. The student will be involved with all phases of hard disk-based recording, editing, synchronization technologies, hardware and software systems, digital signal processing techniques, and in creating digital audio and MIDI-based music. Whether the projects will be on DAT, a CD-ROM, DVD, or any desktop audio, this class will develop the ability to record and playback multiple tracks of digital audio. 3 lectures, 3 credits

MUS-152 Music Business I is a course designed to provide students with important skills and knowledge that will enhance their abilities for a career in fields combining music and business. Basic concepts of how the music industry works and how music is created and marketed will be presented along with discussions of numerous career options. Topics discussed will provide an overview of the record, radio, video, film, television, and advertising industries and how each uses music. 3 lectures, 3 credits

## MUS-220 Pop/Rock Ensemble II

requires students to study and to perform in a variety of popular music styles. Special attention will be given to the development of creative skills and reading pop charts. Students are expected to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit
Prerequisite: MUS-120

MUS-221 Pop/Rock Ensemble III requires students to study and to perform in a variety of popular music styles. Special attention will be given to the development of creative skills and reading pop charts. Students are expected to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit
Prerequisite: MUS-220

## MUS-222 Pop/Rock Ensemble IV

 requires students to study and to perform in a variety of popular music styles. Special attention will be given to the development of creative skills and reading pop charts. Students are expected to participate in concerts for college ceremonies and functions.1 lecture, 1 lab, 1 credit
Prerequisite: MUS-221
MUS-231 Class Piano II provides continuing piano instruction for any student who fulfills the prerequisite for the course. The course includes the study of piano literature from the Baroque period to the present and emphasizes the further development of the student's piano technique. 1 lecture, 2 labs, 2 credits Prerequisite: MUS-131 or by permission of the Department Head

## MUS-232 Music Theory II is a

 study of harmonizations and harmonic progressions. The course includes the study of six-four chords, non-harmonic tones, modulation, and the dominant seventh chord.1 lecture, 2 labs, 2 credits
Prerequisite: MUS-132
MUS-241 Class Piano III is a course designed to develop skills in sight reading, transposition, harmonization styles, and improvisation techniques. Included is the study of piano literature from the Baroque to the present. The emphasis is on good pianist technique. 1 lecture, 2 labs, 2 credits Prerequisite: MUS-231

## MUS-242 Class Piano IV is a

course designed to further develop skills in sight-reading, transposition, harmonization styles, and accompaniment techniques. Included is further study of piano literature from the Baroque to the present. There is continued emphasis on good pianistic technique.
1 lecture, 2 labs, 2 credits
Prerequisite: MUS-241

MUS-246 Jazz Ensemble II requires students to study and to perform in a variety of jazz styles. Special attention will be given to the developmment of improvisational skills and reading jazz charts.
Students are expected to participate in concerts for the college ceremonies and functions.
1 lecture, 1 lab, 1 credit
Prerequisite: MUS-140

## MUS-247 Jazz Ensemble III

requires students to study and to perform in a variety of jazz styles. Special attention will be given to the developmment of improvisational skills and reading jazz charts. Students are expected to participate in concerts for the college ceremonies and functions.
1 lecture, 1 lab, 1 credit
Prerequisite: MUS-246
MUS-250 Electronic Music II is a further study and application of synthesizers, computers, and sequencing. It includes MIDI (Musical Instrument Digital Interface) devices used for notation, arrangement, composition, and performance of music. The topics covered are selected to give a student the background and technical skill necessary to create compositions and sound works. This course is a continuation of Electronic Music I with a focus upon the further development of musical projects utilizing advanced digital techniques. 3 lectures, 3 credits
Prerequisite: MUS-150

## MUS-251 Computer-Based

Recording II is a further study and application of both theoretical and applied concepts in studio automation, digital recording, and advanced audio skills in the all digital studio. Students will be provided with hands-on experience and training in digital music technology, synthesizers, samplers, automated mixing, SMPTE time code and MIDI .
3 lectures, 3 credits
Prerequisite: MUS-151
MUS-252 Music Business II provides further study of the music industry for students who wish to seek employment in fields combining music and business. This course will provide an in-depth study focusing upon topics including music publishing, national and international copyright law, live performance, managers and agents, music organizations, recording agreements, music publishing, film and television music production, music merchandising, and other contractual obligations.
3 lectures, 3 credits
Prerequisite: MUS-152

MUS-255 Chorus II requires students to study and to perform standard and contemporary choral literature for mixed voices and to participate in concerts for college ceremonies and functions. 1 lecture, 1 lab, 1 credit

MUS-256 Chorus III requires students to study and to perform standard and contemporary choral literature for mixed voices and to participate in concerts for college ceremonies and functions. 1 lecture, 1 lab, 1 credit

MUS-257 Chorus IV requires students to study and to perform standard and contemporary choral literature for mixed voices and to participate in concerts for college ceremonies and functions. 1 lecture, 1 lab, 1 credit

MUS-258 Orchestra II requires students to study and to perform standard and contemporary instrumental literature and to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit
MUS-259 Orchestra III requires students to study and to perform standard and contemporary instrumental literature and to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit
MUS-260 Orchestra IV requires students to study and to perform standard and contemporary instrumental literature and to participate in concerts for college ceremonies and functions.
1 lecture, 1 lab, 1 credit

## NUR - NURSING

## NUR-181 Physical Assessment is

a first level course in the nursing sequence which focuses on taking a nursing history including a psychosocial assessment and performing a basic systematic head-to-toe physical assessment of adults using selected techniques. At the end of this course students will be able to perform a beginning level physical assessment. 2 labs, 1 credit
Prerequisite: Admission to the Department Corequisites: NUR-182, NUR-183, BIO-109, and PSY-101

## NUR-182 Pharmacology for

 Nurses is a first level course in the nursing sequence which introduces the student to the drug classification system. Students will learn basic actions and side effects of drugs and drug regulations. Mathematical calculations necessary to the practice of nursing are taught, and students must achieve a passing score on a medication calculations test in order to pass this course.1 lecture, 1 credit
Prerequisite: Admission to the Department Corequisites: NUR-181, NUR-183, BIO109, and PSY-101

## NUR-183 Basic Concepts and

 Skills of Nursing is a first level course in the nursing sequence. Concepts developed throughout the program are introduced. Orem's nursing model is presented as the organizing framework of the curriculum. The nursing process is introduced as a problem solving technique. Students will be required to pass performance tests and are expected to practice these skills to perfect techniques. Students will plan and implement nursing care in a variety of health care settings. 2 lectures, 12 labs, 6 creditsPrerequisite: Admission to the Department Corequisites: NUR-181, NUR-182, BIO109, and PSY-101

## NUR-281 Adult Health Nursing A is

 a second level course in the nursing sequence which focuses on the health care of individuals and families who have needs related to fluid and electrolytes, oxygenation and circulation. Students will use the nursing process in a variety of health care settings to assist individuals, families and groups achieve optimum health. This course runs for half the semester concurrently with NUR-282.4 lectures, 12 labs, 7.5 weeks, 4 credits Prerequisites: NUR-181, NUR-182, NUR-183, BIO-109, and PSY-101 Corequisites: BIO-209, PSY-106, and NUR-282

## NUR-282 Adult Health Nursing B

 is a second level course in the nursing sequence which focuses on the health care of individuals and families who have needs related to nutrition and elimination. Students will use the nursing process in a variety of health care settings to assist individuals and families achieve optimum health. This course runs for half the semester concurrently with NUR-281. 4 lectures, 12 labs, 7.5 weeks, 4 credits Prerequisites: NUR-181, NUR-182, NUR-183, BIO-109, and PSY-101 Corequisites: BIO-209, PSY-106, and NUR-281
## NUR-284 Maternal-Child Health

 Nursing is a third level course in the nursing sequence which focuses on family units, reproduction, childbearing, and the health care needs of infants, children and adolescents to meet universal selfcare requisites. Students will use the nursing process in a variety of health care settings to assist individual families and groups achieve optimum health. 6 lectures, 12 labs, 7.5 weeks, 5 credits Prerequisites: NUR-281 \& NUR-282 Corequisites: BIO-104, SOC-101, and NUR-285NUR-285 Mental Health Nursing is a third level course in the nursing sequence which focuses on adaptive and maladaptive psychosocial behaviors. Concentration is on the interpersonal and intrapersonal relationships for infants, children, adolescents and adults. Students will use the nursing process in a variety of health care settings to assist individuals and families achieve optimum health.
4 lectures, 12 labs, 7.5 weeks, 4 credits Prerequisites: NUR-281 \& NUR-282 Corequisites: BIO-104, SOC-101, and NUR-284

NUR-290 Adult Health Nursing C is a fourth level course in the nursing sequence which focuses on the health care of individuals, families and groups who have self-care deficits related to mobility and neurosensory problems. Students will use the nursing process in a variety of health care settings to assist individuals, families and groups achieve optimum health. Professional Role Management content will be integrated within this course during clinical conference time. Students will examine principles and skills inherent in advanced nursing practice, case management, health care economics and leadership. Critical thinking exercises, patient care scenarios, role play and discussion will be utilized. 4 lectures, 12 labs, 7.5 wks., 4 credits Prerequisites: NUR-284 \& NUR-285 Corequisite: NUR-291

## MUS-PHR

NUR-291 Adult Health Nursing D
is a fourth level course in the nursing sequence which focuses on the health care of individuals and families who have self care deficits related to cellular regulation, sexual practices and endocrine and immune function. Students will use the nursing process in a variety of healthcare settings to assist individuals, families and groups achieve optimum health. Professional Role Management content will be integrated within this course during clinical conference time. Students will examine principles and skills inherent in advanced nursing practice, case management, health care economics and leadership. Critical thinking exercises, patient care scenarios, role play and discussion will be utilized. 4 lectures, 12 labs, 7.5 wks., 4 credits Prerequisites: NUR-284 and NUR-285 Corequisite: NUR-290

## PHR - PHILOSOPHY \& <br> RELICION

PHR-101 Introduction to
Philosophy is a study of the basic problems and methods of philosophical inquiry, concentrating on the work of such major thinkers as Plato, Aristotle, Augustine, Aquinas, Descartes, Hume, Kant, Hegel, Marx, Kierkegaard, and Sartre. Topics of discussion include the nature and limits of human knowledge, the existence of God, the differences between right and wrong conduct, the nature of the good life, and the meaning and value of human existence.
3 lectures, 3 credits
\}General Education Course

## PHR-102 Contemporary Moral

Issues is an introduction to applied or practical ethics. This involves discussions of specific moral problems, issues, controversies, and questions. Topics may include abortion; euthanasia; the death penalty and other punishments; sexual morality; pornography and censorship; discrimination on the basis of race, gender, or sexual orientation; drugs; environmental ethics; the moral status of animals; and the meaning of virtue and vice. 3 lectures, 3 credits.
\}General Education Course

PHR-PHY

PHR-103 Basic Logic is an introduction to the principles and methods of correct reasoning. Topics of discussion include the relationship between logic and language; the distinction between formal and informal logic; the detection and avoidance of formal and informal fallacies; the formulation and evaluation of deductive arguments; the differences between traditional and modern (symbolic) logic; and the nature, scope, and limits of inductive reasoning.
3 lectures, 3 credits
\}General Education Course

## PHR-104 Topics in Philosophy is

 an introductory study of major themes in both traditional and modern philosophical literature, concentrating on such topics as the human condition; the scope and limits of human freedom; the human experience of death; the nature of truth, beauty, and goodness; the relationship between liberty, equality, and justice; and the human search for the meaning of life. 3 lectures, 3 credits\}General Education Course

## PHR-105 Ethics in Business and

Society is an introductory study of major philosophical and moral issues arising within modern business and social systems. Topics of discussion include the nature of economic and social justice; private property and the profit motive; the social and moral responsibilities of business organizations; the ethics of investment, production, and advertising; and governmental regulation of business.
3 lectures, 3 credits
\}General Education Course
PHR-106 Eastern Philosophy is an introduction to the major philosophical traditions of China and India, concentrating on the work of such major thinkers as Lao Tzu, Confucius, Nagarjuna, Vasubandhu, Shankara, and Ramanuja. Topics of discussion include the nature, problems, and methods of Eastern philosophy; the nature of ultimate reality; the nature of the self; the nature and existence of God; the nature and limits of human knowledge; human nature and the human condition; the meaning and value of life and death; the nature of the good life; and the search for enlightenment.
3 lectures, 3 credits
\}General Education Course
\}Diversity Course

PHR-110 Introduction to Ethical Theory is a study of the basic theories, methods, and problems of ethics. Topics may include the study of the moral theories of Aristotle, Aquinas, Hobbes, Kant, Mill, and Rawls; the nature and meaning of moral terms; moral absolutism and relativism; the nature of moral reasoning; conceptions of the good life; free will, determinism, and moral responsibility. 3 lectures, 3 credits. \}General Education Course

## PHR-120 Introduction to Religion is

 a study of major themes in religious and theological thought. Topics of discussion include the nature and existence of God; the relationship between God, humanity, and the universe; human nature and the human condition; religious responses to the problems of human existence; and the relationship between religion and society. 3 lectures, 3 credits\}General Education Course

## PHR-121 Religions of the World is

 a comparative study of the history, basic beliefs, and characteristic practices of such major religious systems as Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, and Islam. Some attention is also given to the religions of ancient Middle Eastern and Mediterranean peoples, to ancient and modern tribal religions, and to contemporary sectarian and cultic movements. 3 lectures, 3 credits\}General Education Course \}Diversity Course

PHR-122 Women and Religion analyzes the relationship of women to the major religious traditions of the world, including Judaism, Christianity, Islam, Hinduism, Buddhism, and others. The course examines such issues as religious statements about the nature of women, religious codes of behavior for women, and the extent and nature of women's religious participation within the various traditions. 3 lectures, 3 credits
\}General Education Course \}Diversity Course

