County Executive

Charles I. Ecker

County Council

Charles Feaga, Chairman
Darrel Drown, Vice-Chairman
C. Vernon Gray
Mary Lorsung
Dennis Schrader



Designs from the original Howard and Calvert family crests—the heritage of Howard County—are displayed in the HCC symbol, proudly showing the College's commitment to serving Howard County, and to providing high quality education to its citizens.

Howard Community College is a public two-year college sponsored by Howard County and the State of Maryland.

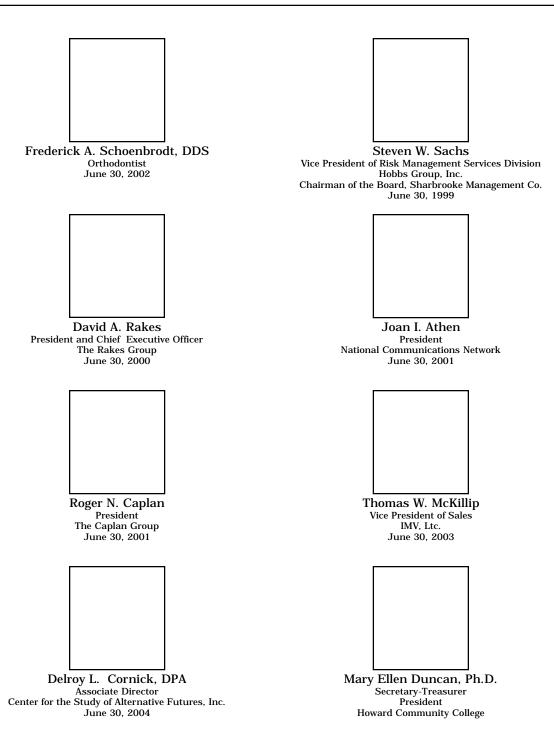


CATALOGUE 1998 • 99

June, 1998

The college reserves the right to change unilaterally without notification any requirement, fee or program if it is deemed necessary.

BOARD OF TRUSTEES



1998-99 ACADEMIC CALENDAR

CREDIT PROGRAMS

| Summer | Coccion | TT | 1000 |
|---------|---------|----|------|
| Silmmer | Session | | 1998 |

| July 3 | Independence Day Observed - COLLEGE CLOSED |
|----------|--|
| | Classes Begin |
| August 7 | Classes End |

| Fall 1998 | |
|-----------------------|--|
| August 29 | . Regular Weekend Classes Begin |
| August 31 | . Classes Begin |
| September 5-7 | . Labor Day - COLLEGE CLOSED |
| September 11 | . Telecourses, Fast Track Courses, and Weekend College |
| | Classes Begin |
| November 25-29 | . Thanksgiving Recess for Students - NO CLASSES |
| November 26-29 | . Thanksgiving Recess for Faculty and Staff - COLLEGE CLOSED |
| December 13 | . Classes End |
| December 14-20 | . Exams |
| December 24-January 1 | . Winter Recess - COLLEGE CLOSED |

Intersession 1999

| January 4 | . Classes Begin |
|------------|--|
| January 18 | . MLK, Jr. Day Observed - COLLEGE CLOSED |
| January 29 | . Classes End |

Spring 1999

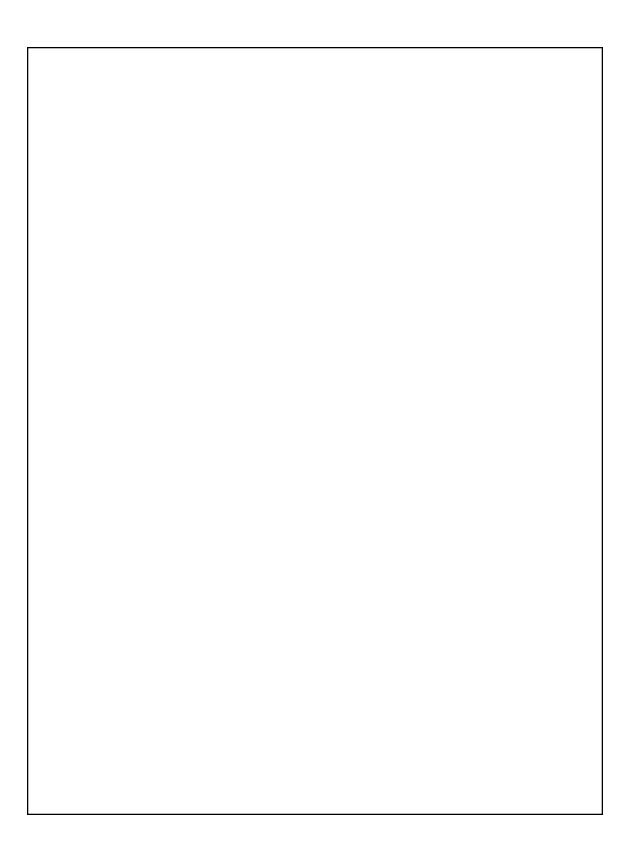
| January 30 | . Classes Begin |
|------------------|--------------------------------|
| March 29-April 4 | Spring Recess - COLLEGE CLOSED |
| May 14 | . Classes End |
| May 15-20 | . Exams |
| May 20 | . Commencement |
| May 31 | Memorial Day - COLLEGE CLOSED |

Summer Session I 1999

| June 1 | Classes | Begin |
|--------|---------|-------|
| July 2 | Classes | End |

CREDIT FREE PROGRAMS

REGISTRATION FOR CREDIT-FREE COURSES IS ONGOING AS CLASSES BEGIN DAILY. Quarterly brochures listing classes are delivered to all homes in Howard County in March, May, August, and December.



| P | Page | |
|---|-----------|---------------------------------------|
| Academic Calendar | iii | |
| Directory for Assistance | ix | |
| General Information | 1 | |
| | 1 | College Profile |
| | 1 | Nondiscrimination, Equal Opportunity, |
| | | and Affirmative Action |
| | 2 | College Mission |
| | 2 | Statement of Beliefs |
| | 2 | Accreditation and Membership |
| | 2 | Educational Foundation |
| | 2 | HCC Alumni and Friends Association |
| | 3 | Student Residency |
| | 4 | Student Injuries |
| | 4 | Student Health Insurance |
| | 4 | Tuition Charges |
| | 6 | Learning Centers |
| | 7 | Computer Services |
| | 8 | Student Conduct |
| Admissions Policies and Procedures | 11 | |
| Financial Aid Policies and Procedures | 15 | |
| Academic Information | 21 | |
| | 23 | Associate in Arts Degree Requirements |
| | 23 | Associate in Applied Science Degree |
| | 23 | Certificate of Proficiency |
| | 23 | Letter of Recognition |
| | 23 | Placement Testing |
| | 24 | Credit for Prior Learning |
| | 27 | Honors and Academic Recognition |
| | 28 | Academic Procedures |
| | 30 | Registration and Enrollment |
| | 31 32 | Academic Standards |
| | 32 33 | Grading System |
| Student Services | 35 | Academic Honesty |
| Student Services | 35 | Admissions |
| | 36 | New Student Orientation |
| | 36 | Advising Services |
| | 37 | Career Services |
| | 38 | Academic Support Services |
| | 39 | Personal Counseling |
| | 39 | Test Center |
| | 40 | Student Life |
| Transfer Policies | 43 | |
| Continuing Education | 53 | |
| Statewide Instructional Programs | 55 | |
| Curriculum Profile | 54 | |
| | | |

| , | Page | |
|-----------------------------------|------|--------------------------------------|
| Curricula | 59 | |
| Currena | 59 | Program Selection |
| | 59 | General Education Requirements |
| | 60 | General Education Core Requirements |
| | 62 | Student Responsibilities |
| | 63 | Categories of Electives |
| | 63 | Course Codes |
| CurriculaTransfer Programs | 65 | Course codes |
| Curriculariansici riograms | 66 | Arts and Sciences |
| | 66 | Architecture |
| | 67 | Art |
| | 68 | Criminal Justice |
| | 69 | Environmental Science |
| | 70 | Health and Fitness Education |
| | 70 | Laboratory ScienceBiotechnology |
| | 73 | Liberal Arts |
| | 74 | Liberal ArtsDegrees at a Distance |
| | 75 | Life Sciences |
| | 76 | Music |
| | 77 | Nursing |
| | 78 | NursingLPN Pathway |
| | 79 | Photography |
| | 80 | Physical Sciences |
| | 81 | Pre-Allied Health |
| | 72 | Pre-Dentistry |
| | 83 | Pre-Medicine |
| | 84 | Pre-Medical Technology |
| | 85 | Pre-Nuclear Medicine Technology |
| | 86 | Pre-Optometry |
| | 87 | Pre-Pharmacy |
| | 88 | Pre-Veterinary Medicine |
| | 89 | Psychology |
| | 90 | Social Sciences |
| | 91 | Theatre—Performance |
| | 92 | Theatre—Technical |
| | 93 | Business Administration |
| | 93 | Accounting, Business Administration, |
| | | Fashion Merchandising |
| | 94 | Information Systems Management |
| | 96 | Computer Science |
| | 97 | Engineering |
| | 98 | General Studies |
| | 99 | General StudiesDegrees at a Distance |
| | 100 | Teacher Education—Early Childhood/ |
| | | Elementary |
| | 101 | Teacher EducationSecondary |

| | Page | |
|----------------------------|------------|---|
| Curricula—Career Programs | 102 103 | Accounting Propagation for the CDA |
| | 103 | AccountingPreparation for the CPA Examination |
| | 104 | Biomedical Engineering Technology |
| | 106 | Business Management |
| | 109 | Cardiovascular Technology |
| | 113 | Chemical Dependency Counseling |
| | 114 | Computer Aided Design Technology |
| | 116 | Computer Support Technology |
| | 119 116 | Early Childhood Development Electronics Technology |
| | 123 | Telecommunications Technology |
| | 125 | Laboratory Science (Biotechnology) |
| | 126 | Network Administration |
| | 128 | Novell Certification |
| | 130 | Microsoft Certification |
| | 131 | Nursing |
| | 132 | Practical Nursing |
| | 133 137 | Office Technology Paralegal Studies |
| | 139 | Plant Science |
| Course Descriptions | 141 | Tidit Science |
| | 141 | Accounting (AC) |
| | 142 | Art and Photography (AR) |
| | 147 | Biology (BY) |
| | 150 | Biomedical Engineering Technology (BT) |
| | 150 | Business Administration (BU) |
| | 151 153 | Cardiovascular Technology (CV) Chemistry (CH) |
| | 154 | Computer-Aided Design (CD) |
| | 155 | Computer Systems (CS) |
| | 162 | Cooperative Education (CO) |
| | 162 | Criminal Justice (CJ) |
| | 162 | Dance (DA) |
| | 164 | Economics (EC) |
| | 165 167 | Education (ED) |
| | 169 | Electronics (EL) Engineering (EN) |
| | 170 | English (EG) |
| | 176 | Film (FM) |
| | 176 | Fine Arts (FA) |
| | 177 | Financial Planning (FP) |
| | 177 | French (FR) |
| | 178 | Geography (GE) |
| | 178 | German (GR) Health Care (HC) |
| | 179 | nealth Care (HC) |

|] | Page | |
|--|------|------------------------------------|
| Course Descriptions (continued) | 179 | Health Education (HE) |
| • | 182 | History (HY) |
| | 185 | Human Development (HD) |
| | 186 | Life Fitness (LF) |
| | 189 | Management (MN) |
| | 190 | Mass Media (MM) |
| | 190 | Mathematics (MA) |
| | 195 | Microsoft (MS) |
| | 196 | Music (MU) |
| | 199 | Novell (NT) |
| | 200 | Nursing (NU) |
| | 202 | Office Technology (OT) |
| | 205 | Philosophy (PL) |
| | 206 | Physics (PS) |
| | 208 | Plant Science (PT) |
| | 209 | Political Science (PO) |
| | 210 | Psychology (PY) |
| | 211 | Retailing (RE) |
| | 211 | Russian (RU) |
| | 211 | Science (SC) |
| | 212 | Sociology (SO) |
| | 214 | Spanish (SP) |
| | 214 | Speech (SH) |
| | 215 | Smalltalk (ST) |
| | 215 | Theatre (TH) |
| | 217 | Women's Studies (WS) |
| College Staff | 219 | |
| | 219 | Administrative Staff |
| | 220 | Professional Staff |
| | 222 | Faculty |
| | 226 | Part-time Professional Staff |
| | 227 | FacultyGrant Funded |
| | 227 | ProfessionalGrant Funded |
| | 227 | Part-time ProfessionalGrant Funded |
| | 227 | Emeriti |
| | 229 | |
| | 233 | |
| Maps | 236 | |

DIRECTORY FOR ASSISTANCE

Area Code: 410 Main Switchboard: 772-4800 www.howardcc.edu

Information may be obtained by writing or phoning the office listed. Correspondence should be directed to the person listed and addressed to:

Howard Community College 10901 Little Patuxent Parkway Columbia, MD 21044-3197

Admissions

Director of Admissions and Advising 772-4856 V/TDD

Advising

Director of Admissions and Advising 772-4856 V/TDD

Alumni Affairs

Director of Development and Alumni Relations 772-4450

Art Gallery

Division Chair, Humanities 772-4941

Assessment of Prior Learning

772-4615

Business Training Center

Director of Business and Economic Development 772-4808

Career Services, Job Placement, Cooperative

Education

Coordinator of Career Services

772-4840

Computer Lab

772-4987

Continuing Education

Executive Director of Continuing Education 772-4823

Counseling/Crisis Intervention

Director of Academic Support and Career Services

772-4840

Educational Foundation

Director of Development and Alumni Relations

772-4450

Equal Opportunities & Affirmative Action

Director of Human Resources

772-4817

Faculty Hiring

Director of Human Resources 772-4817

Industry Certification Programs (Microsoft,

Novell, A+)

715-4431

Library

772-4812

New Focus (Single Parents and Displaced Homemakers)

772-4954

Placement Testing

Test Coordinator 772-4856 V/TDD

Public Relations and Marketing

Director of Public Relations and Marketing 772-4810

Scholarships and Student Financial Aid

Director of Financial Aid

772-4912

Services for Students with Disabilities

Director of Academic Support and Career Services

772-4822 V/TDD

Student Employment

Director of Financial Aid 772-4912

Student Support Services

Assistant Director of Student Support Services 772-4822 V/TDD

Telecourses/Distance Learning/Fast Track

Director of Lifelong Learning

772-4824

Theatre and Rep Stage

Box Office

772-4900

General Manager

772-4947

Transcripts

Director of Records and Registration 772-4764

Transfer Information and Advising

Transfer Coordinator

772-4856

Tuition and Fees/Student Billings/Refunds

Supervisor of Accounts Receivable 772-4850

Tutoring

Coordinator of Learning Assistance Center 772-4822 V/TDD

Use of College Facilities

Office of Public Relations and Marketing 772-4810

Veterans Inquiries

Director of Financial Aid 772-4856

Emergency Closing of the College

If, due to inclement weather or other emergencies that force the college or any off-campus facility to suspend classes or close, public service announcements will be provided to local radio and television stations as early as possible. Refer to the schedule of classes for listing of stations.

General Information

COLLEGE PROFILE

Situated on a 120-acre wooded campus, Howard Community College (HCC) offers a wide range of academic pursuits and extracurricular activities for students of all ages and walks of life.

About 5,000 students pursue studies at HCC in a variety of academic programs leading to transfer to four-year colleges or immediate employment upon graduation. An additional 12,000 students take courses for personal or professional development.

HCC is the leading choice for Howard County residents. About 44 percent of all undergraduates from Howard County are enrolled at HCC. HCC has a reputation as one of Maryland's most technologically advanced campuses for online classes taught via the Internet, Distance Learning Lab, and state-of-the-art multimedia computer labs for math, English, foreign language, and computer training.

Conveniently located in the heart of Howard County, the HCC campus features a Science and Technology Building, home to lasers, robots, computers, satellite links, and other tools for high-tech learning. The Galleria, a spacious two-story windowed atrium adjacent to the building, provides a pleasing space for quiet study, informal gatherings, or special events.

The physical education complex features a 25-yard, eight-lane pool; large gymnasium; and weight room. Nine acres of athletic fields support archery, tennis, hardball, softball, soccer and track.

Other facilities include the Library with more than 40,000 volumes of reference materials and online databases, the Nursing Building, and the Administration Building which contains offices, learning labs, and studios for

painting, music, photography and sculpture. The Alfred J. Smith, Jr., Theatre for the performing arts provides the setting for an outstanding cultural arts program. The Theatre Outback is a black box performance space for experimental theatre and student productions.

A Student Activities Center provides an exclusive domain for student government, newspaper and other student activities.

Founded by the Board of Education of Howard County, HCC was formally authorized by the Howard County Commissioners and approved by the State of Maryland in 1966. The first classes were held in October 1970.

NONDISCRIMINATION, EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

The Board of Trustees of Howard Community College is committed to providing equal opportunity through its employment practices, educational programs, admissions and the many services it offers to the community. The Board of Trustees has committed the college to undertake an affirmative action program to enhance equality of opportunity and the recruitment of minorities. It is the policy of the college to abide by all applicable requirements of state and federal law so that no person shall be discriminated against or otherwise harassed on the basis of race, religion, disability, color, gender, national origin, age, political opinion, sexual orientation, veteran status, or marital status. The college will adhere to applicable laws and regulations affecting affirmative action and equal employment opportunity.

COLLEGE MISSION

The mission of Howard Community College is to offer all residents of its service area equal access to high-quality instruction that results in a growth in knowledge, attitudes and skills necessary to function successfully as a transfer student, in a career and as a citizen.

STATEMENT OF BELIEFS

The college values the diversity of the student population and will offer a variety of educational opportunities at a reasonable cost which incorporates multiple teaching strategies and support services; calls upon students to accept responsibility for their individual growth; maximizes the use of its resources; and makes a significant contribution to the cultural, economic and social development of the community. The college fosters the professional development of its staff and supports academic freedom.

ACCREDITATION AND MEMBERSHIP

Howard Community College is fully accredited by the Middle States Association of Colleges and Secondary Schools and authorized by Maryland Higher Education Commission to offer programs of learning and to award the associate in arts degree, associate in applied science degree and certificate of proficiency.

The college's associate degree program in nursing is fully accredited by the National League for Nursing, the national accrediting organization, and approved by the Maryland Board of Nursing. Graduates of the nursing program, upon recommendation by the director of nursing and approval of the Maryland Board of Nursing, may sit for the registered nurse licensure examination.

The college also holds membership in a number of professional organizations including the American Association of Community Colleges, the National Association of College and University Business Officers, the Maryland Association of Community Colleges, the National Association of Community College Trustees, the National Accrediting Commission, National League for Nursing, and Alliance of Cardiovascular Professionals.

Howard Community College's programs of learning are fully approved by the Veterans Administration for veterans' benefits.

EDUCATIONAL FOUNDATION

The mission of the HCC Educational Foundation, Inc. is to raise funds to advance and support the programs and facilities of Howard Community College, to support equal access, and to ultimately make the college the pre-eminent institution of its kind. The directors of the foundation, all leaders in the business community, have recently completed a fund-raising campaign to build a two million dollar endowment for the purpose of providing scholarships for students.

In addition, to raise funds, the foundation cosponsors each year activities of interest to the community. The foundation solicits corporate and community dollars for events such as the Columbia Classic Grand Prix horse-jumping show. The foundation also sponsors tributes to community leaders by publicly recognizing their significant achievements and establishing scholarships in their names.

Established in 1978, the HCC Educational Foundation is a non-profit corporation which exists solely to conduct activities for the benefit of the college. The foundation provides funds for scholarships, cultural and curriculum development, and facilities enhancement.

HCC ALUMNI AND FRIENDS ASSOCIATION

The HCC Alumni and Friends Association was established in 1988 to provide the opportunity for graduates, former students and

friends of the college to maintain a meaningful relationship with the college and to work toward ways to continue to support the college. The Association is administered through the college's Development and Alumni Relations Office.

STUDENT RESIDENCY

The cost of education in Maryland community colleges is supported by student tuition, aid from the State of Maryland, and contributions from the sponsoring political subdivisions. The appropriate levels and percent of support by students and state and local governments are specified in state law and are provided in state and local appropriations. Equity in funding requires that the level of tuition and governmental support be computed based upon a student's place of legal residence.

A student is a state or county resident for tuition purposes if the student maintains legal residence in the state or county and has done so for a period of not less than three months before the date of the student's enrollment at the college.

Students whose official residence is outside the State of Maryland pay a higher tuition rate than those whose residence is within Maryland. Similarly, students residing in Maryland but outside the county or counties that support a community college pay a higher rate than county residents, but a lower rate than the rate charged for out-of-state residents. For these reasons, it is essential that the college be informed of the legal place of residence of each student.

General policies of the Maryland Higher Education Commission and the policies of the board of trustees of this college require that each student, at the time of initial enrollment in any credit course, signa legally binding statement affirming residency for tuition classification purposes. The statement need not be notarized, but must be affirmed under penalty of perjury as being true, correct, and complete to the best of the student's knowledge and belief. Students who refuse or fail to properly complete such a

statement will be assessed tuition at the out-ofstate rate.

In the course of the admissions process for enrollment in credit courses, each student will be required to show proof of residency. Students will also be required to show proof of residency at the time they change their address. Students who have signed the required statements and who can verify through factual evidence that they legally reside in Maryland or Howard County will be afforded the appropriate lower tuition rates.

According to General Policies of the Maryland Higher Education Commission, the following factors may be considered as substantiation of legal residency:

- Ownership or rental of local living quarters in which the student resides;
- Substantially uninterrupted physical presence, including the months when the student is not in attendance at the college;
- Maintenance in Maryland and in the county of all, or substantially all, of the student's possessions;
- Payment of Maryland state and local piggy back income taxes on all taxable income earned outside the state:
- Possession of a valid Maryland driver's license, with a local address specified if the student is licensed anywhere to drive a motor vehicle.

Persons who have made false statements or have presented false verification in regard to residency shall be charged the higher rates of tuition and may be subject to further college disciplinary measures. In addition, a person may be charged with perjury in a criminal action.

A foreign national lawfully admitted for permanent residence in the United States may be considered a resident for tuition purposes if the student meets the residency requirements as defined by state law. International citizens admitted to the United States for a limited period of time are not normally eligible for in-county or in-state tuition rates. Refer to page 13 for further details.

General questions about residency and tuition classifications should be directed to the Office of Admissions and Advising. Inquiries regarding specific provisions for active duty military personnel and their dependents, members of the Maryland National Guard, or international citizens should also be directed to the Office of Admissions and Advising.

STUDENT INJURIES

Howard Community College does not provide medical coverage for students who are accidently injured during classes or who suffer injuries as a result of incidents between students. All students are encouraged to obtain their own medical insurance, especially if they participate in classes and/or activities which require physical activity or exposure to other health risks (e.g. nursing classes, science labs, physical education activities, dance and theater classes, clubs and student government activities, etc.)

STUDENT HEALTH INSURANCE

The college does not administer a student medical insurance plan, but the Student Insurance Division of United Insurance Companies will provide voluntary medical insurance for HCC students. If you are interested in more information about health insurance, please contact the Office of Student Life, SA-201.

TUITION CHARGES

(All fees and tuition are subject to change.)

| | Per | Maximum |
|-------------------------------|-----------|---------------|
| | Credit | Per |
| | Hour | Semester |
| Howard County Resident | \$81 | \$1215 |
| Maryland Resident | | |
| of Other County | \$152 | \$2280 |
| Out of State Resident | \$220 | \$3300 |
| Please note that lab fees a | re attach | ed to certain |
| courses. | | |
| | | |

Standard Enrollment Fees

| Application Fee | . \$15 |
|--|--------|
| Special Program Application Fees: | |
| International Student Application Fee | . \$55 |
| Rouse Scholars Program | . \$30 |
| Summer Scholars Program | \$20 |
| (International citizens: see information | listed |
| under Admissions Policies and Procedur | es) |

Consolidated Fee All students, including senior citizens, pay a consolidated fee. The fee is 10% of the amount determined by multiplying the number of credits for which the student is enrolling and the in-county student tuition rate, regardless of the student's residence. This is a fee plan presented by the Student Government Association and approved by the Board of Trustees in March, 1985.

Of the 10% consolidated fee, the following allocation levels are used to support each area:

- 1.0% Instructional Materials
- 1.7% Technology Fee
- 2.8% Building Fund
- 4.5% Student Activities Fees

| Late Registration | Fee | \$5 |
|-------------------|--------------------|-----|
| Schedule Change | Fee (per add form) | \$5 |

Course-Related Fees

Certain courses offered by the college may require a special fee. These fees are identified in the Schedule of Classes published four times per year.

Other College Charges (Non-refundable)

| (1101110101101010) | | |
|---|--|--|
| Graduation (per certificate or degree) \$25 | | |
| ID Card (late or replacement) \$5 | | |
| Library Fine (overdue reserve | | |
| materials per item per day) \$.50 | | |
| Insufficient Fund Check Service Charge \$25 | | |
| Parking Permit (per vehicle, payable | | |
| at time of registration)\$5 | | |
| Proficiency Exam 50% of course tuition | | |
| Transcript Evaluation | | |
| Single learning program \$15 | | |
| Multiple learning programs \$25 | | |
| Traffic Violations \$20 | | |
| If not paid within 10 business days \$25 | | |

Tuition Payments

Tuition and fees are due and payable in full at the time of registration. Howard Community College accepts cash, checks, money orders, credit cards (VISA/Master Card only) and employer purchase orders as payments toward a student's tuition. Checks and money orders should be made payable to Howard Community College. All checks and money orders must include the student's name, current address and phone number on the face of the check. All returned checks are subject to a \$25 service charge.

If, for any reason, a parent, guardian or employer does not honor the check, credit card or purchase order, and fails to fulfill the financial obligation on behalf of the student, the student will beheld responsible for those financial obligations to the college. The college will issue grades and transcripts, and offer admission for subsequent semesters, only to those students whose financial obligations have been satisfied. Please keep receipts of all payments and registration transactions.

Tuition Waivers

The Board of Trustees of Howard Community College has approved a free tuition program for senior citizens residing in Howard County and enrolling in credit and credit free classes in which course space is available. This program, which follows approval by the Maryland State Legislature, enables all people 60 years of age or older or who are retired or disabled as defined by the Social Security or Railroad Retirement Acts to pursue an associate in arts degree or a certificate of proficiency, participate in college activities and enroll in a variety of creditfree courses and seminars. Students eligible for waivers are obligated to pay all additional college fees.

General Tuition Refunds

Tuition refunds are made only during the first week of the spring and fall semesters and the first few days of the intersession and summer semesters. To be eligible to receive a refund, a student must submit a Drop Form to the Registration Office on or before the deadline which appears under Dates and Deadlines in the Schedule of Credit Classes. Students will then be refunded 100% of tuition and related fees (less a \$25 transaction fee). No refunds will be made after this date.

Students who have paid their tuition but who have never attended or have stopped attending classes will not receive a refund if they neglect to submit a Drop Form to the Registration Office within the required time period. Classroom seats, reserved during registration, continue to be held for a student until an official Drop Form is processed in the Registration Office. Stopping payment on a tuition check or not attending a class(es) does not constitute an official drop.

Please allow two to three (2-3) weeks to receive your refund. The college does not issue cash refunds.

Federal Financial Aid Refunds

Refer to the Financial Aid section of this catalogue for further information.

Tuition Payment Plan

Howard Community College provides a tuition payment plan for credit students during the fall and spring semesters. (Non-credit students are not eligible to participate in this program.) The plan provides for five equal payments of estimated tuition and fees for a semester. The first payment is due two months before the semester begins. Please contact the business office well before the start of the semester for further information. (Note: Participation in this program restricts early registration options.)

Collection Procedure

A student with an outstanding balance at the end of the semester will have his/her grades, transcripts and registration withheld until the outstanding balance is paid in full. The college will make every effort to contact the student.

However, if our attempts are unsuccessful, the account will be turned over to a collection agency, and an additional charge of 35 percent of the outstanding balance will be added to the student's account.

LEARNING CENTERS

The Learning Centers Division, located on the second floor of the LRC Building, supports the instructional program of the college through the library, audio-visual services, tutoring, and the academic support services.

Library

The library contains over 40,000 items including books, video and audiotapes, compact discs, videodiscs, slides, records, films, and computer software. A periodical collection of approximately 700 titles is maintained, with back files of many of these journals and newspapers available in microform or on computer. Access to the library's holdings is available through HCC CAT, the online public access catalogue. With this automated library system, one can search by author, title, keyword and subject for books and audiovisual materials which are owned by the HCC Library. Other computer databases including ProQuest magazines and newspapers, a nursing index and a variety of other subject specific databases are available for student and community use via QuestNet, the Library's Local Area Network (LAN). Library tours and formal library instruction are available by appointment.

Audio Visual Services

AV Services include Graphic Arts Production and AV Equipment Distribution. The Production area provides resource support for instruction through the production of audiovisual materials: photographics, computer-generated art, instructional publications, transparency output services as well as support and training for faculty and staff in various levels of multimedia production, internet utilization, and on-line

instruction. Equipment Distribution provides resource support for instruction through the delivery and maintenance of audiovisual equipment to and from classrooms, labs and other offices. Additional services are provided for distance learning activities and satellite down-linking for teleconference support.

Academic Support Services

The Academic Support Services are part of the Learning Centers Division.

LEARNING ASSISTANCE CENTER

The Learning Assistance Center provides tutoring and academic support services to all students enrolled in credit courses who would like to become more successful and efficient learners. The LAC, located inside the library (L-230) on the second floor of the LRC Building, provides free group tutoring in most courses offered at the college. Drop-in tutoring service is scheduled and advertised each semester. The LAC conducts workshops on study skills, learning styles, time management, memory building, note-taking and test-taking. Drop-in help for writing assignments is available in the Write Room located inside the LAC. Tutoring, writing and study skills software are available for use on computers. Housed within the LAC area are a variety of other support services which include:

STUDENT SUPPORT SERVICES

Student Support Services is a federallyfunded program offering free comprehensive academic services to eligible students. Eligibility criteria include low-income and/or first generation college (neither parent received a four-year degree), and/or a documented disability.

The program's goal is to increase retention and graduation of students at the college. The Student Support Services program provides free individualized instruction by academic specialists in the areas of math, reading, writing, English as a second language, and study skills. Learning disabilities specialists assist students who have varying learning styles. Free individual tutoring is available in most courses. Personal,

academic, financial aid, career, and transfer counseling is available to program students. Advocacy, assistance with accommodation, and equipment is also available for students with disabilities.

SERVICES FOR STUDENTS WITH DISABILITIES

Students with physical or learning disabilities are encouraged to contact the Student Support Services office of the Learning Assistance Center upon admission to the college or when contemplating attending the college. This will give the college ample opportunity to respond to any special service needs of the student, as well as provide the student an opportunity to see what services are available. Prior to receiving accommodations and services, students must initiate a request with the Student Support Services office, (N-200, 410-772-4822, V/ TDD)and supply appropriate documentation of a disability. This information is provided to the Student Support Services office and is kept confidential unless the student signs a written waiver of release. Services provided to students with documented disabilities include: advocacy, tutoring, interpreters, readers, assistance with locating notetakers, alternate means of test-taking, counseling, and academic advising. Equipment such as the Arkenstone Reading Machine, Omni 3000, Dragon Dictate, tape recorders and magnifiers are available for student use. Students in need of sign language interpreters are encouraged to contact the student Support Services office at least two weeks prior to the start of classes

VOCATIONAL SUPPORT SERVICES TEAM

The Vocational Support Services Team (VSST) Program is designed for students enrolled in vocational/career programs who are having academic difficulties or for students with physical or learning disabilities enrolled in vocational/career programs. The VSST Program provides free small group and individual tutoring in vocational courses such as nursing, accounting and electronics. Group test reviews for vocational courses, study skills and test-taking

workshops are also available. The program also assists students with disabilities majoring in vocational/career programs with arranging accommodations and specialized equipment.

Students in need of any of the services provided by offices of the student Academic Support Services can apply by stopping by the Learning Assistance Center, L-230 or N-200 or by calling 410-772-4822 V/TDD.

COMPUTER SERVICES

The college provides a variety of computer services to meet the widespread needs of the entire college community through HCC's state of the art computer labs, computer classrooms, and on-line courses.

Academic Computer Support

Academic Computer Support (ACS) is the office which makes computer services available to students in the College Computer Lab and helps maintain all computer equipment, software and networking found in classrooms throughout the campus.

The College Computer Lab, located in the first floor of the Library Building, supplies users with computer hardware and software support in a quiet academic environment. IBM compatible Pentium computers, popular multimedia software packages, and laser printing services are available to students with a valid student identification or to non-students who have paid an entrance fee. Students may also access Internet with their own e-mail accounts. Lab consultants assist with basic hardware and software problems and provide students with additional computer related reading material and manuals. Stations for physically impaired students are located in the College Computer Lab and computer classrooms.