## PHR-124 The Christian Scriptures

is an introductory study of traditional and modern perspectives on the Old and New Testaments, with primary emphasis on the New Testament.
3 lectures, 3 credits
\}General Education Course

PHR-125 The Hebrew Scriptures
is an introductory study of traditional and modern perspectives on the Hebrew Bible. The relationship between the Bible and the Talmud will also discussed.
3 lectures, 3 credits
\}General Education Course

## PHR-126 The Islamic Scriptures

is an introductory study of the origins, content, and meaning of the primary sacred text of Islam, the Koran (Our'an). The relationship between the Koran and the Hadith (a record of sayings and actions of Muhammed) will also be discussed. 3 lectures, 3 credits \}General Education Course

PHR-203 Intermediate Logic is a second level course in logic for those students who are interested in studying advanced systems of logic and their philosophical foundations.
Topics covered include the nature of formal deductive systems; sentential logic (advanced problems and methods); predicate logic and quantification theory; and issues in the philosophy of logic.
3 lectures, 3 credits
Prerequisite: PHR-103 or MAT-130
\}General Education Course

## PHY - PHYSICS

## PHY-185 Introduction to Physics

covers a series of topics: Newton's Laws of Motion, mechanical energy, work and power, heat and heat transfer, electricity and magnetism, light, sound, atomic structure, and radioactivity and relativity. Conceptual principles are emphasized without dwelling on the rigorous mathematical aspects of the topics studied. Although no math is required, some principles are developed and used. Application of principles to environmental and health problems included. 3 lectures, 3 labs, 4 credits \}General Education Course

PHY-186 General Physics I is the first half of a two-semester, algebra based physics sequence, and is a study of mechanics (motion, forces, and the conservation laws), waves, sound, and fluids. It covers kinematics, dynamics, energy, momentum, rotation, and the mechanical properties of matter. The laws of physics are investigated and applied to problem solving. 3 lectures, 3 labs, 4 credits Prerequisite: MAT-045 with a grade of $C$ or better.
Recommended prerequisite: High School Trigonometry and one year of High School Physics or PHY-185 \}General Education Course

PHY-280 Physics I is the first semester of a three-semester, calculus based physics sequence, and is a study of mechanics (motion, forces, and the conservation laws). It covers kinematics, dynamics, statics, energy, momentum, oscillations, gravity, and the properties of solid matter.
The laws of physics are investigated and applied to problem solving. 3 lectures, 3 labs, 4 credits Prerequisite: MAT-180 with a grade of $C$ or better.
Corequisite: MAT-280
Recommended prerequisite: PHY-185 or one year of High School Physics \}General Education Course

PHY-286 General Physics II is the continuation of PHY-186 General Physics I, and is a study of heat, electricity and magnetism, light, and modern physics. It covers thermodynamics, electrostatics, magnetic fields and forces, capacitance and inductance, electrical and electronic circuits, geometrical and physical optics, relativity, and quantum theory. 3 lectures, 3 labs, 4 credits Prerequisite: PHY -186 with a grade of C or better.
\}General Education Course
PHY-290 Physics II is the continuation of PHY-280 Physics I, and is primarily a study of electricity and magnetism. It covers electrostatics, electrical circuits, magnetic fields and forces, capacitance and inductance, Maxwell's equations, and the properties of fluids. 3 lectures, 3 labs, 4 credits
Prerequisites: MAT-280, PHY-280 with grades of C or better.
Corequisite: MAT-281
\}General Education Course
PHY-291 Physics III is the continuation of PHY-290 Physics II, and is a study of waves, heat, and modern physics. It covers sound and light, geometrical and physical optics, thermodynamics, relativity, and quantum theory. 3 lectures, 3 labs, 4 credits
Prerequisites: MAT-281, PHY-290, with grades of C or better.
Recommended corequisite: MAT-282
\}General Education Course
PHY-294 Engineering Mechanics is a study of the state of rest or motion of bodies under the action of forces. This course builds a foundation of analytic capability for the solution of a great variety of engineering problems. Topics covered include the statics and dynamics of particles and rigid bodies. 4 lectures, 4 credits
Prerequisites: MAT-282 and PHY-280 with grades of C or better.

POL-101 American Government is the study of the American national political system and the uses, options, patterns, and limitations of public power. The course examines the theoretical roots of government, the American adaptation of the Western political tradition, the Constitution, decision making structures, the role of the people in government, political parties, and civil rights. Current political problems are analyzed and discussed. 3 lectures, 3 credits
\}General Education Course

## POL-102 International Relations

is an examination of the basic elements and processes of the modern nationstate system. Political power, nationalism, diplomacy, international law, international organizations, bal-ance-of-power strategies, imperialism, regionalism, polycentrism, and current world issues are analyzed. 3 lectures, 3 credits
\}General Education Course

## POL-103 Modern Political

Ideologies focuses on the ideologies that have dominated contemporary world politics. Such theories as Socialism, Communism, Fascism, and Democracy are studied.
3 lectures, 3 credits
\}General Education Course
(Offered only in the spring)

## POL-104 State and Local

Government is the study of state, county, and municipal political systems. The course examines the making and enforcement of public policy and the political roles of the people, political parties, political machines, and pressure groups.
Intergovernmental relations and evolving patterns of metropolitan government are analyzed with an emphasis on New Jersey and Bergen County. 3 lectures, 3 credits
\}General Education Course

## POL-106 Themes in U.S. History

 (Modern American Presidency) is an analytical and historical examination of the development of the office and powers of the modern American presidency. Emphasis is placed on studying the roles of the president as described in the Constitution, the relationship of the executive with the other branches of government, presidential views of the office, the presidential election system, and presidential character and personality. 3 lectures, 3 creditsPOL-107 Introduction to Politics is a survey of the basic concepts and methodologies of political science. Topics considered include power, comparative and international politics, the state, government, forms of representation, and methods of social science analysis.
3 lectures, 3 credits
\}General Education Course
(Offered only in the fall)
POL-116 Labor Law is a study of the laws that govern labor unions and of labor-management relations, union organizing, collective bargaining, contract enforcement, job security and opportunities, working conditions, union members' rights, and labormanagement disputes. Emphasis is placed on understanding the National Labor Relations Act and its amendments, the National Labor Relations Board, and Supreme Court decisions relevant to labor law. Extensive use of case studies is made.
3 lectures, 3 credits
POL-122 Collective Bargaining is an introduction to the theory and practice of collective bargaining, including the legal basis, the goals, the structure, and the content of labor management contracts, grievance and arbitration, the responsibilities and obligations of the parties to collective bargaining, and the costs, strategies, and other considerations involved in reaching collective bargaining agreement. The emphasis in the course is on the private sector, and it introduces the student to actual contract negotiations and enforcement.
3 lectures, 3 credits

## POL-461-463 Co-op Work

 Experience (Political Science) provides a student with practical, supervised work experience in the area of political science. This program is under professional guidance in a college approved work environment. Job placement assistance is available through the Cooperative Education OfficePOL-461, 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit POL-462, 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits POL-463, 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: Any Political Science course

## PSY - PSYCHOLOGY

## PSY-101 General Psychology is

an analysis of human behavior with special reference to thinking, learning, memory, perception, emotion, individual differences in intelligence, psychotherapy, and personality. The scientific nature and practical relevance of psychological investigations and research findings are discussed. 3 lectures, 3 credits
\}General Education Course

## PSY-102 Abnormal Psychology is

 an examination of psychological adjustment and of the prevention and treatment of psychological disorders. The course focuses on the framework established by the Diagnostic and Statistical Manual of Mental Disorders. Topics of discussion include community mental health problems, stress and coping mechanisms, anxiety disorders, sexual variations and dysfunction, and the more severe disorders such as schizophrenia.3 lectures, 3 credits
\}General Education Course
PSY-103 Educational Psychology
introduces the student to psychology as applied to the teaching-learning process. Topics of discussion include the varieties of human learning, the physical, social, and cognitive development of the learner, the teacher's use of the environment to influence learning, the teacher's role in education, and education self direction.
3 lectures, 3 credits

## PSY-104 Psychology of Human

Relations is designed to encourage the active participation of each student in a series of activities and lectures that promote increased self-awareness and self-concept. Source materials in the psychology of human relations, communications, group behavior, adjustment, and leadership are studied and discussed.
3 lectures, 3 credits

## PSY-106 Developmental

Psychology is a survey course that provides an overview of the psychological development of the individual through the lifespan. The changes during the childhood, adolescent, adult and elderly periods are studies via theories applied to the whole human lifecycle. Theories about psycho-social, moral, and language development as well as the effect of work, gender, intelligence, personality, health, and other factors on human development are examined.
3 lectures, 3 credits
\}General Education Course

PSY-108 The Psychology of Aging reflects the interdisciplinary character of contemporary gerontology. The focus of the course is on psychological issues associated with the last third of the human life cycle. Topics of discussion include theories of aging, the psychosocial characteristics of an aging population, how to deal with psychobiological changes, changes in mental functions, mental disorders and their treatment, preretirement counseling, parentchild relations, sex differences in the aging process, cross-cultural perspectives on aging, and life review through oral history and autobiography. 3 lectures, 3 credits

PSY-109 Industrial Psychology is a study of organizational behavior focusing on psychological theories, techniques, and procedures relevant to the work place. Topics discussed include the characteristics of job related behavior, personnel selection, personnel training, job satisfaction, work motivation, job enlargement, and leadership on the job.
3 lectures, 3 credits

## PSY-110 Psychology of Sexuality

 emphasizes the changing concepts in human sexuality. Of importance are socialization, deviance, treatment, and psychotherapy in the field of sexuality. Of major interest are the paraphilia, victimization, homosexuality, gender identity, and the psychodynamics involved in sexual expression. 3 credits, 3 hours
## PSY-115 Behavior Modification

focuses on changing problem behavior by using techniques derived from learning theory. Topics of discussion include assertiveness training, biofeedback, hypnosis, controlling reinforcement contingencies, aversive conditioning, modeling, and systematic desensitization. The use of behavior modification in industry, hospitals, schools, and prisons is considered. 3 lectures, 3 credits

## PSY-121 Comparative

Psychology uses Bergen County as an environmental laboratory. Birds are studied in their natural habitat and used as a barometer of the changes that have developed in our immediate psychological environment. Behavioral comparisons are made between human and animal behavior. Such topics as the quality of life experience, psychophysiology, group or single living disturbances, sexual behavior, territoriality and self-preservation are discussed.
3 lectures, 3 credits
(Offered only in the fall)


## PSY-122 Environmental Psychology

is the study of the effects of environmental change of human behavior. Topics considered include territoriality, mobbing activity, sexual rituals, habitat destruction, and internal physical and environmental structures. This course is offered at off-campus sites (e.g., The Florida Everglades). See instructor before registering.
3 lectures, 3 credits
(Offered only in the spring)

## PSY-123 Cross-Cultural

Psychology is an analysis of psychological development in a variety of cultural settings. The course explains the similarities and differences in personality between people with different cultural backgrounds. Topics included in the course are childbearing, abnormal and normal behavior, sex roles, attitudes toward authority, and moral/religious traditions in various cultures.
3 lectures, 3 credits

## PSY-127 Stress Management is a

 study of stressful tension and of its psychological and physiological management. Students practice several techniques of coping with stress including problem solving, relaxation techniques, biofeedback, exercise, and work strategies. Personal stress management approaches are emphasized.3 lectures, 3 credits

## PSY-201 Child Psychology is

 designed to help the student understand the significant stages of motor, cognitive, linguistic, emotional, and social development of the child as these are influenced by genetic, cultural, and individual forces from the prenatal period through middle childhood. 3 lectures, 3 creditsPrerequisite: PSY-101
\}General Education Course

## PSY-202 Psychology of

Adolescence is the study of human development from late childhood to adulthood. The course examines the physical, psychological, sexual, and social development of adolescents, the development of identity and selfconcept, relationships with parents, and the maturation process.
3 lectures, 3 credits
Prerequisite: PSY-101

## PSY-203 Psychology of

Personality is an introduction to the most influential theories of personality. The focus of the course is on the contemporary relevance of various theoretical approaches. Students have the opportunity to apply personality theory to the understanding of case history material.
3 lectures, 3 credits
Prerequisite: PSY-101
PSY-206 Adult Development is the study of human behavior from adolescence through early, middle, and late adulthood. Developmental tasks, psychological crises and coping processes appropriate to each state are examined. Several theoretical perspectives on aging, current research on adult development, and the foundation of a flexible approach to the understanding of the whole person are discussed.
3 lectures, 3 credits
Prerequisite: PSY-101
PSY-207 Psychology of Women is an in-depth examination of the psychology of women. The course analyzes the interplay of biological and cultural factors as they affect gender roles. "Typical" female behaviors are examined and assessed in terms of these factors in an attempt to understand the bases of social similarities as well as differences.
3 lectures, 3 credits
Prerequisite: PSY-101
\}General Education Course
\}Diversity Course

## PSY-461-463 Co-op Work

 Experience (Psychology) provides the student with the opportunity to gain human relations work experience in social institutions that relate to his/her career goals. The program is under professional guidance in a college approved work environment. Students are supervised by a faculty member, and job placement assistance is available through the Co-op office.PSY-461 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit
PSY-462 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits
PSY-463 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits
Prerequisite: PSY-101 or by permission of the Department Head

## PTA - PHYSICAL THERAPIST ASSISTANT

PTA-101 Introduction to Physical Therapist Assistant introduces the student to the role of the PTA in the health care delivery system and in the field of rehabilitation. The team approach to care and service delivery and the complementary functions of team members will be emphasized. Issues such as licensure, professional organization and legal and ethical parameters of practice will be considered. Content will include medical terminology, documentation, reimbursement, and psychosocial aspects of disability. Students will volunteer and observe physical therapy treatments and practice in participating clinics. 2 lectures, 3 labs, 3 credits Corequisites: BIO-109, PHY-185, PTA-122