Computer Classrooms

Throughout the college campus are computer classrooms using cutting edge multi-media software for many subjects from simple word

processing to complex computer operations. On the main campus and at the Business Training Center there are classrooms where credited courses are taught in computer repair, computer applications, and computer networking. At the Hickory Ridge campus, classrooms are used for English, math and foreign language skills as well as for continuing Education.

Online Courses

Online courses allow students an opportunity to take class from home, office, or wherever they have access to a computer. Students interact with the instructor and other classmates via the Internet using e-mail, online discussions and chat groups. They can do classwork at their own pace, using Internet technology and tools. Students should be familiar with e-mail, accessing the Internet, and using Windows 3.1 or higher. Usually students find that their computer skills increase dramatically over the course of the semester. Internet connection requirements include direct access to an Internet service provider and an e-mail address.

Online chat is an integral part of many of our online courses. Chatting offers a real-time opportunity to exchange ideas and gives students a sense of being a part of a class. Most instructors will provide students with a variety of times to join a chat group. Transcripts of discussions can be saved and printed. For more information on online courses and other college services, the HCC homepage can be reached at http://www.howardcc.edu.

STUDENT CONDUCT

Student Conduct Code

Students must demonstrate proper behavior and conduct while on campus, attending college functions, or representing the college. Students are required to comply with the provisions of the conduct code and should become familiar with the judicial process. Information on these subjects can be found in the student handbook.

Sexual Harassment

The board of trustees of Howard Community College concurs in the action of the Maryland Higher Education Commission in recognizing that sexual harassment seriously damages the integrity of the educational institution, destroys the institution's positive work and educational atmosphere, and causes psychological and physiological damage to the victim. The board condemns such illegal activity and is strongly committed to promoting an educational and work environment free from sexual harassment of any form. For the purpose of these guidelines, the board adopts the sexual harassment definition promulgated by the United States Equal Employment Opportunity Commission.

It shall be a violation of this policy for any member of the college staff to harass a student or employee through conduct or communications of a sexual nature as defined below. It shall also be a violation of this policy for students to harass other students through conductor communications of a sexual nature as defined below or for students to harass staff.

Definitions Unwelcomed sexual advances, requests for sexual favors and other inappropriate oral, written or physical conduct of a sexual nature when made by a member of the college staff to a student or another employee or when made by a student to another student constitute sexual harassment when:

- a) submission to such conduct is made, either explicitly or implicitly, a term or condition of an individual's education or employment;
- b) submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual; or
- c) such conduct has the purpose or effect of substantially interfering with an individual's academic, professional or employment performance or creating an intimidating, hostile or offensive academic or employment environment.

Sexual harassment, as defined above, may include but is not limited to the following: ver-

bal harassment or abuse; pressure for sexual activity; repeated remarks to a person, with sexual or demeaning implications; unwelcome touching; and suggesting or demeaning sexual involvement accompanied by implied or explicit threats concerning one's grades, job, etc.

The college, upon receiving a sexual harassment complaint will ensure: 1) that the right to confidentiality, both of the complainant and of the accused, will be respected consistent with the college's legal obligations, and with the necessity to investigate allegations of misconduct and take corrective action when this conduct has occurred; 2) that persons filing complaints of sexual harassment will be protected against reprisals, but that the deliberate filing of false accusations of sexual harassment shall be condemned and may lead to possible disciplinary action.

A substantiated charge against an employee of the college shall subject that employee to disciplinary action, including discharge.

A substantiated charge against a student of the college shall subject that student to disciplinary action including suspension or expulsion.

Drug and Alcohol-Free Campus

It is the intent and obligation of the college to provide a drug-free, healthy, safe and secure educational environment. Students are expected to contribute to the desired environment by conducting themselves within the guidelines of the student conduct code.

The unlawful manufacture, distribution, dispensation, possession or use of illicit drugs or alcohol as a part of any Howard Community College activity whether on or off college premises is absolutely prohibited. Violations of this policy will result in disciplinary action, up to and including dismissal, consistent with normal college policy and procedures. In addition, any violations may have legal consequences consistent with local, state, and federal law. The college will cooperate with appropriate health and law enforcement agencies.

The college recognizes drug or alcohol abuse as an illness and a major health problem. The college also recognizes drug or alcohol abuse as a potential safety and security problem. Students needing help in dealing with such problems are encouraged to use their health insurance plans, the college Academic Support and Career Services Office and other appropriate community agencies. A list of other county agencies, and descriptions of various health risks associated with the use of illicit drug or alcohol abuse, is available in the offices of the Academic Support and Career Services, Student Life, Human Resources, and the Athletic Department.

Voluntary participation in an assistance program will not jeopardize enrollment at the college and will not be noted in any student record provided that behavior is consistent with established standards. However, voluntary participation in an assistance program will not prevent disciplinary action for violation of the policy described here.

For further information, pick up one of our Drug-Free Campus brochures in the Office of Student Life or on the table outside Security. The brochure includes the effects and corresponding names of a variety of drugs and lists local service agencies which provide assistance and support to those seeking help.

Admissions Policies and Procedures

Howard Community College maintains an open door policy of admission. Persons who have the maturity and ability to benefit from the college's learning programs will be admitted on a space available basis without regard to race, gender, age, religion, ethnic background, marital status, sexual orientation, political persuasion or disability. No student will be denied initial admission to the college on the basis of previous educational experience, except as prescribed by law.

Students must submit a completed application and a \$15 application fee. Application fees differ for international (F-1 students) and some special programs. Students must also provide proof of legal residency such as a driver's license or lease agreement. Students are encouraged to submit high school transcripts or transcripts from previously attended postsecondary institutions. This information is used to advise students and does not affect general admission to the college.

Although admitted to the college, students may not enroll in particular courses unless they have the necessary educational background. The college has a mandatory basic skills assessment policy. Placement tests are required for most students planning to enroll in English or math courses or courses with English or math prerequisites. Exceptions are made for students who provide transcripts verifying prior collegelevel English or math coursework. The English placement test is waived for students with an SAT verbal score of 600 or higher. The basic math placement test is not required for students with an SAT math score of 600 or higher who are planning to take MA 122, 124, 127 or 131. However, students seeking higher course placements must take advanced math placement tests. The Testing/Developmental Studies Policy

(page 23) provides further details regarding placement assessment requirements. All new incoming freshmen are also required to take the Academic Profile. This assessment provides the college with an important statistical profile of incoming freshmen. Individual results do not affect admission or placement and are not part of a student's academic record.

All students will be offered assistance in planning a program of learning in accordance with their academic background and goals. Students must attend a placement test information session or meet with an advisor to review placement test results. Students are strongly advised to begin any required developmental course sequences immediately and they are required to do so upon completion of 12 credits. Non-degree seeking students must meet with an advisor on or before completion of 12 credits to determine if they will be required to take placement exams.

There are additional admissions procedures required for high school, cardiovascular technology, nursing, transfer, international, and previously dismissed students. Different application procedures are required for the James W. Rouse Scholars Program and the Summer Scholars Program for High School Students (see page 35).

High School Students

Various enrollment options are available to high school students.

CONCURRENT ENROLLMENT—Juniors and seniors attending the college on this basis may enroll for a maximum of two courses per semester. Credits earned apply toward high school graduation only under highly specific circumstances. The award of high school credit for col-

ADMISSIONS POLICIES AND PROCEDURES

lege coursework is arranged through a student's high school and does not involve the college in any way. Requirements for admission include submission of the college's Early Entrance Program materials, along with official high school transcripts, and proof of legal residency. Appropriate placement testing is also required. Public and private high schools also have policies and procedures which students must follow.

SUMMER ENROLLMENT—Juniors and seniors may attend the college during the summer preceding their junior or senior year. Application procedures are identical to those for Concurrent Enrollment.

EARLY ADMISSION—This option enables seniors to complete high school graduation requirements at Howard Community College under very specific conditions. Students are required to complete thirty credits of college coursework, including at least one college-level English composition course. Students must apply for this option during their junior year. Application procedures include submission of the college's standard application, the application fee, high school transcripts, college entrance exam scores, proof of residency, and two letters of recommendation which address the student's academic ability and social and emotional maturity. Students must also submit a letter of consent from their high school principal and any other required school system officials. The college also requires an admissions interview attended by the student and a parent or guardian. Students must consult high school personnel regarding specific courses needed to fulfill high school graduation requirements. The college reserves the right to grant consent to enroll for the Early Admission option on a case by case basis. Consent to enroll is dependent upon what the college determines to be in the student's and its own best interests.

Gifted and Talented Students

Students in the eighth through tenth grades who are enrolled in public or private school

gifted and talented programs, or who have otherwise demonstrated outstanding ability, may be considered for admission on a case by case basis. In addition to the standard application, application fee, and proof of residency, students must submit the supplemental application for secondary school students, and official secondary school transcripts (including standardized test scores). Other documentation of outstanding abilities and maturity, such as test scores, recommendations, portfolios or awards, must be submitted to assist with admissions decisions. A pre-admission interview with at least one parent or guardian in attendance in addition to the student is required. Appropriate placement testing is also required. Students attending the college on this basis may enroll for a maximum of two courses per semester.

Howard Community College reserves the right to grant admission to secondary school students on an individual basis.

Cardiovascular Technology and Nursing Students

Applicants to the Cardiovascular Technology and Nursing Programs must have a high school diploma or General Education Development (GED) diploma. In addition to standard application procedures, supplementary procedures are required which vary by program. All nursing applicants are required to take the English placement test regardless of prior educational experience. Acceptance to clinical coursework is based upon fulfillment of clinical prerequisites, legal residency, and the availability of spaces.

As part of the clinical nursing application process, students must indicate whether they are seeking admission to the daytime or evening/weekend program. Once they accept a seat in the option they selected, students will be committed to that option for all subsequent clinical nursing semesters.

The Cardiovascular Technology Program is a statewide instructional program. All Maryland residents who fulfill program prerequisites are

ADMISSIONS POLICIES AND PROCEDURES

eligible to enroll at Howard County tuition rates. Clinical coursework is available as a day option only. Applicants to the Advanced Imaging and Analysis Certificate option must be certified radiologic technologists.

Prospective students must contact the Office of Admissions and Advising to arrange to attend the appropriate information session where program requirements, admission procedures and other topics are discussed.

Requirements for admission to clinical programs are subject to change. Students are responsible for ensuring they have fulfilled all requirements.

Transfer Students

Students planning to transfer to the college should arrange an appointment with an admissions counselor. In addition to standard application procedures, students seeking credit for prior college-level coursework must declare a major and officially request a transcript evaluation by completing and submitting a Transcript Evaluation Request form and the appropriate transcript evaluation fee (\$15 for a single learning program evaluation; \$25 for multiple evaluations). Transfer students must also submit official transcripts and appropriate catalogues and other documentation necessary for transcript evaluation. The college will award transfer credit when appropriate for prior college-level coursework successfully completed at foreign colleges and universities. However, students with foreign transcripts must have them evaluated by a nationally accredited foreign transcript evaluation service and submit such evaluations to the Office of Admissions and Advising for further review. Information regarding such services is available in the Office of Admissions and Advising. Details regarding credit for prior learning policies are provided on page 24.

Military Personnel and Veterans

Howard Community College welcomes the opportunity to assist military personnel, their families, and veterans in achieving their academic goals. The college is a member of Service

members Opportunities Colleges (SOC). The college also serves participants in the Veterans' Educational Assistance program.

In accordance with Maryland State law all active duty personnel are eligible to pay in-state tuition regardless of legal residence. Active duty personnel residing in Howard County are eligible to pay in-county tuition.

Active members of the Maryland National Guard are entitled to a twenty-five percent discount of their applicable tuition based upon legal residency. This discount does not apply to fees.

Military personnel and veterans should contact the Office of Admissions and Advising for information pertaining to enrollment, transcript evaluation, and tuition assistance. The Financial Aid and Veterans' Affairs Office should be contacted for information related to veterans' benefits, financial aid, student employment, and scholarships.

International Citizens

Admission eligibility and tuition vary for international citizens based upon immigration and residency status and federal and state laws.

F-1 IMMIGRATION STATUS—International citizens seeking admission with F-1 immigration status must consult the Office of Admissions and Advising. Admission requirements include:

- 1. Application for Admission and \$35 application fee
- Official transcript of the TOEFL: Test of English as a Foreign Language (score of 550 or more required)
- 3. Certification of Finances form, bank statements and statements of support
- 4. Official secondary school transcripts verifying graduation and grades
- 5. College/university transcripts (if applicable) translated in English.
- 6. Proof of health insurance for health care in the United States.

F-1 students are expected to be proficient in English. All requirements must be completed and submitted by the following dates: July 1 for the

ADMISSIONS POLICIES AND PROCEDURES

Fall semester; November 15 for the Spring semester; April 15 for the Summer semesters. All requirements and deadlines are strictly upheld.

F-1 students enrolled at other colleges or universities may attend Howard Community College. Specific procedures must be followed, including adherence to standard application processes, presentation of proof of immigration status (I-94), and submission of a letter of consent to enroll at Howard Community College prepared by the institution that issued their I-20.

OTHER INTERNATIONAL CITIZENS—International citizens with A, E, G, H, I, J, K, L,O, P, R, TD, TN, and NATO immigration status and Permanent, Conditional, and Temporary residents are eligible to attend the college. Students with B immigration status are admitted on a case by case basis. In addition to standard application procedures, proof of immigration status must be presented at the time of admission. Photocopied credentials are not acceptable.

International citizens with residency cards, or A, E, G, H, I, O, TD, and TN visas are eligible

for in-county/in-state tuition based upon place of residence while in the United States. Other international citizens are charged out-of-state tuition in accordance with state law.

International citizens are generally not eligible for financial aid with the exception of those with residency status. The Financial Aid Office verifies eligibility for financial assistance.

Students Seeking Readmission

Students who previously attended the college may need to update admission information. If this is necessary, a new application must be completed and proof of residency provided, however, the application fee will be waived. Students previously dismissed for academic reasons must submit a letter requesting approval for readmission from the vice president and dean of instruction. Nursing students should consult the Nursing Student Handbook to determine procedures for re-entry to clinical nursing coursework.

Financial Aid Policies and Procedures

It is the goal of the college that no student should be restricted from attending this institution because of limited financial resources. To meet this goal the college maintains a program of grants, scholarships, loans and part-time employment for eligible students who are accepted and enrolled in the college as certificate or degree-seeking students in good standing.

Application Procedures

Students should complete a Howard Community College Financial Aid Application and the Free Application for Federal Student Aid (FAFSA) to begin application procedures. These forms are available at the Financial Aid counter and from secondary school guidance offices. If a student has taken courses at a post-secondary school, other than Howard Community College, a financial aid transcript from each institution must be submitted.

Students seeking any type of financial aid should apply by May 15 (March 1 for Maryland State Scholarship). Applicants not attending HCC in the fall should apply for financial aid by November 1 for the Spring 1999 semester. These are priority deadline dates. Applications submitted on time are given first priority for limited grant funds. You may apply for the Pell Grant until June 30, 1999.

Transfer Students

All transfer students must have a Financial Aid Transcript(s) submitted to HCC whether or not they received financial aid at their previous institution(s).

If a transfer student received a Federal Pell Grant in the fall semester and is planning to attend Howard Community College the following spring semester, a duplicate copy of the Student Aid Report (SAR) or Information Acknowledgement SAR and the appropriate financial aid transcripts should be submitted to the Howard Community College Financial Aid Office.

If a transferring student has a Federal Stafford Loan (formerly named GSL) or Federal Unsubsidized Stafford Loan at another college in the fall semester and plans to attend HCC the following spring semester, the student must cancel any remaining reimbursements at the prior college and reapply at Howard Community College.

If a student received a Maryland State Scholarship, the student should check with the Maryland State Scholarship Administration to see if the scholarship can be transferred to HCC and, if so, to determine the amount of the award.

Eligibility Criteria

You are eligible for Financial Aid if:

- · You have a high school diploma or a GED.
- You are a U.S. citizen or an eligible noncitizen.
- You demonstrate financial need by filing Free Application for Federal Student Aid.
- You are making satisfactory progress toward completion of a degree or certificate.
- You are not in default on a Perkins Loan, Stafford Student Loan, Unsubsidized Stafford Student Loan, or PLUS at any postsecondary institution.
- You do not owe a balance or a refund on a Federal Pell Grant or Federal Supplemental Educational Opportunity Grant at any postsecondary institution.
- You are enrolled in an eligible certificate or a degree program at HCC*.

- You are in compliance with Selective Service registration.
- You have a Social Security Number.

*Students enrolled in programs not leading to a degree or certificate awarded by Howard Community College, such as CPA Preparation or Chemical Dependency Counseling or Paralegal Studies, are not eligible for Financial Aid through HCC.

You may receive aid only for classes which you are registered in as of the official last date to drop for the semester. You may not receive aid for late start classes such as Office Technology or mini-session classes such a Microsoft or Novell, unless you register for these classes during the first three weeks of the semester—before the official drop period for the semester has ended.

FINANCIAL NEED—Financial need is defined as the difference between your educational expenses at Howard Community College and the amount expected from you and/or your family. The college uses the Free Application for Federal Student Aid (FAFSA) to determine the amount of financial need of each applicant.

Satisfactory Academic Progress Standards

Financial aid is intended to meet the financial needs of the student who otherwise could/would not consider continuing their education. Students who receive financial aid must not only demonstrate financial need, but must also make satisfactory progress as determined by Howard Community College in accordance with federal regulations.

Financial aid recipients are required to be in good standing and to maintain satisfactory academic progress toward their degree requirements for each semester in which they are enrolled. Satisfactory academic progress, as described below, is evaluated at the end of the Fall and Spring semesters. Failure to maintain satisfactory progress, as described below, may result in cancellation of financial aid awards.

and the student may have to repay any funds already received.

Semester Requirements—The semester requirements for minimum satisfactory performance for financial aid recipients are defined as follows:

- 1. semester quality point average (QPA) of at least 2.0.
- completing at least 50% of attempted credits for the semester.

The minimum quality point average and the fifty percent completion standards will be reviewed at the end of the fall and spring semesters.

Cumulative Requirements—In addition to meeting the above minimum standards, federal regulations mandate that the following cumulative requirements also be satisfied:

- 1. At the end of the student's second year (as measured by credit hours attempted) the student has at least a cumulative grade point average of 2.0 (for example, earned at least a 2.0 cumulative QPA after attempting 48 credits).
- 2. The student must complete his or her educational program within a time-frame no longer than 150% of the published length of the educational program (for example, completed his or her program after attempting a maximum of 90 credits for a 60 credit program).

Required developmental courses are calculated into the QPA and are counted as regular course work. Required developmental courses will be added onto the program length when determining compliance with the 150% of program length completion requirement. Federal regulations require that the Financial Aid Office track the academic progress of financial aid recipients from the first date of enrollment, whether or not financial aid was received. Credits transferred from another institution will be considered as attempted and completed credits in the evaluation of the 150% program completion standard.

The two cumulative standards outlined above are eligibility requirements for student aid. Students who fail to meet the cumulative standards will be placed on Financial Aid Restriction, not Financial Aid Probation. No financial aid will be disbursed for the student during subsequent semesters unless the student has made an appeal of the Financial Aid Restriction and the appeal is granted for that semester. The only exception to this is that a student who is on Financial Aid Restriction because of failure to satisfy the 2.0 cumulative GPA requirements will regain eligibility when/if their cumulative GPA is raised to a 2.0 or above.

Treatment of W, I, L and N Grades and Repeated Course Work—

- Course withdrawals (W) after the drop/add period are not included in the QPA calculation, but are considered a non-completion of attempted course work.
- 2. Incomplete (I) grades are not included in the QPA calculation, but are considered a noncompletion of attempted course work until the Incomplete grade is replaced with a permanent grade and academic progress can be re-evaluated.
- 3. The "L" grade is an incomplete achievement of course objectives. The "L" grade is included in the QPA calculation as "0" quality points earned and is treated as a non-completion of attempted coursework.
- 4. An audit (N) grade is not considered attempted course work. It is not included in the QPA calculation or completion rate determinations.
- 5. The highest grade earned in a course that is repeated will count in the QPA computation, but every repeated attempt will be included in the completion rate determinations. Please note that no financial aid can be disbursed for a repeated attempt if the student already has achieved a passing grade for that course.

Financial Aid Probation—Failure to meet the minimum semester quality point average standards or to complete fifty percent of semester

course work attempted will result in Financial Aid Probation for the next Fall or Spring semester. Financial aid can be received during the semester of probation. Payment of future semester tuition bills will be held until the grades and course completions have been reviewed for the semester of Financial Aid Probation.

Students receiving financial aid for the first time will be placed on Financial Aid Probation if they do not meet the minimum grade point average and course completion standards as noted in this policy. Transfer students will be treated as first time students for their first semester, but accepted credits from another institution will be considered as attempted credits in the evaluation of the 150% program completion standard. Mitigating circumstances may exist which will need to be reviewed via the appeal process described in this policy.

Financial Aid Restriction—Students who, after the Financial Aid Probation semester or a Financial Aid Restriction semester, fail to complete fifty percent of semester course work attempted and/or fail to achieve a semester QPA of 2.0 or better, will be placed on Financial Aid Restriction for the following Fall or Spring semester. No financial aid will be disbursed during that semester or for summer or intersession courses as well. Students failing to meet the cumulative requirements will also be placed on Financial Aid Restriction. Any aid awarded for the restriction semester will be cancelled. No aid will be disbursed during subsequent semesters unless the student has made an appeal of the Restriction and the appeal is granted for that semester. The only exception to this is that a student who is on Financial Aid Restriction because of failure to satisfy the 2.0 cumulative QPA requirement will regain eligibility when/if their cumulative QPA is raised to a 2.0 or above.

Reinstatement of Aid After Financial Aid Restriction—Reinstatement of financial aid after a student is placed on Restriction is achieved as follows:

1. The student submits a written letter of appeal in accordance with the appeal process

and the Financial Aid Appeals Committee grants the appeal. The student is placed on Financial Aid Probation for the semester rather than on Restriction.

- 2. The student attends HCC during the Restriction semester, pays for tuition and fees without the help of student financial aid, and does well enough in the coursework to satisfy all the satisfactory academic progress standards. The student is then removed from Restriction and regains eligibility for financial aid for the following fall or spring semester and any summer or intersession course work following the update of the student's financial aid status. Students who are on Financial Aid Restriction due to failure to satisfy the cumulative requirements cannot regain aid eligibility this way.
- 3. The student remains out of HCC during the Financial Aid Restriction semester and reenrolls during a subsequent fall or spring semester. The student will be placed on Financial Aid probation for that semester. Students who are on Financial Aid Restriction due to failure to satisfy the cumulative requirements cannot regain aid eligibility this way.

Students who fail to meet the cumulative requirements cannot skip a semester and regain eligibility. No financial aid will be disbursed during subsequent semesters for students with a cumulative QPA under 2.0 after attempting 48 credits unless their they bring the cumulative QPA above 2.0 or the student has made an appeal of the Financial Aid Restriction for a specific semester and the appeal is granted. Students who have exceeded 150% of their program cannot regain financial aid eligibility except on a semester by semester basis through the appeals process.

Appeal Process—Appeals of Financial Aid Probation and Restriction must be made in writing to the Director of Financial Aid by the date specified in the Financial Aid Probation or Restriction notification letter. The Financial Aid Appeals Committee will review the appeal and notify the

student in writing of their decision within 5 working days. All decisions made by the Financial Aid Appeals Committee are final.

When an appeal letter is received, any aid which had been cancelled due to the Restriction status, will be temporarily restored to an estimated status until the appeals committee makes a decision. These students (with estimated aid) may register for classes and their registration will be held until the Appeals Committee meets. If the appeal is granted, the Financial Aid Office will resume processing the student's aid. If the appeal is denied then the aid will be cancelled and the student is responsible to either drop the classes or pay for the classes. Any student whose appeal is denied and who fails to drop the classes before the 100% refund period is over must pay for the classes.

Continued Eligibility for Receipt of Financial Aid

Student aid awards are normally for one academic year. Continuation is dependent upon meeting application priority deadline dates each year, re-establishing financial need, making satisfactory academic progress, and continuing to enroll for at least one (1) credit per semester (six credits for SEOG recipients, work study and loan applicants).

Determination of Need

Need for financial aid is determined by the following calculations:

Cost of Attendance Budget
Less Expected Family Contribution
Equals Financial Aid Eligibility (Need)

To determine the Expected Family Contribution (EFC), the calculation formula used is the Federal Needs Analysis mandated by the U.S. Congress. By completing the Free Application for Federal Student Aid (FAFSA), your family contribution is calculated and reported on the Student Aid Report (SAR) which is mailed to your home by the federal processor.

Student Consumer Rights and Responsibilities

Section 493.A of the Higher Education Act as amended in 1992 requires post-secondary educational institutions to disseminate relevant, candid information on student financial aid programs available at the college. These rights and responsibilities may be found in "The Student Guide," (U.S. Department of Education) and is available in the Student Financial Aid Office. All financial aid awards are for one academic year and it is the student's responsibility to reapply each year.

Financial Aid Programs

Howard Community College maintains and/or coordinates the following financial aid programs for students.

GRANTS

Federal Pell Grant—Pell Grant is a Title IV program offering need-based grants ranging up to \$3,000, dependent upon appropriations by Congress, student eligibility and level of enrollment.

Federal Supplemental Educational Opportunity Grant (FSEOG)—FSEOG is Title IV program offering grant funds for students demonstrating exceptional financial need. Grants can range from \$200 to \$4,000 per year, based on the student's need and funds available from the U.S. Department of Education. Typical grants at HCC are \$400 per year. Priority must be given to Federal Pell Grant recipients with the lowest Expected Family Contributions (EFC) and those who apply by the May 15 priority deadline.

SCHOLARSHIPS

Maryland State Scholarship Program—The Maryland State Scholarship Administration offers several need-based scholarships for Mary-

land residents. The scholarships most frequently awarded to HCC students include, but are not limited to, the Educational Assistance Grant, the Guaranteed Access Grant, Senatorial Scholarship, and Delegate Scholarship. In order to be considered for a Maryland State Scholarship, a student must file the Free Application for Federal Student Aid (FAFSA) by March 1. State scholarships other than the Educational Assistance and Senatorial may have additional application requirements. Some scholarships require full-time (12+ credit hours) enrollment. Please check with the Maryland State Scholarship Administration at 410-974-5370 for additional information.

HCC General Scholarships/Howard County Executive and Howard County Council Scholarships—A need-based scholarship program funded from Howard Community College's operating budget. Scholarships are available to new and returning students. Awards range from \$100 to \$2500, not to exceed the cost of tuition, fees, and books in combination with other grant/scholarship aid. Priority is given to those with the lowest EFC and those who apply by the May 15 priority deadline.

HCC Educational Foundation, Inc. Scholarships-The college's foundation maintains a scholarship program through contributions from private business, foundations, civic organizations and individuals. Scholarships are available to returning and entering students. Most scholarships are need-based and stipends range from \$50 to \$2500 per year, not to exceed the cost of tuition, fees, and books in combination with other grant/scholarship aid. Priority is given to those who apply by the May 15 priority deadline. Some have additional requirements beyond need such as academic achievement. For more information on specific scholarships available, consult the bulletin board in the Financial Aid office. To contribute a scholarship for students, contact the HCC Educational Foundation Office at 410-772-4450.

PART-TIME EMPLOYMENT

Federal Work Study Program—Federal work study is a Title IV program offering part-time work for HCC students who demonstrate financial need. Students work from 5 to 17 hours per week, dependent upon availability of federal funds and students' academic course work. Five percent of the school's annual Federal Work Study allocation will be used to fund community service jobs. For more information, please inquire in the Financial Aid Office.

HCC Student Assistants Program—An institutionally funded part-time work program. HCC students who demonstrate financial need are given priority. Any student who desires part-time employment at the college may apply. Students work 5 to 17 hours per week, dependent upon availability of college funds, and students' academic course work. For more information, please inquire in the Financial Aid Office.

LOANS

Federal Stafford Student Loans—Stafford loans are a Title IV financial aid program and federal aid eligibility requirements apply. Loan applicants must be actively enrolled in at least six credits. Applications are available at local banks and credit unions, and the Financial Aid Office. Students must remain in good academic standing. A loan application must be completed in addition to the FAFSA and HCC Financial Aid Application. Loans are available the first year in a program up to \$2,625 to students who demonstrate need on the FAFSA. The loan limit for a second year in an associate degree program is \$3,500. Students who do not demonstrate need on the FAFSA may apply for an Unsubsidized Federal Stafford Student Loan up to the annual limit. "Independent" students have additional unsubsidized Stafford Loan eligibility of \$4000 per year, not to exceed the cost of attendance. The interest rates are variable and are set as of July 1 each year. For more details regarding this program you should read "The Student Guide," a free financial aid brochure available in the Financial Aid Office. Students enrolled in certain certificate programs may not be eligible foe the full loan amount due to the short duration of the program. Please inquire in the Financial Aid Office for more information.

Federal PLUS Loans—Federal PLUS Loans are a Title IV program which enables parents with good credit histories to borrow to pay the educational expenses of their child if the student is classified as "dependent" and is enrolled at least half-time. Applications are available at local banks and credit unions, and the Financial Aid Office. Students must remain in good standing. A PLUS loan application must be completed in addition to an HCC Financial Aid Application. A FAFSA is not required. The PLUS loan is not a need-based loan. A parent is eligible to borrow up to the cost of attendance less any other financial aid the student is receiving. The interest rate is variable and set on July 1 each year. For more details regarding this program you should read "The Student Guide". a free financial aid brochure available in the Financial Aid Office.

Financial aid is awarded without regard to age, gender, race, creed, national origin or disability. Students interested in receiving financial aid may receive counseling services concerning application procedures and program eligibility from the staff of the Financial Aid Office.

How Aid Is Disbursed

Students eligible for financial aid will have their financial aid applied directly to their tuition bill after their file is complete. If the financial aid disbursed (paid) exceeds the tuition bill, the student may give permission for the "excess" aid to be used for purchasing books in the HCC bookstore by signing the financial aid award letter. Estimated aid awards cannot be used to purchase books. Any financial aid funds, including Federal Stafford Loans, over and above tuition, fees, and bookstore charges are paid directly to the student within 14 days after the credit balance is created each semester, with the exception of an HCC Scholarship. An HCC

Scholarship can be used only for tuition, fees, and books and is applied after all other grant and scholarship aid is applied. The combination of grant and scholarship aid, if it includes HCC Scholarship, cannot exceed the tuition, fees, and books charged on the student's account. Rebate/refund checks are mailed to the student.

Students on Federal Work Study and the HCC Student Assistants Program receive checks bimonthly from the Cashier's Office based on the number of hours worked.

Federal Stafford Loan checks and Federal Unsubsidized Stafford Loan checks are applied directly against the tuition bill after the borrower endorses the check. Loan disbursements received by EFT do not require additional signature/endorsement. The student will be notified in writing of the receipt of EFT loan funds and may cancel the disbursement in writing within 20 days of receipt. Due to a 30-day delay in disbursing loans, loan awards cannot be used to purchase books.

Summer classes and Intersession classes will be considered in a separate session when we calculate your Pell Grant and will be prorated. No other aid or HCC Scholarship is applicable toward Intersession and Summer classes.

Refund Policy

Students receiving financial aid have the responsibility to follow the college's withdrawal procedures as outlined in the Schedule of Classes.

Federal Financial Aid recipient refunds will be determined based on the federal regulations. In addition to the 60% prorata refund policy which applies to first-time federal student aid recipients, Howard Community College is required to implement the federal refund calculation for all other federal student aid recipients.

Students should be aware that both refund calculations include a treatment of any unpaid balances by the student which could result in an even larger refund to the Title IV programs.

Federal 60% Prorata Refund Calculation Percent to be Refunded

| Percentage of Attendance | Refund |
|--------------------------|--------|
| Up to and including 10% | 90% |
| 10.1% - 20% | 80% |
| 20.01% - 30.00% | 70% |
| 30.01% - 40.00% | 60% |
| 40.01% - 50.00% | 50% |
| 50.01% - 60% | 40% |
| Greater than 60.00% | 0% |

Federal Refund Calculation Percent to be Retained

| Percentage of Attendance | Retain | |
|--------------------------|--------|--|
| Up to and including 10% | 10% | |
| 10.1% - 25% | 50% | |
| 25.01% - 50.00% | 75% | |
| Greater than 50.00% | 100% | |

Examples of federal refunds are available in the Financial Aid Office. Students receiving financial aid who withdraw may not receive furinstitutional expenses will be prorated based on the number of weeks the student completes during the semester before withdrawing. For students who begin attendance at the college, 100% of books and supplies allowance is considered expended.

Students who withdraw after receiving a financial aid refund check may owe a repayment of those funds.

Refunds and repayments owed back to the financial aid programs are allocated as follows: Unsubsidized Stafford Loan, Subsidized Stafford Loan, PLUS loan, Federal Pell Grant, Federal SEOG, other Title IV aid, other federal, state, private, or institutional aid, and to the student.

VETERANS AFFAIRS

Howard Community College is particularly concerned with the educational, vocational and personal advancement of those men and women who served in the armed forces. Through the Office of Veterans Affairs, ex-military personnel

are able to obtain assistance in applying for veterans' benefits, educational and occupational counseling, job referral, and academic advising.

A student planning to ask for benefits should apply to the HCC Office of Veterans Affairs as soon as the student has enrolled in the college or registered for the next semester's classes. Student tuition and fees are paid by the student and not by the Veterans Administration. Therefore, the student, and not the Veterans Administration, is held responsible for prompt payment of all college costs. Benefit checks are sent directly to the student by the Veterans Administration. Veterans should plan finances to cover tuition and fees and at least two months of living expenses, since benefit checks often do not start arriving before that time.

VA benefits will pay for any classes required in a student's major with the following excep-

tions. VA will not pay for any class that is audited. A telecourse will be paid for only if a residential class is also taken that session.

If a VA student is taking a course required only for transfer to a four-year college, the student must provide a letter from the other college to document the requirement.

VA regulations require satisfactory progress in all programs leading to a degree or certificate.

The following grades are considered unsatisfactory: F, L, W and NA. See the section of the catalogue dealing with the grading system for the definition of each designation. A veteran receiving these grades may be subject to repaying all funds received for that course. Veterans should contact the Office of Veterans Affairs as soon as possible upon receiving an unsatisfactory grade.

Academic Information

ASSOCIATE IN ARTS DEGREE AND ASSOCIATE IN APPLIED SCIENCE DEGREE

Requirements include:

- 1. completion of at least 60 semester hours of credit, depending upon the major selected, with a minimum of a "C" (2.0) quality point average;
- a minimum of 15 semester hours of credit above must be completed at Howard Community College. The college, to ensure the quality of its programs, reserves the right to determine which courses students must undertake to successfully complete a specific degree program;
- completion of the requirements of an approved curriculum in the college catalogue;
- 4. the recommendation of the faculty.

The associate in arts degree includes a 36-credit general education core and the associate in applied science degree includes a 20-credit general education core. The general education core includes courses in writing, literature, fine arts, humanities, mathematics, science, history, social sciences, and interdisciplinary and emerging issues.

CERTIFICATE OF PROFICIENCY

A certificate of proficiency is awarded to fulltime or part-time students who have concentrated their study in a specialized subject matter area and have satisfied the following requirements:

- Completion of the approved curriculum in the college catalogue;
- 2. achievement of a minimum of a "C" (2.0) quality point average in the instructional program;
- 3. a minimum of 25 percent of the credit hours must be completed at Howard Community College;
- 4. the recommendation of the faculty.

LETTER OF RECOGNITION

A letter of recognition is awarded to full- and part-time students who have completed a designated group of courses, totaling fewer than 12 credits in the following areas: Certified Novell Administrator, Computer Support Technology, Early Childhood Education, Office Technology, Personal Fitness Trainer, Stage Technician and Theatre Performance. For more information see the appropriate division office.

PLACEMENT TESTING AND DEVELOPMENTAL STUDIES POLICY

Howard Community College's faculty and staff are committed to student success. Research has shown that students with reading, writing, and mathematics skills below the college-level are at great risk of failing college-level coursework. Therefore, the college requires students to take reading, writing, and mathematics placement testing in order to place them in courses appropriate to their skill level.

Mandatory Placement Testing Policies

- Students planning to enroll in English or math courses or in courses requiring English or math prerequisites must take placement tests unless they qualify for an exemption (see #3 and #4).
- 2. All students in learning programs requiring English or mathematics must take placement tests by the time they have completed 12 credit hours unless they qualify for an exemption (see #4). After completion of 12 credits, students will not be permitted to register until appropriate placement tests have been taken.
- 3. Placement test exemption policies for nondegree seeking students include two options:
 - a. Those seeking to enroll in credit courses that have English or math prerequisites may enroll as CustomClass (credit-free) students. (See page 30 or refer to the Schedule of Classes for more information about CustomClass);
 - b. Upon completion of 12 credits, non-degree seekers must consult with an advisor for consent to register for additional coursework without placement testing. Consent will be based on academic goals and past performance.
- 4. Placement test exemptions may be made based on prior college-level math and/or English coursework as demonstrated by college transcripts or grade reports or score reports from appropriate national examinations (i.e., SAT. AP. CLEP). Students with verbal SAT I scores of 600 or higher are exempt from the English placement exam. English placement testing is required prior to application for enrollment in clinical nursing courses regardless of prior educational or standardized testing experience. The basic math placement test is not required for students with an SAT I math score of 600 or higher who are planning to take MA 122, 124, 127, or 131. However, students seeking a higher course placement must take advanced math placement tests.

Mandatory Developmental Studies

Students who require developmental coursework must enroll in the appropriate course(s). Enrollment in developmental courses must be continued each semester until the required sequence is completed.

CREDIT FOR PRIOR LEARNING

Howard Community College believes that learning is a lifelong process and is acquired in many different ways. In addition to the traditional classroom setting, mastery of college-level knowledge and skills may occur as a result of nontraditional learning experiences such as employment, military training and experience, noncollegiate training programs, advanced high school courses, and self-development.

Up to 45 credits of an associate degree, or fifty percent of a certificate, may be granted for prior learning. In accordance with state law, no more than 30 credits may be granted for non-traditional learning.

Credit age limitations apply for the nursing and cardiovascular technology programs. Clinical coursework is generally not accepted if completed more than three years ago. Science coursework for these programs is generally not accepted if completed more than ten years ago. While age limitations do not apply to coursework in other programs, it is each student's responsibility to ensure that they have adequate prerequisite knowledge to be successful in their program of study. Therefore, students are strongly advised to retake or otherwise review prior prerequisite coursework whenever necessary.

To be awarded transfer credits, students must have a declared major. Official transcripts must also be submitted to the Office of Admissions and Advising along with a formal request for a transcript evaluation and the appropriate transcript evaluation fee (\$15 for a single learning program; \$25 for multiple learning programs). When students change their major, a

new transcript evaluation must be done. It is the student's responsibility to officially request that this occurs.

Traditional Prior Learning

COLLEGE AND UNIVERSITY CREDIT-Credit may be granted for coursework completed at accredited colleges and universities. Transfer courses must apply to students' learning programs. A grade of "C" or higher is required for any coursework which is prerequisite to clinical courses in the Nursing and Cardiovascular Technology programs. The college awards credit for other coursework completed with a grade of "D." However, it is imperative that students understand that, while "D" grades may satisfy general education requirements at transfer institutions, they are unlikely to satisfy specific course requirements directly related to a student's major.

FOREIGN COLLEGE AND UNIVERSITY CREDIT-Howard Community College's Office of Admissions and Advising generally does not evaluate foreign transcripts. Students seeking credit for coursework completed at foreign colleges and universities must have their transcripts evaluated by an accredited foreign transcript evaluation service, such as the World Education Service. Credit may be granted for foreign coursework based upon the results of such evaluations as well as the same procedures which apply to coursework completed at U.S. colleges and universities. Additional information is available in the Office of Admissions and Advising.

Nontraditional Prior Learning

Nontraditional learning is any college-level learning which takes place outside the college classroom. State law limits the number of credits which can be awarded for nontraditional learning to thirty for both two-year and fouryear colleges and universities. The college awards applicable credits earned through the following nontraditional methods:

NONCOLLEGIATE PROGRAMS-Credit may be granted for educational programs which apply to students' learning programs and have been successfully completed at noncollegiate organizations such as government agencies, corporations and businesses, trade and technical schools, and others. Noncollegiate courses must be described in The Directory for the National Program on Noncollegiate Sponsored Instruction (PONSI) or The National Guide to Educational Credit for Training Programs (ACE) or awarded based upon articulation agreements with noncollegiate organizations or agencies. Official transcripts for such courses must be submitted to the Office of Admissions and Advising and formal requests for evaluations must be made.

MILITARY EDUCATION AND TRAINING-Credit may be granted for a variety of formal military, vocational and educational programs based upon a student's declared learning program at Howard Community College. Military programs must be described with credit recommendations in the American Council of Education's (ACE) "Guide to the Evaluation of Educational Experience in the Armed Services." Official Community College of the Air Force, AARTS, DD214, DD295, or other military transcripts must be submitted to the Office of Admissions and Advising and official requests for evaluations must be made.

PORTFOLIO ASSESSMENT-Credit for prior learning acquired through employment, self-study, volunteer, civic, or other activities may be awarded through the portfolio assessment option. To earn credit through this method, students must enroll in a course specifically designed to assist in the development of a portfolio summarizing prior experiential learning. In CO 160: Portfolio Development, students learn to document previous learning in a format that enables faculty to assess eligibility for academic

credit. Students must demonstrate that prior learning and experience have resulted in the acquisition of college-level competencies and skills directly related to courses in their learning programs. Students have eighteen months to complete their assessment of prior learning through Portfolio Assessment. Specific prerequisites are necessary to participate in this program. Further information may be obtained by contacting Dr. Peggy Walton, English/Foreign Language Division.

CREDIT BY EXAMINATION-Students may be awarded credit through national standardized or HCC institutional testing programs. Howard Community College has specific policies for all testing programs for which it awards credits based upon scores, other credits earned, and students' learning programs. Credit is generally not awarded for institutional exams taken at other colleges and universities.

Students must submit official score transcripts, declare a major, and submit an official request for a transcript evaluation to receive credit for national examination programs. Information regarding required scores and credits awarded may be obtained by contacting the Office of Admissions and Advising.

NATIONAL EXAMINATIONS—The national examination programs for which the college awards credit are:

Advanced Placement (AP) Exams—These are subject-matter exams sponsored by the Educational Testing Service and generally administered through high schools at the culmination of Advanced Placement course offerings. Further information can be obtained by contacting high school guidance offices or the Educational Testing Service, Princeton, New Jersey 08540. Credit is generally awarded for scores of 3, 4 or 5.

College-Level Examination Program (CLEP)—This is a national credit-by-examination program providing individuals of all ages and backgrounds the opportunity to

receive credit for college-level achievement acquired in a wide variety of ways. General and subject examinations are available in many different areas. Howard Community College administers CLEP examinations to current and prospective students on scheduled dates throughout the year. Additional information regarding CLEP can be obtained by contacting the Office of Admissions and Advising or the College Entrance Examination Board, Attention: CLEP, Princeton, New Jersey, 08540.

More information about AP and CLEP exams may be obtained at the following e-mail address: www.collegeboard.org

INSTITUTIONAL EXAMINATIONS—Institutional exams are offered at HCC for selected courses:

Proficiency Exams—These exams are taken **prior** to course enrollment when students believe they have mastery of course skills and objectives. Successful test performance results in course credits and appears on transcripts as proficiency credit. Proficiency exams cannot be retaken and cannot be taken by students previously unsuccessful in courses for which they are seeking credit. Students must be admitted to the college prior to taking proficiency exams. A fee equal to 50 percent of the current in-county tuition for the course will be charged for each proficiency examination. Proficiency exams must be taken within 30 calendar days after fee payment; students not taking exams within this 30-day limit will be notified that they have not passed.

Challenge Exams—These exams are taken after enrolling in courses when students believe they have acquired course skills and objectives. Successful test performance results in the award of course credit and appears on a student's transcript as course credit along with the grade earned. A challenge exam may only be attempted once during a course; if the exam does not result in a passing grade, the student remains in the

course. There is no additional cost for challenge exams beyond course tuition and fees.

Students must contact appropriate faculty or division chairperson to arrange proficiency and challenge exams. Lists of proficiency and challenge exams are available in the Office of Admissions and Advising and in division offices.

NURSING MOBILITY PROFILE EXAM—Howard Community College administers the Nursing Mobility Profile I Exam. This exam is produced by the National League of Nursing and is designed to facilite LPN-to-RN career mobility. The exam is one option used by the college to assess prior learning and experience in the nursing field and to assist the college with the award of clinical nursing transfer credit and advanced standing placement decisions. Further information regarding the Nursing Mobility Profile Exam may be obtained through the Office of Admissions and Advising.

HIGH SCHOOL ARTICULATION PROGRAMS—In specific circmstances, Howard County high school students may receive credit for coursework articulated with Howard Community College. Such agreements exist for selected courses only, generally in career-related programs, and do not include Advanced Placement coursework for which separate procedures apply (see page 35). Receiving credit for such coursework involves the submission of articulation forms completed by designated high school personnel to the appropriate college division chairperson. Further information is available through high school guidance ofices or the college's Office of Admissions and Advising.

HONORS AND ACADEMIC RECOGNITION

Honors Program

The Honors Program at Howard Community College is offered to students seeking edu-

cational and intellectual challenges that go beyond standard coursework. In honors courses the student can delve into some of the major issues and developments of our society. Honors sections are distinguished from regular courses by higher expectations and more rigorous qualitative attention to critical thinking; writing and/or oral intensive components; participatory learning; and the use of primary as well as scholarly secondary source materials in an original applied course project(s).

Current HCC students can gain entry into the honors track if they have completed 12 credits of 100 level courses or above with a 3.0 GPA. One of the courses must be EG 101/111 or placement into EG 102. A students may also be eligible if they have a 3.0 high school GPA and at least a 1000 SAT score. A semester probationary period will determine continued eligibility should the student's cumulative GPA drop below 3.0 in any semester.

Entry into an individual honors course by a non-honors track participant will be by the consent of the instructor.

Honors classes have limited enrollments. The college keeps the class size moderate so that there can be maximum contact between instructor and the students. The college encourages a mix of students. Adult students as well as recent high school graduates are invited to apply.

Students who successfully complete an honors course with a grade of B or A will have the honors designation noted on their transcript. Students who successfully complete a minimum of 15 credits of honors coursework will receive a Letter of Recognition in addition to having their transcripts show the honors courses.

Students may not enroll in honors courses for audit.

James W. Rouse Scholars Program

This selective admissions honors program is for incoming high school seniors. For further details, see page 35.

Summer Scholars Program for High School Students

This selective admissions program is open only to high school sophomores, juniors, and seniors. For further details, see page 35.

Dean's List

Students who have carried and maintained at least 12 semester hours with a semester grade point average of 3.5 or better are eligible for nomination to the Dean's List. Students who qualify for the Dean's List must not have received an F, L, or W grade. Students who have met the qualifications will be recognized as superior students by the vice president and dean of instruction, and their names will be published on the Dean's List each semester.

Dean's List for Part-time Students

Part-time students who have accumulated 12 or more semester hours with a semester grade point average of 3.5 are eligible for nomination to the dean's list of part-time students. To qualify for the list students must have completed a minimum of six credits in the semester under consideration. Furthermore, students who qualify for the list must not have received an F, L, or W grade. Students who qualify for this list will be recognized as superior students by the college, and their names will be published on the List of Distinguished Students.

Honor Society

Alpha Alpha Sigma is the HCC chapter of Phi Theta Kappa, the national honor society of two-year colleges. To be invited to join, students must meet the following criteria during a spring or fall semester: be named to the Dean's List, complete at least eight credits during the semester with no F, L, or W grade, accumulate 18 credits and have at least a 3.5 cumulative GPA. Induction ceremonies are held during both the fall and spring semesters.

Graduation with Honors

Students who have maintained a cumulative grade point average of 3.5 or above will be graduated with honors. Those students who have a grade point average of 3.75 or above will be graduated with high honors.

ACADEMIC PROCEDURES

Learning Outcomes Assessment and Accountability

Howard Community College is committed to the philosophy of educational accountability. In order to determine that students are attaining the knowledge and skills appropriate to various courses and programs, regular and planned assessment activities occur.

The assessment activities may take diverse forms including standardized assessments, placement tests, faculty-developed evaluations, focus sessions, and surveys. The college believes that such input is vital to its responsibility to maintain quality instruction. Therefore, class time may be used at times for these activities and it is expected that students will participate in the processes when asked. Entering freshmen and graduating students are required to take the Academic Profile.

Confidentiality of Student Records

A student's record at the college is confidential and includes only information relevant to the educational process. The policy and procedures concerning the release and confidentiality of student records are in compliance with the Family Educational Rights and Privacy Act of 1974. Questions may be referred to the Records and Registration Office.

Student Academic Complaint Procedures

Students who have academic complaints (including a specific academic complaint involving a faculty member) that remains unresolved

through informal means, may enter a formal process of problem resolution. The Student Academic Complaint Procedures and the appropriate form may be obtained from the division offices, the counseling center and the office of evening services. An academic complaint is defined as issues related to classroom instruction or grade disputes (including late penalties, acceptance or non-acceptance of late assignments and incomplete grades). The student and instructor are encouraged to seek resolution informally before filing an academic complaint. Students wishing to initiate a formal academic complaint must submit an academic complaint form to the appropriate division chair by the end of the seventh week of the next full semester.

Grading and Attendance Policy for Courses

The method(s) for evaluation and grading within a course will be clearly stated in the course syllabus. Evaluation procedures will be objective and appropriately related to the course's objectives and content.

Howard Community College does not have a college-wide attendance policy; however, regular class attendance is one of the most important responsibilities of the student. Each instructor determines the requirements for attendance, which in many cases will count toward the final grade. Attendance requirements will be clearly spelled out in the course syllabus and discussed by the instructor.

Graduation Petitions

Students who anticipate completing the requirements for an AA degree or certificate are responsible for filing a graduation petition with the Office of Records and Registration and for paying the graduation fee (currently \$25 for each degree or certificate). The petition includes an audit of your completion of degree requirements. Therefore, the petition must be signed by an advisor. The deadlines for submitting graduation petitions are: May graduation—March 15; December graduation—October 15.

To be awarded a degree or certificate from Howard Community College, students must:

- 1. Achieve a minimum of 2.0 or greater GPA for all coursework taken at HCC.
- 2. Complete all the requirements of an approved curriculum in the college catalogue.
- 3. Be in good academic and financial standing with the college.
- 4. Have their graduation petitions reviewed and cleared by the Records and Registration Office.

Students who do not complete degree or certificate requirements in the semester in which they first applied for graduation may petition for graduation at a later date.

A graduation ceremony is held in May each year. Students who completed degree or certificate requirements the previous December, as well as those who complete their requirements in May, are invited to participate.

All graduation candidates will be required to take a forty-minute Academic Profile Outcome Assessment Examination prior to the date of graduation. The scores on the exam will be used for statistical purposes measuring student progress. The scores will NOT be a part of a student's academic record. The exams will be given in the HCC Test Center.

Academic Persistence and Catalogue Requirements

Students attending Howard Community College will follow the catalogue requirements in effect during the semester they enrolled, or any catalogue thereafter, provided they have maintained continuous enrollment. Students may take up to two calendar years off and still graduate under the prior catalogue requirements provided they completed a course in the last semester attended and complete a course in the semester they return. Students who change their learning programs must follow the curriculum requirements of the catalogue in place when the change is made. To officially

change learning programs, students must complete a Change of Information Form which must be signed by an advisor and submitted to the Office of Admissions and Advising. Students must also officially request a re-evaluation of their transcript based upon the new learning program, if applicable.

Student Address Change

To officially change a name, address or telephone number, students must complete a Change of Information form and submit it to the Office of Admissions and Advising. Proof of residency is required for address changes.

Withdrawal

Students who register for a course and do not report to class within the first three weeks will be given the mark of "NA" (indicating never attended) for the course and will not receive any refund of tuition.

A student who wishes to officially withdraw from a course should complete a withdrawal form in the Registration Office. This form should be submitted as soon as the student ceases attendance but must be done between the third and tenth week of classes during a regular semester. The schedule of classes publication will list each semester's withdrawal deadline date. Students withdrawing officially from a class will receive a grade of "W." Students who do not withdraw by the posted deadline must accept the final grade earned for the course. The "W" will appear on the student's transcript and show as hours attempted but will not be calculated into the student's GPA. Students who withdraw from 50% of the credits attempted in two consecutive semesters may be placed on academic probation (see page 31 for details).

To be eligible for readmission to the nursing education program, each student who withdraws from a nursing course or does not continue into the next nursing course must schedule an exit interview with the director of nursing, or nursing faculty member. The purposes of the interview are for counseling and

guidance and for completing the appropriate college form. Readmission to the nursing program is limited to one time if the student has a failing average; or once per year if passing when participation in the program is interrupted. See Nursing Student Handbook for specific details regarding criteria for readmission.

REGISTRATION AND ENROLLMENT

Auditing Courses

An audit designation must be specified during registration on the course schedule form. No credit or grade will be given. Audit status can ONLY be converted to credit status and credit status can ONLY be converted to audit status during the first three weeks of a major semester. Students converting from audit status to credit status must have the written approval of the appropriate division chair. Students may convert their status only once during that period. Audited courses do not count as part of the semester's credit hour load nor as credit towards graduation unless repeated for credit. In addition, audited courses will appear on the transcript as an N.

CustomClass

"CustomClass" is an enrollment option which allows students to enroll in credit classes without having been admitted as credit students or meeting the normal prerequisites. CustomClass students select this option at the time of registration and CANNOT later change to credit or audit status. They will be exposed to the material and instruction in a credit course but will not receive grades or transcripts for the course. Some courses may be eligible for CEUs (continuing education units) or certifications from the Continuing Education Division.

Cancellation of Courses

The college may cancel any course due to insufficient registration.

Credits

One semester hour of credit is generally assigned for each lecture period or laboratory session. Lecture periods are 55 minutes and laboratory sessions are two to three hours in length per credit.

Semester Schedule

A full-time student schedule for either the fall or spring semester generally consists of 12 to 18 semester hours. Schedules in excess of 18 semester hours must be approved by a counselor or academic advisor.

ACADEMIC STANDARDS

It is expected that students will make satisfactory progress each semester they are enrolled. At the end of the Fall and Spring semesters, the progress of each student will be reviewed against the standard of satisfactory progress as stated below. Financial aid recipients are subject to additional standards of academic progress as required by financial aid regulations; see page 15 for further information.

Satisfactory performance at Howard Community College means:

- a. achieving a minimum semester quality point average (QPA) of 2.0; and
- b. successfully completing at least 50% of the credits attempted each semester.

Academic Probation

A student will be placed on academic probation if his or her academic performance falls into either category below:

- a. the semester quality point average (QPA) falls below 2.0 when attempting five credits or more in any two semesters; or
- b. the student does not successfully complete at least 50% of the credits attempted in each

of two consecutive semesters. This standard will be applied after the student has attempted 12 cumulative credits at HCC. Grades of "F" or "W" are considered nonsuccessful completion of credits.

When placed on academic probation, the student must meet the requirements for minimum satisfactory performance in the next major semester enrolled or the student will be dismissed.

Participants in selective admissions Rouse Scholars Program will be put on probation if their cumulative GPA falls below 2.5. The student has a semester to recover his GPA. During this probation period there will be not diminishing of support or standing. A student failing to re-establish his GPA will no longer be a Rouse Scholar. This situation does not affect his standing, enrollment or non-program scholarships and aid at Howard Community College.

Academic Suspension

The student on probation who does not meet the minimum standard of satisfactory performance the next major semester in which he or she is enrolled will be placed on academic suspension. When placed on suspension, the student may not attend HCC during next major semester. Students have the right to appeal academic suspension.

SUSPENSION APPEAL-There may be mitigating circumstances contributing to a student being suspended; therefore, the student may appeal his or her suspension. Details of the appeal process are included in a letter notifying the student of his or her suspension. If the student's appeal is granted, the student will remain on academic probation and the course schedule may be restricted. Additionally, if the student does not meet the satisfactory performance standard, suspension will be automatic and cannot be appealed.

T

0

Incomplete. A temporary desig-

nation generally given only in an emergency situation such as ill-

ness which results in the

student's inability to complete

course objectives. A student

must have successfully com-

pleted 75% of the course objec-

tives, as determined by the

instructor, for the "I" designation. This designation must be changed to a permanent grade other than W or L within a pe-

riod of time determined by the instructor at the time the I des-

ignation is assigned. Normally

the period to complete objectives

shall not exceed the end of the

seventh week of the next full se-

mester or it will be converted to

an F grade. A written agreement

READMISSION AFTER SUSPENSION-Students who were suspended and have been out for one major semester must apply in writing for readmission through the office of the Director of Records and Registration. Upon readmission, the student will remain on academic probation and must meet the satisfactory progress standard as stated above. Specific readmission procedures for the nursing program are found under "Withdrawal" guidelines found on page 25.

GRADING SYSTEM

Quality

Final grades will be issued at the end of each semester. All grades earned will remain on the official transcript.

Letter grades earn quality points according to the following schedule:

| <u>Grade</u> | Points Per Credit <u>Hour</u> | | | | by the instructor specifying the necessary objectives and period of time within which they need to be completed shall be sent to the student with a copy to the |
|--------------|--|---|---|---|---|
| A | 4 | Mastery of course objectives with outstanding quality of academic achievement | L | 0 | student's permanent file. The L grade is assigned only in |
| В | 3 | Mastery of course objectives with high quality of academic achievement | 2 | Ü | developmental courses to stu- dents who have not mastered the course objectives due to indi- vidual learning characteristics. |
| С | 2 | Mastery of course objectives (developmental courses require a minimum grade of "C") | | | In order to qualify for an L grade, students must work with steady diligence, effort and near perfect |
| D | 1 | Minimum passing grade (does not meet minimum grade for Nursing and Cardiovascular Technology prerequisites.) | | | attendance, and must show progress on course objectives. Students may be required to seek additional assistance be- yond class sessions. The L grade |
| F | 0 | Lack of mastery of course objectives | | | is not computed in the students' grade point averages. Those who |
| W | 0 | Withdraw. This grade is given at the time of withdrawal no later than the end of the tenth week | N | 0 | receive an L grade must re- register and repeat the develop- mental course. |
| | | of classes. | N | 0 | Audit |

The total semester hours earned by a student are equivalent to the total of the credit hours for which a grade of A, B, C, D or F was recorded. A student's quality point average (QPA) is recorded on his or her official transcript. The QPA is calculated as follows:

Grades with the indication of "None" under Quality Points Per Credit Hour in the grade schedule are not used in computing the QPA. Grade records are maintained in the Office of Records and Registration. An official transcript may be obtained for completed work by writing to the coordinator of records and registration. Students who have not met all of their financial obligations will have transcripts and grades withheld until such obligations are satisfied. If a student repeats a course, the highest grade earned in the course will count toward the quality point average (QPA); however, all attempts and the resulting grades will appear on the transcript.

ACADEMIC HONESTY

Howard Community College expects academic honesty from its students. Academic honesty is a matter of concern to everyone connected with the college. A clearly and carefully developed policy and set of procedures guides students and faculty members in achieving academic honesty. Communication of these procedures will be accomplished through the following sources:

All catalogues, class schedules, and course descriptions will contain the following statement:

"Academic honesty, as defined in the Student Handbook, is expected of all students."

A statement of policies and procedures will appear in both the Faculty Handbook and the Student Handbook.

Definition

Academic honesty means the use of one's own thoughts and materials in the writing of

papers, taking of tests, and other classroom related activities. Students intentionally aiding other students in any infraction of the academic honesty policy are considered equally guilty.

Students are expected to give full credit for the borrowing of other's words or ideas. Intentional or unintentional use of another's words or ideas without acknowledging this use constitutes plagiarism.

There are four common forms of plagiarism:

- The duplication of an author's words without quotation marks and accurate references or footnotes.
- 2. The duplication of an author's words or phrases with footnotes or accurate references, but without quotation marks.
- 3. The use of an author's ideas in paraphrase without accurate references or footnotes.
- 4. Submitting a paper in which exact words are merely rearranged even though footnoted.

Misrepresentation is the submission of materials for evaluation that are not the student's own.

Unauthorized use of notes, copying, using another individual's materials, or prior knowledge of instructional materials during tests, quizzes, or other educational experiences shall be considered a violation of the Academic Honesty Policy.

Penalties

FIRST INFRACTION-For the first infraction of the Academic Honesty Policy the faculty member shall give the student an F or its equivalent on the paper or examination in question. This action could result in a final grade lower than it otherwise would have been. The appropriate division chairperson concerned will be informed of the infraction in writing and the dean of students will notify the student in writing of the consequences and implications of this infraction.

SECOND INFRACTION-A second infraction of academic dishonesty, either in the same course or in another course, will result in an automatic F in the course in which the second infraction

| incurred. The student will be dropped from the |
|---|
| course, and barred from further class partici- |
| pation. The appropriate division chairperson will |
| be informed of the incident in writing and will |
| notify the dean of students. The dean of stu- |
| dents will notify the registrar that the student |
| is to receive an F grade for the course. The dean |
| of students will meet with the student involved |

and apprise the student of the implication of this second infraction.

THIRD INFRACTION-A third instance of plagiarism or any behavior involving an infraction of the Academic Honesty Policy will result in disciplinary action as determined by the Student Judicial Process.

Student Services

ADMISSIONS

It is the responsibility of the Office of Admissions and Advising to ensure that all students admitted to the college receive the pre-enrollment services necessary to ensure the successful completion of academic, career, and personal goals.

The Admissions and Advising staff advises prospective, newly admitted, transfer, and international students. A special effort is made to prepare students for that most critical first semester of college. In addition to pre-enrollment advising, other services provided by the Office of Admissions and Advising include transcript evaluation and course clearance based on coursework completed at other postsecondary institutions, military and other designated organizations as well as specific national examination programs (see page 26).

The Admissions and Advising staff welcomes the opportunity to inform students about programs and services which will contribute to the fulfillment of their goals.

Programs for High School Students

The college offers a variety of programs for current and graduating high school students including:

JAMES W. ROUSE SCHOLARS PROGRAM—The James W. Rouse Scholars Program is a selective, challenging honors and leadership program designed for transfer to distinguished four-year colleges and universities at the end of the sophomore year. The program combines academic opportunities, development of leadership skills, projects involving community mentors, and cultural and recreational activities. Rouse Scholars and program faculty and

staff work closely with transfer institutions. Scholarships specifically designated for the program are available. Admission to this highly selective program is based on grades, college entrance exam scores, course selection, intellectual interests, extracurricular activities, recommendations, and other indicators of academic excellence and potential. In certain circumstances, consideration will be given to students for whom traditional indicators of success are not always valid. For further information, contact the Office of Admissions and Advising and high school guidance offices.

FRESHMAN FOCUS PROGRAM—Early preparation is directly related to a successful college career. The Freshman Focus Program is designed specifically for graduating high school seniors who are Howard Community College's incoming freshmen. The program provides the opportunity to be tested, advised, and registered early, prior to the hectic pace and more limited course selection of general registration. Students who take advantage of this program complete the college registration process prior to high school graduation. For further information, contact the Office of Admissions and Advising and high school guidance offices.

SUMMER SCHOLARS PROGRAM FOR HIGH SCHOOL STUDENTS—The Summer Scholars Program for High School Students offers qualified high school sophomores, juniors, and seniors the opportunity to get an early start on their college careers. In addition to earning college credit highly transferrable to other colleges and universities, and enjoying credit-free offerings, students can sharpen their academic skills and gain first-hand experience valuable in the college se-

lection process. Admission is based upon grades, test scores, maturity, and teacher and counselor recommendations. Class size is limited and qualified students are admitted on a first-come, first-served basis. The program's enrichment component includes guest speakers, cultural activities, trips, and a community forum which addresses a different timely and important topic each year. For further information, contact the Office of Admissions and Advising.

EARLY ENTRANCE PROGRAM AND OTHER PROGRAMS FOR HIGH SCHOOL STUDENTS—Enrollment opportunities are available for high school students during the school year under certain circumstances. These opportunities include concurrent, early admission and summer enrollment. Special enrollment conditions apply based upon State law, Howard County Public School System regulations, and college policies.

The Early Entrance Program facilitates the enrollment of high school students planning to enroll concurrently at the college during the fall and/or spring of their senior year. The program enables students to plan their high school and HCC schedules at the same time and complete all or most procedures, including application, testing, and registration, well in advance of general registration periods. Students must also fulfill public school system requirements necessary to participate. For further information, contact the Office of Admissions and Advising and high school guidance offices.

The college reserves the right to grant admission to secondary school students on an individual basis. Further details regarding these programs are described on pages 11-12.

NEW STUDENT ORIENTATION

Most colleges and universities across the nation require participation in New Student Orientation programs because of their proven effectiveness in preparing students for the critical first semester of college. By providing important information about academic policies and

procedures, registration options, college services, and student activities, the New Student Orientation Program helps students avoid potential obstacles to the achievement of their goals while enhancing the enjoyment of campus life. Information important to transfer and career preparation is also provided. Students have the opportunity to meet college faculty and staff as well as fellow students. Comprehensive New Student Orientation Programs are conducted immediately prior to the Fall and Spring terms. Additionally, specific workshops are offered throughout the entire semester for both new and returning students. Further information is provided to students as part of the enrollment process and through the Office of Student Activities.