## PTA-122 Physical Therapist

Assistant Procedures I teaches fundamentals of patient care including body mechanics, positioning, bed mobility and exercise, wound healing and infection control, range of motion, measurement for assistive devices and gait training. Patient assessment modalities such as vital signs and goniometry are also included as well as introduction to therapeutic exercise.
4 lectures, 6 labs, 6 credits
Corequisites: PTA-101, BIO-109, PHY-185

PTA-201 Kinesiology is the study of human movement and the neuromusculoskeletal structures and their function in relation to activity. Topics include biomechanics, muscle physiology, physical laws and principles of leverage, posture, and gait. Students will be taught manual muscle testing and challenged to problem solve and analyze basic exercises and movements.
3 lectures, 3 labs, 4 credits
Prerequisites: BIO-109, PHY-185,
PTA-101, PTA-122
Corequisite: PTA-222, BIO-209

## PTA-222 Physical Therapist

 Assistant Procedures II teaches the basic theory of the physiology and application of heat, cold, light, electricity, sound, compression, and traction. Modalities used in physical therapy treatments such as hot/cold packs, ultrasound, electrotherapy, hydrotherapy, and mechanical traction are practiced in the laboratory.3 lectures, 6 labs, 5 credits
Prerequisites: BIO-109, PHY-185,
PTA-101, PTA-122
Corequisites: BIO-209, PTA-201

## PTA-223 Physical Therapist

 Assistant Procedures III teaches the fundamentals of therapeutic exercise and treatment guidelines that are most commonly used in treating musculoskeletal injuries and disorders. Exposure to exercise equipment, treatment protocols, exercise modifications, and teaching home exercise programs are offered in the laboratory.4 lectures, 6 labs, 6 credits
Prerequisite: BIO-209, PTA-201, PTA222, PTA-245
Corequisites: PTA-231, PTA-241

## PTA-224 Physical Therapist

 Assistant Procedures IV covers the impairments, functional limitations, and physical therapy treatments of patients with neurological disorders, amputations, and burns. The course also covers the considerations for treating geriatric, pediatric, and cardiopulmonary patients. 4 lectures, 3 labs, 5 creditsPrerequisites: PTA-223, PTA-231, PTA-241
Corequisites: PTA-232, PTA-242
PTA-231 Clinical Education I is assignment to physical therapy clinic sites where the student practices techniques previously or currently learned in the academic setting under the supervision of a licensed physical therapist or physical therapist assistant.
16 clinical hours, 2 credits.
Prerequisites: BIO-209, PTA-201,
PTA-222, PTA-245
Corequisites: PTA-223, PTA-241
PTA-232 Clinical Education II is a course in which the student continues to be supervised by a licensed physical therapist or physical therapist assistant in assigned clinical sites. Emphasis is on continued development of proficiency in patient treatments and documentation.
24 clinical hours, 2 credits
Prerequisites: PTA-223, PTA-231,
PTA-241
Corequisites: PTA-224, PTA-242

## PTA-233 Clinical Education III

allows the student under the supervision of a licensed physical therapist or physical therapist assistant to continue developing proficiency of entrylevel physical therapy and patient care skills in assigned clinical sites. 40 clinical hours, 2 credits
Prerequisites: PTA-224, PTA-232, PTA-242
Corequisites: PTA-243

## PTA-241 Clinical Seminar I

addresses the student's experience in the clinic including the role of various health care practitioners, physical therapy documentation, and reimbursement issues. Special topics will be discussed including current practice issues. Didactic and clinical experiences are incorporated in case study presentations by students.
1 lecture, 1 credit
Prerequisites: BIO-209, PTA-201, PTA222, PTA-245
Corequisites: PTA-223, PTA-231

## PTA-242 Clinical Seminar II

addresses the student's experience in the clinic and begins to prepare the student for licensure and employment. Special topics will be discussed including employment preparation skills and current licensure issues. Didactic and clinical experiences are incorporated in case study presentations by students.
1 lecture, 1 credit
Prerequisites: PTA-223, PTA-231, PTA-241
Corequisites: PTA-224, PTA-232
PTA-243 Clinical Seminar III prepares the student for licensure examination and entry level practice as a physical therapist assistant by discussion, presentations by students, and speakers on physical therapy topics of interest. Comprehensive examination will be given to help the student assess his/her readiness for taking the PTA licensing exam.
1 lecture, 1 credit
Prerequisite: PTA-224, PTA-232, PTA-242
Corequisite: PTA-233

## PTA-245 Disease and Impairment

 introduces the student to disease and injury of the various systems of the human body. Disease etiology, pathophysiology, clinical symptoms, impairment, and treatment considerations will be studies. Emphasis is placed on the diseases and injuries most commonly treated in physical therapy. 3 lectures, 3 creditsPrerequisites: BIO-209, PTA-201, PTA-222

## RAD - RADIOGRAPHY

## RAD-180 Introduction to

Radiography is a study of the basic aspects of the health care system, the profession of radiography and patient care. Topics will include moral, legal, and professional responsibilities of a radiographer, communication techniques, medical and surgical asepsis, vital signs, communicable diseases, and medical emergencies.
2 lectures, 2 credits

RAD-181 Radiography I introduces the study of radiography and the ethical considerations of this medical field. The theory and application of positioning, dark room chemistry, radiation protection techniques, and radiographic exposure with associated film critiques and laboratory experiments are covered in the course. 3 lectures, 6 labs, 5 credits

## RAD-182 Radiography Clinical I

is designed to introduce the student to the physical layout and operation of a department of radiology. This course requires the performance of some routine examinations under the direct supervision of a registered radiographer and a college clinical instructor. The student rotates throughout three affiliated hospitals during this experience.
8 labs, 1 credit

## RAD-183 Radiographic Pathology

is a survey of medical and surgical diseases designed to acquaint the student with changes caused by disease which have a relation to radiography. Emphasis is placed on pathogenesis, signs, symptoms, diagnosis and treatment. Student projects, associated film presentations, and critiques are also included.
2 lectures, 2 credits
Prerequisite: RAD-281

## RAD-184 Special Procedures

 and Imaging Modalities I introduces the student to advanced radiographic examinations of the brain, spinal column, vascular system, lungs, reproductive organs, skeleton, and other body systems. In addition, specialized imaging modalities and advances in imaging systems and equipment are discussed. 3 lectures, 3 credits
## RAD-250 Cross-Sectional

 Anatomy for Specialty Imaging is a course that involves the study of the structure and function of human anatomy in the cross-sectional mode. Among the topics included are abdomen, thoracic, neck and cranial imaging. The course content will be presented through lectures, discussion and laboratory exercises. Anatomy identification plates and a workbook will be utilized in this course. 3 lectures, 3 labs, 4 credits Prerequisite: Registered Radiologic Technologist and NJ LicenseRAD-251 Computer Tomography presents the concepts, content and technology of CT imaging. Topics to be presented include patient care, principles of operation; image processing and display, system components; image procedures and image quality. Clinical application related to neurological, cardiac, abdominal and musculoskeletal imaging will be discussed. This course meets eligibility requirements for the specialty certification examination in Computerized Tomography. 3 lectures, 3 credits Prerequisite: Registered Radiologic Technologist and NJ License

## RAD-252 Magnetic Resonance

Imaging begins with the very basic including the physical principles, artifacts, image contrast; image quality, clinical application and safety issues. The student will then move into the more intricate physical principles of MRI, including rapid imaging, fast spin echo, K-space, contrast agents as well as the principles and clinical applications of MRA and spectroscopy. In addition, imaging concerns such as positioning tips, compensation for artifacts, dynamic and functional imaging and interventional procedures will be discussed. This course meets eligibility requirements for the specialty certification in Magnetic Resonance Imaging. 3 lectures, 3 credits
Prerequisite: Registered Radiologic Technologist and NJ License

RAD-253 Magnetic Resonance Imaging Clinical Practicum is a 75 hour clinical experience in a neighboring hospital or specialty imaging center. The student will perform routine MRI examinations on patients under direct supervision of a specialty technologist. Clinical records will be maintained and monitored by faculty.
75 labs, 1 credit
Prerequisite: RAD-252

## RAD-254 Computerized

Tomography Clinical Practicum is
a 75 hour clinical experience in a neighboring hospital or specialty imaging center. The student will perform routine CT examinations on patients under direct supervision of a specialty technologist. Clinical records will be maintained and monitored by faculty.
75 labs, 1 credit
Prerequisite: RAD-251

RAD-275 Special Procedures and Imaging Modalities II presents the advanced imaging techniques required for nuclear medicine, mammography, tomography, and CT scanning. In addition, the basic concepts and principles of radiation therapy are discussed.
2 lectures, 2 credits
Prerequisite: RAD-184, RAD-276

## RAD-276 Radiographic Health

and Protection describes the various types of ionizing radiations, their origins, and their effect on biological materials. Methods of practice that afford greater protection from ionizing radiation for both patient and practitioner are also covered in detail.
3 lectures, 3 credits
Prerequisites: BIO-109, RAD-181
RAD-280 Image Production and Evaluation is a study of the theoretical and practical aspects of radiographic equipment and image recording systems. The photographic and geometric characteristics of a diagnostic radiographic image are presented. Evaluation of changes caused in the radiographic image through the use of different types of imaging equipment and recording systems are demonstrated and discussed. Also included in the course are the basic concepts of the origin and effects of ionizing radiations on a patient and a radiographic image. These topics are supported through the performance of laboratory experiments and radiography based computer software. 3 hours, 3 credits
Prerequisites: RAD-276, RAD-281, RAD-283

RAD-281 Radiography II reinforces basic concepts presented in Radiography I. The major topics covered include the upper extremities, technique conversions, film quality, the skull, spinal procedures, sterile technique, basic first aid with associated terminology, and various laboratory experiments. 3 lectures, 3 labs, 4 credits Prerequisites: RAD-180, RAD-181, and RAD-182

## RAD-282 Radiography Clinical II

 requires students to spend two clinical days a week in a radiology department where students will perform routine as well as some complex examinations under the direct supervision of a registered radiographer and a college clinical instructor. Procedures performed are evaluated on the basis of a competency based clinical education system.16 labs, 1 credit
Prerequisite: RAD-182

RAD-RSP

RAD-283 Intermediate Radiography Clinical provides extensive training in the operation of a department of radiology as well as practical experience in patient handling and routine examinations under the direct supervision of a registered radiographer and a college clinical instructor. Students spend 12 thir-ty-two hour weeks meeting established requirements for competency based clinical education.
384 labs, 2 credits
Prerequisites: RAD-281 and RAD-282
RAD-285 Radiography III is a study of the anatomy, positioning, and radiography of the bones of the cranium and face; pediatric, portable and trauma radiography; basic medical techniques and patient care; and medical terminology. Included in the course is structured practice in evaluation and improvement of radiographs of all parts of the body. 3 lectures, 3 labs, 4 credits
Prerequisites: RAD-281 and RAD-283

## RAD-286 Radiography Clinical III

 requires the performance of routine, complex, and advanced X-ray procedures under the supervision of a registered radiographer and college clinical instructor in a Radiology Department. Students spend 16 hours a week for 15 weeks meeting the established requirements for competency based clinical education.16 labs, 1 credit
Prerequisites: RAD-282 and RAD-283
RAD-288 Radiography IV incorporates two major areas of study. The first portion of the course is a comprehensive presentation of radiation detection and protection principles and quality control with appropriate laboratory experiments. The second half is devoted to hands-on experience with computers and computer software. A continuation of the study of medical terminology is also included. 3 lectures, 3 labs, 4 credits Prerequisites: RAD-276, RAD-285, and RAD-286

RAD-289 Radiography Clinical IV requires the performance of routine, complex, and advanced X -ray procedures under the supervision of a registered radiographer and a college clinical instructor in a radiology department. Students spend 24 hours per week for 15 weeks meeting the established requirements for competency based clinical education. Rotations into specialty areas and elective rotations are also begun. 24 labs, 2 credits
Prerequisites: RAD-276, RAD-285, and RAD-286

## RAD-290 Senior Student Seminar

 requires the performance of routine, complex and advanced X -ray procedures under the supervision of a registered radiographer and a college clinical instructor in a radiography department. Students spend 32 hours per week for 15 weeks meeting the established requirements for competency based clinical education. Specialty clinical elective rotations continue. The student will also attend a series of 12 four-hour lectures. The lectures are designed to amplify the students entry level skills as a radiographer. Upon completion of the required 1834 clinical hours and all course work, the student becomes ARRT eligible. 480 labs, 3 creditsPrerequisites: RAD-182, RAD-276, RAD-282, RAD-283, RAD-286, and RAD-289

## REA - REAL ESTATE

REA-101 Principles of Real Estate I is an introduction to real estate law. Topics covered include property rights, title concepts, liens, contracts, mortgages, deeds, and other property instruments. Students must complete this course and REA-201 in same or consecutive semesters to qualify for the New Jersey Real Estate Salesperson's Examination which must be taken within 1 year after completion of REA-201.
3 lectures, 3 credits

## REA-201 Principles of Real Estate II

is a structured review of real estate law with emphasis on leases, land-lord-tenant relations, appraisals, the law of agency, the License Act and Regulations, and other state and municipal laws and regulations. Students must complete this course and REA-101 in same or consecutive semesters to qualify as a candidate for the New Jersey Real Estate Salesperson's Examination which must be taken within 1 year after completion of this course. 3 lectures, 3 credits

## RSP - RESPIRATORY THERAPY

RSP-119 Introduction to Respiratory
Therapy provides the student with an in-depth understanding of medical gas administration, humidity and aerosol therapy, safety systems, and infection control. Students will learn the application of mechanical devices utilized to maintain patent airways and emergency cardiopulmonary resuscitation. The gas laws, physiology, and medical equipment terminology is taught. The laboratory exercises provide students with an opportunity to develop their skills in oxygen administration, CPR, and airway management.
3 lectures, 3 labs, 4 credits

## RSP-121 Respiratory Therapy

Clinical Externship I introduces the student to the hospital environment. The student studies the relationship of the respiratory therapy department with other medical departments in the hospital. The student learns charting, patient rounds, equipment, and medical ethics during this rotation. 16 hours per week, 2 credits

RSP-122 Clinical Medicine offers the student an opportunity to study the various disease entities and their effect on the cardiopulmonary system. The pathophysiology, diagnosis, and treatment of pulmonary disease are covered in this course.
3 lectures, 3 credits

## RSP-200 Pharmacology for

 Respiratory Therapists introduces the student to the medications utilized in the treatment of patients with acute and chronic cardiopulmonary disorders. 2 lectures, 2 creditsCorequisites: RSP-119 and RSP-121

## RSP-222 Cardiopulmonary

Anatomy and Physiology places special emphasis on the structure and function of the respiratory and circulatory systems. The laboratory segment of the course consists of demonstrations of these two systems and the application of medical physiological techniques.
3 lectures, 3 labs, 4 credits
Prerequisite: BIO-109
Corequisite: BIO-209

## RSP-225 Respiratory Therapy

 Clinical Externship II provides the students with an opportunity to administer aerosol therapy treatments, perform cardiopulmonary resuscitation, and evaluate infection control. 16 hours/week (224 hours), 2 credits Prerequisites: RSP-119, RSP-121, and RSP-200RSP-226 Respiratory Therapy Clinical Externship III gives the student a further opportunity to develop clinical skills of airway management, cardiopulmonary resuscitation, aerosol therapy, and patient evaluation rounds.
40 hours/week (6 weeks, 240 hours), 2 credits
Prerequisites: RSP-222 and RSP-225

## RSP-227 Management in Health

Care provides the student with an opportunity to learn the skills necessary to supervise a respiratory therapy department. Emphasis is placed on interpersonal relationships, scheduling employees, budgeting, purchasing equipment, cost effective management, and computer technology development. Computer skills are required and students will be given opportunities to work on computer programs in the allied health computer labs.
2 lectures, 2 credits
Prerequisite: RSP-231

## RSP-229 Mechanical Ventilation

provides the student with the skills necessary to evaluate patients in need of ventilatory support, to select mechanical ventilatory parameters, and to monitor the patient laboratory exercises. It provides the student with an opportunity to operate ventilators, to change ventilator modalities, and to repair ventilators. 3 lectures, 3 labs, 4 credits

## RSP-231 Respiratory Therapy

 Clinical Externship IV provides the students with clinical experiences in the complete cardiopulmonary assessment of the patient. Emphasis of clinical training is in the critical care areas.2 labs, 2 credit
Prerequisite: RSP-226
Corequisites: RSP-229 and RSP-240

## RSP-235 Respiratory Therapy

 Clinical Externship V enables the student to continue training in the critical care areas, pulmonary function laboratory and pulmonary clinical. Emphasis is placed on patient evaluation and decision making skills. 16 hours/week (224 hours), 2 credits Prerequisite: RSP-231RSP-240 Diagnostic Monitoring and Patient Assessment provides the student with an understanding of logical therapeutic interventions based upon pulmonary and hemodynamic procedures utilized in the collection, analysis, and the interpretation of this data in diagnosis and evaluation of treatment of the patient. Attention is given to fundamental physiological concept because these concepts provide a foundation for discussion of cardiopulmonary pathophysiology and common cardiopulmonary abnormalities that occur in patients.
3 lectures, 3 lab, 4 credits
Prerequisites: RSP-222 \& CHM-112

## RSP-241 Neonatal and Pediatric

 Respiratory Care is a comprehensive overview of pediatric and neonatal respiratory care. Special considerations of respiratory care practice unique to pediatrics and neonatology are discussed. Topics include pediatric anatomy and physiology, fetal development, clinical assessment, oxygen therapy, airway management, mechanical ventilation, resuscitation, cardiopulmonary pathophysiology and disorders specific to this specialty. 2 lectures, 2 lab, 3 credits Prerequisite: RSP-229
## RTT - RADIATION THERAPY

## RTT-110 Introduction to

 Radiotherapy and Patient CareManagement is an exploration of the foundation of radiation therapy practices and variety of roles for the professional in the delivery of health care. Principles of practice, professional responsibilities, medical law and ethics will be addressed.
2 lectures, 2 credits

## RTT-120 Radiation Therapy

Practices I introduces the student radiation therapist to treatment equipment and techniques. Topics include patient immobilization, localization, simulation, documentation, patient positioning, treatment delivery parameters, prescriptions, and patient care. 3 lectures, 3 lab, 4 credits
Corequisite: RTT-110

## RTT-121 Radiation Therapy

## Clinical Practicum I serves as a

 clinical orientation to radiation therapy where students are afforded an opportunity to develop professional clincal skills and knowledge through structured rotations and assignments in radiation therapy. Treatment competencies and related objectives will be used to measure clinical outcomes. Students will be afforded 360 hours for this clinical experience. 2 credits, 360 hours
## RTT-130 Radiation Biology and

Safety explores the cellular and systemic effects of radiation exposure. Radiation health, safety, and federal and state requirements will be enforced. 3 lectures, 3 credits

## RTT-150 Principles of Diagnostic

 Radiation Physics is a continuation of the exploration of radiation physics. Emphasis will be on basic principles of physics, atomic structure, electro-magnetic and particulate radiation, $x$-ray circuits, radiagraphic tubes and radiation production. 3 lectures, 3 creditsRTT-200 Survey of Diseases orients students to disease and disorders that compromise the human body. Emphasis is on cellular, systemic and manifestations. There will be an emphasis on the management of pathologies as well.
3 lectures, 3 credits
Prerequisites: RTT-120

## RTT-210 Dosimetry and Treatment

 Practices applies the concepts of radiation physics to therapy practice. Treatment units, scatter radiation analysis, isodose curves, patient contouring, dosimetric calculations, compensating filtration and equipment calibration are introduced. 3 lectures, 3 creditsPrerequisites: RTT-110, RTT-150
Corequisite: RTT-230,

## RTT-220 Radiation Therapy

Practices II is an exploration of cancer; its detection, diagnosis, correlation and prognosis. The focus of the course is on the management of neoplastic disease and its mechanism of spreading.
3 lectures, 3 lab, 4 credits
Prerequisite: RTT-120
Corequisite: RTT-210, RTT-230

## RTT-221 Radiation Therapy

 Clinical Practicum II affords student radiation therapists an avenue to continue their development of professional skills through rotations on various treatment machines, treatment planning and simulation. Objectives and treatment competencies will be used to assess outcomes. Students will be given 360 hours for this clinical experience. 3 credits, 360 hours Prerequisite: RTT-121
## RTT-222 Radiation Therapy

Clinical Practicum III affords student radiation therapists with an avenue to continue the development of advanced professional clinical skills through the correlation of didactic theory. Students continue towards competency and mastery and will be gven 360 hours of clinical experience.
3 credits, 360 hours
Prerequisites: RTT-121, RTT-221

## RTT-230 Quality Control and

Instrumentation explores quality control programs and protocols for various radiation therapeutic facilities. There will be an introduction to computing, information processing, computer concepts and various laboratory experiments.
1 lecture, 2 lab, 2 credits
Prerequisite: RTT-120, RTT-150 Corequisite: RTT-210

## SOC - SOCIOLOGY

SOC-101 Sociology is an examination of the culture and structure of human societies. The course focuses on social groups and institutions, their norms and controls, and how and why they change. Topics of discussion include the family, education, deviance, race and ethnicity, gender roles, social change, and social inequalities.
3 lectures, 3 credits
\}General Education Course

## SOC-102 Introduction to Human

Services is an analysis of social service systems in the United States. The course provides an overview of educational, mental health, child care, and recreational social service agencies. Through group participation, lectures, role-playing, and field trips, students learn to recognize the common aspects of helping within the broad field of human services. 3 lectures, 3 credits

SOC-103 Sociology of the Family is a study of the oldest and most fundamental social institution. This course analyzes various types of courtship, parenting, human sexuality, marital breakup, and family patterns. Family life is viewed from the perspective of society and of the individual. Students are encouraged to examine their own family patterns in relation to the broad range of possibilities that are discussed. 3 lectures, 3 credits
\}General Education Course

## RSP-SOC

SOC-105 Urban Sociology is an analysis of the modern urban community. Topics of discussion include the history of the city, urban institutions, urban behavior patterns, urban problems and social dislocation within metropolitan areas, community planning, and urban renewal. Field trips to major urban centers are an integral part of the course.
3 lectures, 3 credits
SOC-107 Death and Dying is a study of the sociological, psychological, and biological information that relates to dying, death, and the adjustment to death. Topics of discussion include euthanasia, abortion, bereavement, and attitudes toward death in our society and around the world. The intention of the course is to help students come to an understanding of a reality that we must all confront. 3 lectures, 3 credits

SOC-113 Social Problems is the study of contemporary social issues and problems in the United States. Various theoretical perspectives are utilized in an effort to understand why particular issues become defined as "problems," to determine the origin of social problems, and to critically assess proposed solutions to these perceived problems. Topics of discussion can include: crime and delinquency, poverty, family violence, overpopulation, war, AIDS, sexual assault, mental illness, racism, sexism, and classism (social inequality).
3 lectures, 3 credits
SOC-120 Sociology of Gender Roles is a study of the changing roles of men and women in contemporary society. Topics of discussion include the biological bases for differentiation in gender roles, male and female roles in a crosscultural perspective, changing expectations for men and women in work and sports, the sexual revolution, and the consequences of gender role change. 3 lectures, 3 credits
\}General Education Course
\}Diversity Course

SOC-121 The Changing Roles of
Women is an introductory, interdisciplinary study of the changing roles of women today. Topics of discussion include women's roles in a cross-cultural and historical perspective, the influence of biology, sexuality, and psychology on the roles of women, women in the work force, women as portrayed in literature, the impact of religious beliefs on women, women's changing family roles, and traditional and present-day feminism.
3 lectures, 3 credits
\}General Education Course
\}Diversity Course

## SOC-222 Ethnic and Minority

Group Relations is a study of the diverse ethnic and multicultural structure of the United States. Particular attention is given to Native Americans, Hispanic Americans, Asian Americans, African Americans, Italian Americans, Irish Americans, and Jewish Americans. Topics include social, economic, and familial structures of various ethnic groups, the dislocation of new immigrants, prejudice and discrimination, and the life styles of various minority groups.
3 lectures, 3 credits
Prerequisite: SOC-101
\}General Education Course
\}Diversity Course

## SOC-461-463 Co-op Work

Experience (Sociology) are courses that provide a student with the opportunity to gain human relations work experience in social institutions that relate to his/her career goals. This program is under professional guidance in a college approved work environment. Students are supervised by a faculty member, and job placement assistance is available through the Co-op office.
SOC-461 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit
SOC-462 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits
SOC-463 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits Prerequisite: SOC-101 or by permission of the Department Head

## SPE - SPEECH

 COMMUNICATIONSPE-001 Speaking/Listening I for International Students is designed for beginning students whose native language is not English. The course aims at developing comprehension of the spoken language, greater fluency, and intelligibility in speaking American English. This course should be taken in conjunction with American Language I.
3 lectures, 3 credits (non-degree credits)
Prerequisite: CELT placement Corequisites: ALP-041, ALP-042, ALP-043, and ALP-044

## SPE-002 Speaking/Listening II for

 International Students is designed for intermediate students whose native language is not English. The course aims at extending and reinforcing students' skills in listening comprehension, pronunciation, and fluency through extensive practice in using spoken American English. This course should be taken in conjunction with American Language II. 3 lectures, 3 credits (non-degree credits) Prerequisite: CELT placement Corequisites: ALP-051, ALP-052, ALP-053, and ALP-054SPE-003 Speaking/Listening III for International Students is designed for students for whom English is not a native language. This course seeks to expand students' listening skills, language comprehension, and speech fluency and to develop their confidence in the speaking of English. This course should be taken in conjunction with American Language III. 3 lectures, 3 credits (non-degree credits) Prerequisite: CELT placement Corequisites: ALP-061, ALP-062, ALP-063, and ALP-064

SPE-005 Basic Communication is a practical course specifically designed to improve general communication skills. The course provides usable techniques in speaking and listening skills. 3 lectures, 3 credits (non-degree credits)

## SPE-006 American Language

Pronunciation is a course designed to help the nonnative speakers of English improve their American pronunciation. Basic drill material on all the individual sounds, the more important combinations of the English sound system, and the study of intonations and stress in ordinary speech patterns will be provided for practice. 2 lab hours, 1 credit (non-degree credit)

SPE-009 American Language Foundations: Speaking and Listening is a course for international students with little or no exposure to English. It provides them with instruction in basic expression and understanding simple oral language, including following instructions. They will learn to use vocabulary in everyday speaking situations. 3 hours, 3 (non-degree credits)

## SPE-111 Speech Communication

guides students through the methods of organizing, delivering, and evaluating the spoken word in various speech situations. Intrapersonal and interpersonal communication in conjunction with public address are studied. 3 lectures, 3 credits
\}General Education Course

## SPE-112 Voice and Articulation

is designed to improve the vocal and articulatory components of speech. Areas of study and practice include pronunciation, vocal production, and the sounds of standard American English. Speaking assignments provide the students with practice in the skills that are necessary for effective verbal communication. 2 lectures, 1 lab, 3 credits

## SPE-114 Intercultural

Communication provides the student with practical information regarding the problems present in communicating with people of other cultures. It also explores cross-cultural differences in the communication process in order to learn how to communicate effectively with one another across cultural boundaries. 3 lectures, 3 credits