ADVISING SERVICES

Academic Advising

One of the college's most important responsibilities is to provide comprehensive academic advising services. Students are responsible for fulfilling the requirements of their learning program and for the catalogue year which applies to them. Therefore, it is also each student's responsibility to meet with an advisor prior to each term and more often, if needed. Advisors provide students with information and recommendations regarding learning programs, course selection, and transfer preparation. Students in selected majors are assigned to specific academic or faculty advisors as appropriate. Advising is available to students year round through the Office of Admissions and Advising.

Transfer Information and Advising

The Transfer Center is located in the Office of Admissions and Advising. It provides the following services:

Transfer advising

ARTSYS—a computerized articulation system designed to provide guidance to students planning to transfer to Maryland public col-

leges and universities, as well as several private Maryland institutions.

- College Source—a software program which provides access to college catalogues across the nation.
- College View—a software program which provides virtual tours of campuses through the nation and on line applications.
- Internet—provides access to college, scholarship, financial aid and many other websites.
- Transfer-related publications—guidebooks, catalogues, view books, transfer applications, scholarship materials and others.
- Specialized transfer information for students with specific concerns—pertinent information for international students, students with disabilities and others.

The colleges hosts a transfer fair during the fall and spring terms. Representatives from a wide variety of private and public universities attend, providing students opportunities to explore and become more informed about available options. Students enrolled in transfer programs should meet with an advisor at least once each semester to prepare for their future matriculation to a four-year college or university.

FINANCIAL AID

It is the goal of the college that no student should be restricted from attending this institution because of limited financial resources. To meet this goal the college maintains a program of grants, scholarships, loans and parttime employment for eligible students who are accepted and enrolled in the college as certificate or degree-seeking students in good standing. Detailed information regarding financial aid, scholarships and veterans' benefits is located on pages 15-22.

CAREER SERVICES

Career and Life Planning Services

Whether deciding on a major, preparing to enter the job market, or considering a career

change, career and life planning services are available to students, prospective students, and alumni. The college offers a wide range of career and life planning services which help students focus on their values, interests, skills, and personality traits. These services include individualized career counseling, special topics workshops, career assessments, job assistance services, and a career development and decision making course. The Career Center is open to the public and provides a library of job and career materials, including printed resources, video tapes, and computerized self-assessment and career exploration programs. For further information, contact the Academic Support and Career Services Offices.

Cooperative Education/Internships

Cooperative education, also referred to as co-op education, is supervised work experience directly related to a student's learning program and/or career interests. Its basic purpose is to integrate classroom theory with work applications. For further information, contact the Academic Support and Career Services Office.

Job Assistance

Job assistance is available to students and community members who are interested in pursuing full time, part time, permanent and temporary positions. Available resources include:

- job books listing current openings in the Baltimore-Washington corridor
- job hunting reference materials featuring books and videos about resume writing, interviewing skills, creative job search techniques, and related topics
- company files consisting of annual reports, recruitment information, and local company marketing materials

Job assistance services include:

- customized workshops on a wide range of topics as requested by the college community
- job fairs are held each semester and on campus recruiter visits are scheduled regularly

 individual assistance and job search support is provided on an appointment basis.

For further information, contact the Academic Support and Career Services Office.

ACADEMIC SUPPORT SERVICES

Learning Assistance Center

The Learning Assistance Center provides tutoring and academic support services to all students enrolled in credit courses who would like to become more successful and efficient learners. The LAC, located inside the library on the second floor of the LRC Building, provides free group tutoring in most courses offered at the college. Drop-in tutoring services are scheduled and advertised each semester. The LAC conducts workshops on study skills, learning styles, time management, memory building, notetaking, and test-taking. Drop-in help for writing assignments is available in the Write Room, located inside the LAC. Tutoring, writing, and study skills software are available for use on computers. Housed within the LAC are a variety of other support services which include:

Student Support Services

Student Support Services is a federallyfunded program offering free comprehensive services to eligible students. Eligibility criteria include low-income and/or first generation college (neither parent received a four-year college degree), and/or a documented disability.

The program's goal is to increase the retention and graduation rates of students at the college. The Student Support Services Program provides free, individualized instruction by academic specialists in the areas of math, reading, writing, English as a second language, and study skills. Learning disabilities specialists assist students who have varying learning styles. Free individual tutoring is available in most courses. Personal, academic, financial aid, career, and

transfer counseling is available to program students. Advocacy, assistance with accommodations, and equipment are also available for students with disabilities.

Services for Students with Disabilities

Students with physical or learning disabilities are encouraged to contact the Student Support Services Office of the Learning Assistance Center upon admission to the college or when contemplating attending the college. This will give the college ample opportunity to respond to any special needs of the student, as well as provide the student an opportunity to see what services are available. Prior to receiving accommodations and services, students must initiate a request with the Student Support Services Office and supply appropriate documentation of a disability. This information is kept confidential unless the student signs a written waiver of release. Services provided to students with documented disabilities include: advocacy, tutoring, interpreters, notetakers, test-taking accommodations, counseling, and academic advising. Equipment such as the Arkenstone Reading Machine, Omni 3000, Dragon Dictate, tape recorders, and magnifiers are available for student use. Students in need of sign language interpreters are encouraged to contact the Student Support Services Office at least two weeks prior to the start of classes.

Vocational Support Team

The Vocational Support Services Team (VSST) Program is designed for students in vocational/career programs who are having academic difficulties or who have physical or learning disabilities. The VSST Program provides free small group and individual tutoring in vocational courses, such as nursing, accounting, and electronics. Career Counseling is available from a Career Specialist located in Career Services, room L-140. Group test reviews for vocational courses, and study skills and test-taking workshops are also available. The pro-

gram assists students with disabilities majoring in vocational/career programs in arranging accommodations and specialized equipment.

Retention Services

Retention services provides structured assistance that supports students' academic persistence and success. Services include diagnostic, experiential, co-curricular, learning community involvement, and peer mentoring. The development of comprehensive action plans, interactional monitoring, assessment follow-up and skill reinforcement complements the process for enhanced student performance.

New Focus

New Focus is a grant-funded program that assists Howard County low-income single parents, displaced homemakers and single pregnant women to become economically self-sufficient. The goals of the program are to develop marketable work skills and learn effective job search skills.

New Focus staff will help participants determine their goals and decide on the type of work they would like to do based on their interests and past experiences. If appropriate, the staff will help participants plan a program of study, assist with the application for college admission and financial aid, as well as facilitate the registration process. Information on resume writing, interviewing skills, the job search process, and the hidden job market is provided. The staff will also assist program participants with concerns that interfere with job or school activities. Staff members can make referrals to a wide variety of community services. The New Focus Program assists with any difficulty participants may encounter on their way to economic self-sufficiency.

Low-income single parents, displaced homemakers, or single pregnant women residing in Howard County should contact the Academic Support and Career Services Office for further information and to attend a New Focus program orientation.

PERSONAL COUNSELING

Counseling and crisis intervention are available for students experiencing personal, social or adjustment concerns relating to college. These services are provided by the Academic Support and Career Services Office. A personal counselor is available for appointments. To schedule an appointment come to the Career Services Office, L-140 or call 410-772-4840.

TEST CENTER

The Test Center provides centralized testing services to the college community. Career and academic make-up exams, as well as placement assessments are administered in the Center. The Center also provides accommodations for students with special needs. Placement testing is arranged by contacting the Office of Admissions and Advising. Career testing is arranged through the Academic Support and Career Services Office. Academic make-up testing is arranged by contacting instructors. The college is an Authorized Prometric Testing Center (APTC) and administers Novell, Microsoft and Autocad certification testing on a daily basis. Registration for certification exams is done directly through APTC. The Test Center also administers CLEP (College-Level Examination Program) testing on selected dates to current and prospective students.

The Test Center's schedule is published each semester and is available at various college locations. Test Center information is available at http://www.howardcc.edu/academic/testing.htm.

STUDENT LIFE

"Student Life" is comprised of the Office of Student Activities, Athletics, The Student Government Association (SGA), The Student Program Board (SPB), Student Newspaper (The HCC Times), Gameroom, Clubs and Intramurals. Each area provides a distinct service and opportunity to HCC students which

complement the classroom through social, cultural, experimental and leadership experiences. Activities are planned based on student input and participation. Any student who has the desire is strongly encouraged to "get involved" with Student Activities as a leader, participant, or volunteer to ensure that these programs and events are reflective of the interests of the student body.

Student Activities also arranges for several "off campus" trips such as Broadway plays, amusement parks, sports events, museums and student leadership conferences.

All Student Activities programs are funded by student generated fees and fall under the auspices of the Dean of Students.

Location: Second floor of the Student Activities Center (SA 201).

Athletics

The intercollegiate athletic program is an integral part of the college's educational objectives. The program is part of a network of services provided to enhance the student life environment. As a member of the Maryland JUCO and Region XX Conferences, the college provides programs of a highly diverse nature to appeal to a vast majority of the Howard Community College student body.

At present, our sports program offers men's and women's soccer, men's and women's basketball, cross country, indoor and outdoor track, women's volleyball and co-ed tennis. Participation in several of these sports requires full-time academic enrollment, where others have a minimal requirement of part-time enrollment. For further information, contact a coach or staff member in the PE facility.

Equity in Athletics Disclosure Act (EADA)

HCC is a Division III school (Division II in Men's Basketball) and a member of the Maryland Juco Athletic Conference. The college does not offer ANY athletically related aid nor any other assistance relative specifically to student athletes. The athletic program is funded through a portion of student consolidated fees (10% of tuition). A full disclosure of gender participation, expenditures and other resources provided by the college is available in the main office in the PE building and in the Office of Student Activities.

Student Government Association

The Student Government Association (SGA) provides an opportunity for student involvement in the development and administration of college policies and serves as the official voice of the student body. The SGA is made up of SGA president, his/her officers and general membership. Working with the Director of Student Activities, SGA is responsible for designating student funds to college clubs and organizations as well as selecting specific themes and issues for various programs brought to the college by the SGA. SGA members also play a significant role in representing the student body on various college and statewide committees. All students are invited and encouraged to join and participate. For more information on the SGA structure and how to get involved, call or stop by the Student Activities or Student Government offices.

Location: Second floor of Student Activities Center (SA 201A).

Student Program Board

The Student Program Board (SPB) is responsible for selecting, planning and implementing a diverse offering of social and educational activities for all HCC students. This board is chaired by the SPB chairperson and comprised of full and part-time students. Students wishing to serve on this board are invited to join by talking with the SPB chairperson (SA 201B) or contacting the Assistant Director of Student Programs (SA 201). Activities include, but are not limited to dances, concerts, lectures, films,

cultural arts and special events. SPB also offers discount tickets to local movie theatres, the Maryland Renaissance Festival and other similar events.

Location: Second floor of the Student Activities Center (SA 201).

The Times

The student newspaper is published monthly by students for the college community. The editor and staff cooperate with the many different departments on campus to keep the school population informed about school events, resources and club activities. If you are interested in working on the newspaper staff contact the paper's editor (SA 201C) or Student Activities.

The paper needs student participation and wishes to encourage any student having an interest in working on the newspaper staff to please contact the paper's editor (SA 201C) or a Student Activities staff member. Opportunities exist for experiences in photography, desktop publishing, layout and design, advertising, creative writing and reporting. Email address: newspape@ccm.howardcc.edu

Location: Second floor of the Student Activities Center (SA 201).

The Game Room

The Gameroom is equipped with widescreen TV, table tennis, air hockey and electronic videomachines. A variety of tournaments are sponsored and run each semester with prizes

and trophies. Board games and tables are also provided for your enjoyment. See the Gameroom Supervisor or stop by the Student Activities office.

Hours: Monday through Thursday 10 a.m.-7 p.m., Friday 10 a.m.-3 p.m.

Location: First floor of the Student Activities Center (SA 101)

Clubs

Clubs are formed by students who have a common interest and wish to explore topics and issues that relate to the subject; sometimes sharing information with the college community. A list of existing clubs can be found in your student handbook. If you wish to start a club you can see your student government president or stop by the Student Activities office (SA 201).

Intramurals

The intramurals program is part of the network of services provided to meet the leisure time needs of students. The college provides programs with the intent to appeal to a majority of the Howard Community College population. This program provides recreational sports at a lower level of intensity. In the past, basketball, bowling, softball, tennis and volleyball have been offered. All of these are planned and provided based on student interest and participation. All students who have the desire to play should contact a member of the PE staff in the PE facility or a Student Government Association representative.

Student Transfer Policies

Revised July 1, 1996

Policies of the Maryland Higher Education Commission on Academic Regulations. General Education Requirements, and Transfer of Undergraduates

- I. Scope and Applicability.
 This chapter applies only to public institutions of higher education.
- II. Definitions.
 - A. In this chapter, the following terms have the meanings indicated.
 - B. Terms Defined.
 - (1) "A.A. degree" means the Associate of Arts degree.
 - (2) "A.A.S. degree" means the Associate of Applied Sciences degree.
 - (3) "Arts" means courses that examine aesthetics and the development of the aesthetic form and explore the relationship between theory and practice. Courses in this area may include fine arts, performing and studio arts, appreciation of the arts, and history of the arts.
 - (4) "A.S. degree" means the Associate of Sciences degree.
 - (5) "Biological and physical sciences" means courses that examine living systems and the physical universe. They introduce students to the variety of methods used to collect, interpret, and apply scientific data, and to an understanding of the relationship between scientific theory and application.
 - (6) "English composition courses" means courses that provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.

- (7) "General education" means the foundation of the higher education curriculum providing a coherent intellectual experience for all students.
- (8) "General education program" means a program that is designed to:
 - (a) Introduce undergraduates to the fundamental knowledge, skills, and values that are essential to the study of academic disciplines;
 - (b) Encourage the pursuit of lifelong learning; and
 - (c) Foster the development of educated members of the community and the world.
- (9) "Humanities" means courses that examine the values and cultural heritage that establish the framework for inquiry into the meaning of life. Courses in the humanities may include the language, history, literature, and philosophy of Western and other cultures.
- (10) "Mathematics" means courses that provide students with numerical, analytical, statistical, and problemsolving skills.
- (11) "Native student" means a student whose initial college enrollment was at a given institution of higher education and who has not transferred to another institution of higher education since that initial enrollment.
- (12) "Parallel program" means the program of study or courses at one institution of higher education which has comparable objectives as those at another higher education insti-

- tution, for example, a transfer program in psychology in a community college is definable as a parallel program to a baccalaureate psychology program at a 4-year institution of higher education.
- (13) "Receiving institution" means the institution of higher education at which a transfer student currently desires to enroll.
- (14) "Recommended transfer program" means a planned program of courses, both general education and courses in the major, taken at a community college, which is applicable to a baccalaureate program at a receiving institution, and ordinarily the first 2 years of the baccalaureate degree.
- (15) "Sending institution" means the institution of higher education of most recent previous enrollment by a transfer student at which transferable academic credit was earned.
- (16) "Social and behavioral sciences" means courses that examine the psychology of individuals and the ways in which individuals, groups, or segments of society behave, function, and influence one another. The courses include, but are not limited to, subjects which focus on:
 - (a) History and cultural diversity;
 - (b) Concepts of groups, work, and political systems;
 - (c) Applications of qualitative and quantitative data to social issues; and
 - (d) Interdependence of individuals, society, and the physical environment.
- (17) "Transfer student" means a student entering an institution for the first time having successfully completed a minimum of 12 semester hours at another institution which is ap-

- plicable for credit at the institution the student is entering.
- III. General Education Requirements for Public Institutions.
 - A. While public institutions have the autonomy to design their general education program to meet their unique needs and mission, that program shall conform to the definitions and common standards in this chapter. A public institution shall satisfy the general education requirement by:
 - (1) Requiring each program leading to the A.A. or A.S. degree to include not less than 30 and not more than 36 semester hours, and each baccalaureate degree program to include not less than 40 and not more than 46 semester hours of required core courses, with the core requiring, at a minimum, course work in each of the following five areas:
 - (a) Arts and humanities
 - (b) Social and behavioral sciences,
 - (c) Biological and physical sciences.
 - (d) Mathematics, and
 - (e) English composition; or
 - (2) Conforming with COMAR 13B.02.02.16D(2)(b)-(c).
 - B. Each core course used to satisfy the distribution requirements of §A(1)of this regulation shall carry at least 3 semester hours.
 - C. General education programs of public institutions shall require at least:
 - (1) One course in each of two disciplines in arts and humanities;
 - (2) One course in each of two disciplines in social and behavioral sciences;
 - (3) Two science courses, at least one of which shall be a laboratory course:
 - (4) One course in mathematics at or above the level of college algebra; and
 - (5) One course in English composition.

- D. Interdisciplinary and Emerging Issues.
 - (1) In addition to the five required areas in §A of this regulation, a public institution may include up to 8 semester hours in a sixth category that addresses emerging issues that institutions have identified as essential to a full program of general education for their students. These courses may:
 - (a) Be integrated into other general education courses or may be presented as separate courses; and
 - (b) Include courses that:
 - (i) Provide an interdisciplinary examination of issues across the five areas, or
 - (ii) Address other categories of knowledge, skills, and values that lie outside of the five areas.
 - (2) Public institutions may not include the courses in this section in a general education program unless they provide academic content and rigor equivalent to the areas in §A(1) of this regulation.
- E. General education programs leading to the A.A.S. degree shall include at least 20 semester hours from the same course list designated by the sending institution for the A.A. and A.S. degrees. The A.A.S. degree shall include at least one 3-semester-hour course from each of the five areas listed in §A(1) of this regulation.
- F. A course in a discipline listed in more than one of the areas of general education may be applied only to one area of general education.
- G. A public institution may allow a speech communication or foreign language course to be part of the arts and humanities category.
- H. Composition and literature courses may be placed in the arts and humani-

- ties area if literature is included as part of the content of the course.
- Public institutions may not include physical education skills courses as part of the general education requirements.
- J. General education courses shall reflect current scholarship in the discipline and provide reference to theoretical frameworks and methods of inquiry appropriate to academic disciplines.
- K. Courses that are theoretical may include applications, but all applications courses shall include theoretical components if they are to be included as meeting general education requirements.
- L. Public institutions may incorporate knowledge and skills involving the use of quantitative data, effective writing, information retrieval, and information literacy when possible in the general education program.
- M. Notwithstanding §A(1) of this regulation, a public 4-year institution may require 48 semester hours of required core courses if courses upon which the institution's curriculum is based carry 4 semester hours.
- N. Public institutions shall develop systems to ensure that courses approved for inclusion on the list of general education courses are designed and assessed to comply with the requirements of this chapter.
- IV. Transfer of General Education Credit.
 - A. A student transferring to one public institution from another public institution shall receive general education credit for work completed at the student's sending institution as provided by this chapter.
 - B. A completed general education program shall transfer without further review or approval by; the receiving institution and without the need for a course-by-course match.

- C. Courses that are defined as general education by one institution shall transfer as general education even if the receiving institution does not have that specific course or has not designated that course as general education.
- D. The receiving institution shall give lower-division general education credits to a transferring student who has taken any part of the lower-division general education credits described in Regulation .03 of this chapter at a public institution for any general education courses successfully completed at the sending institution.
- E. Except as provided in Regulation .03M of this chapter, a receiving institution may not require a transfer student who has completed the requisite number of general education credits at any public college or university to take, as a condition of graduation, more than 10-16 additional semester hours of general education and specific courses required of all students at the receiving institution, with the total number not to exceed 46 semester hours. This provision does not relieve students of the obligation to complete specific academic program requirements or course prerequisites required by a receiving institution.
- F. A sending institution shall designate on or with the student transcript those courses that have met its general education requirements, as well as indicate whether the student has completed the general education program.
- G. A.A.S. Degrees
 - (1) While there may be variance in the numbers of hours of general education required for A.A., A.S., and A.A.S. degrees at a given institution, the courses identified as meeting general education requirements for all degrees shall come from the

- same general education course list and exclude technical or career courses.
- (2) An A.A.S. student who transfers into a receiving institution with fewer than the total number of general education credits designated by the receiving institution shall complete the difference in credits according to the distribution as designated by the receiving institution. Except as provided in Regulation .03M of this chapter, the total general education credits for baccalaureate degree-granting public receiving institutions may not exceed 46 semester hours.
- H. Student Responsibilities. A student is held:
 - (1) Accountable for the loss of credits that:
 - (a) Result from changes in the student's selection of the major program of study,
 - (b) Were earned for remedial course work, or
 - (c) Exceed the total course credits accepted in transfer as allowed by this chapter; and
 - (2) Responsible for meeting all requirements of the academic program of the receiving institution.
- V. Transfer of Nongeneral Education Program Credit.
 - A. Transfer to Another Public Institution.
 - (1) Credit earned at any public institution in the State is transferable to any other public institution if the:
 - (a) Credit is from a college or university parallel course or program;
 - (b) Grades in the block of courses transferred average 2.0 or higher; and
 - (c) Acceptance of the credit is consistent with the policies of the receiving institution governing

- native students following the same program.
- (2) If a native student's "D" grade in a specific course is acceptable in a program, then a "D" earned by a transfer student in the same course at a sending institution is also acceptable in the program. Conversely, if a native student is required to earn a grade of "C" or better in a required course, the transfer student shall also be required to earn a grade of "C" or better to meet the same requirement.
- B. Credit earned in or transferred from a community college is limited to:
 - (1) the baccalaureate degree program requirement, but may not be more than 70 semester hours; and
 - (2) The first 2 years of the undergraduate education experience.
- C. Nontraditional Credit.
 - (1) The assignment of credit for AP, CLEP, or other nationally recognized standardized examination scores presented by transfer students if determined according to the same standards that apply to native students in the receiving institution, and the assignment shall be consistent with the State minimum requirements.
 - (2) Transfer of credit from the following areas shall be consistent with COMAR 13B.02.02. and shall be evaluated by the receiving institution on a course-by-course basis:
 - (a) Technical courses from career programs;
 - (b) Course credit awarded through articulation agreements with other segments or agencies;
 - (c) Credit awarded for clinical practice or cooperative education experiences; and
 - (d) Credit awarded for life and work experiences.

- (3) The basis for the awarding of the credit shall be indicated on the student's transcript by the receiving institution.
- (4) The receiving institution shall inform a transfer student of the procedures for validation of course work for which there is no clear equivalency. Examples of validation procedures include ACE recommendations, portfolio assessment, credit through challenge examinations, and satisfactory completion of the next course in sequence in the academic area.
- (5) The receiving baccalaureate degree-granting institution shall use validation procedure when a transferring student successfully completes a course at the lower division level that the receiving institution offers at the upper division level. The validated credits earned for the course shall be substituted for the upper division course.
- D. Program Articulation.
 - (1) Recommended transfer programs shall be developed through consultation between the sending and receiving institutions. A recommended transfer program represents an agreement between the two institutions that allows students aspiring to the baccalaureate degree to plan their programs. These programs constitute freshman/sophomore level course work to be taken at the community college in fulfillment of the receiving institutions's lower division course work requirement.
 - (2) Recommended transfer programs in effect at the time that this regulation takes effect, which conform to this chapter, may be retained.
- VI. Academic Success and General Well-Being of Transfer Students.

A. Sending Institutions.

- (1) Community colleges shall encourage their students to complete the associate degree or to complete 56 hours in a recommended transfer program which includes both general education courses and courses applicable toward the program at the receiving institution.
- (2) Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.
- (3) The sending institution shall:
 - (a) Provide to community college students information about the specific transferability of courses at 4-year colleges;
 - (b) Transmit information about transfer students who are capable of honors work or independent study to the receiving institution; and
 - (c) Promptly supply the receiving institution with all the required documents if the student has met all financial and other obligations of the sending institution for transfer.

B. Receiving Institutions.

- Admission requirements and curriculum prerequisites shall be stated explicitly in institutional publications.
- (2) A receiving institution shall admit transfer students from newly established public colleges that are functioning with the approval of the Maryland Higher Education commission on the same basis as applicants from regionally accredited colleges.
- (3) A receiving institution shall evaluate the transcript of a degree-seeking transfer student as expeditiously as possible, and notify the student

- of the results not later than mid-semester of the student's first semester of enrollment at the receiving institution, if all official transcripts have been received at least 15 working days before mid-semester. The receiving institution shall inform a student of the courses which are acceptable for transfer credit and the courses which are applicable to the student's intended program of study.
- (4) A receiving institution shall give a transfer student the option of satisfying institutional graduation requirements that were in effect at the receiving institution at the time the student enrolled as a freshman at the sending institution. In the case of major requirements, a transfer student may satisfy the major requirements in effect at the time when the student was identifiable as pursuing the recommended transfer program at the sending institution. These conditions are applicable to a student who has been continuously enrolled at the sending institution.

VII. Programmatic Currency.

- A. A receiving institution shall provide to the community college current and accurate information on recommended transfer programs and the transferability status of courses. Community college students shall have access to this information.
- B. Recommended transfer programs shall be developed with each community college whenever new baccalaureate programs are approved by the degreegranting institution.
- C. When considering curricular changes, institutions shall notify each other of the proposed changes that might affect transfer students. An appropriate

mechanism shall be created to ensure that both 2-year and 4-year public colleges provide input or comments to the institution proposing the change. Sufficient lead time shall be provided to effect the change with minimum disruption. Transfer students are not required to repeat equivalent course work successfully completed at a community college.

VIII. Transfer Mediation Committee.

- A. There is a Transfer Mediation Committee, appointed by the Secretary, which is representative of the public 4-year colleges and universities and the community colleges.
- B. Sending and receiving institutions that disagree on the transferability of general education courses as defined by this chapter shall submit their disagreements to the Transfer Mediation Committee. The Transfer Mediation Committee shall address general questions regarding existing or past courses only, not individual student cases, and shall also address questions raised by institutions about the acceptability of new general education courses. As appropriate, the Committee shall consult with faculty on curricular issues.
- C. The findings of the Transfer Mediation Committee are considered binding on both parties.

IX. Appeal Process.

- A. Notice of Denial of Transfer Credit by a Receiving Institution.
 - (1) Except as provided in §A(2) of this regulation, a receiving institution shall inform a transfer student in writing of the denial of transfer credit not later than mid-semester of the transfer student's first semester, if all official transcripts have been received at least 15 working days before mid-semester.

- (2) If transcripts are submitted after 15 working days before mid-semester of a student's first semester, the receiving institution shall inform the student of credit denied within 20 working days of receipt of the official transcript.
- (3) A receiving institution shall include in the notice of denial of transfer credit:
 - (a) A statement of the student's right to appeal; and
 - (b) A notification that the appeal process is available in the institution's catalog.
- (4) The statement of the student's right to appeal the denial shall include notice of the time limitations in §B of this regulation.
- B. A student believing that the receiving institution has denied the student transfer credits in violation of this chapter may initiate an appeal by contacting the receiving institution's transfer coordinator or other responsible official of the receiving institution within 20 working days of receiving notice of the denial of credit.
- C. Response by Receiving Institution.
 - (1) A receiving institution shall:
 - (a) Establish expeditious and simplified procedures governing the appeal of a denial of transfer of credit: and
 - (b) Respond to a student's appeal within 10 working days.
 - (2) An institution may either grant or deny an appeal. The institution's reasons for denying the appeal shall be consistent with this chapter and conveyed to the student in written form.
 - (3) Unless a student appeals to the sending institution, the writing decision in §C(2) of this regulation constitutes the receiving institution's final decision and is not subject to appeal.

- D. Appeal to Sending Institution.
 - (1) If a student has been denied transfer credit after an appeal to the receiving institution, the student may request the sending institution to intercede on the student's behalf by contacting the transfer coordinator of the sending institution.
 - (2) A student shall make an appeal to the sending institution within 10 working days of having received the decision of the receiving institution.
- E. Consultation Between Sending and Receiving Institutions.
 - (1) Representatives of the two institutions shall have 15 working days to resolve the issues involved in an appeal.
 - (2) As a result of a consultation in this section, the receiving institution may affirm, modify, or reverse its earlier decision.
 - (3) The receiving institution shall inform a student in writing of the result of the consultation.
 - (4) The decision arising out of a consultation constitutes the final decision of the receiving institution and is not subject to appeal.
- X. Periodic Review.
 - A. Report by Receiving Institution.
 - (1) A receiving institution shall report annually the progress of students who transfer from two-year and

- four-year institutions within the State to each community college and to the Secretary of the Maryland Higher Education Commission.
- (2) An annual report shall include ongoing reports on the subsequent academic success of enrolled transfer students, including graduation rates, by major subject areas.
- (3) A receiving institution shall include in the reports comparable information on the progress of native students.
- B. Transfer Coordinator. A public institution of higher education shall designate a transfer coordinator, who serves as a resource person to transfer students at either the sending or receiving campus. The transfer coordinator is responsible for overseeing the application of the policies and procedures outlined in this chapter and interpreting transfer policies to the individual student and to the institution.
- C. The Maryland Higher Education Commission shall establish a permanent Student Transfer Advisory Committee that meets regularly to review transfer issues and recommend policy changes as needed. The Student Transfer Advisory Committee shall address issues of interpretation and implementation of this chapter.

| STU | JDENT TRAN | ISFER POLIC | IES | |
|-----|------------|-------------|-----|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| STU | JDENT TRAN | ISFER POLIC | IES | |
|-----|------------|-------------|-----|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| STU | JDENT TRAN | ISFER POLIC | IES | |
|-----|------------|-------------|-----|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Continuing Education

The Office of Continuing Education, HCC's center for non-traditional learning, offers:

Advanced Technology Training
Microcomputer Instruction
Personal Growth and Enrichment
Professional Licensure and Certification
Training
Health Care Training
Management and Supervisory Development
Basic Skills
Weekend, Fast Track and TV Classes Leading
to a Degree
Overseas Travel
Elementary, Middle and High School Student
Programs

Courses appeal to students of all ages and interests and can run six or 160 hours, days, evenings, or weekends anytime during the year. Continuing Education classes are offered in a variety of formats and held in locations throughout the county including HCC, public schools, businesses, and local organizations. They provide a good way of getting an education without having to follow the traditional model of a semester-long course with tests and grades.

Here is a sampling of the hundreds of courses offered:

Irish, Spanish, Japanese
Project Management, Mail-OrderBusiness,
Franchising
Real Estate Licensure, CPA Review, Insurance
Phlebotomy, EKG-Technician, Nursing
Patient Care Technician, EMT Training
Word, Excel, Access, Webmaster
Microsoft and Novell Certification
English As A Second Language, GED
Preparation, Citizenship

Swimming, Yoga, Dancing

Opera and Music, Howard County History, Artand Architecture Fiber Optics, Private Pilot, Air Conditioning Travel Agent, Day Care, Manicurist Stained Glass, Financial Planning, Quilting

Special services to the community include:

SUMMER AND YEAR-ROUND PROGRAMS FOR ELEMENTARY, MIDDLE AND HIGH SCHOOLERS—selections include study skills, computer classes, languages, and creative writing. 410-772-4976

MEDIATION AND CONFLICT RESOLUTION—includes courses, referrals, and information. 410-772-4972

BUSINESS TRAINING—Training includes a variety of options at the Business Training Center Gateway campus, a corporate park easily accessed from Interstate 95, with its state-of-theart labs, equipment, and software. Custom-designed services and facilities are available to meet the training needs of regional businesses. Courses such as Oracle, C++ Programming, Visual Basic, UNIX, and Network as well as traditional microcomputer applications classes in all Microsoft and Lotus products and Novell software are taught in these modern labs. 410-772-4808

NON-TRADITIONAL AA DEGREES—programs include Weekend College, Fast Track and Telecourses allowing flexible learning on campus or at home. 410-772-4824

NON-TRADITIONAL HIGH SCHOOL DIPLOMAS FOR ADULTS—formats include the portfoliobased external high school diploma and standardized class instruction leading to the GED test. 410-772-4919

CONTINUING EDUCATION

CREDIT OPPORTUNITIES IN A NON-CREDIT FORMAT—options include the CustomClass program, which opens credit courses to non-degree-seeking students looking for review, career exploration, and personal enrichment. 410-772-4825

INTERNATIONAL EDUCATION—choices include credit and credit-free study trips abroad, cultural awareness courses, and instruction in 16 foreign languages. 410-772-4974

Quarterly continuing education brochures are delivered to every residence in Howard County in March, May, August, and December.

Brochures for the health care team, Howard County businesses and Weekend College, Fast Track and Telecourse students are also mailed periodically to special mailing lists.

For brochures and general information, call 410-772-4823.

STATEWIDE INSTRUCTIONAL PROGRAMS

The Maryland Higher Education Commission has designated certain instructional programs at Maryland community colleges as statewide programs. In addition to providing greater opportunity to additional Maryland citizens, the implementation of statewide programs allows for more effective planning for the placement of new instructional programs, particularly in high-cost specialties. Since residents of one county can enroll in designated programs in adjoining areas with little or no additional cost, there is less need to have all programs available locally. The procedure tends to reduce unnecessary duplication of effort. The programs designated as statewide are:

Allegany Community College

Automotive Technology
Communications Media
Dental Hygiene
Electromechanical Technology
Forest Technology
Medical Lab Technology
Nursing/LPN
Nursing/RN
Radiologic Technology
Respiratory Therapy

Anne Arundel Community College

EMT Paramedic Computer Network Management Medical Assistant Radiologic Technology

Baltimore City Community College

Dental Hygiene
Dietetic Management
Dietetic Technology
International Trade
Medical Records Technology
Operating Room Technology
Physical Therapist Assistant
Respiratory Therapy Technology

Catonsville Community College

Air Transportation
Automotive Tech (GM, Ford, Toyota options)
Automated Manufacturing Tech
Computer Graphics
Interpretation for the Deaf
Mortuary Science
Occupational Safety and Health Technology
Occupational Therapy Assistant
Printing Management Technology
Recreation, Parks and Leisure

Cecil Community College

Equine Science Professional Photography

Charles Community College

Nursing/LPN

Chesapeake Community College

Aviation Maintenance Technology Early Childhood (Pending) Radiologic Technology

Dundalk Community College

Chemical Dependency Counseling Labor Studies Physical Fitness Technology Retail Floristry

Essex Community College

Diagnostic Medical Sonography Medical Lab Technology Medical Records Technology Nuclear Medical Technology Physician Assistant Radiography Radiation Therapy Technology Respiratory Therapy Veterinary Technology

Frederick Community College

Aviation Maintenance Technology Nursing/LPN Park Operation Management

Garrett Community College

Resort Management Wildlife Management

Hagerstown Junior College

Radiologic technology

Harford Community College

Electroneurodiagnostic Technologies Nursing/LPN Science Laboratory Technology

Howard Community College

Biomedical Engineering Technology Cardiovascular Technology

Montgomery College

Biotechnology Laboratory Technology Dental Assisting Diagnostic Medical Sonography Fire Science Medical Coder Abstracter Medical Lab Technology Radiologic Technology Technical Writing

Prince George's Community College

Culinary Arts Health Information Technology Nuclear Medicine Technology Radiography (X-Ray) Technology Respiratory Therapy

Wor-Wic Tech Community College

Hotel-Motel Restaurant Management Nursing/LPN Nursing/RN Radiologic Technology Resort Management

CURRICULUM PROFILE

ASSOCIATE IN ARTS DEGREE—Transfer Programs

Two-year curriculum leading to transfer to a four-year program

Arts and Sciences

Architecture

Art

Criminal Justice

Environmental Science

Health and Fitness Education

Laboratory Science - Biotechnology

Liberal Arts

Life Science

Music

Nursing

Nursing-LPN Pathway Sequence

Photography

Physical Sciences

Pre-Allied Health

Pre-Dentistry

Pre-Medicine

Pre-Medical Technology

Pre-Nuclear Medicine Technology

Pre-Optometry

Pre-Pharmacy

Pre-Veterinary Medicine

Psychology

Social Science

Theatre—Performance

Theatre—Technical

Business Administration

Accounting, Business Administration, Fashion Merchandising Information Systems Management—Microcomputer Emphasis

Information Systems Management—Programming Emphasis

Computer Science

Engineering

General Studies

Teacher Education

Early Childhood/Elementary Education

Secondary Education

ASSOCIATE IN APPLIED SCIENCE DEGREE—Career Programs

Two-year curriculum leading to immediate employment

Accounting-Preparation for the CPA Examination

Biomedical Engineering Technology1

Business Management

Business Management—Financial Planning

Business Management—Retail Management

Cardiovascular Technology

Chemical Dependency Counseling

Computer Aided Design Technology

Computer Support Technology

Early Childhood Development

Electronics Technology

Electronics Technology—Telecommunications Technology

CURRICULUM PROFILE

ASSOCIATE IN APPLIED SCIENCE DEGREE—Career Programs (continued)

Network Administration

Novell Certification Pathways

Certified Netware Engineer

Enterprise Certified Netware Engineer

Certified Netware Administrator

Office Technology—Office Management/Supervision

Office Technology-Office Assistant

Office Technology—Legal Office Assistant

Office Technology—Medical Office Assistant

CERTIFICATE OF PROFICIENCY—Career Programs

One-year curriculum leading to employment

Biomedical Engineering Technology1

Biomedical Engineering Advanced Certificate

Business Management—Financial Planning Option

Business Management—Financial Planning Advanced Certificate

Business Management—Retailing

Cardiovascular Technology

Advanced Cardiovascular Imaging and Interventional Therapies

Cardiac Monitoring and Analysis

Cardiovascular Technology for Allied Health Professionals

Computer Aided Design

Computer Support Technology—Microsoft

Computer Support Technology—Novell
Computer Support Technology—PC Maintenance with Network Emphasis

Early Childhood Development

Electronics Technology

Electronics Technology—Telecommunications Option

Nursing

Practical Nursing

Office Technology—Office Assistant

Office Technology—Legal Office Assistant

Office Technology—Medical Office Assistant

Plant Science

LETTER OF RECOGNITION

Cohesive set of courses to enhance skill level

Certified Novell Administrator

Computer Support Technology—A+ Certification

Early Childhood Education

Office Technology—Legal Office Assistant

Office Technology-Medical Office Assistant

Office Technology—Office Assistant
Office Technology—Word Processing Specialist

Performance Theatre

Personal Fitness Trainer

Technical Theatre

¹Residents of Maryland may enroll in this designated Statewide Program at in-county tuition rates if this program is not offered in their county.

Curricula

PROGRAM SELECTION

The college offers a number of curricula leading to the associate of arts degree, the associate of applied science degree, the certificate of proficiency and the letter of recognition. Each curriculum has been designed to accomplish specific purposes as indicated in the description section of the curricula or program. Students should read the descriptions carefully to ensure the program meets their educational and career goals.

Each associate degree requires between 60-70 credits in order to fulfill graduation requirements. Students may be required to take preparatory or developmental coursework as prerequisite to college level courses. Such courses are not transferable and do not count toward graduation requirements, although developmental coursework figures into the student's cumulative grade point average (see "Placement Testing for Basic Skills Assessment and Developmental Studies Policy" on page 23 for further information). Developmental courses are taught in lecture and laboratory settings where maximum supervision and support can be provided and instruction is often individualized.

Developmental English

Developmental English courses include preparation in reading, writing and study skills. In addition, courses for non-native speakers of English focus on reading, writing, study skills and oral communication skills.

Developmental Mathematics

Developmental mathematics courses focus on elementary arithmetic, fundamental algebra,

and elementary geometry. Students should review their prior math material before completing math basic skills assessment testing.

GENERAL EDUCATION REQUIREMENTS

Howard Community college has the responsibility to ensure that all degree recipients have achieved a broad educational experience. To achieve this breadth of learning, the college has established fundamental general educational goals. These goals include the ability to express ideas effectively both orally and in writing; the ability to analyze written text coherently and in detail; the ability to perform mathematical operations at a college level and apply these skills; the ability to reason logically and to evaluate the reasoning of others; and the ability to understand the elements of one's own culture in relation to other cultures.

To ensure these general education goals are met by each student, Howard Community College requires all students to take courses in writing, literature, fine arts, humanities, mathematics, science, history, social sciences, and interdisciplinary and emerging issues. These topics are woven into the General Education Core Courses. Students completing the asociate in arts degree must complete a minimum of 30 and a maxium of 36 credits from the general eduation core as designated in the specific curriculum and delineated below. Also, see STU-DENT TRANSFER POLICIES on page 43. Students completing the associate of applied science degree will complete at least 20 credits in general education as specified in the individual curriculum.

COURSES FULFILLING CORE REQUIREMENTS

Each program specifies general education courses needed to complete the 36 credit general education core requirement for the Associate in Arts degree. Most of the courses listed below fulfill core curriculum requirements at state colleges and universities. A few courses may not transfer as core requirements to every college or university. Check the requirements of your transfer institution before selecting specific courses, or see your advisor for assistance.

ENGLISH COMPOSITION CORE (3-6 credits)

| EG 101 | Introduction to | Composition | Ī |
|--------|-----------------|-------------|--------|
| EG 102 | Introduction to | Composition | II^* |

*EG 102 fulfills the state composition core requirement.

ARTS AND HUMANITIES CORE (6-9 credits)

Literature Core

| EG 120 | Introduction to Literature |
|--------|----------------------------------|
| EG 201 | American Literature I |
| EG 202 | American Literature II |
| EG 203 | English Literature I |
| EG 204 | English Literature II |
| EG 225 | Introduction to World Literature |

Fine Arts Core

| AR 104 | Art History I |
|-----------|--------------------------------|
| AR 105 | Art History II |
| AR 143 | History of Photography |
| DA 190 | Dance Appreciation |
| FA 101 | Humanities through the Arts |
| FA 102 | Arts, Cultures, and Ideas |
| FA/WS 193 | Introduction to Women's |
| | Studies: Women, Art, and |
| | Culture |
| FA200H | 20th Century Arts, Culture and |
| | Ideas-Rouse |
| FM 171 | Introduction to the American |
| | Cinema |

| FM 172 | Introduction to Foreign Cinema |
|--------|--------------------------------|
| MU100 | Fundamentals of Music |
| MU 101 | Music Appreciation |
| MU 102 | A Survey of Music Literature |
| TH 131 | Theatre Appreciation |
| TH 141 | Basic Acting I |
| TH 190 | Theatre History I |
| TH 191 | Theatre History II |
| | |

Two-Dimensional Basic Design

Humanities Core

AR 101

| AR 104 | Art History I |
|-----------|----------------------------------|
| AR 105 | Art History II |
| AR 109 | Drawing I |
| AR 143 | History of Photography |
| DA 190 | Dance Appreciation |
| EG 102 | Introduction to Composition II |
| EG 120 | Introduction to Literature |
| EG 201 | American Literature I |
| EG 202 | American Literature II |
| EG 203 | English Literature I |
| EG 204 | English Literature II |
| EG 206 | African-American Literature |
| EG 209 | Modern Drama |
| EG/WS 212 | By and About Women |
| EG 225 | Introduction to World Literature |
| FA 101 | Humanities through the Arts |
| FA 102 | Arts, Cultures, and Ideas |
| FA/WS 193 | Introduction to Women's |
| | Studies: Women, Art, and |
| | Culture |
| EVSUUT | 20th Contury Arts Culture and |

FA200H 20th Century Arts, Culture and Ideas-Rouse

| FM 171 | Introduction to the American |
|--------|--------------------------------|
| | Cinema |
| FM 172 | Introduction to Foreign Cinema |
| MU 100 | Fundamentals of Music |
| MU 101 | Music Appreciation |
| MU 102 | A Survey of Music Literature |
| MU 108 | African-American Music |
| PL 101 | Introduction to Philosophy |

PL 103 **Introduction to Ethics** PL 201 Religions of the World PL 202 **Logic and Critical Thinking** Fundamentals of Public SH 105

Speaking

Interpersonal Communication SH 110

| TH 131 | Theatre Appreciation | | ORE (7-16 credits) |
|--|---|----------|----------------------------------|
| TH 141 | Basic Acting I | BY 101 | General Biology I |
| TH 190 | Theatre History I | BY 102 | General Biology II |
| TH 191 | Theatre History II | BY 103 | Human Heredity |
| Any course with an SP, FR, GR, or RU prefix | | BY 104 | Oceanography |
| | | BY 105 | Environmental Science |
| | | BY 107 | Fundamentals of Microbiology |
| | | BY 115 | Environmental Science |
| SOCIAL SCIE | ENCES CORE (6-9 credits) | | Laboratory |
| | | BY 200 | Microbiology |
| History Core | | BY 201 | Genetics |
| HY 111 | American History to 1877 | BY 202 | Genetics Lab |
| HY 112 | American History since 1877 | BY 203 | Anatomy and Physiology I |
| HY 121 | The Ancient World: Prehistory to | BY 204 | Anatomy and Physiology II |
| | the Middle Ages | CH 101 | General Inorganic Chemistry I |
| HY 122 | Western Civilization and the | CH 102 | General Inorganic Chemistry II |
| | Pre-Modern World | CH 103 | Fundamentals of General |
| HY 123 | Western Civilization and the | | Chemistry |
| | Modern World | CH 105 | Chemistry and Society |
| | | CH 115 | Chemistry and Society Lab |
| Social And B | ehavioral Science Core | CH 201 | Organic Chemistry I |
| No more than ONE history course can be taken | | CH 202 | Organic Chemistry II |
| in this area. | J | PS 100 | Technical Physics |
| EC 101 | Principles of Economics (Macro) | PS 103 | Fundamentals of Physics I |
| EC 102 | Principles of Economic (Micro) | PS 104 | Fundamentals of Physics II |
| GE 101 | Introduction to World Geography | PS 105 | Introduction to Physical Science |
| GE 102 | Elements of Cultural Geography | PS 110 | General Physics I (Calculus) |
| HY 111 | American History to 1877 | PS 111 | General Physics II (Calculus) |
| HY 112 | American History since 1877 | PS 115 | Introduction to Physical Science |
| HY 121 | The Ancient World: Prehistory | | Lab |
| | to the Middle Ages | SC 104 | Elementary Astronomy |
| HY 122 | Western Civilization and the | SC 107 | Introduction to Physical Geology |
| | Pre- Modern World | SC 111 | Meteorology |
| HY 123 | Western Civilization and the | SC 114 | Elementary Astronomy Lab |
| 111 140 | Modern World | SC 117 | Introduction to Physical Geology |
| HY 201 | Europe in the Twentieth | | Lab |
| 111 201 | Century | | |
| HY 211 | Asian Civilization- China, | MATHEMAT | ICS CORE (3-9 credits) |
| 111 211 | Japan, and Korea | MA 122 | Ideas in Mathematics |
| HY 213 | History of Modern Russia | MA 124 | Technical Math |
| HY 226 | History of African American | MA 127 | Concepts of Mathematics I |
| 111 220 | Experience | MA 128 | Concepts of Mathematics II |
| PO 101 | American Federal Government | MA 131 | College Alebra |
| PY 101 | General Psychology | MA 133 | College Trigonometry |
| SO 101 | Introduction to Sociology | MA 135 | Precalculus |
| SO 101 | Introduction to Sociology Introduction to Cultural | MA 140 | Calculus I |
| 50 100 | Anthropology | MA 145 | Business Calculus |
| | | | |

| MA 150 | Calculus II |
|--------|---------------------------------|
| MA 186 | Introductory Numerical Analysis |
| MA 200 | Statistics |
| MA 220 | Introduction to Discrete |
| | Structures |
| MA 240 | Calculus III |
| MA 250 | Linear Algebra |
| MA 260 | Differential Equations |
| | |

INTERDISCIPLINARY AND EMERGING ISSUES CORE (1-6 credits)

| CS 110 | Software Applications for Micros |
|-----------|----------------------------------|
| CS 126 | Introduction to Internet |
| CS 129 | Principles of Internet |
| CS 271 | Introduction to Multimedia |
| | Applications |
| EG 211 | Science through Science Fiction |
| HD 200 | Life Span Development |
| HE 100 | Introduction to Lifetime Fitness |
| HE 102 | Introduction to Weight |
| | Management |
| HE 104 | Personal Nutrition Assessment |
| HE 109 | Basic CPR and First Aid |
| HE 110 | Introduction to Personal |
| | Wellness |
| HE 111 | Introduction to Health |
| | Education |
| HE 112 | First Aid and Safety |
| HE 113 | Drug Use and Abuse |
| HE 115 | Personal and Community |
| | Health |
| HE 160 | The Aging Process: Gerontology |
| HE 200 | Health/Fitness Leader |
| HE 211 | Nutrition |
| HE 212 | Current Health Issues |
| HE 213 | Stress Management |
| HY/WS 225 | Women in American History: |
| | Colonial Times to 1880 |
| HY/WS 227 | Women in American History: |
| | 1880 to Present |
| SO/WS 111 | Introduction to Women's |
| | Studies: Women, Gender, and |
| | Society |
| SO 120 | Comparative World Cultures |
| | |

STUDENT RESPONSIBILITIES

After students have selected a particular curriculum, they should familiarize themselves with the various courses that have been specified for the freshman and sophomore years. They should note particularly the prerequisites and the placement of the various courses of learning and should also be aware of their own level of development and how their backgrounds relate to their choice of curriculum.

Because of enrollment patterns and scheduling problems, not all courses specified in the suggested curricula are offered each semester. In addition, courses scheduled for a given semester may be canceled because of insufficient enrollment. Students must take these factors into consideration when planning their schedules and/or timetable for completing any given program or degree. It is strongly suggested that you consult with an advisor or counselor in planning your program.

It is the responsibility of students to meet the requirements of the curriculum in which they are enrolled even though counselors and faculty advisors will provide students with advice and recommendations. Students who wish to transfer courses must acquaint themselves with the requirements of the senior institution in order to obtain maximum credit at time of transfer. A complete statement of Student Transfer Policies is included in this catalog.

CATEGORIES OF ELECTIVES

SOCIAL SCIENCES ELECTIVE

Any course with a prefix of CJ, EC, GE, HY, PO, PY, SO, ED 260, HD 200, WS 111, WS 225, and WS 227.

FINE ARTS ELECTIVES

Any course with a prefix of AR, DA, FA, FM, MU, TH, EG 209, 115, 215, and WS 193.

HUMANITIES ELECTIVES

Any course with a prefix of AR or DA, EG 115, EG 120, any 200 level or higher EG course (except EG 901), any course with a prefix of FA, FM, FR, GR, JP, MM, MU, PL, RU, SH, SP, TH, WS 193 and WS 212.

SCIENCE ELECTIVES

Any course with a prefix of BY, CH, PS, or SC.

BUSINESS ELECTIVES

Any course with a prefix of AC, BU, CS, EC, FP, LA, MN, OT, and RE.

ENGLISH ELECTIVES

EG 115, EG 120, any 200 level or higher EG course (except EG 901), any course with a prefix of MM or SH, and WS 212.

ARTS & SCIENCES ELECTIVES

Any course with a prefix of AR, BY, CH, CJ, CS 110, CS 120, CS 121, CS 126, CS 129, CS 135, CS 140, CS 150, CS 160, CS 170, CS 180, CS 210, CS 230, CS 261, CS 271, CS 280, DA, EC, ED, EG (except course below the 100 level), EN, FA, FM, FR, GE, GR, HD, HE, HY, MA (except MA 060, 061, 064, 065, 070, 105, and 108), MM, MU, PL, PO, PS, PY, RU, SC, SH, SO, SP, TH, and WS.

COURSE CODES

Course descriptions are alphabetized by category and not by course code

AC Accounting

AR Art

BY Biology

BT Biomedical Engineering Technology

BU Business Administration CV Cardiovascular Technology

CH Chemistry

CD Computer-Aided Design

CJ Criminal Justice

CS Computer Systems
CO Cooperative Education

DA Dance

EC Economics

ED Education

EG English

EL Electronics Technology

EN Engineering FA Fine Arts

FA Fine A

FP Financial Planning

FR French

GE Geography GR German

HC Health Care

HE Health Education

HY History

HD Human Development

LF Life Fitness

MN Management

MM Mass Media MS Microsoft

MA Mathematics

MU Music

NT Novell

NU Nursing

OT Office Technology

PL Philosophy

PS Physics

PT Plant Science

PO Political Science

PY Psychology

RC Recreation

RE Retailing

RU Russian

SC Science

SO Sociology

SP Spanish

ST Smalltalk

SH Speech

TH Theatre

WS Women's Studies

The following segment of the catalogue presents transfer patterns and program options in five basic areas: arts and sciences, business administration, computer science, engineering and general studies. Transfer programs are designed to transfer primarily to University of Maryland system schools, however, students may plan to transfer to universities and colleges throughout the nation.

The college has numerous services for students preparing to transfer, such as transfer counseling,

| To deter of Maryl which th | pus visits by trans rmine the transfer and System's con ney are interested sociate in arts de | rability of speci nputerized tran l in transferring | ific courses, stu sfer articulatio | udents should u n database, or o | use "ARTSYS," t consult with the | he University institution to |
|----------------------------------|---|---|---------------------------------------|-------------------------------------|-------------------------------------|---------------------------------|
| or arr as | sociate in arts de | gree. | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| İ | | | | | | |

ARTS AND SCIENCES - Architecture ASSOCIATE IN ARTS DEGREE

This curriculum is a guide to students planning to transfer to a four-year institution to complete a bachelor of science degree in Architecture. This program is specifically designed to transfer to UMCP. Students are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATIO (General education of general electives or of total of general educa- least 60 semester hor | Credits | Suggested Semester | |
|--|--|-----------------------|--------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 2 3 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 2-3 |
| Social Sciences | Social and Behavioral Sciences Core Course | 3 | 4 |
| | (see p. 61) | | |
| BY 101 | General Biology I | 4 | 1 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| Mathematics | MA 140 or higher | 4 | 2 |
| Interdisciplinary | Interdisciplinary and Emerging Issues | | |
| | Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | S RELATED TO MAJOR | | |
| AR 108 | Environmental Design: Introduction to the | 3 | 3 |
| | Built Environment | | |
| AR 106 | The History of Western Architecture I | 3 | 3 |
| AR 109 | Drawing I | 3 | 3 |
| AR 107 | The History of Western Architecture II | 3 | 4 |
| MA 150 | Calculus IĬ | 4 | 4 |
| PS 103 | Fundamentals of Physics I | 4 | 4 |
| PS 104 | Fundamentals of Physics II | 4 | 4 |

ARTS AND SCIENCES - Art ASSOCIATE IN ARTS DEGREE

This curriculum is designed as a guide for students planning to transfer to a four-year institution to complete a bachelor's degree in studio art/art history and such specialty areas as drawing, painting, graphic design, product design, interior design, architectural design, printmaking, photography, ceramics, sculpture, fiber arts, and crafts. Students are advised to check the requirements of the institution to which they intend to transfer. The main emphasis in the art program is the development of conceptual and technical visualization skills and a transfer portfolio.

| general electives or o | ore credits in excess of 36 willl transfer as courses related to the major. Each student's ation and required courses must equal at | Credits | Suggested Semester |
|------------------------|---|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | |
| Literature | Literature Core Course (see p. 60) | 3 | 2 3 3 |
| FA 102 | Arts, Cultures, and Ideas | 3 | 3 |
| AR 104, 105 | Art History I or II | 3 | 1 |
| History | HY 121, 122, or 123 | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core | | |
| | Course (see p. 61) | 6 | 3-4 |
| Science | Science Core Course (see p. 61; must | | |
| | include one course with lab) | 7-8 | 2-3 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues Core | | |
| 1 3 | Course (see p. 62) | 1-3 | 3 |
| REQUIRED COURSE | S RELATED TO MAJOR | | |
| AR 104, 105 | Art History I or II (course not taken in CORE | 3 | 2 |
| AR 101 | Two-Dimensional Design | 3 | 1 |
| AR 102 | Three-Dimensional Design | 3 | 2 |
| AR 109 | Drawing I | 3 | 1 |
| AR 110 | Drawing II | 3 | 2 |
| AR 211 | Painting I | 3 | 3 |
| AR 250 | Art Portfolio Assessment | 1 | 4 |
| Art | Art Elective | 6 | 3-4 |
| Humanities | Humanities Elective (see p. 63) | 3 | 3 |

ARTS AND SCIENCES - Criminal Justice ASSOCIATE IN ARTS DEGREE

The Criminal Justice pattern is designed as a guide for students planning to transfer to a four-year institution to complete a bachelor's degree in Criminology/Criminal Justice. It is designed to prepare students who plan to ultimately serve the community on a local, state, or national level in the fields of law enforcement, parole and probation, juvenile justice corrections, law or criminal justice research. Articulation has been established with the University of Baltimore and the University of Maryland, College Park and it is recommended that students acquaint themselves with the course requirements of the institution to which they plan to transfer.

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willl transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at | | | | |
|--|---|-----|-----|--|
| least 60 semester hou | | | | |
| EG 101 | Introduction to Composition I | 3 | 1 | |
| EG 102 | Introduction to Composition II | 3 | 2 | |
| Literature | Literature Core Course (see p. 60 | 3 | 2 | |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 1 | |
| SH 105 | Fundamentals of Public Speaking | 3 | 1 | |
| History | History Core Course (see p. 61) | 3 | 1 | |
| Social Sciences | Social and Behavioral Sciences Core Course | S | | |
| | (see p. 61) (Required SO 101 and PY 101) | 6 | 2-3 | |
| Science | Science Core Course (see p. 61; must | | | |
| | include one course with lab) | 7-8 | 2-3 | |
| Mathematics | MA 122 or higher | 3-5 | 1 | |
| Interdisciplinary | Interdisciplinary and Emerging Issues Core | | | |
| • • | Course (see p. 62) | 2-3 | 3 | |
| REQUIRED COURSES | RELATED TO MAJOR | | | |
| CJ 101 | Introduction to Criminal Justice | 3 | 1 | |
| CJ 102 | Introduction to Criminology | 3 | 2 | |
| Political Science | American Federal Government (PO 101) OR | | | |
| | State and Local Government (PO 102) | 3 | 3 | |
| Criminal Justice | Any two courses with a CJ prefix | 6 | 3-4 | |
| Social Sciences | Social and Behavioral Sciences Elective | Ü | 0.1 | |
| Computer Systems | (see p. 63) (Recommend completion of history sequence and PO 101 or PO 102) Any course with a CS Prefix | 6 | 3-4 | |
| r | (CS 110 recommended) | 3-4 | 4 | |

ARTS AND SCIENCES - Environmental Science ASSOCIATE IN ARTS DEGREE

The growing emphasis on environmental issues has created a demand for skilled specialists in the area of environmental science and natural resources management. This curriculum is a guide to students planning to transfer to a four-year institution to complete a bachelor of science degree in Environmental Science, Ecology, or Natural Resources Management. Students are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATIO (General education of general electives or of total of general educa- least 60 semester hor | Credits | Suggested Semester | |
|--|--|-----------------------|--------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | 3 | 4 |
| | (see p. 61) | | |
| BY 101 | General Biology I | 4 | 1 |
| BY 102 | General Biology II | 4 | 2 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| CS 110 | Software Applications for Micros | 3 | 3 |
| REQUIRED COURSES | S RELATED TO MAJOR | | |
| Mathematics | MA 140 or higher | 4 | 2 |
| BY 105 | Environmental Science | 3 | 3 |
| BY 115 | Environmental Science Lab | 1 | 3 3 |
| BY 200 | Microbiology | 4 | 3 |
| PS 105 | Introduction to Physical Science | 3 | 4 |
| PS 115 | Introduction to Physical Science Lab | 1 | 4 |
| SC 107 | Introduction to Physical Geology | 3 | 4 |
| SC 117 | Introduction to Physical Geology Lab | 1 | 4 |

ARTS AND SCIENCES - Health and Fitness Education ASSOCIATE IN ARTS DEGREE

This pattern is designed for students who wish to transfer to a four-year institution to complete a baccalaureate degree in general health education, school and community health and health fitness and promotion programs. The courses and curricula have been designed to provide the student with a foundation of science, an introduction to fundamental competencies in health, fitness, and wellness, and an academic core of general education requirements. This program has been designed to fit with similar programs at Frostburg University, Salisbury State University and the University of Maryland. Students are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATIO (General education co general electives or co total of general educa least 60 semester hou | Credits | Suggested Semester | |
|---|---------------------------------------|-----------------------|-----|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 |
| SH 105 | Fundamentals of Public Speaking | 3 | 4 |
| History | History Core Course (see p. 61) | 3 | 1 |
| SO 101 | Introduction to Sociology | 3 | 2 |
| PY 101 | Introduction to Psychology | 3 | 3 |
| BY 101 | General Biology I | 4 | 1 |
| BY 203 | Anatomy and Physiology I | 4 | 2 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| HE 200 | Health/Fitness Leader | 3 | 4 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| BY 204 | Anatomy & Physiology II | 4 | 3 |
| HE 111 | Introduction to Health Education | 3 | 1 |
| HE 112 | First Aid and Safety | 3 | 2 |
| HE 211 | Nutrition | 3 | 4 |
| HE 213 | Stress Management | 3 | 4 |
| Health | Health Electives (Select from HE 113, | 9 | 2,3 |
| | HE 115, HE 120, HE 121, HE 160, or | | |
| | HE 212) | | |

ARTS AND SCIENCES - Health and Fitness Education (Personal Fitness Trainer) LETTER OF RECOGNITION

The letter of recognition provides students with the basic competencies necessary for an entry level position in the fitness field. It also enhances the knowledge and skills of those already employed in the exercise/fitness industry.

| | | Credits |
|--------|--|---------|
| HE 109 | Basic First Aid | 2 |
| HE 200 | Health/Fitness Leader | 3 |
| HE 211 | Nutrition | 3 |
| HE 111 | Introduction to Health Education OR | 3 |
| HE 213 | Stress Management | 3 |

ARTS AND SCIENCES - Laboratory Science (Biotechnology) ASSOCIATE IN ARTS DEGREE

The growing emphasis on modern science technology has created a demand for skilled laboratory specialists in the emerging biotechnology and chemical industries. These areas include genetic engineering, pharmaceuticals, biological and biomedical research, quality control, water quality and treatment, pollution abatement, and others. The college has articulated this program with the Department of Medical and Research Technology at the University of Maryland at Baltimore which leads to a B.S. degree. The laboratory science program is suitable for students planning to seek employment as laboratory technicians in industrial and research laboratories. Graduates of this program should be able to carry out laboratory procedures, properly use laboratory apparatus and perform basic calculations. Students interested in this curriculum are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willl transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at least 60 semester hours of credit.) | | | | |
|--|--|-----|----------------------|--|
| EG 101 | Introduction to Composition I | 3 | 1 | |
| EG 102 | Introduction to Composition II | 3 | 2 | |
| Literature | Literature Core Course (see p. 60) | 3 | $\tilde{\mathbf{z}}$ | |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 | |
| History | History Core Course (see p. 61) | 3 | 2 | |
| Social Sciences | Social and Behavioral Sciences Core Course (see p. 61) | | 4 | |
| BY 101 | General Biology I | 4 | 1 | |
| CH 101 | General Inorganic Chemistry I | 4 | 1 | |
| CH 102 | General Inorganic Chemistry II | 4 | 2 | |
| CH 201 | Organic Chemistry I | 4 | 3 | |
| Mathematics | MA 133 or higher | 3-5 | 1 | |
| Interdisciplinary | Interdisciplinary and Emerging | 0 0 | - | |
| j | Issues Core Course (see p. 63) | 1-3 | 2 | |
| REQUIRED COURSES | RELATED TO MAJOR | | | |
| BY 200 | Microbiology | 4 | 3 | |
| MA 200 | Statistics | 3 | 3 | |
| Science | Science Electives (see p. 63) (BY 102, BY 290, PS 103, PS 104, BY 203, BY 204 | | | |
| | recommended) | 4 | 3-4 | |
| BY 201 | Genetics | 3 | 4 | |
| BY 202 | Genetics Lab | 1 | 4 | |
| BY 205 | Cell Biology | 4 | 4 | |
| CH 202 | Organic Chemistry II | 4 | 4 | |
| CS 110 | Software Applications For Micros | 3 | 4 | |

ARTS AND SCIENCES - Liberal Arts ASSOCIATE IN ARTS DEGREE

This curriculum is designed for those who want to study pre-law, journalism, interdisciplinary studies, English, sociology, economics and other similar disciplines at a four-year school. It gives the student the flexibility to pursue a major interest and, at the same time, to fulfill the lower-division general education requirements for transfer to a baccalaureate degree program. Students should seek guidance from advisors and the institution to which they wish to transfer to determine appropriate coursework for specific transfer programs.

| general electives or co | re credits in excess of 36 willI transfer as ourses related to the major. Each student's tion and required courses must equal at | Credits | Suggested Semester |
|-------------------------|--|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | |
| Literature | Literature Core Course (see p. 60) | 3 | 2 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| Humanities | Humanities Core Course | | |
| | (Foreign Language Sequence is | | |
| | recommended.) | 3 | 1 |
| History | History Core Course (see p. 61) | 3 | 1 |
| Social Sciences | Social and Behavioral Sciences Core | | |
| | Courses (see p. 59) | 6 | 2-3 |
| Science | Science Core Course (see p. 61; must | | |
| | include one course with lab) | 7-8 | 3-4 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues | | |
| r | Core Course (see p. 62) | 2-3 | 4 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| Oral Communication | Select one of the following: FA 102, HD 100, | | |
| | SH 105 or 110, TH 141 | 3 | 1 |
| Arts and Sciences | Arts and Sciences Electives (see p. 63) | 6 | 2,4 |
| Humanities | Humanities Electives (see p. 63) | | |
| | (Foreign Language sequence is | | |
| | recommended.) | 6 | 3-4 |
| English | Any course with an EG or MM prefix | | |
| 8 | (Course must be 200 level or higher) | 3 | 4 |
| Social Sciences | Social and Behavioral Sciences Elective | | |
| | (see p. 63) (Completion of history sequence | | |
| | recommended.) | 6 | 2 |
| | , | | |