## SPE-116 Interpersonal

 Communications is a study of the way people communicate in the process of developing and maintaining relationships. Class activities include the analysis of communication in dyadic and small group situations. The following topics are examined with respect to their effects on interpersonal communication: self-awareness, shyness and assertiveness, listening, attraction, conflict, Ioneliness, and love. 3 lectures, 3 credits
## SPE-119 Business and

 Professional Speaking teaches theories and practices of effective communication in the context of business settings: interpersonal, interviews, group and public speaking. 3 lectures, 3 creditsSPE-122 Argumentation and
Debate is a course in the methods of effective argumentation, persuasion, and educational debate, with emphasis on rational decision-making. This course is designed for students who want preparation for participation in a democratic society. 3 lectures, 3 credits

SPE-213 Small Group Discussion is an introduction to the various discussion forms. Major topics include the applicability of specific discussion forms to particular situations, the responsibilities of a discussion leader, and practical experience in the use of these forms in controlling the quality and discipline by which a discussion moves in a positive direction toward a specific goal. 3 hours, 3 credits
Prerequisite: SPE-111

## SUR - SURGICAL <br> TECHNOLOGY

## SUR-101 Principles of Surgical

Technology I is a study of the surgical technologist's role as a member of the surgical team. Surgical principles, technique, and procedures are taught. The laboratory segment consists of demonstrations and return demonstrations of performance skills.
5 lectures, 3 labs, 6 credits Corequisites: SUR-102, SUR-103, SUR-104

## SUR-102 Surgical Technology

Externship I introduces the student to the operating room environment. Approximately six weeks are spent on campus in a preclinical segment, during which time the student is exposed to background information and practice of entry level skills. The remaining time is spent in the clinical area with directed experience in surgical procedures and operating room practice. 16 hours per week, 2 credits Corequisites: SUR-101, SUR-103, SUR104

SUR-103 Surgical Terminology is a study of the basic structure of medical and surgical words, including roots, combining forms, prefixes and suffixes. Emphasis is placed on correct pronunciation and definition of surgical terms, allowing the student to build a professional vocabulary for working in the operating room.
1 lecture, 1 credit
Corequisites: SUR-101, SUR-102, and SUR-104

## SUR-104 Microbiological

Applications in Surgery is a study of microorganisms and their relationship to disease. This overview of the fundamentals of Microbiology includes historical aspects, cell structure, and the functions of microorganisms. Emphasis is placed on infectious disease, modes of transmission, infection control and their clinical application in surgery. Discussion is centered on the role of the Surgical Technologist regarding operating room techniques, infection control and sterilization, and disinfecting of supplies, instruments and the environment. 2 lectures, 2 credits Corequisites: SUR-101, SUR-102, SUR-103,

## SUR-201 Principles of Surgical

Technology II is an in-depth study of specialty surgical procedures with emphasis on common diseases and surgical procedures in relation to the various body systems.
5 lectures, 5 credits
Prerequisites: SUR-101 and SUR-102
Corequisite: SUR-202

## SUR-202 Surgical Technology

Externship II gives the student the opportunity for further directed experience in the operating room. The student will scrub for procedures in general and specialty areas surgery. A study of surgical instrumentation and equipment is also included in this course. 24 hours per week, 2 credits Prerequisites: SUR-101 and SUR-102 Corequisite: SUR-201

## SUR-203 Surgical Technology

 Externship III enables the student to continue with directed experience in the operating room. Emphasis is on refining skills and scrubbing for a wide variety of surgical procedures. 40 hours per week, 1 credit Prerequisite: SUR-201 and SUR-202
## TEC - TECHNOLOGICAL SCIENCES

TEC-180 Problem Solving Using
Technology is a "hands-on" course using computers and graphic calculators to solve problems related to various industrial and engineering technologies. 3 lectures, 3 labs, 4 credits

## TEC-190 Introduction to

 Geographic Information Systems (GIS) introduces the student to the basic underlying principles of geography that deal with measurements and analysis of the earth's surface and the field of geographic information systems. The critical underlying issues of GIS will be discussed in the context of the learned principles and promote critical thinking by the student. Students will learn the fundamentals of computer generated GIS by using the leading GIS software product, ArcView. 2 lectures, 2 labs, 3 credits
## TEC-191 Introduction to Mapping

 and Cartography introduces students to the science of cartography including a history of the discipline and its current practices. Topics include basic map use and analysis, the display of quantitative and qualitative information, and map production techniques. 2 lectures, 2 labs, 3 credits
## TEC-201 Science Laboratory

Technology I is designed to give students a working knowledge of the instrumentation used in the modern chemical and biochemical laboratory. Emphasis will be placed on the study of techniques that have the broadest range of applications. Topics studied will include enzyme purification, DNA sequencing, spectroscopic techniques, chromatography and computer interfacing of laboratory instruments.
8 labs, 4 credits
Prerequisite: CHM-212 or by permission of the Department Head

## TEC-202 Science Laboratory

 Technology II is designed to give students a working knowledge of the instrumentation used in the modern physics laboratory. Emphasis will be placed on the study of techniques that have the broadest range of applications. Topics will include lasers and other optical techniques as well as materials science and scanning/probe techniques. 8 labs, 4 creditsPrerequisites: PHY-186 and TEC-201 or by permission of Department Head

## TEC-203 Work Based Learning for Science Technologies is designed to

 give students experience in on-the-job laboratory situations to which they can apply the lessons of their interdisciplinary, advanced laboratory-based science technology courses. Students in this course will be counseled by industry and faculty mentors.4 labs, 1 credit
Prerequisites: TEC-201
Corequisite: TEC-202 or by permission
of the Department Head

TEC-292 Introduction to Remote Sensing explores the topics of satellite imagery and aerial photography. Students gain an understanding of how digital satellite images and air photos are created and used in geology, environmental management and civil engineering.
2 lectures, 2 labs, 3 credits
Prerequisite: TEC-191 or by permission of the Department Head

## TEC-293 Advanced Geographic Information Systems broadens

 understanding of GIS and includes discussions of cartographic data formats, cartographic representations, computer programming for GIS, database management and Internet based mapping. The laboratory section will focus on use of advanced functions of ArcView GIS including all extensions, GIS programming with Avenue and Map Objects. Students learn the principles of GIS project management and data documentation.2 lectures, 2 labs, 3 credits
Prerequisite: TEC-190 or by permission of the Department Head

## THR - THEATRE

## THR-101 Introduction to the

Theatre is a study of live theatre and of how it is produced, how it has developed historically and culturally, and how it is analyzed and evaluated. This is primarily a theory course, but it also includes theatre-going assignments. 3 lectures, 3 credits
\}General Education Course

## THR-110 Basic Acting Techniques

 utilizes practical exercises to aid the beginning actor in developing technique from which to build self confidence and believable characterizations. The course stresses the importance of self-discipline in developing creativity and freedom in voice and movement. Assignments include the presentation of scenes from various works during the semester.2 lectures, 2 labs, 3 credits

## THR-111 Oral Interpretation of

 Literature explores the development of performance and vocal techniques in the oral presentation of all types of literature. The use of variety in pitch, volume, tempo, and attitude is stressed in communicating the author's meaning through the reader to the audience. Following specific guidelines, most of the literature is selected directly by each student. 3 lectures, 3 credits
## SUR-THR

## THR-113 Movement for the

Performing Artist is a practical
course in directing the student to experience, explore, and visualize movements. The aim of the course is to help the actor become a more physically secure and expressive performer. 3 hours, 2 credits

## THR-114 Audition Techniques is

 a practical course which helps the student investigate, select, and prepare audition material appropriate to the individual and the audition call. The course includes exercises in handling "cold" readings and in learning to look at auditions from the casting director's point of view. 2 lectures, 2 credits
## THR-116 Theatre Production

Workshop is a practical course that produces a selected dramatic work as a result of collective class involvement in casting, set design and construction, lighting, costuming, makeup, promotion, rehearsal, stage management, and performance. The workshop culminates in a public performance of the project. 4 lectures, 4 credits

THR-117 Theatre Performance and Production is a practical course in which students are introduced to acting and/or technical production. As a part of the course, students will actually be involved in theatre productions.
2 hours, 2 credits
THR-120 Stage Makeup provides a practical approach to makeup techniques for theatre and related arts. Through practical experience, students investigate basic, character, and stylized makeup.
1 lecture, 1 lab, 1 credit
THR-124 Dance Experience is a practical and critical introduction to various dance forms. By attending performances, tracing the development of the particular form, studying the demands the art form makes upon its performers, discussing critics' views, and evaluating the experience, students are exposed to broad representation of dance experiences. 3 hours, 3 credits

THR-131 Introduction to Stagecraft and Lighting introduces the student to the theory and practice of stagecraft. It includes study in scene design, practice in construction of sets, and the setting and control of lighting. 2 lectures, 2 labs, 3 credits

THR-VAS

THR-132 Stage Management is an analysis of the techniques and responsibilities of the stage manager in the various forms of the performing arts. Areas of study include stage management in the theatre, concerts, and television. 1 lecture, 1 credit

## THR-136 Stage Electrics is

 designed to familiarize the student with the fundamental skills requisite to actualizing lighting and sound designs. Emphasis is given to the identification, use, and maintenance of equipment, as well as to basic electronics theory and practice. Special attention is given to basic theories and aesthetics of light and sound as design elements.4 hours, 3 credits

## THR-140/CIN-140 Introduction to

the Cinema is a study of film as an art form. The course is designed to awaken a more sensitive and critical response to the cinema through an understanding of its form, content, development, and criticism. Films are screened to demonstrate these elements.
2 lectures, 2 labs, 3 credits
\}General Education Course

## THR-150 Summer Theatre

Workshop is an intensive, practical course in the requisite skills in producing a live theatrical production. Students will be exposed to all areas of the theatre crafts. A selected play will be completely produced for public presentation. This will be accomplished through collective class involvement in play selection, casting, rehearsal, stage management, makeup, set design and construction, lighting, costuming, promotion, and performance.
6 hours, 6 credits
THR-210 Scene Study includes advanced work in characterization, vocal and body control, and exercise in the development of style and technique relevant to scenes and plays selected for study and presentation. 2 lectures, 2 labs, 3 credits Prerequisite: THR-110

## THR-215 Directing for the Stage

 is designed to instruct students in the fundamentals of direction for the stage. Student directors will learn how to analyze a script, cast, block, and direct a scene that will be presented in a performance for the public. This course explores various directing techniques that emphasize not only the artistic approach but also the practical and technical elements of the theatre.2 lecture, 2 lab, 3 credits
Prerequisites: THR-110 and THR-101

THR-236 Lighting Design is a practical course in the principles and actual techniques of lighting design. Course work includes lectures, demonstrations, and lab sessions on equipment, color optics, and the setting and control of lighting for all forms of stage performance. A portion of the course is devoted to the contemporary lighting techniques used in clubs and rock concerts. 3 hours, 3 credits
Prerequisite: THR-136

## THR-240/CIN-240 The Classic

Cinema is an in-depth study of the style, philosophy, and significance of selected directors and films. 3 lectures, 3 credits
Prerequisite: THR-140/CIN-140

## THR-464 Co-op Work Experience

 (Stage Technology) is a field work course in preproduction, production, and/or shop work arranged on an individual basis by the student. The student must attend periodic seminars and/or prepare reports or other projects as required by the Theatre Arts faculty. Credit is based on a predetermined number of hours/weeks worked in an approved theatre shop, or other entertainment facility. Job placement assistance is available through the Co-op office.1 lecture, plus 240 minimum hours work experience distributed over the semester, 4 credits.
Prerequisite: Permission of the Department Head

## TRV - TRAVEL \& TOURISM

TRV-101 Introduction to Travel and Tourism is an introductory course which helps to familiarize the student with the impact of travel and tourism in our country and abroad. Students gain an overall view of the various phases of tourism in the U.S. and around the world. Latest developments in airlines, cruises, rail and ground transport are studied. This course is not travel-agent specific. 3 lectures, 3 credits

## TRV-103 Travel Area Studies is a

 global course geared to the travel and tourism student. Time zones and IATA (International Air Transport Association) conferences throughout the world, and resort/regional map-work in the United States and worldwide will be included. Students read regional/global research materials and plan itineraries for specified destinations. Destination video tapes are viewed.3 lectures, 3 credits
(Offered only in the fall)

TRV-104 Travel-Electronic Ticketing SABRE is a hands-on course utilizing a frame-by-frame, lesson-by-lesson program simulation. The course includes creating PNRs (Passenger Name Records) on the computer and booking reservations off-line. A computer printer is used for practice in printing of tickets. 2 lectures, 2 labs, 3 credits

## TRV-204 Travel Planning and

 Marketing explores the world of corporate, group, incentive, resort, and vacation travel and tourism. Students review corporate travel policies/manuals, develop/package group tours, discuss incentive travel used for employee motivation and organization fund raising. Prime vacation locations/properties are examined. Students explore a variety of techniques used in the industry to attract visitors to the most popular destinations. Students develop several domestic, international, resort, and special-interest vacations from original concept to conclusion and write business plans. 3 lectures, 3 creditsPrerequisite: TRV-101
(Offered every other spring semester)

## TRV-206 Travel and Tourism Management-Electronic is a

 course designed for students planning to become professionals in the travel and tourism industry. Computer software covers back-office streamlining and offers the student the opportunity to learn quick and easy ways to read computer run-offs for keeping track of commissions from airlines, hotels, car rental agencies, and transfer transportation.1 lecture, 2 labs, 2 credits
Prerequisites: OFF-101 and TRV-101
(Offered every other spring semester)

## TRV-207 Travel and Tourism

Study-Abroad combines classroom instruction with foreign field study. Ten hours of classroom study are devoted to an investigation of the social/cultural/tourism aspects of the destination. The subsequent one-week field study-abroad includes visits to tourism related industries at the destination. 3 credits
Prerequisite: TRV-101

TRV-210 Corporate Travel discusses topics specific to corporate travel and familiarizes the student with different types of travel delivery. Topics include corporate accounts, specialized services, operating a corporate travel department and international corporate travel.
3 lectures, 3 credits
Prerequisite: TRV-101 or by permission of the Department Head
(Offered every other spring semester)

## TRV-461-464 Co-op Work Experience (Travel) enables the

 student to learn and practice travel industry skills under professional guidance in a college approved work environment. The students work is supervised by a trained faculty member. All student appointments must be approved by the Co-op Coordinator. Co-op job placement assistance is available through the Co-op office.TRV-461 1 lecture, plus 60 minimum hours work experience distributed over the semester, 1 credit
TRV-462 1 lecture, plus 120 minimum hours work experience distributed over the semester, 2 credits TRV-463 1 lecture, plus 180 minimum hours work experience distributed over the semester, 3 credits TRV-464 1 lecture, plus 240 minimum hours work experience distributed over the semester, 4 credits Prerequisite: TRV-101

## VAS - VASCULAR <br> TECHNOLOGY

VAS-101 Introduction to Vascular Imaging is designed to introduce the student to fundamental scan-plan relationships for ultrasonic imaging of the vasculature of the human body. The student will learn gross vascular anatomy and corresponding ultrasound scanning views. Patient assessment and common vascular pathologies will be introduced. The student will learn how to perform a limited carotid and venous exam. 1 lecture, $3 \mathrm{lab}, 2$ credits Corequisites: DMS-101, DMS-102, VAS-102, BIO-109

VAS-102 Introduction to Vascular Principles and Physiology is
designed to introduce the student to the field of vascular technology. The student will receive an introduction to vascular terminology, blood flow hemodynamics, vascular Doppler physics, and non-ultrasonic vascular instrumentation.
1 lecture, 1 credit
Corequisites: DMS-101, DMS-102, VAS-101

## VAS-201 Cerebrovascular

Ultrasound is an in-depth study of cerebrovascular disease and the ultrasonic evaluation of it. The student will learn how to perform a complete B-mode and Doppler ultrasonic examination using all current industry standards. Transcranial Doppler techniques will also be presented. Pathological development and pathophysiology will be described. This course will also review techniques for patient assessment, obtaining patient histories, evaluating and correlating patient symptoms with diagnostic findings. Surgical and non-surgical corrective techniques will be discussed. The student will be introduced to correlating ultrasound test results with angiography, computed tomography, nuclear medicine vascular procedures and magnetic resonance imaging. 2 lectures, 3 lab, 3 credits Prerequisites: VAS-101 and VAS-102 Corequisites DMS-201, VAS-202, VAS-203, BIO-209

VAS-202 Arterial Ultrasound provides an in-depth study of peripheral arterial disease and non-invasive evaluation of it. The student will learn how to perform B-mode and Doppler evaluation of the upper and lower extremities. The student will also learn how to perform pulsed volume recording, segmental blood pressures and plethysmography. Pathological and pathophysiologic states will be described. The course will review pertinent techniques for patient assessment, obtaining patient histories, evaluating and correlating patient symptoms with diagnostic findings. The student will be introduced to correlating information with other diagnostic procedures. Surgical and nonsurgical corrective techniques will be discussed. Techniques for evaluating post interventions or surgical techniques will also be explained. 2 lectures, 3 lab, 3 credits Prerequisites: VAS-101, VAS-102 Corequisites VAS-201, VAS-203, DMS-201, BIO-209

## VAS-203 Vascular Practicum I

 requires the student to spend two days a week in an approved hospital vascular laboratory. Students will perform cerebrovascular procedures under the direct supervision of the supervising vascular technologist. Students are given specific learning objectives for the rotation and must meet the established requirements for competency based clinical education. 2 credits, 240 hoursPrerequisites: VAS-101, VAS-102 Corequisites VAS-201, VAS-202, DMS-201, BIO-209

VAS-204 Vascular Practicum II requires the student to spend five days a week in an improved hospital vascular department. Students will perform complete arterial procedures under the direct supervision of the supervising vascular technologist. Students are given specific learning objectives for the rotation and must meet the established requirements for competency based clinical education.
2 credits, 240 hours
Prerequisites: VAS-202, VAS-203

## VAS-210 Abdominal Vascular

 Ultrasound teaches students how to perform duplex exams of the renal, mesenteric, aorta and iliac arteries as well as the inferior vena cava, iliac, hepatic and portal veins. The student will identify risk factors and describe pathogenic mechanisms of these vessels. Surgical and interventional techniques will be discussed. Post interventional ultrasonic evaluation of these procedures will also be discussed and demonstrated. Correlation with other diagnostic procedures will be demonstrated. 2 lectures, 3 lab, 3 credits Prerequisites: DMS-201, VAS-204 Corequisites VAS-211, VAS-212, DMS-115, DMS-214VAS-211 Venous Ultrasound provides the student with an in-depth study of the evaluation of peripheral venous disease using duplex ultrasound and plethysmographic techniques. The student will learn to evaluate for venous thrombosis and insufficiency. Superficial venous mapping will be demonstrated. The student will review techniques for evaluating the presence of venous disease. The student will learn pathological mechanism and risk factors for venous disease. Surgical and non-surgical corrective procedures will be discussed. Correlation with other vascular procedures will be demonstrated.
1 lecture, 3 lab, 2 credits
Prerequisites: DMS-201, VAS-204 Corequisites: DMS-115, DMS-214, VAS-210, VAS-212

VAS-212 Vascular Practicum III requires the student to spend two days a week in an approved vascular laboratory. Students will perform a complete venous evaluation and a limited abdomen under the direct supervision of the supervising vascular technologist. Students are given specific learning objectives for the rotation and must meet the established requirements for competency based clinical education.
2 credits, 240 hours
Prerequisites: DMS-201, VAS-203 Corequisites: DMS-115, DMS-214, VAS-210, VAS-211

## VAS-220 Advanced Vascular

 Topics and Techniques exposes the student to less frequently performed vascular testing such as Hemodialysis graft evaluations, renal allograft evaluations, penile evaluation and advances in graft and stent technology. The most current topics for surgical and medical treatments for vascular disease will be discussed. Lab accreditation philosophy and standards will be presented Current topics in vascular physical principles will also be reviewed. 2 lecture, 2 credits Prerequisites: DMS-115, DMS-214, VAS-211, VAS-212Corequisites: DMS-227, VAS-221, VAS-222

## VAS-221 Cardiovascular

 Pharmacology is designed to review common laboratory test used in the diagnosis of cardiovascular disease as well as introduce the student to medications used in the treatment and diagnosis of cardiovascular disorders. Contrast agents used in ultrasound and other imaging modalities will also be discussed. 1 lecture, 1 creditPrerequisites: DMS-115, DMS-214, VAS-210
Corequisites: DMS-227, VAS-220, VAS-222

VAS-222 Vascular Practicum IV requires the student to spend two days a week in an approved hospital Ultrasound department. Students will perform a complete echocardiography procedure under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation and must meet the established requirements for competency based clinical education.
2 credits, 240 hours
Prerequisites: DMS-115, DMS-214,
VAS-210, VAS-212
Corequisites: DMS-227, VAS-220,
VAS-221

VAS-223 Vascular Practicum V
requires the student to spend 40 hours a week for five weeks performing vascular procedures in an approved vascular laboratory. The main objectives of this practicum will be for the student to demonstrate clinical competency in all aspects in the field of vascular sonography. A minimum of three procedures will be performed independently by the student in establishing clinical competency.
1 credit, 200 hours
Prerequisites: DMS-227, VAS-220, VAS-222

VET - VETERINARY
TECHNOLOGY
VET-102 Introduction to Veterinary Technology introduces the student to the profession of veterinary technology through a study of the duties and responsibilities of the graduate veterinary technician and available career opportunities. In addition, other basic issues such as occupational safety and health, membership in professional organizations, certification and licensing, professional standards and behavior, the human-companion animal bond, and introductory animal restraint and handling will be covered. The course is the prerequisite to all other VET courses.
1 lecture, 1 credit
Corequisite: VET-103

## VET-103 Veterinary Medical

 Terminology introduces the student to prefixes, suffixes, and word roots used in the language of veterinary medicine. Topics include veterinary medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems in the various species. Upon completion, students should be able to pronounce, spell, and define medical terms as related to body systems and their pathological disorders.1 lecture, 1 credit
Corequisite: VET-102

## VET 104 <br> VET-104 Research Animal

Technology is an introduction to the handling, husbandry, and nursing care of the common laboratory animals. In addition, classroom study will cover the principles and ethics of animal research, as well as the laws that regulate the use of animals to ensure that they are treated humanely. Laboratory sessions provide hands-on training in restraint, drug administration, sample collection, anesthesia and research techniques. Dissection is required.
2 lectures, 3 labs, 3 credits
Prerequisites: VET-102, VET-103 and admission to the professional component of the program

## VET-110 Nutrition and Principles

of Feeding is designed to introduce the fundamentals of nutrition.
Materials cover the six classes of nutrients (water, protein, carbohydrates, lipids, minerals, and vitamins); their general functions, deficiencies, and toxicities; general digestion, absorption, utilization, and excretion of these classes in domestic animals. We will cover the feeding of animals in health and disease during various stages of the life cycle. Of primary concern will be the dietary management of specific diseases that affect domestic animals.
2 lectures, 2 credits
Prerequisites: VET-102, VET-103 and admission to the professional component of the program

## VET-112 Veterinary Pharmacology

is a study of pharmacology and its practical applications. This course is designed to give the student a basic understanding of drugs and other substances used in the treatment of disease. Emphasis is on classification of drugs based on their effects and therapeutic usage, sources of drugs, standards and regulations, weights and measures, conversions, labeling, and pharmacy maintenance. In addition, the student studies possible toxicological effects of these drugs and other toxic plants and substances. 3 lectures, 3 credits Prerequisites: VET-102, VET-103 and admission to the professional component of the program

VET-203 Veterinary Nursing I will furnish the skills and considerations necessary for the nursing duties of the veterinary technician. Topics include general animal care, handling and restraint, administration of medications and bandaging techniques. Special emphasis will be placed on safety of both patient and handler. Includes laboratory demonstrations and practice on live animals. 2 lectures, 3 labs, 3 credits Prerequisites: VET-102, VET-103, VET-110, VET-112, BIO-115, BIO-215

## VET-205 Clinical Laboratory

Procedures I deals with the examination of blood, urine, and other body substances for diagnostic and prognostic purposes in veterinary practice. Students will learn to perform complete blood counts, blood chemistries, serological tests, and urinalysis. Lecture periods will cover the theories on which the tests are based and the relevance of laboratory results in the evaluation of the health of animals. 2 lectures, 3 labs, 3 credits Prerequisites: VET-102, VET-103, BIO-115, BIO-215

VET-207 Diagnostic Imaging is an introduction to basic radiology, ultrasound and associated diagnostic techniques. The student will learn how to correctly position a patient, calculate exposure values, expose radiographic film, and process radiographs of diagnostic quality, both manually and automatically, for the veterinarian to examine. Special emphasis is placed on the potential hazards of radiation and occupational safety. Laboratory experiences provide skills practice in radiographic technique.
2 lectures, 3 labs, 3 credits
Prerequisites: VET-102, VET-103, BIO-115, BIO-215

VET-214 Veterinary Nursing II is a continuation of Veterinary Nursing I. Principles of emergency care, intensive care, administration of drugs and fluids, shock therapy, oxygen therapy and the application of indwelling catheters will be discussed. This course will include a general study of diseases, their definition, etiology, pathogenesis, clinical signs, diagnosis, prevention, and treatment. Intensive care nursing will include hands on experience with animals and models.
2 lectures, 3 labs, 3 credits
Prerequisite: VET-203

## VET-216 Veterinary Office

 Management is designed to introduce the student to modern veterinary hospital business practices. A study of management techniques, inventory procedures, basic marketing, accounting and computer skills, medical records, personnel management, and psychology of client and staff relations. Emphasizes professional ethics.3 lectures, 3 credits
Prerequisites: VET-102 and VET-103

## VET-217 Clinical Laboratory

Procedures II will cover basic parasitology, cytology, histology and necropsy techniques. The student will study the life cycles, pathogenesis, identification, prevention, control and public health concerns of internal and external parasites in domestic animals. Cytological specimens will be collected and processed. A necropsy prosection will be performed, with the collection of specimens and preparation of histology slides for examination by the veterinarian.
2 lectures, 3 labs, 3 credits
Prerequisite: VET-205

## VET-218 Farm Animal Nursing is

 designed to teach the student the skills associated with assisting the large animal practitioner. The essential tasks relating to handling, restraint, treatment, venipuncture and blood collecting, anesthesia and administration of drugs and fluids to farm animals will be covered. A study of diseases of these animals with emphasis on disease control, prevention, treatment, and immunization will be given. Common surgical procedures, as well as specimen collection and preservation. 2 lectures, 3 labs, 3 credits Prerequisites: VET-110, VET-112 (Offered in the summer)
## VET-219 Surgical Assistance and

Anesthesia includes in-depth discussion and hands-on experience with hygiene of the surgical suite and surgical prep room, asepsis, surgical instruments, and sterilization. The student will learn the basics of animal anesthesia as used in surgical procedures. It includes drugs and equipment for anesthetic administration, recovery, and emergencies, along with management of these preparations. We will also provide the student with in-depth coverage of preoperative and postoperative patient care.
2 lectures, 3 labs, 3 credits
Prerequisite: VET-203