ARTS AND SCIENCES-Liberal Arts ASSOCIATE IN ARTS DEGREE

Degrees at a Distance For Students Who Can't Regularly Come to Campus

Students can now earn a degree without having to come to campus on a weekly basis. Howard Community College is part of a national project, Going the Distance, sponsored by the Public Broadcasting Service which designs degrees built primarily around distance learning or learning done in places other than the classroom during a regular academic term. This program reflects the needs of those students who have professional or family responsibilities which limit their availability for traditional on-campus courses. By combining Telecourses, Weekend College, Fast Track (accelerated classes), and new online classes taught via the Internet, students can easily comlete an Associate in Arts in General Studies or Liberal Arts and design their own schedule. With the exception of MA 200 Statistics, the same distance learning option exists for an Associate in Arts degree in Business Administration. The AA in Liberal Arts can be earned through distance learning by selecting courses from the following options:

Suggested

| OLINEINAL EDUCATION | TOOKE | | ouggesteu | | |
|--|--|------------|---------------|--|--|
| (General education co | Credit | s Semester | | | |
| generalelectives or courses related to the major. Each student's | | | | | |
| total of general educat | ion and required courses must equal at | | | | |
| least 60 semester hou | rs of credit.) | | | | |
| English | EG 101 and EG 102 | 6 7 | Tel/WC/FT/OL* | | |
| Literature | EG120, EG 201, EG 202 | 3 | Tel/OL* | | |
| Fine Arts | AR 104, AR 105, FA 101, FA 102, or MU101 | 3 | Tel/OL* | | |
| Humanities | AR 104, AR 105, EG 120, EG 201, EG 202, | | | | |
| | FA 101, FA 102, MU 101, PL 101, or SH 105 | 3 | Tel/OL* | | |
| History | HY 111, HY 112, HY 121, HY 122, or HY 123 | 3 | Tel/OL* | | |
| Social Sciences | HY 111, HY 112, HY 121, HY 122, HY 123, | | | | |
| | EC101, EC 102,GE 101, GE 102, PO 101, | | | | |
| | PY 101, PY 102, or SO 101 | 6 | Tel/FT/OL* | | |
| Science | BY 101, BY 107, SC 104, SC 107, SC 117 | | | | |
| | (must include one course with Lab) | 7-8 | Tel/WC/OL* | | |
| Mathematics | MA 131, MA 133, or MA 145 | 3-5 | Tel/WC/OL* | | |
| Emerging Issues | CS 129, HE 104, HE 115, or HD 200 | 2-3 | Tel/OL* | | |
| REQUIRED COURSES | RELATED TO MA IOR | | | | |
| Oral Communication | | 3 | FT/OL* | | |
| Humanities | AR 104, AR 105, EG 120, EG 201, EG 202, | 3 | I I / OL | | |
| Tumanities | FA 101, FA 102, MU 101, PL 101, or SH 105 | 3 | Tel/OL* | | |
| English | EG 201 or EG 202 | 3 | OL* | | |
| Social Sciences | HY 111, HY 112, HY 121, HY 122, HY 123, | J | OL | | |
| Boelai Belefices | EC 101, EC 102, GE 101, GE 102, PO 101, | | | | |
| | PY 101, PY 102, SO 101, SO 103, or HD 200 | 6 | Tel/FT/OL* | | |
| Elective | Any course listed above no used to fulfill a | Ü | 101/11/OL | | |
| Licetive | requirement and AC 111, AC 112, BU 100, | | | | |
| | BU 130, BU 151, ED 200, EG 115, or MN 14 | 0 6 | Tel/WC/OL* | | |
| | , | | | | |

^{*}Tel - Telecourse

GENERAL EDUCATION CORE

^{*}WC - Weekend College

^{*}OL - Online

^{*}FT - Fast Track

ARTS AND SCIENCES - Life Sciences ASSOCIATE IN ARTS DEGREE

Recent advances in molecular biology and genetics have expanded the employment opportunities for biologists. Training in the life sciences prepares students for diverse occupations including employment in research or industrial laboratories, fish and wildlife programs, zoos, museums, and aquaria. This curriculum prepares students for further study in specialty areas including agriculture, botany, entomology, horticulture, microbiology, zoology, molecular biology, genetics, ecology, physiology, and marine biology. In addition, some students use this curriculum as preparation for pre-medical or pre-allied health programs. The life sciences curriculum focuses on the fundamental scientific principles and problem solving techniques which are essential for future success as a biologist. The college has articulated this program with the biotechnology (biochemistry major track) program at the University of Maryland at Baltimore County which leads to a B.A. degree. This program also transfers to other colleges. Students interested in this curriculum are advised to check the requirements of the institution to which they intend to transfer.

| general electives or | ore credits in excess of 36 willl transfer as courses related to the major. Each student's ation and required courses must equal at | Credits | Suggested Semester |
|----------------------|---|----------------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 101 EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | ~ 3 |
| History | History Core Course (see p. 61) | 3 | 3 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | | 4 |
| Bocker Belefices | (see p. 61) | Ü | • |
| BY 101 | General Biology I | 4 | 1 |
| BY 102 | General Biology II | 4 | 2 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| 1 0 | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | S RELATED TO MAJOR | | |
| Mathematics | MA 140 or higher | 4 | 2 |
| BY 200 | Microbiology | $\overline{4}$ | 3 |
| CH 201 | Organic Chemistry I | 4 | 3 |
| Science | Science Elective (see p. 63) | | |
| | (Physics recommended) | 4 | 3-4 |
| BY 201 | Genetics | 3 | 4 |
| BY 202 | Genetics Lab | 1 | 4 |
| CH 202 | Organic Chemistry II | 4 | 4 |
| | | | |

ARTS AND SCIENCES - Music ASSOCIATE IN ARTS DEGREE

This curriculum is designed as a guide for students planning to transfer to a four-year institution to complete a bachelor's degree in music majoring in performance, musicology, music education, or jazz/commercial music. Students are advised to check the requirements of the institution to which they intend to transfer. The main emphasis in the music program is the creation of an artistic point of view on the part of the student.

| GENERAL EDUCATION | ON CORE | | Suggested |
|-----------------------|---|---------|-------------|
| (General education of | core credits in excess of 36 will transfer as | Credits | Semester |
| general electives or | courses related to the major. Each student's | | |
| total of general educ | ation and required courses must equal at | | |
| least 60 semester ho | ours of credit.) | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 3 |
| MU 102 | Survey of Music Literature | 3 | 3 |
| FA 102 | Arts, Cultures and Ideas | 3 | 4 |
| History | History Core Course (see p. 61) | 3 | 4 |
| Social Sciences | Social and Behavioral Sciences Core | 6 | 3-4 |
| | Courses (see p. 61) | | |
| Science | Science Core Course (see p. 61; must | | |
| | include one course with lab) | 7-8 | 1-2 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSE | S RELATED TO MAJOR | | |
| MU 110 | Music Theory I | 4 | 1 |
| MU 117 | Applied Music I * | 2 | 1 |
| MU 111 | Music Theory II | 4 | 2 |
| MU 118 | Applied Music II * | 2 | 2 |
| MU 194 | Class Piano II * | 2 | 2 2 3 |
| MU 210 | Music Theory III | 4 | |
| MU 217 | Applied Music III * | 2 | 3 |
| MU 211 | Music Theory IV | 4 | 4 |
| MU 218 | Applied Music IV * | 2 | 4 |
| MU 130-180 | Ensemble (Major) | 4 | 1-4 |
| | (Participation in one major ensemble | | |
| | per semester is required and may be | | |
| | taken up to four times for students | | |
| | enrolled in the music curriculum.) | | |
| | · · | | |

^{*}Students seeking a Jazz/Commercial Music Emphasis should enroll in the jazz sections of Applied Music and may substitute MU 109 Techniques of Electronic and Computer Music for Class Piano II.

ARTS AND SCIENCES - Nursing ASSOCIATE IN ARTS DEGREE

This program is designed to prepare a person to become registered nurse. It is both a career and a transfer program. Graduates are qualified for positions in hospitals, community agencies, long term care facilities and other health care settings. Graduates are also eligible for direct transfer to selected baccalaureate nursing programs in Maryland. Learning occurs through classroom experience, simulated laboratory activities and clinical assignments in a variety of health care settings. Students apply to participate in learning activities in the day or evening/weekend sections of the program. The program is approved by the Maryland Board of Nursing 4140 Patterson Avenue, Baltimore, Maryland 21215, 410-764-5124, and accredited by the National League for Nursing Accrediting Commission, 350 Hudson Street, New York, New York 10014, 212-989-9393 ext. 153. Successful completion of courses in this program will lead to eligibility to be considered by the Board of Nursing to write the National Council Licensing Examination for Registered Nurse licensure.

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willI transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at least 60 semester hours of credit.) | | | | |
|---|-----------------------------------|-----|---------|--|
| EG 101 | Introduction to Composition I | 3 | 2 | |
| EG 102 | Introduction to Composition II | 3 | 3 | |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 | |
| SO 101 | Introduction to Sociology | 3 | 3 | |
| PY 101 | General Psychology | 3 | 2 | |
| BY 107 | Fundamentals of Microbiology | 4 | Pre-req | |
| CH 103 | Fundamentals of General Chemistry | 4 | Pre-req | |
| BY 203 | Anatomy and Physiology I | 4 | 1 | |
| BY 204 | Anatomy and Physiology II | 4 | 2 | |
| Mathematics | MA 122, 131 or higher | 3-5 | 1 | |
| HD 200 | Life Span Development | 3 | 1 | |
| REQUIRED COURSES | RELATED TO MAJOR | | | |
| NU 101 | Introduction to Patient Needs | 7 | 1 | |
| | and Nursing Actions | | | |
| NU 102 | Nursing of Patients with Common | 8 | 2 | |
| | Responses to Stress | | | |
| NU 201 | Nursing of Patients with Complex | 9 | 3 | |
| | Responses to Stress I | | | |
| NU 202 | Nursing of Patients with Complex | 9 | 4 | |
| | Responses to Stress II | | | |

Admission to the Associate Degree Nursing Program is based upon priorities associated with the completion of specific courses in the Nursing Program. Contact the Admissions Office to schedule an appointment for an information session regarding the Associate Degree Nursing Program.

A grade of "C" or better is required in nursing, mathematics and science courses. An exception includes a student with a weighted exam and course average between 71-73% "D," in NU 102. In this situation the student may enroll in NU 104. However, prior to advancement into NU 201, the student must progress through NU 103 and achieve a grade of "C" or better.

ARTS AND SCIENCES - Nursing

ASSOCIATE IN ARTS DEGREE

LPN Pathway Sequence

An LPN Pathway sequence is an option for advanced standing in the associate in arts degree program in nursing for those licensed practical nurses who meet specified criteria. Most general education coursework must be completed prior to entry into a summer transition course. Students apply to participate in learning activities in the day or evening/weekend sections of the program. The program is approved by the Maryland Board of Nursing, 4140 Patterson Avenue, Baltimore, Maryland 21215, 410-764-5124, and accredited by the National League for Nursing Accrediting Commission, 350 Hudson Street, New York, New York 10014, 212-989-9393 ext. 153. Successful completion of courses in this program will lead to eligibility to be considered by the Board of Nursing to write the National Council Licensing Examination for Registered Nurse licensure.

| | | | Suggested |
|-------------------|-----------------------------------|---------|-----------|
| GENERAL EDUCATION | I CORE | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | Pre-req |
| EG 102 | Introduction to Composition II | 3 | 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 |
| SO 101 | Introduction to Sociology | 3 | 3 |
| PY 101 | General Psychology | 3 | Pre-req |
| BY 107 | Fundamentals of Microbiology | 4 | Pre-req |
| CH 103 | Fundamentals of General Chemistry | 4 | Pre-req |
| BY 203 | Anatomy and Physiology I | 4 | Pre-req |
| BY 204 | Anatomy and Physiology II | 4 | Pre-req |
| Mathematics | MA 122, 131 or higher | 3-5 | Pre-req |
| HD 200 | Life Span Development | 3 | Pre-req |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| NU 103 | Transition into Nursing II | 5 | Summer |
| NU 201 | Nursing of Patients with Complex | 9 | 3 |
| | Responses to Stress I | | |
| NU 202 | Nursing of Patients with Complex | 9 | 4 |
| | Responses to Stress II | | |
| | | | |

NU 101 and NU 102 credit for LPN education and experience may be gained through examination and successful completion of NU 103. Please contact the Admissions Office for information regarding admission requirements.

Graduates of an LPN program which has been validated for statewide LPN-ADN articulation will be granted transfer credit for NU 101 and NU 102 after successful completion of NU 103.

A grade of "C" or better is required in nursing, mathematics, and science courses.

ARTS AND SCIENCES - Photography ASSOCIATE IN ARTS DEGREE

This option to the art curriculum is designed as a guide for students planning to transfer to a four-year institution to complete a bachelors degree in photography or visual arts. Students are advised to check the requirements of the institution to which they intend to transfer. The photography program emphasizes the theory, techniques, and aesthetics of photography as an art form. In the process of developing conceptual and technical visualization skills, students also produce a transfer portfolio.

| N CORE ore credits in excess of 36 will transfer as ourses related to the major. Each student's | Credits | Suggested Semester |
|---|--|--|
| | | |
| , | 3 | 1 |
| Introduction to Composition II | 3 | 2 |
| Literature Core Course (see p. 60) | 3 | 3 |
| Arts, Cultures, and Ideas | 3 | 3 |
| Art History I or II | | 1 |
| HY 121, 122, or 123 | 3 | 3 |
| Social and Behavioral Sciences Core Course | | |
| (see p. 61) | 6 | 3-4 |
| Science Core Course (see p. 61; must includ | e | |
| one course with lab) | 7-8 | 2-3 |
| MA 122 or higher | 3-5 | 1 |
| Interdisciplinary and Emerging Issues Core | | |
| Course (see p. 62) | 1-3 | 3 |
| RELATED TO MAJOR | | |
| Art History I or II (course not taken in CORE |) 3 | 2 |
| Two-Dimensional Design | 3 | 1 |
| Drawing I | 3 | 2 |
| Basic Photography | 3 | 1 |
| Intermediate Photography | 3 | 3 |
| History of Photography | 3 | 3 |
| Introduction to Color Photography | | 4 |
| Photography Elective | 3 | 3-4 |
| Art Portfolio Assessment | 1 | 4 |
| | re credits in excess of 36 willI transfer as burses related to the major. Each student's bion and required courses must equal at rs of credit.) Introduction to Composition I Introduction to Composition II Literature Core Course (see p. 60) Arts, Cultures, and Ideas Art History I or II HY 121, 122, or 123 Social and Behavioral Sciences Core Course (see p. 61) Science Core Course (see p. 61; must include one course with lab) MA 122 or higher Interdisciplinary and Emerging Issues Core Course (see p. 62) RELATED TO MAJOR Art History I or II (course not taken in CORE Two-Dimensional Design Drawing I Basic Photography Intermediate Photography Introduction to Color Photography Photography Elective | re credits in excess of 36 willI transfer as burses related to the major. Each student's burses related to the |

ARTS AND SCIENCES - Physical Sciences ASSOCIATE IN ARTS DEGREE

There is a need for trained physical scientists in government and industry to meet society's increasing emphasis on science and technology. Diversified fields of specialization within the physical sciences include: astronomy, chemistry, geology, meteorology, physics, lab technicians (B.S.), technical writing, and secondary and college teaching. This program provides a strong mathematics background and emphasizes the ability to apply theory to solve problems in physical science, especially chemistry and physics. There is also emphasis on operating laboratory equipment and collecting data to appraise, use and interpret, including the identification of unknowns. Students interested in this curriculum are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATION | N CORE | | Suggested |
|--------------------------|---|---------|-----------|
| (General education co | re credits in excess of 36 will transfer as | Credits | Semester |
| general electives or co | ourses related to the major. Each student's | | |
| total of general educat | tion and required courses must equal at | | |
| least 60 semester hou | rs of credit.) | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 1 |
| Social Sciences | Social and Behavioral Sciences Core Course (see p. 61) | 3 | 4 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| PS 110 | General Physics I (Calculus) | 4 | 1 |
| PS 111 | General Physics II (Calculus) | 4 | 2 |
| MA 140 | Calculus I | 4 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues | | |
| 1 3 | Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| MA 150 | Calculus II | 4 | 2 |
| PS 112 | General Physics III (Calculus) | 3 | 3 |
| Science | Science Electives (see p. 63) (CH 201, CH 202, SC 104, SC 114, SC 107, | | |
| | SC 117, SC 109 and SC 115 recommended) | | 3,4 |
| Arts and Sciences | Arts and Sciences Elective (see p. 63) | 0.4 | |
| | (MA 240 recommended) | 3-4 | 4 |

ARTS AND SCIENCES - Pre-Allied Health ASSOCIATE IN ARTS DEGREE

Highly qualified allied health professionals are needed to respond to the increasing health needs of a growing population. The pre-allied health curriculum is designed to prepare students for entrance into the following programs: dental hygiene, nursing, physical therapy, physician assistant programs, and radiation therapist. The pre-allied health curriculum emphasizes science and liberal arts courses that are required for transfer into these professional schools at other institutions. The curriculum has been designed to fulfill the diverse pre-requisites of professional schools in these allied health areas. Students should become familiar with the entrance requirements of the professional program from which they plan to obtain their allied health degree in order to plan a program of study at HCC that includes the appropriate electives.

| GENERAL EDUCATION | N CORE | | Suggested | | |
|---|--|---------|-----------|--|--|
| (General education co | re credits in excess of 36 willl transfer as | Credits | Semester | | |
| general electives or courses related to the major. Each student's | | | | | |
| total of general education and required courses must equal at | | | | | |
| least 60 semester hou | • | | | | |
| EG 101 | Introduction to Composition I | 3 | 1 | | |
| EG 102 | Introduction to Composition II | 3 | 2 | | |
| Literature | Literature Core Course (see p. 60) | 3 | 2 | | |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 2 | | |
| History | History Core Course (see p. 61) | 3 | 3 | | |
| Social Sciences | Social and Behavioral Sciences Core Course (see p. 61) | 3 | 4 | | |
| PY 101 | General Psychology | 3 | 2 | | |
| BY 101 | General Biology I | 4 | 1 | | |
| BY 203 | Anatomy and Physiology I | 4 | 2 | | |
| CH 101 | General Inorganic Chemistry I | 4 | 1 | | |
| Mathematics | MA 133 or higher | 3-5 | 1 | | |
| Interdisciplinary | Interdisciplinary and Emerging | | | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 | | |
| REQUIRED COURSES | RELATED TO MAJOR | | | | |
| CH 102 | General Inorganic Chemistry II | | | | |
| | OR | | | | |
| CH 104 | Fundamentals of Organic and Biochemistry | 4 | 3 | | |
| Science | Science Electives (see p. 63) | | | | |
| | (BY 200, BY 201, BY 202, BY 205, PS 103, | | | | |
| | PS 104, BY 204, BY 206 recommended. See | | | | |
| | your advisor regarding science electives | | | | |
| | for your program.) | 12 | 3-4 | | |
| Social Sciences | Select two courses with a prefix of EC, | | | | |
| | GE, HY, PO, PY, or SO. | 6 | 3-4 | | |
| Mathematics | MA 133 or higher (MA 200 recommended | | | | |
| | for most programs) | 3-4 | 4 | | |
| | | | | | |

ARTS AND SCIENCES - Pre-Dentistry ASSOCIATE IN ARTS DEGREE

Dentists are important health professionals who are employed in a variety of settings including privately owned practices, group practices, and government or industrial facilities. This program is designed to prepare students who plan to apply for admission to dental school. Students who have not already earned a B.S. or B.A. will apply to dental school after transferring to a four-year college or university. In many colleges, students must choose a major other than pre-dentistry. Students often select a major which will provide an alternative career route should they change their occupational plans. The pre-dentistry curriculum prepares students for both dental school as well as for bachelor's degrees in the life sciences, chemistry, or related fields. Pre-dentistry students should obtain a copy of admissions requirements for U.S. and Canadian dental schools available through the American Association of Dental Schools, 1625 Massachusetts Avenue, N.W., Washington, D.C. 20036.

| GENERAL EDUCATION CORE | | | | |
|--|--|--|--|--|
| (General education core credits in excess of 36 will transfer as | | | | |
| ourses related to the major. Each student's | | | | |
| | | | | |
| • | | | | |
| | | 1 | | |
| | | 2 | | |
| | | 2 3 | | |
| | | 3 | | |
| | | 3 | | |
| Social and Behavioral Sciences Core Course | 3 | 4 | | |
| (see p. 61) | | | | |
| General Biology I | 4 | 1 | | |
| | 4 | 2 | | |
| General Inorganic Chemistry I | 4 | 1 | | |
| General Inorganic Chemistry II | 4 | 2 | | |
| MA 133 or higher | 3-5 | 1 | | |
| Interdisciplinary and Emerging Issues Core | | | | |
| Course (see p. 62) | 1-3 | 2 | | |
| DEL ATER TO MA 100 | | | | |
| | | | | |
| | | 2 | | |
| | | 3 | | |
| | | 3 | | |
| | | 4 | | |
| | _ | 4 | | |
| | | 4 | | |
| Fundamentals of Physics II | 4 | 4 | | |
| | re credits in excess of 36 willI transfer as burses related to the major. Each student's tion and required courses must equal at rs of credit.) Introduction to Composition I Introduction to Composition II Literature Core Course (see p. 60) Fine Arts Core Course (see p. 60) History Core Course (see p. 61) Social and Behavioral Sciences Core Course (see p. 61) General Biology I General Biology II General Biology II General Inorganic Chemistry I General Inorganic Chemistry II MA 133 or higher Interdisciplinary and Emerging Issues Core | re credits in excess of 36 willI transfer as burses related to the major. Each student's biton and required courses must equal at rs of credit.) Introduction to Composition I 3 Introduction to Composition II 4 Introduction II | | |

ARTS AND SCIENCES - Pre-Medicine ASSOCIATE IN ARTS DEGREE

Medical professionals make an important contribution to the welfare of many individuals both as health practitioners and as researchers. This curriculum is designed to prepare students who plan to apply to medical school. Unless students have already earned a B.S. or B.A. degree, they will apply to medical school after transferring to a four-year college or university. In many colleges, students must choose a major other than pre-medicine. Students often select a major which will provide an alternative career route should they change their occupational plans. Pre-medical students should obtain a copy of the Association of American Medical Colleges (AAMC) Admissions Requirements Handbook on pre-medical programs and the requirements for admission to AAMC-approved medical schools. A copy can be ordered through the Association of American Medical Colleges, Section for Student Services, Suite 201, 2450 N. Street, N.W., Washington, D.C. 20037.

| general electives or | ON CORE ore credits in excess of 36 willl transfer as courses related to the major. Each student's ation and required courses must equal at | Credits | Suggested Semester |
|----------------------|---|----------------|-----------------------|
| least 60 semester ho | | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 3 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | 3 | 4 |
| | (see p. 61) | | |
| BY 101 | General Biology I | 4 | 1 |
| BY 102 | General Biology II | 4 | 2 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 1 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSE | S RELATED TO MAJOR | | |
| Mathematics | MA 140 or higher | 4 | 2 |
| CH 201 | Organic Chemistry I | $\overline{4}$ | 3 |
| PS 103 | Fundamentals of Physics I | $\overline{4}$ | 3 |
| BY 201 | Genetics | 3 | 4 |
| BY 202 | Genetics Lab | 1 | 4 |
| CH 202 | Organic Chemistry II | $\overline{4}$ | 4 |
| PS 104 | Fundamentals of Physics II | 4 | 4 |

ARTS AND SCIENCES - Pre-Medical Technology ASSOCIATE IN ARTS DEGREE

Career opportunities for the medical technologist (clinical laboratory scientist) exist in many areas. Many of these allied health professionals are employed in labs in hospitals or government and industrial research facilities. The medical technologist performs laboratory diagnostic and therapeutic procedures to assist in the diagnosis, management and prevention of disease. Specializations include blood banking, chemistry, hematology, immunology and microbiology. Students will complete their professional studies at another institution where they will obtain a B.S. degree and become eligible to take the National Registry Exam given by the American Society for Clinical Pathologists. Students should become familiar with the entrance requirements of the professional school from which they plan to obtain their B.S. degree in order to plan a program of study at HCC that includes the appropriate electives.

| general electives or co | ore credits in excess of 36 willI transfer as ourses related to the major. Each student's tion and required courses must equal at | Credits | Suggested Semester |
|-------------------------|---|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 3 |
| History | History Core Course (see p. 61) | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | , | |
| | (see p. 61) | 6 | 3-4 |
| BY 101 | General Biology I | 4 | 1 |
| BY 200 | Microbiology | 4 | 3 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| MA 200 | Statistics | 3 | 2 |
| BY 203 | Anatomy and Physiology I | 4 | 2 3 |
| CH 201 | Organic Chemistry I | 4 | 3 |
| BY 201 | Genetics | 3 | 4 |
| BY 202 | Genetics Lab | 1 | 4 |
| BY 204 | Anatomy and Physiology II | 4 | 4 |
| CH 202 | Organic Chemistry II | 4 | 4 |

ARTS AND SCIENCES - Pre-Nuclear Medicine Technology ASSOCIATE IN ARTS DEGREE

Highly qualified allied health professionals are needed to respond to the increasing health needs of a growing population. The nuclear medicine technologist is a highly specialized health care professional who works closely with the nuclear medicine physician. The nuclear medicine technology program emphasizes science and liberal arts courses that are required for transfer to the Johns Hopkins Hospital Nuclear Medicine Technology Program. Students should become familiar with the entrance requirements of the Nuclear Medicine Technology Program at Johns Hopkins Hospital.

| GENERAL EDUCATIO | N CORE | | Suggested |
|-----------------------|--|---------|-------------|
| (General education co | ore credits in excess of 36 will transfer as | Credits | Semester |
| | ourses related to the major. Each student's | | |
| | tion and required courses must equal at | | |
| least 60 semester hou | • | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 2 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 2 |
| History | History Core Course (see p. 61) | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | 3 | 4 |
| | (see p. 61) | | |
| PY 101 | General Psychology | 3 | 2 |
| BY 101 | General Biology I | 4 | 1 |
| BY 203 | Anatomy and Physiology I | 4 | 2 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| CS 110 | Software Applications for Micros | 3 | 4 |
| REQUIRED COURSES | S RELATED TO MAJOR | | |
| SH 110 | Interpersonal Communication | 3 | 2 |
| BY 204 | Anatomy and Physiology II | 4 | 3 |
| CH 104 | Fundamentals of Organic and Biochemistry | | |
| | OR | | |
| CH 201 | Organic Chemistry I | 4 | 3 |
| OT 290 | Medical Terminology | 2 | 3 |
| PS 103 | Fundamentals of Physics I | 4 | 3 |
| MA 200 | Statistics | 3 | 4 |
| PS 104 | Fundamentals of Physics II | 4 | 4 |
| | • | | |

ARTS AND SCIENCES - Pre-Optometry ASSOCIATE IN ARTS DEGREE

Optometrists play a significant role in providing eye care both in private offices as well as in group practices and government or industrial facilities. This program is designed to prepare students who plan to apply for admission to a school of optometry. Some optometric colleges admit students after two years of college, but successful admission often requires a bachelor's degree or higher. For their bachelor's degree, many students select a major which will provide an alternative career route should they change their occupational plans. The pre-optometry curriculum provides a foundation for both optometric studies as well as for a future major in the life sciences, chemistry, or related fields. Students interested in this curriculum are advised to check the requirements of the institution to which they intend to transfer.

| general electives or co | re credits in excess of 36 willl transfer as ourses related to the major. Each student's tion and required courses must equal at | Credits | Suggested Semester |
|-------------------------|--|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | 3 | 4 |
| | (see p. 61) | | |
| BY 101 | General Biology I | 4 | 1 |
| BY 102 | General Biology II | 4 | 2 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| Mathematics | MA 133 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| Mathematics | MA 140 or higher | 4 | 2 |
| BY 200 | Microbiology | 4 | 3 |
| CH 201 | Organic Chemistry I | 4 | 3 |
| PS 103 | Fundamentals of Physics I | 4 | 3 3 |
| CH 202 | Organic Chemistry II | 4 | 4 |
| PS 104 | Fundamentals of Physics II | 4 | 4 |

ARTS AND SCIENCES - Pre-Pharmacy ASSOCIATE IN ARTS DEGREE

Pharmacists dispense drugs and medicines prescribed by physicians and dentists, advise on the proper use and proper dosage of prescription and nonprescription medicines, and work in research and marketing positions. Job opportunities exist in hospitals and clinics, community pharmacies, the pharmaceutical industry and in government agencies. The pre-pharmacy curriculum below includes the science, math and liberal arts electives that are pre-requisites for admission into pharmacy programs at transfer institutions. Students should become familiar with the pre-requisite entrance requirements of the transfer institution from which they intend to receive their professional degree in order to plan a program of study at HCC that includes the appropriate electives.

| GENERAL EDUCATION (General education co | N CORE ore credits in excess of 36 will transfer as | Credits | Suggested Semester |
|---|---|--------------|-----------------------|
| | ourses related to the major. Each student's | | |
| | tion and required courses must equal at | | |
| least 60 semester hou | | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 3 |
| Social Sciences | Social and Behavioral Sciences Core Course | ; | |
| | (see p. 61) | 6 | 4 |
| BY 101 | General Biology I | 4 | 1 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| MA 140 | Calculus I | 4 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| MA 200 | Statistics | 3 | 2 |
| CH 201 | Organic Chemistry I | 4 | 3 |
| PS 103 | Fundamentals of Physics I | 4 | 3 |
| BY 200 | Microbiology | 4 | 4 |
| CH 202 | Organic Chemistry II | 4 | 4 |
| PS 104 | Fundamentals of Physics II | 4 | 4 |

ARTS AND SCIENCES - Pre-Veterinary Medicine ASSOCIATE IN ARTS DEGREE

Veterinarians are important health professionals who are employed in a variety of settings including privately owned practices, group practices, and government or industrial facilities. This program is designed to prepare students who plan to apply for admission to veterinary school. Students who have not already earned a B.S. or B.A. will apply to veterinary school after transferring to a four-year college or university. In many colleges, students must choose a major other than pre-veterinary medicine. Students often select a major which will provide an alternative career route should they change their occupational plans. The pre-veterinary curriculum prepares students for both veterinary school as well as for bachelor's degrees in the life sciences, chemistry, or related fields. Preveterinary students should obtain a copy of admissions requirements for U.S. and Canadian veterinary schools available through the American Veterinary Medical Colleges, 1522 K Street, Washington, D.C. 20036.

| GENERAL EDUCATION CORE | | | | Suggested |
|------------------------|-------------------------|--|---------|-----------|
| | (General education co | re credits in excess of 36 willl transfer as | Credits | Semester |
| | or general electives or | r courses related to the major. Each student's | | |
| | total of general educat | ion and required courses must equal at | | |
| | least 60 semester hour | | | |
| | EG 101 | Introduction to Composition I | 3 | 1 |
| | EG 102 | Introduction to Composition II | 3 | 2 |
| | Literature | Literature Core Course (see p. 60) | 3 | 2 3 |
| | Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| | History | History Core Course (see p. 61) | 3 | 3 |
| | Social Sciences | Social and Behavioral Sciences Core Course | | |
| | | (see p. 61) | 3 | 4 |
| | BY 101 | General Biology I | 4 | 1 |
| | BY 102 | General Biology II | 4 | 2 |
| | CH 101 | General Inorganic Chemistry I | 4 | 1 |
| | CH 102 | General Inorganic Chemistry II | 4 | 2 |
| | Mathematics | MA 133 or higher | 3-5 | 1 |
| | Interdisciplinary | Interdisciplinary and Emerging | | |
| | | Issues Core Course (see p. 62) | 1-3 | 2 |
| | REQUIRED COURSES | S RELATED TO MAJOR | | |
| | Mathematics | MA 140 or higher | 4 | 2 |
| | CH 201 | Organic Chemistry I | 4 | 3 |
| | PS 103 | Fundamentals of Physics I | 4 | 3 |
| | BY 201 | Genetics | 3 | 4 |
| | BY 202 | Genetics Lab | 1 | 4 |
| | CH 202 | Organic Chemistry II | 4 | 4 |
| | PS 104 | Fundamentals of Physics II | 4 | 4 |
| | | | | |

ARTS AND SCIENCES - Psychology ASSOCIATE IN ARTS DEGREE

This curriculum is designed as a guide to students planning to transfer to a four-year institution to complete a bachelor's degree in psychology. There are many diversified fields in psychology including social psychology, developmental psychology, individual differences, counseling, clinical psychology, industrial psychology, experimental psychology, and physiological psychology. This psychology curriculum emphasizes an understanding of the major theories, concepts, and facts of psychology. Students are encouraged to apply their learning to a better understanding of their own experiences. Students will also develop the writing and thinking skills which are necessary for success at four-year institutions.