VET-220 Veterinary Technology Externship I is a clinical experience providing the student with the opportunity to refine technical skills developed in areas such as animal handling, nursing care and treatment, surgical assistance, radiology, anesthesia, dental prophylaxis, diagnostic laboratory procedures, practice management, and client communication. Students spend 12 weeks in total in a pre-approved small animal hospital, animal research facility, or other allied animal health facility within the metropolitan area. Students train under the supervision of licensed veterinarians and graduate veterinary technicians.
1 credit, 192 hours
(16 hours/wk x 12 wks = 192 hours) Prerequisites: Permission from the program coordinator

## VET-221 Veterinary Technology

 Externship II is a clinical experience providing the student with the opportunity to refine technical skills developed in Externship I. Students spend 12 weeks in total in a preapproved small animal hospital, animal research facility, or other allied animal health facility within the metropolitan area. Students train under the supervision of licensed veterinarians and graduate veterinary technicians. VeterinaryTechnology Externship II is the second half of the student's clinical experience.
1 credit, 192 hours
(16 hours/wk x 12 wks = 192 hours) Prerequisites: Permission from the program coordinator

## VET-290 Applied Transgenics and Microinjection Techniques

 is a Laboratory Science course focusing on intense hands-on laboratory procedures for real world experience. It is intended for people who want to become employed as microinjectionists, but is open to all people who have an interest in Genomics. The morality and ethics of utilizing animals in research and the application of transgenic techniques will be discussed along with hands-on training on state of the art microinjection equipment used in the industry. Course topics include mouse colony management; embryo development; santation/sterilization of transgenic facilities, animal cages, and microinjection works areas; microscopy; effects of mouse micro and macro environments and disease; reproductive systems; surgical instrumentation and procedures for collection of mouse ova; pronuclear microinjection and the implantation of injected eggs into pseudopregnant mice.1 lecture, 4 lab, 3 credits

## WEX - WELLNESS \& EXERCISE SCIENCE

WEX-101 Dynamics of Health and
Fitness is a theory based study of exercise and its effects on humans Topics investigated are lifestyle issues in wellness including cardiovascular function, weight management and nutrition, strength, flexibility, stress management and principles/programs of exercising.
2 lectures, 1 lab, 2 credits
\}General Education Course
WEX-104 Aquacise is an opportunity for the student to increase fitness through selected aquatic activities such as in-the-water stretching, running, and calisthenic movements. A comfortable exercise program will be adapted to each person's tolerance level. No swimming ability is required. 2 labs, 1 credit

WEX-105 Fitness Center Plus is a physical activity which provides students with the opportunity to participate in personal conditioning programs. Fitness evaluations and computer prescribed exercise programs are generated for each student. All equipment in the Fitness Center is employed to develop and maintain these individualized fitness programs. 2 labs, 1 credit

## WEX-106 Nutrition for Exercise

 and Fitness is a course that explores concepts of nutrition as they apply to exercise and performance. Topics include bioenergetics, thermodynamics and the energy equation, ergogenic aids, supplements and computerized diet analysis. Required for Exercise Science Certificate and Degree. 3 lectures, 3 credits
## WEX-125 Introduction to

Recreation is an historical and philosophical study of leisure and recreation and of the agencies and institutions that serve the recreational needs of society. 3 lectures, 3 credits

WEX-128 Sports Fundamentals is a practical study of the fundamental principles and techniques of major sports. Students experience and practice various common sports activities. 3 lectures, 3 credits

## WEX-129 Organization and

 Direction of RecreationalActivities is a study of the nature and function of play and recreation and of the general principles of organization in the recreational field. 3 lectures, 3 credits

## WEX-141 Coaching Team Sports:

Baseball is a study of the basic concepts and skills involved in coaching baseball. Students learn techniques of hitting, pitching, and catching, defensive play, base running, and strategies.
2 labs, 1 credit
WEX-144 Coaching Team Sports: Basketball is a study of the concepts, theories, skills, rules, and organizational principles involved in coaching basketball.
2 lectures, 1 credit

## WEX-159 Cardiopulmonary

 Resuscitation and Emergency First Aid provides the student with the knowledge and practical skills needed to respond to various emergency situations including: burns; wounds; respiratory and cardiac problems; broken bones; poisoning; etc. Students will receive certification in CPR and First Aid upon successful completion of the course. 3 lectures, 3 hoursWEX-163 Nutrition Today is an investigation of basic nutrition concepts. Current studies and findings are explored and evaluated. Information is used to formulate practices that maximize health benefits. 3 lectures, 3 credits

WEX-164 Exercise Science is a theory based investigation of the effects of exercise on human health, fitness, and sport performance. Emphasis is on basic principles of exercise physiology, exercise prescription, bioenergetics, body composition, training programs, and practical applications to the exercise setting. Recommended as a prerequisite to WEX-106, WEX-183 and WEX-184. Requirement for Exercise Science Certificate and Degree. 3 lectures, 1 lab, 3 credits

WEX-167 Self-Defense is a course that provides the opportunity to learn basic techniques in judo, karate, and jujitsu. (Yellow belt promotion is optional.)
2 labs, 1 credit

WEX-171 Beginning Golf is a study of the fundamental theories, skills, etiquette and rules needed to play the game of golf.
2 labs, 1 credit
WEX-173 Beginner Tennis is a course that provides the student with the opportunity to develop the fundamental skills of the game. It also acquaints students with the basic rules, regulations and strategy of both singles and doubles play. 2 labs, 1 credit

WEX-174 Volleyball is a course that provides fundamental skills, strategies, and knowledge of power volleyball through teaching-learning experiences and active participation.
2 labs, 1 credit

## WEX-175 Beginner Level

 Swimming (for non-swimmers) is a basic course for non-swimmers that includes fundamental water safety and survival, crawl stroke, back crawl, breaststroke, sidestroke, and recreational aquatic activities. 2 labs, 1 credit
## WEX-182 Fitness Measurement

 and Interpretation is a course involving analysis of the parameters of fitness, sport performance, and their assessment. Topics include measurement protocols and the quantitative expression of body composition, aerobic capacity and energy expenditure, strength, endurance, flexibility and sport specific elements relative to exercise application. Requirement for Exercise Science Certificate and Degree.3 lectures, 3 credits

## WEX-183 Programs and Principles

 of Conditioning is an application of theories explored in Exercise Science (WEX-164). This course is designed to provide the student with opportunities to apply conditioning concepts, teaching methodology and presentation experience in a one-on-one and co-op teaching setting.3 lectures, 3 credits
Prerequisites: WEX-164 and WEX-182

WEX-201 Aerobic Dance (Dynamics of Health and Fitness Experience) is an application of the theories of training and conditioning explored in WEX-101. The course is designed to provide students with opportunities to increase cardiovascular endurance, flexibility, muscular strength, and help reduce stress. Different modes of aerobic training will be explored including dance style movements to music.
2 labs, 1 credit
Prerequisite: WEX-101
\}General Education Course

## WEX-202 Body Conditioning

(Dynamics of Health and Fitness
Experience) is an application of the theories explored in WEX-101. The course is designed to effect changes in such fitness areas as cardiorespiratory endurance, flexibility, strength, and body composition thorough aerobic conditioning, progressive resistance exercises, and flexibility exercises. The development of personal exercise regimens for lifelong participation is emphasized. 2 labs, 1 credit
Prerequisite: WEX-101
\}General Education Course
WEX-204 Keep Young, Fit and Alive (Dynamics of Health and Fitness Experience) is an application of the theories explored in WEX101. The course uses exercise as a stress management technique, in the management/prevention of low-back musculoskeletal problems, for muscular strength and endurance, and for flexibility. An analysis of dietary practices is included.
2 labs, 1 credit
Prerequisite: WEX-101
\}General Education Course

## WEX-205 Swimming for

 Conditioning (Dynamics of Health and Fitness Experience) is an application of the theories explored in WEX101. The course is designed to effect changes in cardiovascular endurance, muscular strength, and flexibility.2 labs, 1 credit
Prerequisite: WEX-101
\}General Education Course

WEX-WRT

WEX-206 Weight Training
(Dynamics of Health and Fitness
Experience) is an application of the theories explored in WEX-101. The course is designed to effect changes in muscular strength and endurance through a variety of appropriate training techniques and applications. The development of personal exercise regimens for lifelong participation is emphasized.
2 labs, 1 credit
Prerequisite: WEX-101
\}General Education Course

## WEX-208 40+ Fitness (Dynamics of

 Health and Fitness Experience) is an application of the theories explored inWEX-101. The course is designed to provide students ( 40 years or older) with opportunities to increase fitness through individualized programs emphasizing flexibility, aerobic conditioning, muscle strength/endurance and weight management.
2 labs, 1 credit
Prerequisite: WEX-101
\}General Education Course
WEX-223 Beyond Beginning Tennis provides the student with an opportunity to refine the fundamental tennis skills and to learn more advanced skills and strategies.
2 labs, 1 credit
Prerequisite: WEX-173
WEX-230 Skin and Scuba Diving is a
course that allows students to develop basic skills in skin and scuba diving by means of lectures, demonstrations, and class practice. Students should have good swimming ability. (International certification is optional.)
2 labs, 1 credit
WEX-245 Intermediate Golf is a
study of advanced golf skills.
2 labs, 1 credit
Prerequisite: WEX-171
WEX-260 Exercise Physiology is a course that investigates how the human body responds to exercise. Theory and practical application will draw from musculoskeletal, cardiovascular, endocrine and neuromuscular considerations.
3 lectures, 3 credits
Prerequisites: WEX-164 and WEX-182

## WEX-262 Senior Fitness Training I is a

course that explores and analyzes specific criteria for planning and implementing exercise programs for seniors. Specific needs for this age group and program characteristics will be stressed. 3 lectures, 3 credits Prerequisites: WEX-164, WEX-159, WEX-182 or by permission of the Department Head

## WEX-263 Senior Fitness Training II

focuses on organizing, designing and presenting various adult fitness programs. Specific gerontological factors such as medical limitations and high/low fitness levels that apply to senior fitness will be explored as well as marketing and business considerations.
3 lectures, 3 credits

## WEX-471 Co-op Work

Experience/Exercise Science
enables the student to gain essential
"hands on" experience in a fitness center under professional guidance and supervision.
1 lecture, plus 60 minimum hours work experience over the semester, 1 credit Prerequisites: WEX-164 and WEX-183

## WRT - WRITING

WRT-101 English Composition I gives students the opportunity for extensive practice in expository writing. The course emphasizes the writing process, and concentrates on the organization and development of ideas in written work and on student responses to reading. Attention is devoted to correct language usage and on research and the basic techniques of MLA documentation. 3 lectures, 3 credits
Prerequisite: EBS-017, EBS-024, ALP063, or by placement exam \}General Education Course

## WRT-201 English Composition II

 continues the emphasis of English Composition I on the writing process, and on critical reading and thinking skills. Particular attention is devoted to writing with sources and to argumentative writing. Emphasis is placed on correct language usage and on research and the techniques of MLA documentation.3 lectures, 3 credits
Prerequisite: WRT-101
\}General Education Course
WRT-202 Technical Writing is an introduction to the theory and practice of expository writing in the business, scientific, and industrial fields. Special attention is given to the writing of progress reports, sales and statistical reports, and other types of office, clinical, and scientific material.
3 lectures, 3 credits
Prerequisite: WRT-101
Prerequisite or Corequisite: WRT-201 or by permission of the Department Head

WRT-204 Creative Writing is a
workshop course in which students write in such forms as poetry, fiction, and drama. Students read and discuss each other's work as well as that of published authors.
3 lectures, 3 credits
Prerequisite: WRT-101

## WRT-205 Creative Writing

Workshop in Fiction gives students the opportunity to focus on the elements of fiction writing. Students read and discuss each other's work. 3 lectures, 3 credits
Prerequisite: WRT-101

## Directory

## The following pages contain a listing of the college's governing boards, administration, faculty, and advisory committees.

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| :--- |
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## Bergen Community College Board of Trustees

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## Administrative Staff

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Nancy Carr, Director of Specialized Services and Director of the Center for Collegiate Deaf Education; B.A., State University of New York; M.Ed., Kent State University; Certificate in Administration in Rehabilitation Programs, San Diego University
Patricia Denholm, Director of Sidney Silverman Library and Learning Resource Center; B.A., University of Akron; M.S.L.S., Pratt Institute

Barbara Erdsneker, Director of Research and Planning; B.S., M.A., The City College of New York; M.S., Iona College

Sharon Goldstein, Director of Cooperative Education and Career Development; B.A., St. Peter's College; M.A. Montclair State University
Nancy Haiduck, Director of Public Relations; B.A., Brooklyn College, M.Ed., Baruch College, The City University of New York
Walter Hecht, Assistant Dean of the Philip Ciarco Jr. Learning Center; A.A., Edward Williams College; B.A., M.A.T., Fairleigh Dickinson University
Ilene Kleinman, Director of the Division of Continuing Education; B.A., M.B.A., Rutgers, The State University of New Jersey

Moaz Kurdali, Director of Purchasing and Services; B.B.A., Damascus State University; MBA, Fairleigh Dickinson University
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Lois E. Marshall, Dean of Community Services; Professor; B.A., Paterson State College; M.A., Montclair State College; M.A., Teachers College, Columbia University

Edward G. Mather, Dean of Business, Mathematics, and Social Sciences; Associate Professor; B.A., M.A., Montclair State University
Mary O'Malley, Director of Student Development; B.S., Montclair State University; M.Ed., University of South Carolina

Lamont Pride, Director of Registration and Student Information Services; B.A Hunter College, The City University of New York; M.B.A. Fairleigh Dickinson University

Elliot R. Pruzan, Director of Learning Outcomes Assessment and Testing; B.A., M.A., Ph.D.,Boston University
Joseph Roberto, Director of Financial Aid; B.S., M.A., Ed.S., Certificate in International Marketing, Seton Hall University
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## Academic Department Heads and Coordinators

Brian Altano, Coordinator, American Language Program; Professor; B.A., M.A., M.Phil., Columbia University
Robert Amitrano, Coordinator, Biological Sciences; Associate Professor; B.S., Seton Hall University; D.C., New York Chiropractic College
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Athletics 201-447-7182
Bookstore ..... 201-447-9298
Building \& Grounds 201-447-7107
Bursar. 201-447-7105
Cafeteria. 201-447-9251
Career Counseling ..... 201-447-7171
Child Development Center 201-447-7165
Ciarco Learning Center (Hackensack) ..... 201-489-1551
College Work Study Program ..... 201-447-7462
Collegiate Deaf Education 201-447-7844
TTY Phone 201-447-7845
Community and Cultural Affairs 201-447-7428
Continuing Education 201-447-7488
Cooperative Education /Career Development Center 201-447-7171
Counseling Center ..... 201-447-7211
Dental Hygiene Clinic 201-447-7180
Distance Learning ..... 201-612-5574
East Hall Administration ..... 201-447-7225
Educational Broadcast Center ..... 201-447-7437
Educational Opportunity Fund (EOF) ..... 201-447-7139
English Language Resource Center 201-612-5292
Evening Office ..... 201-447-7172
Executive Vice President ..... 201-447-7205
Financial Aid 201-447-7149
Foundation 201-447-7117
Health Services
EMERGENCY DIAL 2 201-447-9257
Institute for Learning in Retirement 201-447-7156
International Student Admissions ..... 201-447-7195
International Student Advisor ..... 201-447-7211
Job Placement ..... 201-447-7171
Library ..... 201-447-7131
Maintenance ..... 201-447-7107
Media Center ..... 201-447-7132
President's Office. 201-447-7237
Public Safety Office
EMERGENCY DIAL 6 201-447-9200Registration and StudentInformation Services201-447-7195
Service Learning ..... 201-447-7171
Specialized Services for Students with Disabilities ..... 201-612-5270
Student Activities ..... 201-447-7215
Student Government ..... 201-447-7452
Student Newspaper ..... 201-447-3029
Student Services Vice President ..... 201-447-7491
Switchboard ..... 201-447-7100
Technology Assisted Learning Lab
(TALL) ..... 201-447-7988
Television Studio ..... 201-447-7221
Testing and Assessment ..... 201-447-7203
Transcript Requests ..... 201-447-7195
Transfer Counseling ..... 201-447-7212
Tutoring Center ..... 201-447-7489
Veterans Office ..... 201-447-7148
Welcome Center ..... 201-447-7200
Wellness Center ..... 201-612-5365
Writing Center .201-447-7136
Academic Divisions
Academic Vice President ..... 201-447-7190
Arts and Humanities ..... 201-447-7133
Arts \& Communications ..... 201-447-7143
English ..... 201-447-7168
Philosophy and Religion ..... 201-447-7167
World Languages and Cultures ..... 201-447-7167
Business, Mathematics, and
Social Sciences 201-447-7184
Business ..... 201-447-7214
Mathematics and Computer Science ..... 201-447-7975
Social Sciences ..... 201-447-7468
Science and Health ..... 201-447-7178
Allied Health ..... 201-447-7944
Nursing ..... 201-447-7181
Science and Technology ..... 201-447-7140
Wellness and Exercise Science. .201-447-7899


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[^0]:    * The actual dates are published in the Registration booklet each semester. "Weeks" are figured based on the starting date of the semester. For example, if the semester starts on a Wednesday, the first week of classes ends on the following Tuesday.

[^1]:    - International students are not eligible for this program.
    § In order to be considered for admission, you must submit the following documents: Allied Health and Nursing applicant checklist, and all official academic credentials such as high school record, GED scores, and any college transcripts. International students are not eligible to apply for these programs until they have completed their first semester.
    * The day Nursing program considers applications only for the fall semester.
    ** The evening Nursing program considers applications only for the spring semester.
    *** This program can also be completed online.
    $\dagger$ These programs are for practicing professionals whose experience in the field has gained them the equivalent of one year of study in a two-year program.

[^2]:    *Lab Science Elective. To receive full general education credit for CHM140, a student must also take CHM141, and for CHM240, a student must also take CHM241.
    tSome colleges may require both BIO109 and BIO209 before transfer credit is awarded.
    -These courses satisfy the BCC Diversity Requirement.

[^3]:    * General Education Elective in History - see page 63
    ** General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
    *** General Education Elective - see page 63.

[^4]:    * General Education Elective in History - see page 63.
    ** General Education Electives in Arts and Media, Philosophy and Religion, or World Languages - see page 63.
    *** General Education Elective - see page 63.
    $\dagger$ See page 63.
    $\ddagger$ Select any two Literature courses.
    Diversity Requirement Applies

[^5]:    * See page 63. Recommended: PHR101 Introduction to Philosophy.
    ** General Education Elective in History - see page 63.
    *** General Education Elective - see page 63.
    $\dagger$ See page 63. Recommended: PHR103 Basic Logic.
    $\ddagger$ Select any Philosophy course.
    - General Education Electives in Arts and Media, Literature, or World Languages - see page 63.
    Diversity Requirement Applies

[^6]:    * See page 63. Recommended: POL101 American Government or POL107 Introduction to Politics.
    ${ }^{* *}$ General Education Elective in History - see page 63.
    *** General Education Elective in Mathematics/Computer Science - see page 63. Recommended: MAT150 Elementary Statistics.
    $\dagger$ General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
    $\ddagger$ Select any Political Science course.
    - General Education Elective - see page 63.
    - General Education Elective in Anthropology, Economics, Geography, Psychology, or Sociology - see page 63.
    Diversity Requirement Applies

[^7]:    Diversity Requirement Applies

[^8]:    * See page 63. Recommended: PHR120 Introduction to Religion.
    ** General Education Elective in History - see page 63.
    *** General Education Elective - see page 63.
    † See page 63. Recommended: PHR121 Religions of the World.
    $\ddagger$ Select any Religion course.
    - General Education Electives in Arts and Media, Literature, or World Languages - see page 63.
    Diversity Requirement Applies

[^9]:    * See page 63.
    ** General Education Elective in History - see page 63.
    *** General Education Elective - see page 63.
    $\dagger$ General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
    $\ddagger$ Select any two courses from the fields of Anthropology, Economics, Geography, Political Science, Psychology, or Sociology.
    Diversity Requirement Applies

[^10]:    * See page 63. Recommended: SOC101 Sociology.
    ${ }^{* *}$ General Education Elective in History - see page 63.
    *** General Education Elective - see page 63.
    $\dagger$ See page 63.
    $\ddagger$ General Education Electives in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
    - Select any Sociology or Anthropology course.
    $\bullet$ General Education Elective in Economics, Geography, Political Science, or Psychology - see page 63.
    Diversity Requirement Applies

[^11]:    * Choose one of the following: WEX201, WEX202, WEX204, WEX205, WEX206, WEX208.
    ** Choose at least one of the following: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

[^12]:    * General Education Elective - see page 63.
    ** General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
    *** General Education Elective in History - see page 63.
    † Recommended: MUS101 Music Appreciation; MUS110 Music, Art, and Drama; THR101 Introduction to Theatre
    Diversity Requirement Applies

[^13]:    * General Education Elective - see page 63.
    ** General Education Elective in Arts and Media, Literature, Philosophy and Religion, or World Languages - see page 63.
    *** General Education Elective in History - see page 63.
    $\dagger$ Recommended: MUS101 Music Appreciation; MUS110 Music, Art, and Drama; THR101 Introduction to Theatre
    Diversity Requirement Applies

[^14]:    * General Education Elective in Arts and Media, Literature, Philosophy and Religion,or World Languages - see page 63.
    ** General Education Elective - see page 63.
    *** General Education Elective in History - see page 63.
    $\dagger$ Recommended: THR101 Introduction to Theatre; MUS110 Music, Art, and Drama; THR140 Introduction to Cinema
    $\ddagger$ Dance Technique classes should be selected from those DAN classes offered each semester.
    Diversity Requirement Applies

[^15]:    * MAT280 Calculus I is required of all students in Natural Sciences and Mathematics programs.
    ** Choose one of the following: WEX201, WEX202, WEX204, WEX205, WEX206, WEX208.
    *** Choose at least one of the following: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

[^16]:    * General Education Elective - see page 63.
    ** CHM140/CHM141 General Chemistry I and CHM240/241 General Chemistry II are recommended.
    Diversity Requirement Applies

[^17]:    * General Education Elective - see page 63.
    ** The student must choose among the following courses: Mathematics: MAT250
    Computer Science: CIS165, CIS265, CIS288
    Natural Sciences: CHM140/141 and CHM240/241, or PHY186 and PHY286 or PHY190 and PHY290.
    This elective requirement in the first, third, and fourth semesters must total at least 16 credits, including at least one course in Computer Science and at least one 8-credit sequence in Laboratory Science.
    Diversity Requirement Applies

[^18]:    * MAT280, MAT281, MAT282, and MAT283 are required of all students in the Engineering Science program.
    ** Choose one of the following: WEX201, WEX202, WEX204, WEX205, WEX206, WEX208.
    *** Choose at least one of the following: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

[^19]:    * General Education Elective - see page 63.

    Diversity Requirement Applies

[^20]:    Diversity Requirement Applies

[^21]:    * Choose one of the following: WEX201, WEX202, WEX204, WEX205, WEX206, WEX208.
    ** To fulfill these requirements for the AAS degree, the student must follow one of the AAS degree programs listed on the following pages.
    *** Choose at least one of the following: ANT101; HIS105; HIS116; HIS121; HIS126; HIS130; HIS131; LIT203; LIT204; LIT215; LIT218; LIT224; LIT228; PHR106; PHR121; PHR122; PSY207; SOC120; SOC121; SOC222.

[^22]:    * General Education Elective - see page 63.
    ** PHY186 General Physics I required of Diagnostic Medical Sonographers as a substitute for CHM100 Introduction to Chemistry

[^23]:    * Prerequisite for Program - Passing score on CHM100 Challenge Exam or CHM100 Introduction to Chemistry.
    ** Recommended: MAT130, MAT150, MAT155, or MAT180.
    *** General Education Elective - see page 63.

[^24]:    * General Education Elective - see page 63.

[^25]:    * General Education Elective - see page 63.
    $\dagger$ Recommended: MAT130, MAT150, MAT155, or MAT180.

[^26]:    * Course uses Macintosh computers
    ** Course uses Intergraph NT in S250 multimedia lab
    *** General Education Elective - see page 63.
    $\dagger$ Recommended: ART101 Art Appreciation, ART102 Art History Through the Renaissance, ART103 Art History Since the Renaissance, or MUS110 Music, Art, and Drama
    $\ddagger$ "Studio Art" Electives do not include Art Appreciation and Art History

[^27]:    * The student should choose from INF101 Introduction to Information Technology or INF114 Microsoft Office.
    ** General Education Elective - see page 63.
    *** Specialized course that may be offered only in the evening.
    $\dagger$ ECO101 Macroeconomics is recommended.
    $\ddagger$ Choose any BUS course.
    - Restricted Accounting Electives ACC203 Intermediate Accounting II ACC107 Federal Taxation ACC220 Peachtree Accounting/Excel Applications

[^28]:    * General Education Elective - see page 63.
    ** Class offered only during fall semester.
    *** Class offered only during spring semester.

[^29]:    * General Education Elective - see page 63.
    ** Class offered only during fall semester.
    *** Class offered only during spring semester.

[^30]:    * Credit-by-exam tests are available for Keyboarding I
    ** General Education Elective.- see page 63.
    *** Restricted Elective: (Elective 1-2 cr.) from INF120, INF124, INF151, or INF228.

[^31]:    * General Education Elective - see page 63.
    $\dagger$ Taking one of the following Mathematics electives is strongly recommended:

    MAT150 Elementary Statistics
    MAT155 Finite Mathematics
    MAT223 Calculus for Managerial \& Social Sciences
    MAT280 Calculus I

[^32]:    * General Education Elective - see page 63.
    ** Restricted Electives: DFT208, DFT211, DFT282, MFG119, MAT150, MAT280. It is recommended that students planning to transfer to a baccalaureate degree program make the choice of MAT280.

[^33]:    * Evening Nursing applicants cannot be accepted until general corequisites (8 courses) have been completed. Evening nursing program accepts students for spring only.
    ** General Education Elective - see page 63.
    Exit Examination: A nationally standardized examination will be given in the fourth level of the nursing curriculum. Only those students who achieve a passing score and have met all other degree requirements will be certified by the Director to take the NCLEX-RN. There is no fee for this test. There will be a fee for repeat exams.

    Note: Students enrolled in this program ARE REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

[^34]:    * Course uses Intergraph NT computers.
    ${ }^{* *}$ General Education Elective - see page 63.
    *** Course uses Macintosh computers.

[^35]:    * General Education Elective - see page 63.
    ** Information Technology Elective : INF101, INF114, INF140,
    (INF151 and INF251)

[^36]:    * General Education Elective - see page 63.
    ** Restricted Electives: HRT113, HRT232, HRT233.

[^37]:    * Instrumental or vocal ensembles: MUS121, MUS122, MUS123, MUS124, MUS125, MUS126, MUS127, MUS128, MUS140, MUS141, MUS142, MUS143
    ${ }_{* * *}^{* *}$ General Education Elective - see page 63.
    *** Restricted Electives: MUS133, MUS134, MUS152, all MUA courses

[^38]:    * Specialized course that may be offered only in the evening or online.
    ** General Education Elective - see page 63.

[^39]:    *Offered only in the spring

[^40]:    All students must be registered/licensed radiographers [RT(R)/LXT] in good standing to enroll in this program.

    Note: Students enrolled in this program ARE NOT REQUIRED to successfully complete a course in basic algebra if indicated by the Basic Skills Placement Test.