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willl transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at least 60 semester hours of credit.) | | | Suggested Semester |
|--|--|-----|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 101 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 |
| Humanities | Humanities Core Course | 3 | - |
| Hamanices | (Recommend PL 101) | 3 | 2 |
| History | History Core Course (see p. 61) | 3 | 1 |
| Social Sciences | Social and Behavioral Sciences Core Course | • | • |
| Bocker Belefices | (Recommend SO 101 and PY 101) | 6 | 1-2 |
| Science | Science Core Course (see p. 61 - must | Ü | - ~ |
| Deletice | include one course with lab) Recommend | | |
| | BY 101 and BY 201 (Genetics) | 7-8 | 1-2 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues Core | | |
| r | Course (see p. 62) | 2-3 | 4 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| Arts and Sciences | Arts and Sciences Electives (see p. 63) | 3 | 1-2 |
| MA 200 | Statistics | 3 | 4 |
| SH 105 | Fundamentals of Public Speaking | 3 | 2 |
| PL 202 | Logical and Critical Thinking | 3 | 3 |
| PY 102 | Advanced General Psychology | 3 | 4 |
| PY 202 | Social Psychology | 3 | 3 |
| PY 203 | Abnormal Psychology | 3 | 4 |
| English | Any course with an EG or MM prefix | | |
| U | (Course must be 200 level or higher) | 3 | 3 |

ARTS AND SCIENCES - Social Sciences ASSOCIATE IN ARTS DEGREE

This curriculum is designed as a guide to students planning to transfer to a four-year institution to complete a bachelor's degree in the social sciences. Geography, history, political science, pre-law, etc. students are advised to check the requirements of the institution to which they intend to transfer.

| general electives or co | re credits in excess of 36 willI transfer as ourses related to the major. Each student's tion and required courses must equal at | Credits | Suggested Semester |
|----------------------------|--|---------|-----------------------|
| EG 101 | | 9 | 1 |
| EG 101 EG 102 | Introduction to Composition I | 3 | 2 |
| Literature | Introduction to Composition II | 3 3 | 3 |
| Fine Arts | Literature Core Course (see p. 60) | 3 | 3 4 |
| SH 105 | Fine Arts Core Course (see p. 60) | 3 3 | 1 |
| | Fundamentals of Public Speaking | ა 3 | 1 |
| History Social Sciences | History Core Course (see p. 61) | • | 1 |
| Social Sciences | Social and Behavioral Sciences Core Cours | es | |
| | (Recommend completion of History | 0 | 0.0 |
| G • | sequence and PY 101) | 6 | 2-3 |
| Science | Science Core Course (see p. 61; must | ~ 0 | 0.4 |
| 36.3 | include one course with lab) | 7-8 | 3-4 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues | | _ |
| | Core Course (see p. 62) | 2-3 | 3 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| Humanities | Humanities Elective (see p. 63) | 3 | 2 |
| SO 101 | Introduction to Sociology | 3 | 2 |
| PO 101 | American Federal Government | 3 | 1 |
| Arts and Sciences | Arts and Sciences Electives (see p. 63) | | |
| | (Foreign Language Sequence is | | |
| | recommended) | 6-8 | 3-4 |
| PO 102 | State and Local Government | | |
| | OR | | |
| PO 201 | Comparative Government | 3 | 4 |
| English | Any course with an EG or MM prefix | - | = |
| 8 | (Course must be 200 level or higher) | 6 | 3-4 |
| | (| • | ~ - |

ARTS AND SCIENCES - Theatre (Performance) ASSOCIATE IN ARTS DEGREE

This curriculum is designed as a guide to students planning to transfer to a four-year institution to complete a bachelor's degree in theatre. Students are advised to check the requirements of the institution to which they intend to transfer. The main emphasis in the theatre program is the creation of an artistic point of view on the part of the student. Students may choose between two concentrations, performance and technical theatre. Letters of Recognition are also available in both concentrations.

| GENERAL EDUCATION | ON CORE | | Suggested |
|------------------------|--|---------|----------------|
| (General education co | ore credits in excess of 36 will transfer as | Credits | Semester |
| general electives or c | ourses related to the major. Each student's | | |
| total of general educa | ation and required courses must equal at | | |
| least 60 semester hou | urs of credit.) | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 4 |
| TH 190 | Theatre History I | 3 | 1 |
| TH 191 | Theatre History II | 3 | 2 |
| History | History Core Course (see p. 61) | 3 | 1 |
| Social Sciences | Social and Behavioral Sciences Core Cours | es | |
| | (see p. 61) | 6 | 3-4 |
| Science | Science Core Course (see p. 61; must | | |
| | include one course with lab) | 7-8 | 2-3 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| 1 0 | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | S RELATED TO MAJOR | | |
| TH 141 | Basic Acting I | 3 | 1 |
| TH 142 | Basic Acting II | 3 | 2 |
| TH 160 | Theatre Practicum | 1 | 2 2 |
| Dance | Any Course with a DA prefix | 1 | 2 |
| FM 171 | Introduction to American Cinema | | |
| | OR | | |
| FM 172 | Introduction to Foreign Cinema | 3 | 3 |
| Humanities | Humanities Elective (see p. 63) | 3 | 3 |
| Technical Theatre | TH 135, TH 136 or TH 137 | 3 | 3 |
| TH 241 | Acting for Television | 3 | 4 |
| Fine Arts | Any Course with an AR, FA or MU prefix | 3 | $\overline{4}$ |
| Performing Arts | Any Course with a DA, FA, FM, MM or | | _ |
| - 0 | TH prefix | 3 | 4 |

ARTS AND SCIENCES - Theatre (Performance) LETTER OF RECOGNITION

| TH 141 | Basic Acting I | 3 |
|--------|----------------------------|-----|
| TH 142 | Basic Acting II | 3 |
| TH 241 | Acting for Television | 3 |
| TH 160 | Theatre Practicum (Acting) | |
| | OR | |
| | Dance Elective | |
| | OR | |
| | Vocal Music Elective | 1-2 |

ARTS AND SCIENCES - Theatre (Technical) ASSOCIATE IN ARTS DEGREE

This curriculum is designed as a guide to students planning to transfer to a four-year institution to complete a bachelor's degree in theatre. Students are advised to check the requirements of the institution to which they intend to transfer. The main emphasis in the theatre program is the creation of an artistic point of view on the part of the student. Students may choose between two concentrations, performance and technical theatre. Letters of Recognition are also available in both concentrations.

| GENERAL EDUCATION | N CORE | | Suggested |
|-------------------------|--|---------|-----------|
| (General education co | re credits in excess of 36 willl transfer as | Credits | Semester |
| general electives or co | ourses related to the major. Each student's | | |
| total of general educat | ion and required courses must equal at | | |
| least 60 semester hou | rs of credit.) | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 4 |
| TH 190 | Theatre History I | 3 | 1 |
| TH 191 | Theatre History II | 3 | 2 |
| History | History Core Course (see p. 61) | 3 | 1 |
| Social Sciences | Social and Behavioral Sciences Core Courses | S | |
| | (see p. 52) | 6 | 3-4 |
| Science | Science Core Course (see p. 61; must | | |
| | include one course with lab) | 7-8 | 2-3 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR - TECHNICAL THEATRE | | |
| TH 135 | Stagecraft I | 3 | 1 |
| TH 136 | Lighting I | 3 | 2 |
| TH 160 | Theatre Practicum | 1 | 2 |
| FM 171 | Introduction to American Cinema OR | | |
| FM 172 | Introduction to Foreign Cinema | 3 | 3 |
| TH 141 | Basic Acting I | 3 | 3 |
| TH 161 | Theatre Practicum | 1 | 3 |
| Humanities | Humanities Elective (see p. 63) | 3 | 3 |
| TH 137 | Sound I | 3 | 4 |
| Performing Arts | Any Course with a DA, FA, FM, MM or | | |
| ~ | TH prefix | 3 | 4 |
| Fine Arts | Any Course with an AR, DA, FA or MU prefix | 3 | 4 |

ARTS AND SCIENCES - Theatre (Technical) LETTER OF RECOGNITION

| TH 160 | Theatre Practicum | 1 |
|--------|--------------------|---|
| TH 135 | Stagecraft I OR | |
| TH 136 | Lighting I OR | |
| TH 137 | Sound I | 6 |
| TH 161 | Theatre Practicum | 1 |
| TH 230 | Production Seminar | 2 |
| TH 162 | Theatre Practicum | 1 |

BUSINESS ADMINISTRATION

ASSOCIATE IN ARTS DEGREE

Accounting, Business Administration, Fashion Merchandising

In a business environment growing more complex and global, some knowledge of business and management theory is more of an asset than ever before. This business administration curriculum will prepare students to transfer to a four-year program in business and management with eventual entry into all areas of business, from manufacturing through retailing and including accounting, marketing, finance, banking, transportation, and international business. Students in this two-year program will get the broad-based liberal education required for the first two years of a baccalaureate program. At the same time, they will be introduced to several areas of business and management theory and practice.

| GENERAL EDUCATIO (General education co general electives or c total of general educa least 60 semester hou | Credits | Suggested Semester | |
|--|---|-----------------------|-----|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 |
| SH 105 | Fundamentals of Public Speaking | 3 | 4 |
| History | History Core Course (see p. 61) | 3 | 3 |
| EC 101 | Macro Economics | 3 | 2 3 |
| EC 102 | Micro Economics | 3 | 3 |
| Science | Science Core Course (see p. 61-must | | |
| | include 1 course with lab) | 7-8 | 3-4 |
| MA 145 | Business Calculus | 3 | 2 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | S RELATED TO MAJOR | | |
| AC 111 | Principles of Accounting I | 3 | 1 |
| BU 100 | Introduction to Business and Organization | 3 | 1 |
| CS 110 | Software Applications for Micros | 3 | 1 |
| AC 112 | Principles of Accounting II | 3 | 2 |
| BU 151* | Business Law I | 3 | 4 |
| MA 200 | Statistics | 3 | 4 |
| Arts and Sciences | Arts and Sciences Electives (see p. 63) | 6 | 1-2 |

^{*} Fashion Merchandising majors should take RE 103 or RE 105.

BUSINESS ADMINISTRATION

ASSOCIATE IN ARTS DEGREE

Information Systems Management

Since the use of computers has become increasingly commonplace, the need for personnel to help government and industry utilize this tool more effectively continues to grow. Some of the occupations which rely on a firm knowledge of computer systems are programmer, information center specialist, liaison with user departments, and office automation analyst. Students may select one of the four tracks: Microcomputer, Computer Networking, Systems Analysis and Health Care. This program is designed to transfer to UMBC where various upper level courses would then be taken.

| general electives or c | ore credits in excess of 36 willl transfer as courses related to the major. Each student's ation and required courses must equal at | Credits | Suggested Semester |
|------------------------|---|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | $\hat{\mathbf{z}}$ |
| Literature | Literature Core Course (see p. 60) | 3 | 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 4 |
| History | History Core Course (see p. 61) | 3 | 1 |
| EC 101 | Macro Economics | 3 | 2 |
| EC 102 | Micro Economics | 3 | 3 |
| Science | Science Core Course (see p. 61-must | | |
| | include 1 course with lab) | 7-8 | 3-4 |
| Mathematics | MA 140 or higher | 3-5 | 2 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| 1 3 | Issues Core Course (see p. 62) | 1-3 | 1 |
| | S RELATED TO MAJOR | | |
| Microcomputer Track | | | |
| CS 120 | Introduction to Computer Systems | 3 | 1 |
| CS 121 | Structured Logic and Program Design | 3 | 1 |
| MA 133 | College Trigonometry | 3 | 1 |
| AC 111 | Principles of Accounting I | 3 | 2 |
| CS 190 | Introduction to Visual Basic | 3 | 2 |
| AC 112 | Principles of Accounting II | 3 | 3 |
| MA 200 | Statistics | 3 | 3 |
| CS 250 | Systems Analysis and Design | 3 | 4 |
| MN 140 | Principles of Management | 3 | 4 |
| Systems Analysis Tra | | | |
| AC 111 | Principles of Accounting I | 3 | 1 |
| CS 121 | Structured Logic and Program Design | 3 | 1 |
| AC 112 | Principles of Accounting II | 3 | 2 |
| CS 180 | C Programming | 4 | 2 |
| CS 280 | Advanced C Programming | 4 | 3 |
| MN 140 | Principles of Management | 3 | 3 |
| CS 250 | Systems Analysis and Design | 3 | 4 |
| CS Elective | CS Programming Course (see p. 63) | 3-4 | 4 |
| | | | |

BUSINESS ADMINISTRATION

ASSOCIATE IN ARTS DEGREE

Information Systems Management (continued)

| COURSES RELATED | TO MAJOR | Credits | Suggested Semester |
|---------------------|--|---------|-----------------------|
| Computer Networking | g Track | | |
| AC 111 | Principles of Accounting I | 3 | 1 |
| CS 121 | Structured Logic and Program Design | 3 | 1 |
| AC 112 | Principles of Accounting II | 3 | 2 |
| CS 180 | C Programming | 4 | 2 |
| CS 280 | Advanced C Programming | 4 | 3 |
| CS 250 | Systems Analysis and Design | 3 | 4 |
| MN 140 | Principles of Management | 3 | 4 |
| Elective | Arts and Sciences Elective (see p. 63) | 3 | 3 |
| Health Care Track | | | |
| CS 121 | Structured Logic and Program Design | 3 | 1 |
| CS 180 | C Programming | 4 | 2 |
| CS 280 | Advanced C Programming | 4 | 3 |
| MN 140 | Principles of Management | 3 | 3 |
| CS 250 | Systems Analysis and Design | 3 | 4 |
| Elective | Arts and Sciences Elective | 6-7 | 2-4 |

COMPUTER SCIENCE ASSOCIATE IN ARTS DEGREE

The growing emphasis on technology has increased the demand for programmers in both a diverse range of application and systems development environments. This curriculum prepares students for programming in environments such as engineering, scientific employment, government and education. The computer science program emphasizes algorithm/modular design, structured programming techniques, program debugging and structured walkthrough skills, and group interaction. This curriculum has been designed to fit with similar programs at Towson University and at the University of Maryland Baltimore County (UMBC).

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willl transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at least 60 semester hours of credit.) | | | |
|--|--|-----|--------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| FA 102 | Arts, Cultures and Ideas | 3 | 1 |
| Humanities | Humanities Core Course (see p. 60 | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 4 |
| Social Sciences | Social and Behavioral Sciences Core Course | | |
| | (see p. 61) | 6 | 3-4 |
| Science | Science Core Course (see p. 61-must | | |
| | include one course with lab) | 7-8 | 1-4 |
| Mathematics | MA 140 or higher | 4 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| 1 3 | Issues Core Course (see p. 62) | 1-3 | 3 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| CS 140 | Computer Science I | 4 | 1 |
| CS 170 | Computer Science II | 4 | 2 |
| MA 150 | Calculus II | 4 | 2 |
| CS 220 | Assembly Language | 3 | 3 |
| MA 220 | Discrete Structures | 3 | 2 |
| MA 250 | Linear Algebra | 4 | 2 3 |
| Elective | Arts and Sciences Electives (see p. 63) | 3 | 4 |

ENGINEERING ASSOCIATE IN ARTS DEGREE

The rapid broadening of the scope of engineering has increased the demand for trained professionals who understand the significance of these advances and creatively apply the skills of high technology to improve the quality of life. There are many diversified fields in engineering including the classical fields of civil, mechanical, electrical/electronic, industrial and chemical, as well as biomedical, communications, ceramic and agricultural. Lately, major strides are made in the environmental and computer engineering fields, and aerospace engineering is about to reach new dramatic heights in the near future with the establishment of orbiting space stations and colonies on the moon. Students interested in this curriculum are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willl transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at least 60 semester hours of credit.) | | | Suggested Semester |
|--|--|-----|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 2 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 4 |
| History | History Core Course (see p. 61) | 3 | 4 |
| Social Sciences | Social and Behavioral Sciences Core Course | | |
| | (see p. 61) | 3 | 4 |
| CH 101 | General Inorganic Chemistry I | 4 | 1 |
| CH 102 | General Inorganic Chemistry II | 4 | 2 |
| PS 110 | General Physics I (Calculus) | 4 | 1 |
| PS 111 | General Physics II (Calculus) | 4 | 2 |
| MA 140 | Calculus I | 4 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging | | |
| | Issues Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| EN 100 | Introduction to Engineering Design | 3 | 1 |
| EN 120 | Statics | 3 | 2 |
| MA 150 | Calculus II | 4 | 2 |
| EN 130 | Dynamics | 3 | 2 3 3 |
| MA 240 | Calculus III | 4 | |
| PS 112 | General Physics III (Calculus) | 3 | 3 |
| EN 140 | Mechanics of Materials | 3 | 4 |
| | OR | | |
| EN 160* | Systems and Circuits | 3 | 4 |
| MA 260 | Differential Equations | 3 | 4 |
| | | | |

^{*}Electrical engineering students

GENERAL STUDIES

Associate in Arts Degree

The general studies program is intended for students who are uncertain of their career plans or desire two years of a broad, general college education. This curriculum has been adapted to allow students to explore several different subject areas. Those who plan their course sequences with faculty advisors may prepare for either transfer or employment. Students are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATION | N CORE | | Suggested |
|------------------------|--|---------|-----------|
| • | re credits in excess of 36 willl transfer as | Credits | Semester |
| | ourses related to the major. Each student's | | |
| | ion and required courses must equal at | | |
| least 60 semester hour | • | | |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| Literature | Literature Core Course (see p. 60) | 3 | 3 |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 3 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 3 |
| History | History Core Course (see p. 61) | 3 | 1 |
| Social Sciences | Social and Behavioral Sciences Core | | |
| | Courses (see p. 61) | 6 | 1-2 |
| Science | Science Core Course (see p. 61; must | | |
| | include one course with lab) | 7-8 | 2-3 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues | | |
| | Core Course (see p. 62) | 2-3 | 4 |
| REQUIRED COURSES | DEL ATED TO MA JOB | | |
| | | | |
| Oral Collinumication | Select one of the following: FA 102, | 9 | 3 |
| TT | HD 100, SH 105 or 110, TH 141) | 3 | - |
| Humanities | Humanities Electives (see p. 61) | 6 | 3-4 |
| Social Sciences | Social Sciences Elective (see p. 63) | 6 | 2 |
| Elective | General Electives | 9 | 1-4 |

GENERAL STUDIES ASSOCIATE IN ARTS DEGREE

Degrees at a Distance For Students Who Can't Regularly Come to Campus

Students can now earn a degree without having to come to campus on a weekly basis. Howard Community College is part of a national project, Going the Distance, sponsored by the Public Broadcasting Service which designs degrees built primarily around distance learning or learning done in places other than the classroom during a regular academic term. This program reflects the needs of those students who have professional or family responsibilities which limit their availability for traditional on-campus courses. By combining Telecourses, Weekend College, Fast Track (accelerated classes), and new online classes taught via the Internet, students can easily complete an Associate in Arts in General Studies or Liberal Arts and design their own schedule. With the exception of MA 200 Statistics, the same distance learning option exists for an Associate in Arts degree in Business Administration. The AA in General Studies can be earned through distance learning by selecting courses from the following options:

Suggested

| 02.12.17.12.2007.11.01 | | | Guggoolou | | | |
|---|--|---------|---------------|--|--|--|
| | | Credits | s Semester | | | |
| general electives or co | ourses related to the major. Each student's | | | | | |
| total of general education and required courses must equal at | | | | | | |
| least 60 semester hours of credit.) | | | | | | |
| English | EG 101 and EG 102 | 6 T | Cel/WC/FT/OL* | | | |
| Literature | EG120, EG 201, EG 202 | 3 | Tel/OL* | | | |
| Fine Arts | AR 104, AR 105, FA 101, FA 102, or MU101 | 3 | Tel/OL* | | | |
| Humanities | AR 104, AR 105, EG 120, EG 201, EG 202, | | | | | |
| | FA 101, FA 102, MU 101, PL 101, or SH 105 | 3 | Tel/OL* | | | |
| History | HY 111, HY 112, HY 121, HY 122, or HY 123 | 3 | Tel/OL* | | | |
| Social Sciences | HY 111, HY 112, HY 121, HY 122, HY 123, | | | | | |
| | EC101, EC 102, GE 101, GE 102, PO 101, | | | | | |
| | PY 101, PY 102, or SO 101 | 6 | Tel/FT/OL* | | | |
| Science | BY 101, BY 107, SC 104, SC 107, SC 117 | | | | | |
| | (must include one course with Lab) | 7-8 | Tel/WC/OL* | | | |
| Mathematics | MA 131, MA 133, or MA 145 | 3-5 | Tel/WC/OL* | | | |
| Emerging Issues | CS 129, HE 104, HE 115, or HD 200 | 2-3 | Tel/OL* | | | |
| REQUIRED COURSES RELATED TO MAJOR | | | | | | |
| | | | ETT (OT # | | | |
| Oral Communication | | 3 | FT/OL* | | | |
| Humanities | AR 104, AR 105, EG 120, EG 201, EG 202, | _ | T. 1 / 0.7 ii | | | |
| | FA 101, FA 102, MU 101, PL 101, or SH 105 | 6 | Tel/OL* | | | |
| Social Sciences | HY 111, HY 112, HY 121, HY 122, HY 123, | | | | | |
| | EC101, EC 102, GE 101, GE 102, PO 101, | _ | | | | |
| | PY 101, PY 102, SO 101, SO 103, or HD 200 | 6 | Tel/FT/OL* | | | |
| Elective | Any course listed above no used to fulfill a | | | | | |
| | requirement and AC 111, AC 112, BU 100, | | | | | |
| | BU 130, BU 151, ED 200, EG 115 or MN 140 | 9 | Tel/WC/OL* | | | |
| | | | | | | |

*Tel - Telecourse

GENERAL EDUCATION CORE

^{*}WC - Weekend College

^{*}OL - Online

^{*}FT - Fast Track

TEACHER EDUCATION

ASSOCIATE IN ARTS DEGREE

Early Childhood/Elementary Education

In our society, all young children are required to attend school, and teachers are needed to educate the future citizens of our country. This curriculum prepares students to transfer to an Early Childhood/Elementary Education program at a four-year college or university. This curriculum is designed to prepare students to pursue a bachelor's degree program at the college or university level without loss of credit, but students are advised to check the requirements of the institution to which they intend to transfer.

| general electives or co | ore credits in excess of 36 willI transfer as ourses related to the major. Each student's tion and required courses must equal at | Credits | Suggested Semester | | |
|---|---|---------|-----------------------|--|--|
| EG 101 | Introduction to Composition I | 3 | 1 | | |
| EG 102 | Introduction to Composition II | 3 | | | |
| Literature | Literature Core Course (see p. 60) | 3 | 2 3 | | |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 1 | | |
| SH 105 | Fundamentals of Public Speaking | 3 | 2 | | |
| History | History Core Course (see p. 61) | 3 | 1 | | |
| PY 101 | General Psychology | 3 | 2 | | |
| Social Sciences | Social and Behavioral Sciences Core Course | es | | | |
| | (see p. 61) | 3 | 2-4 | | |
| Science | Science Core Course (see p. 59; must | | | | |
| | include one course with lab) | 7-8 | 1-2 | | |
| Mathematics | MA 122 or higher, MA 127 and MA 128 | | | | |
| | recommended | 3-8 | 1-4 | | |
| HD 200 | Life Span Development (Interdisciplinary | | | | |
| | and Emerging Issues Core Course) | 2-3 | 3 | | |
| REQUIRED COURSES RELATED TO MAJOR History History Core Course (see p. 61) (Must take another course in the same area started in | | | | | |
| | General Education Core) | 3 | 2 | | |
| Humanities | Humanities Electives (see p. 63) | 6 | 3-4 | | |
| Arts and Sciences | Arts and Sciences Electives (see p. 63) | 6-9 | 2-4 | | |
| English | Literature Elective (EG 200 or higher) | 3 | 3-4 | | |
| Social Sciences | Social Sciences Elective | 3 | 4 | | |

CURRICULA—TRANSFER PROGRAMS

TEACHER EDUCATION

Associate in Arts Degree

Secondary Education

Teachers are needed in our society to educate and prepare students to be useful and productive citizens. This curriculum prepares students to transfer to a Secondary Education program at a four-year college or university. This option allows the student to fulfill general education requirements and to pursue a major area of interest in the second year. This curriculum is designed to prepare students to pursue a bachelor's degree program at the college or university level without loss of credit, but students are advised to check the requirements of the institution to which they intend to transfer.

| GENERAL EDUCATION CORE (General education core credits in excess of 36 willl transfer as general electives or courses related to the major. Each student's total of general education and required courses must equal at least 60 semester hours of credit.) | | | | |
|--|---|--------|-----|--|
| EG 101 | Introduction to Composition I | 3 | 1 | |
| EG 101 EG 102 | Introduction to Composition II | 3 | 2 | |
| Literature | Literature Core Course (see p. 60) | 3 | 2 | |
| Fine Arts | Fine Arts Core Course (see p. 60) | 3 | 1 | |
| SH 105 | Fundamentals of Public Speaking | 3 | 4 | |
| | | 3 | 1 | |
| History PY 101 | History Core Course (see p. 61) | 3 3 | 2 | |
| | General Psychology | • | 2 | |
| Social Sciences | Social and Behavioral Sciences Core Cours | | 1.0 | |
| a . | (see p. 61) | 3 | 1-2 | |
| Science | Science Core Course (see p. 61; must | | | |
| | include one course with lab) | 7-8 | 1-2 | |
| Mathematics | MA 122 or higher | 3-5 | 1 | |
| HD 200 | Life Span Development (Interdisciplinary | | | |
| | and Emerging Issues Core Course) | 3 | 3 | |
| REQUIRED COURSES | S RELATED TO MAJOR | | | |
| Arts and Sciences | Arts and Sciences Electives (Recommend | | | |
| | SO 101 and GE 101, see p. 63) | 15 | 2-4 | |
| Humanities | Humanities Electives (see p. 63) | 6 | 3-4 | |
| Social Sciences | Social Sciences Electives (see p. 63) | 3 | 3 | |
| Social Sciences | Social Sciences Licentes (See p. 00) | J | J | |

The career programs listed in this section of the catalogue are designed to enable students to gain immediate employment upon completing the associate in applied science degree, certificate of proficiency, or letter of recognition. While these programs are designed for entry into employment, some of the courses within them may be transferable to four-year colleges and universities. To determine the possible transfer eligibility of a course, students are encouraged to use "ARTSYS," the computerized transfer articulation system for the University of Maryland System, which is available in the Academic Support and Career Services Office as well as the Office of Admissions and Advising.

The Laboratory Science-Riotechnology and Nursing associate in arts degree programs are listed in the

| nsfer section of ned to both trar | the catalogue and asfer and lead to in | d referenced in | the career prog oyment upon co | gram section be | ecause they are e associate deg |
|--------------------------------------|---|-----------------|-----------------------------------|-----------------|------------------------------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

ACCOUNTING

PREPARATION FOR THE CPA EXAMINATION (For persons who already have a Bachelor's Degree)

This course of study is designed for persons who already have a bachelor's degree and wish to prepare for the CPA exam even though they did not major in accounting. The current regulations of the Maryland Board of Public Accountancy state that Effective April 1, 1990, for those initially applying to take the examination, a major in accounting on the baccalaureate level, or its substantial equivalent (a baccalaureate in any field), shall be considered as being constituted of a minimum of 45 semester hours in accounting and related accounting subjects..." The courses below meet the Board's requirements. Persons interested in more information regarding the application for the examination or any course substitutions should write to the Maryland Board of Public Accountancy at 501 St. Paul Place, Room 902, Baltimore, Maryland 21202.

| COURSE | | Credits |
|---------|------------------------------------|-----------|
| AC 111 | Principles of Accounting I | 3 |
| AC 112 | Principles of Accounting II | 3 |
| AC 211 | Intermediate Accounting I | 3 |
| AC 212 | Intermediate Accounting II | 3 |
| AC 215 | Cost Accounting | 3 |
| AC 217 | Tax Accounting | 3 |
| AC 219 | Principles of Auditing | 3 |
| AC 221 | Advanced Accounting | 3 |
| BU 151 | Business Law I | 3 |
| BU 152 | Business Law II | 3 |
| CS 110 | Software Applications for Micros | |
| | or any CS course | 3 |
| EC 101 | Principles of Economics (Macro) OR | |
| EC 102 | Principles of Economics (Micro) | 3 |
| MA 200 | Statistics | 3 |
| MN 140 | Principles of Management | 3 |
| Finance | Corporate Finance | 3 |
| | • | <u>45</u> |

NOTE: As of July 1, 1999, a 150-hour requirement to sit for the CPA exam will become effective. A bachelor's degree will still be required. For more information, contact Sandra Balcer at (410) 964-4931.

ADDITIONAL NOTE: All courses, with the exception of the Corporate Finance course, are offered by HCC. This course is offered at many four-year institutions and through the University of Baltimore's Distance Learning option.

BIOMEDICAL ENGINEERING TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE DEGREE

This program prepares students to enter the important career of the biomedical engineering technologist working in hospitals or for equipment manufacturers in field service. High demand for graduates worldwide offers exciting opportunities to become a vital member of the health care delivery system. Graduates are qualified to maintain the technical equipment necessary in modern health care, to evaluate new equipment and to instruct in proper and safe use of the equipment. Theory in electrical, mechanical, fluidic, electronic, and biomedical circuits and systems with hands-on laboratory experience is stressed along with knowledge of modern health care delivery environment. This statewide program allows all Maryland residents in-county tuition. A one-year certificate of proficiency is available to prepare students for entry-level positions. An advanced certificate of proficiency, designed for individuals currently employed as electronic technicians and desiring a career change, is also offered.

| GENERAL EDUCATION | ON CORE | Credits | Suggested Semester |
|-------------------|---|----------------|-----------------------|
| EG 101 | | 3 | Jemester 1 |
| Humanities | Introduction to Composition I Humanities Core Course (see p. 60) | 3 | 2 |
| Social Sciences | | 3 | 2 |
| Social Sciences | Select GE 102, HY 111, HY 112, HY 121, HY 122, HY 123, PO 201, | | |
| | SO 101, or SO 105 | 3 | 4 |
| PS 100 | Technical Physics | 4 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| SH 105 | Fundamentals of Public Speaking OR | - | - |
| SH 110 | Interpersonal Communications | 3 | 3 |
| DECLIBED COURSE | S RELATED TO MAJOR | | |
| EL 107 | Introduction to Electronic Circuits | 4 | 1 |
| HC 111 | The Health Care Delivery System | 3 | 1 |
| BT 112 | Electro-Mechanical-Fluidic Devices I | 3 | 2 |
| BY 106 | Basic Anatomy and Physiology: | 3 | ۵ |
| B1 100 | Biomedical Emphasis | 4 | 2 |
| EL 114 | Semiconductor Devices | 3 | ~ 9 |
| BT 211 | Biomedical Instrumentation I | 5 | 2 3 |
| CS 105 | Personal Computer Systems Repair I | 3 | 3 |
| EL 211 | Analog Circuits | 4 | 3 |
| EL 213 | Digital Circuits | $\overline{4}$ | 3 |
| BT 212 | Biomedical Instrumentation II | 5 | 4 |
| EL 220 | Electro-Mechanical Devices | 3 | 4 |
| HC 212 | Health Care Issues in BMET | 3 | 4 |
| | | | |

BIOMEDICAL ENGINEERING TECHNOLOGY CERTIFICATE OF PROFICIENCY

| | | | Suggested |
|--------|--------------------------------------|---------|-----------|
| | | Credits | Semester |
| EL 107 | Introduction to Electronic Circuits | 4 | 1 |
| HC 111 | The Health Care Delivery System | 3 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| PS 100 | Technical Physics | 4 | 1 |
| BT 112 | Electro-Mechanical-Fluidic Devices I | 3 | 2 |
| BY 106 | Basic Anatomy and Physiology: | | |
| | Biomedical Emphasis | 4 | 2 |
| EL 114 | Semiconductor Devices | 3 | 2 |

BIOMEDICAL ENGINEERING TECHNOLOGY ADVANCED CERTIFICATE

| | | Credits | Suggested Semester |
|--------|--------------------------------------|---------|-----------------------|
| HC 111 | The Health Care Delivery System | 3 | 1 |
| PS 100 | Technical Physics | 4 | 1 |
| BT 112 | Electro-Mechanical-Fluidic Devices I | 3 | 2 |
| BY 106 | Basic Anatomy and Physiology: | | |
| | Biomedical Emphasis | 4 | 2 |
| BT 211 | Biomedical Instrumentation I | 5 | 3 |
| BT 212 | Biomedical Instrumentation II | 5 | 4 |
| HC 212 | Health Care Issues in BMET | 3 | 4 |

NOTE THAT YOU DO NOT NEED TO COMPLETE THE ONE-YEAR CERTIFICATE IN ORDER TO OBTAIN THE ADVANCED CERTIFICATE.

BUSINESS MANAGEMENT ASSOCIATE IN APPLIED SCIENCE DEGREE

Students enrolling in the business management program will have the opportunity to gain a variety of business and management skills designed to prepare them for immediate employment as management trainees. Students currently employed as well as students with no prior experience will be able to select from a number of options developed to meet individual career goals. The major emphasis of the business management program is the development and improvement of business and management skills and the opportunity to select a specific career emphasis.

| Su GENERAL EDUCATION CORE Credits S | | | | | |
|-------------------------------------|---|-----|---|--|--|
| EG 101 | Introduction to Composition I | 3 | 1 | | |
| Humanities | Humanities Core Course (see p. 60) | 3 | 1 | | |
| Social Science | Select HY 111, HY 112, HY 121, HY 122 | | | | |
| | HY 123 | 3 | 2 | | |
| Science | Science Core Course (see p. 61; must | | | | |
| | include 1 course with lab) | 4 | 2 | | |
| Mathematics | MA 122 or higher | 3-4 | 1 | | |
| SH 105 | Fundamentals of Public Speaking | | | | |
| | OR | | | | |
| SH 110 | Interpersonal Communications | 3 | 3 | | |
| Interdisciplinary | Interdisciplinary and Emerging | | | | |
| | Issues Core Course (see p. 62) | 1-3 | 3 | | |
| REQUIRED COURSES | RELATED TO MAJOR | | | | |
| AC 111 | Principles of Accounting I | 3 | 1 | | |
| BU 100 | Introduction to Business and Organization | 3 | 1 | | |
| CS 110 | Software Applications for Micros | 3 | 1 | | |
| AC 112 | Principles of Accounting II | 3 | 2 | | |
| BU 130 | Principles of Marketing | 3 | 3 | | |
| EC 101 | Principles of Economics (Macro) | 3 | 3 | | |

SELECT ONE OF THE FOLLOWING OPTIONS: Business Management, Financial Planning, Retail Management

Select one of these options along with the General Education Core and Courses Related to Major to complete the associate degree in Business Management, Financial Planning or Retail Management.

Business Management

| | | | Suggested |
|------------------|--|---------|-----------|
| 101440 | D. 13 CM | Credits | Semester |
| MN 140 | Principles of Management | 3 | 2 |
| MN 240 | Personnel Management | 3 3 | 3 |
| MN 131 BU 201 | Supervisory Development | 3 | 4 |
| BU 201 | Business Work Experience I OR Business Elective (see p. 63) | 3-4 | 3 |
| BU 202 | Business Work Experience II OR | 3-4 | 3 |
| BU 202 | Business Elective (see p. 63) | 3-4 | 4 |
| MN 200 | Managing For The Future | 3 | 4 |
| Business | Business Elective (see p. 63) | 3 | 4 |
| Elective | Arts and Sciences Elective (see p. 63) | 3 | 4 |
| | Financial Planning | | |
| | _ | | |
| FP 101 | Personal Financial Planning | 3 | 2 |
| FP 201 | Investment Analysis and Portfolio Selection | 3 | 3 |
| FP 202 | Risk Management and Insurance | 3 | 4 |
| MN 140 | Principles of Management | 3 | 4 |
| BU 201 | Business Field Experience I OR | 3-4 | 3 |
| DITOO | Business Elective (see p. 63) | 0.4 | 4 |
| BU 202 | Business Field Experience II OR | 3-4 | 4 |
| EC 201 | Business Elective (see p. 63) | 3 | 4 |
| Elective | Money and Banking MA 200 | 3 3 | 4 |
| Elective | MA 200 | 3 | 4 |
| | Retail Management | | |
| MN 131 | Supervisory Development I | 3 | 4 |
| MN 240 | Personnel Management | 3 | 4 |
| MN 200 | Managing For The Future | 3 | 4 |
| MN 101 | Sales and Sales Management | 3 | 3 |
| MN 102 | Small Business Management | 3 | 4 |
| RE 201 | Retail Field Experience or Business Elective | | |
| | (See p. 63) | 3-4 | 3 |
| RE 202 | Retail Field Experience or Business Elective | | |
| PT 400 | (See p. 63) | 3-4 | 4 |
| RE 103 | Retail Merchandising OR | | |
| RE 105 | Fashion Merchandising | 3 | 2 |
| | | | |

BUSINESS MANAGEMENT - FINANCIAL PLANNING CERTIFICATE OF PROFICIENCY

| | | | Suggested |
|--------|--|---------|-----------|
| | | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| FP 101 | Personal Financial Planning Principles | 3 | 1 |
| MA 108 | Business Mathematics | 3 | 1 |
| AC 111 | Principles of Accounting I | 3 | 2 |
| CS 110 | Software Applications for Micros | 3 | 2 |

BUSINESS MANAGEMENT - FINANCIAL PLANNING ADVANCED CERTIFICATE OF PROFICIENCY

| AC 112 | Principles of Accounting II | 3 | 1 |
|--------|---|---|---|
| BU 201 | Business Work Experience I | 4 | 1 |
| FP 201 | Investment Analysis and Portfolio Selection | 3 | 1 |
| EC 201 | Money and Banking | 3 | 2 |
| FP 202 | Risk Management and Insurance | 3 | 2 |
| MA 200 | Statistics | 3 | 2 |
| EC 101 | Principles of Economics (Macro) | 3 | 2 |

BUSINESS MANAGEMENT - RETAILING CERTIFICATE OF PROFICIENCY

| MN 101 | Sales and Sales Management | 3 | 1 |
|--------------------------|--------------------------------------|-----|---|
| MN 102 | Small Business Management | 3 | 1 |
| RE 201 | Retail Work Experience I OR | | |
| | Business Elective (see p. 63) | 3-4 | 1 |
| Business Elective | Business Elective (see p. 63) | 3 | 1 |
| English Elective | EG, MM or SH (see p. 63) | 3 | 1 |
| MA 108 | Business Mathematics | 3 | 2 |
| MN 131 | Supervisory Development | 3 | 2 |
| RE 103 | Retail Merchandising OR | | |
| RE 105 | Fashion Merchandising | 3 | 2 |
| RE 202 | Retail Work Experience II OR | | |
| | Business Elective (see p. 63) | 3-4 | 2 |
| Social Sciences Flective | Social Sciences Elective (see p. 63) | 3 | 2 |

CARDIOVASCULAR TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE DEGREE

Invasive Option

This program prepares students to enter the allied health career field of cardiovascular technology to gather data and perform various cardiac and/or vascular diagnostic tests and procedures under the direction of a physician. The invasive technologist may be found in cardiac catheterization, blood gas, and electrophysiology laboratories. Working in the cardiac catheterization laboratory, operating area, and/or electrophysiology laboratory, the technologist utilizes x-ray and monitoring equipment in performing invasive diagnostic tests to determine the condition of the patient's heart. New therapeutic steps may be taken to treat an existing condition during the catheterization procedure. Graduates may apply to take the national certification examination to become a Registered Cardiovascular Technologist (RCVT) with a specialty in Invasive Technology.

| | | | Suggested |
|-------------------|--|---------|---------------|
| GENERAL EDUCATION | | Credits | Semester |
| BY 101 OR BY 107 | General Biology OR | | |
| | Fundamentals of Microbiology | 4 | Summer |
| EG 101 | Introduction to Composition I | 3 | 1 |
| SH 110 | Interpersonal Communication | 3 | 2 |
| SO 101 | Introduction to Sociology | 3 | 2 |
| PS 100 OR PS 103 | Technical Physics OR | | |
| AND PS 104 | Fundamentals of Physics I AND II | 4-8 | 1 |
| CH 101 OR CH 103 | General Inorganic Chemistry I OR | | |
| | Fundamentals of General Chemistry | 4 | 1 |
| Mathematics | MA 124,133,135, or 140 | 3-5 | 1 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| BY 203 | Anatomy and Physiology I | 4 | 1 |
| BY 204 | Anatomy and Physiology II | 4 | 2 |
| HC 111 | Health Čare Delivery System | 3 | 1 |
| CV 101 | Cardiovascular Assessments | 3 | 2 |
| CV 103 | Physical Principles of Medicine | 3 | 2 |
| CV 108 | Advanced Anatomy and Pathophysiology | 3 | Summer |
| CV 115 | X-Ray Theory | 1 | Summer |
| CV 201 | Cardiovascular Pharmacology | 2 | 3 |
| CV 203 | Medical Instrumentation | 2 | 3 |
| CV 207 | Diagnostic and Interventional Procedures | 9 | 3 |
| CV 231 | Applied Clinical Practicum | 3 | Intersession* |
| CV 251 | Advanced Interventional Procedures | 5 | 4 |
| CV 261 | Clinical Internship | 4 | 4 |
| | | | |

^{*}Students will be assigned to a clinical agency for the month of January, between the third and fourth semesters. Clinical experience is 40 hours per week.

CARDIOVASCULAR TECHNOLOGY

CERTIFICATE OF PROFICIENCY

Cardiac Monitoring and Analysis

This certificate program is an option within the Cardiovascular Technology Degree program. Students learn to apply and interpret rhythm strips, 12-Lead EKG's and Holter monitors. Classes and labs are held on campus and at clinical sites. Students may apply to continue in the Cardiovascular Technology degree program after completion of required additional coursework. Graduates may apply to take the national certification examination to become a Certified Cardiographic Technician (CCT).

| | | Credits | Suggested Semester |
|------------|--------------------------------------|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| HC 111 | The Health Care Delivery System | 3 | 1 |
| PS 100 OR | Technical Physics OR | 4 | 1 |
| BY 101 | General Biology | | |
| BY 106 | Basic Anatomy and Physiology: | 4 | 2 |
| | Biomedical Emphasis or | | |
| BY 203 AND | Anatomy and Physiology I AND | 4 | 1 |
| BY 204 | Anatomy and Physiology II | 4 | 2 |
| CV 101 | Cardiovascular Assessments | 3 | 2 |
| CV 108 | Advanced Anatomy and Pathophysiology | 3 | 1st summer |

CARDIOVASCULAR TECHNOLOGY

CERTIFICATE OF PROFICIENCY

Advanced Cardiovascular Imaging and Interventional Therapies

This certificate program is an option within the Cardiovascular Technology Degree program. This program prepares certified radiographers to meet the technical and clinical responsibilities associated with the cardiovascular field. The clinical environment combines innovative procedures and state-of-the-art equipment for a vast range of experience. Opportunity exists to work with other health professionals in providing cardiovascular diagnostic and interventional therapies. Graduates may apply to take the examination in Cardiovascular-Interventional Technology to become a Cardiovascular Radiologic Technologist (CVRT).

| | | Credits | Suggested Semester |
|--------|--|---------|-----------------------|
| CV 101 | Cardiovascular Assessments | 3 | 2 |
| CV 103 | Physical Principles of Medicine | 3 | 2 |
| CV 108 | Advanced Anatomy and Pathophysiology | 3 | Summer |
| CV 201 | Cardiovascular Pharmacology | 2 | 3 |
| CV 203 | Medical Instrumentation | 2 | 3 |
| CV 207 | Diagnostic and Interventional Procedures | 9 | 3 |
| CV 231 | Applied Clinical Practicum | 3 | Intersession* |
| CV 251 | Advanced Interventional Procedures | 5 | 4 |
| CV 261 | Clinical Internship | 4 | 4 |

^{*}Students will be assigned to a clinical agency for the month of January, between the third and fourth semesters. Clinical experience is 40 hours per week.

CARDIOVASCULAR TECHNOLOGY

CERTIFICATE OF PROFICIENCY

Cardiovascular Technology for Allied Health Professionals

This certificate program is an option within the Cardiovascular Technology Degree Program. This program prepares allied health professionals to meet the technical and clinical responsibilities associated with the cardiovascular field. The clinical environment combines innovative procedures and state-of-the-art equipment for a vast range of experience. Opportunity exists to work with other health professionals in providing cardiovascular diagnostic and interventional therapies. Graduates may apply to take the national certification exam to become a Registered Cardiovascular Technologist (RCVT) with a specialty in Invasive Technology.

| | | Credits | Suggested Semester |
|--------|--|---------|-----------------------|
| CV 101 | Cardiovascular Assessments | 3 | 9 |
| CVIOI | | 3 | 2 |
| CV 103 | Physical Principles of Medicine | 3 | 2 |
| CV 108 | Advanced Anatomy and Pathophysiology | 3 | Summer |
| CV 115 | X-Ray Theory | 1 | Summer |
| CV 201 | Cardiovascular Pharmacology | 2 | 3 |
| CV 203 | Medical Instrumentation | 2 | 3 |
| CV 207 | Diagnostic and Interventional Procedures | 9 | 3 |
| CV 231 | Applied Clinical Practicum | 3 | Intersession* |
| CV 251 | Advanced Interventional Procedures | 5 | 4 |
| CV 261 | Clinical Internship | 4 | 4 |
| | | | |

^{*}Students will be assigned to a clinical agency for the month of January, between the third and fourth semesters. Clinical experience is 40 hours per week.

^{**}Students must have the following in their background or complete prior to enrollmentin the cardiovascular course sequence:

| BY 101 (or BY 107) | General Biology I (or Fundamentals of Microbiology) |
|--------------------|--|
| BY 203 and BY 204 | Anatomy and Physiology I and II |
| PS 100 (or PS 103 | Technical Physics (or Fundamentals of Physics I and II) |
| and PS 104) | · |
| CH 101 or CH 103 | General Inorganic Chemistry I or Fundamentals of General |
| | Chemistry |
| MA 124, 133, 135 | Mathematics |
| or MA 140 | |

CHEMICAL DEPENDENCY COUNSELING

ASSOCIATE IN APPLIED SCIENCE DEGREE

A Combined Program with Dundalk Community College DUNDALK COMMUNITY COLLEGE DEGREE

In conjunction with an articulation agreement with Dundalk Community College, students may complete all general education requirements and several core courses in chemical dependency counseling at Howard Community College. The program is designed to prepare students to counsel persons and families involved with substance abuse problems. Counselors work in hospitals, treatment centers, and other community settings. Graduates have the opportunity for certification through the Maryland Addiction Counselor Certification Board. Coursework is articulated with the Office of Education and Training for Addiction Services, Maryland Department of Health and Mental Hygiene. The degree is awarded from Dundalk Community College.

| | | | Suggested |
|--------------------------|---|-------------|-----------|
| GENERAL EDUCATION | I CORE | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| FA 102 | Arts, Cultures, and Ideas | 3 | 3 |
| SH 110 | Interpersonal Communication | 3 | 2 |
| PY 101 | General Psychology | 3 | 2 |
| Science | BY 101, CH 101 or CH 103 | 4 | 1 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| HE 120 | Medical Aspects of Chemical Dependency | 3 | 1 |
| HE 121 | Introduction to Chemical Dep. Treatment | 3 | 2 |
| HE 122 | Basic Chemical Dependency Counseling | | |
| | Skills | 3 | 1 |
| HE 123 | Group Counseling Skills (Chemical | | |
| | Dependency) | 3 | 2 |
| HE 124 | Family Counseling (Chemical Dependency) | 3 3 3 | 2 3 |
| HE 211 | Nutrition | 3 | 3 |
| HD 200 | Life Span Development | 3 | 3 |
| PY 203 | Abnormal Psychology | 3 | 4 |
| COURSES OFFERED A | AT DUNDALK COMMUNITY COLLEGE | | |
| CDC 121 | Delivery of Services I | 3 | 3 |
| CDC 173 | Internship: Chemical Dependency | | |
| | Counseling OR | | |
| CDC 183 | Cooperative Education I | 3 | 3 |
| CDC 211 | Advanced Counseling | 3 | 4 |
| CDC 212 | Group Counseling: Advanced | 3 | 4 |
| CDC 221 | Delivery Services II | 3 | 4 |
| CDC 273 | Internship: Chemical Dependency | | |
| | Counseling OR | _ | _ |
| CDC 283 | Cooperative Education II | 3 | 4 |
| | | | |

COMPUTER-AIDED DESIGN (CAD) TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE DEGREE

The growing applications of CAD in such fields as electro-mechanical engineering, civil engineering, architecture, multimedia, and presentation graphics have increased the demand for skilled technicians to assist in all phases of conception and design. Graduates of this program will be able to gain employment as a skilled application specialist in CAD. Individuals experienced in manual drafting may also enroll in this program to enhance their skills and knowledge. The students will learn to use the CAD system to develop complex drawings and technical documents. Among the skills acquired in this program, the students will learn to program the CAD system and develop their own application packages. The student will become proficient in recognizing various computer graphic file formats and translation standards. Also, the student will become familiar with various CAD systems in the industry. The college and the Howard County public school system have developed a tech prep track in Computer-Aided Design Technology. For more information, call the chairperson of Science and Technology.

A certificate of proficiency is available for students seeking entry in the field or desiring enhancement of a present position.

| | | | Suggested |
|------------------|---|---------|-----------|
| GENERAL EDUCATIO | N CORE | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 4 |
| Social Sciences | Select GE 102, HY 111, HY 112, HY 121, | | |
| | HY 122, HY 123, PO 201, SO 101, or SO 105 | 5 3 | 2 |
| PS 100 | Technical Physics | 4 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| SH 105 | Fundamentals of Public Speaking OR | | |
| SH 110 | Interpersonal Communications | 3 | 3 |
| | | | |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| CD 100 | Principles of Drafting | 3 | 1 |
| CD 101 | Introduction to CAD | 3 | 1 |
| CS 120 | Introduction to Computer Systems | 3 | 1 |
| BU 100 | Introduction to Business and Organization | 3 | 2 |
| CD 103 | Intermediate CAD | 3 | 2 |
| CS 110 | Software Applications for Micros | 3 | 2 |
| CD 104 | Advanced CAD | 3 | 3 |
| CS 219 | Microcomputer Operating Systems | 3 | 3 |
| CAD | Computer-Aided Design Electives OR | | |
| Computer Systems | Computer Systems Electives | 12 | 3-4 |
| CD 105 | CAD Projects | 3 | 4 |
| CD 106 | CAD Systems | 3 | 4 |

COMPUTER-AIDED DESIGN (CAD) TECHNOLOGY CERTIFICATE OF PROFICIENCY

| | | Credits | Suggested Semester |
|--------|-------------------------------------|---------|-----------------------|
| CD 100 | Principles of Drafting | 3 | 1 |
| CD 101 | Introduction to CAD | 3 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| CD 103 | Intermediate CAD | 3 | 2 |
| CS 110 | Software Applications for Micros | 3 | 2 |
| CD 104 | Advanced ČAD | 3 | 3 |
| CD 105 | CAD Projects | 3 | 4 |
| CS 219 | Microcomputer Operating Systems-DOS | 3 | 4 |

COMPUTER SUPPORT TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE DEGREE

This program is designed to meet the needs of business and industry by qualifying students for a variety of technical positions in computer support including (but not limited to) HelpDesk Specialist, PC Software Support Technician, Installation and Repair Technician, Novell Network Administrator, and Microsoft Certified Product Specialist. Because the college is a Novell Education Academic Partner (NEAP) all NetWare courses are taught by Certified Novell Instructors (CNI). HCC's membership in the Microsoft Academic Training Program assures students of having Microsoft Certified Trainers (MCT) for all MS courses. HCC is a CompTIA authorized Training Center for A+ Certification. This curriculum prepares students to sit for the Certified Novell Administrator (CNA) certification exam, the Microsoft Certified Product Specialist (MCPS) exam(s), and A+ certification exams.

| | | | Suggestea |
|-------------------|---|---------|-----------|
| GENERAL EDUCATION | I CORE | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 3 |
| SH 105 | Fundamentals of Public Speaking | 3 | 2 |
| Social Sciences | Select GE 102, HY 111, HY 112, HY 121, | | |
| | HY 122, HY 123, PO 201, SO 101, or SO 105 | 3 | 4 |
| Science | Science Core Course (PS 105/PS 115 | | |
| | recommended) (see p. 61-must include lab) | 4 | 3 |
| Mathematics | MA 122 or higher | 3-4 | 1 |
| CS 129 | Principles of Internet | 3 | 4 |
| | | | |
| REQUIRED COURSES | | | |
| AC 111 | Principles of Accounting I | | |
| | OR | | |
| BU 100 | Introduction to Business and Organization | 3 | 1 |
| CS 219 | Microcomputer Operating Systems-DOS | 3 3 | 1 |
| EL 105 | Fundamentals of Electronics | 3 | 1 |
| CS 105 | Personal Computer Systems Repair I | 3 | 2 |
| CS 177 | Microsoft Office User Proficient | 3 | 2 |
| CS 106 | Personal Computer Systems Repair II | 3 | 3 |
| EL 260 | Internetworking with Multi-Protocol Systems | s 3 | 4 |
| Naturalia a Cara | | | |
| Networking Core | Character Manual | | |
| | Choose one sequence of two courses-Novell | • | 0.0 |
| NIE FOO | NetWare version 4 or Microsoft NT version 4 | 6 | 2,3 |
| NT 520 | NetWare v4.x System Manager ANDNT 525 | | |
| 1.00 | NetWare v4.x Advanced System Manager OR | | |
| MS 803 | Administering Windows NT 4.0 AND | | |
| MS 922 | Supporting Windows NT - Core Technologies | 1 | |
| | | | |

Additional Courses in Major

12 varies

Suggested

Students will choose 12 credits (four courses) from the courses listed below according to their specific career plans. The courses are grouped into four interest areas but students are free to select twelve credits from any area. Since this is a rapidly changing field, students should consult a faculty advisor each semester for program updates.

Microsoft Networking Support

| CS 110 | Software Applications for Micros (see NOTE 1 below) |
|--------|---|
| MS 578 | Networking Essentials (see NOTE 2 below) |
| MS 798 | Implementing and Supporting Microsoft Windows 95 |
| MS 688 | TCP/IP NT 4.0 |
| MS 771 | Implementing Microsoft Exchange |
| MS 689 | Supporting Microsoft Windows NT Enterprise |
| MS 867 | System Administrator for MS-SQL Server |
| CS 201 | Computer Systems Work Experience |

Novell Networking Support

| CS 110 | Software Applications for Micros (see NOTE 1 below) |
|--------|---|
| NT 801 | NetWare Service and Support |
| NT 200 | Networking Technologies (see NOTE 2 below) |
| NT 532 | NDS Design and Implementation |
| NT 540 | Building Intranets with NetWare |
| NT 605 | NetWare TCP/IP Transport |
| CS 201 | Computer Systems Work Experience |
| | |

Help Desk Support and Application Development

| CS 110 | Software Applications for Micros (see NOTE 1 below) |
|------------------|---|
| MS 578 or NT 200 | Networking Essentials or Networking Technologies |
| | (see NOTE 2 below) |
| CS 277 | Microsoft Office User Expert |
| CS 113 | Intermediate Database |
| MS 540 | Implementing and Supporting Microsoft Windows 95 |
| CS 190 | Visual Basic |
| CS 180 | C Programming Language |
| CS 917 | Introduction to Java |
| CS 201 | Computer Systems Work Experience |

Internetworking Support

| internetworking Suppo | и |
|-----------------------|---|
| CS 110 | Software Applications for Micros (see NOTE 1 below) |
| MS 688 | TCP/IP NT 4.0 |
| EL 261 | Introduction to Router Configuration |
| EL 262 | Advanced Router Configuration |
| CS 201 | Computer Systems Work Experience |
| MS 578 or NT 200 | Networking Essentials or Networking Technologies |
| | (see NOTE 2 below) |
| | |

NOTE 1: Students who have little experience with microcomputers may need CS 110, Software Applications for Micros. These CS110 skills are the real world prerequisite for the program. Therefore, if CS 110 is taken, it must be taken before any other CS, MS, or NT course and will count as one course in the area of emphasis. If completed later, no credit will be granted towards the degree.

NOTE 2: MS 578 Networking Essentials and NT 200 Networking Technologies may not both be counted towards a degree since they cover similar material.

COMPUTER SUPPORT TECHNOLOGY

CERTIFICATE OF PROFICIENCY

PC Maintenance (A+ Certification) with Network Emphasis

This program is designed to meet the needs of individuals who are interested in computer maintenance, troubleshooting and internetworking with different protocols. Labs will include hands-on experiences in computer repair and network configurations. This program also prepares the student for the A+Certification exam given by the Computer Industry Association.

| | | Suggest | |
|--------|---|---------|----------|
| | | Credits | Semester |
| CS 105 | Personal Computer Systems Repair I | 3 | 1 |
| CS 219 | Microcomputer Operating Systems—DOS | 3 | 1 |
| EL 105 | Fundamentals of Electronics | 3 | 1 |
| CS 106 | Personal Computer Systems Repair II | 3 | 2 |
| EL 260 | Internetworking with Multi-Protocol Systems | s 3 | 2 |

COMPUTER SUPPORT TECHNOLOGY

LETTER OF RECOGNITION - A+ CERTIFICATION

A+ Certification is a CompTIA-sponsored testing program that certifies the competency of individuals in the microcomputer service industry. Earning A+ Certification means that you have met the computer service industry standard for technical competence.

| CS 105 | Personal Computer Systems Repair I | 3 |
|--------|-------------------------------------|---|
| CS 106 | Personal Computer Systems Repair II | 3 |
| CS 219 | Microcomputer Operating Systems-DOS | 3 |

The following Certificates of Proficiency and Letters of Recognition are available in Novell and Microsoft. (See pages 126-130)

MICROSOFT

Certificate of Proficiency - Microsoft Certified Systems Engineer (MCSE) Letter of Recognition - Microsoft Certified Product Specialist (MCPS)

NOVELL

Certificate of Proficiency
Certified Novell Engineer 3 (CNE 3)
Certified Novell Engineer 4 (CNE 4)
Letter of Recognition
Certified Novell Administration (CNA

EARLY CHILDHOOD DEVELOPMENT ASSOCIATE IN APPLIED SCIENCE DEGREE

In our society where both parents are working full-time outside the home, the need for qualified child care providers is growing rapidly. This curriculum is designed to provide the student with a well-rounded background in early childhood development. As part of their career education, most courses assign students to off-campus child care settings where they will interact with young children under the supervision of professionals in the field. Graduates of this program, under current State of Maryland regulations, will have the skills necessary to become a Director of a Child Care Center licensed for more than forty children provided that they have two years of experience in an early childhood program and are at least 21 years of age.

| GENERAL EDUCATI | ON DECLIDEMENTS | Credits | Suggested Semester |
|-----------------|---|---------|-----------------------|
| EG 101 | GENERAL EDUCATION REQUIREMENTS | | 1 |
| Mathematics | Introduction to Composition I MA 122 or higher, MA 127 or MA 128 | 3 | 1 |
| Mathematics | recommended | 3-5 | 2 |
| SH 105 | Fundamentals of Public Speaking | 3-3 | 3 |
| Science | Science Core Course (see p. 61; must | 3 | 3 |
| Science | include a lab) | 4 | 3 |
| Social Sciences | Social and Behavioral Sciences Core | 4 | 3 |
| Social Sciences | Courses (see p. 61) | 6 | 4 |
| HE 109 | Basic CPR and First Aid | 2 | 2 |
| HE 109 | Dasic Crk and Pirst Aid | ۵ | ۵ |
| REQUIRED COURSE | S RELATED TO MAJOR | | |
| ED 111 | Introduction to the Early Childhood Years | 3 | 1 |
| ED 112 | Methods and Materials in Early Childhood | | |
| | Education | 3 | 1 |
| ED 113 | Working with Infants and Toddlers | 3 | 1 |
| ED 120 | Observing and Recording Children's | | |
| | Behavior | 3 | 1 |
| ED 130 | Learning Environments for Young Children | 3 | 2 |
| ED 140 | Child Health, Safety, Nutrition | 3 | 2 |
| ED 150 | Practicum in Early Childhood Development | 4 | 2 2 |
| ED 200 | Introduction to Special Education | 3 | 3 |
| ED 210 | Language Development and Activities in | | |
| | Early Childhood Education | 3 | 3 |
| ED 212 | Advanced Methods and Materials in Early | | |
| | Childhood Education | 3 | 3 |
| ED 230 | Child Care Center Administration and | | |
| | Management | 3 | 4 |
| ED 240 | Successful Classroom Management | 3 | 4 |
| ED 250 | Advanced Practicum in Early Childhood | | _ |
| | Development | 4 | 4 |
| | | | |

EARLY CHILDHOOD DEVELOPMENT CERTIFICATE OF PROFICIENCY

This sequence of courses is designed to provide concentrated study and hands-on experience in early childhood development, curriculum, and classroom management. Successful completion of this program will indicate that the student has met the educational requirements, under current State of Maryland regulations, for employment as a Director of a Child Care Center licensed for up to twenty children, provided the individual has at least one year of experience in a licensed early childhood program and is at least 21 years of age; a Senior Staff member in a Child Care Center, provided the individual is at least 20 years of age; or as an Aide in a Child Care Center.

| | | | Suggested |
|-------------------|---|---------|-----------|
| GENERAL EDUCATION | REQUIREMENTS | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| ED 111 | Introduction to the Early Childhood Years | 3 | 1 |
| ED 112 | Methods and Materials in Early Childhood | | |
| | Education | 3 | 1 |
| ED 113 | Working with Infants and Toddlers | 3 | 1 |
| ED 120 | Observing and Recording Children's | | |
| | Behavior | 3 | 1 |
| ED 130 | Learning Environments for Young Children | 3 | 2 |
| ED 140 | Child Health, Safety, Nutrition | 3 | 2 |
| ED 150 | Practicum in Early Childhood Development | 4 | 2 |
| ED 240 | Successful Classroom Management | 3 | 2 |
| HE 109 | Basic First Aid | 2 | 2 |

EARLY CHILDHOOD DEVELOPMENT LETTER OF RECOGNITION*

Successful completion of these two courses will indicate that the student has met the educational requirements, under current State of Maryland regulations, for employment as a Senior Staff member in a Child Care Center provided that they have one year of experience in an early childhood program or one year of college, and are at least 20 years of age; or as an Aide in a Child Care Center.

| | | Credits | Semester |
|--------|---|---------|----------|
| ED 111 | Introduction to the Early Childhood Years | 3 | 1 |
| ED 112 | Methods and Materials in Early Childhood | | |
| | Education | 3 | 1 |

Suggested

^{*}See Social Sciences Division office for Letter of Recognition.

ELECTRONICS TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE DEGREE

Electronics is the wave of the future. All aspects of modern society and business are becoming more dependent on skilled professionals to maintain the electronics infrastructure. Graduates can choose to work in challenging positions in the fields of computers, telecommunications, training and higher studies. Courses will emphasize theory and practice. Course work will reflect the changing needs of industry and inculcate a need for ongoing training. Students planning to transfer to a four-year technical institution should contact that institution to check transferable courses. This curriculum prepares students to sit for the A+ certification exam. A certificate of proficiency is available for students seeking entry in related fields or desiring enhancement of a present position.

| | | | Suggested |
|-------------------|---|---------|-----------|
| GENERAL EDUCATION | I CORE | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 4 |
| Social Sciences | Select GE 102, HY 111, HY 112, HY 121, | | |
| | HY 122, HY 123, PO 201, SO 101, or SO 105 | 5 3 | 1 |
| PS 100 | Technical Physics | 4 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| SH 105 | Fundamentals of Public Speaking OR | | |
| SH 110 | Interpersonal Communications | 3 | 3 |
| | | | |
| REQUIRED COURSES | | | |
| EL 107 | Introduction to Electronic Circuits | 4 | 1 |
| CD 101 | Introduction to CAD OR | | |
| CO 201 | Cooperative Education I | 3 | 2 |
| CS 105 | Personal Computer Systems Repair I | 3 | 2 |
| CS 219 | Microcomputer Operating Systems-DOS | 3 | 2 |
| EL 114 | Semiconductor Devices | 3 | 2 |
| CS 106 | Personal Computer Systems Repair II | 3 | 3 |
| EL 211 | Analog Circuits | 4 | 3 |
| EL 213 | Digital Circuits | 4 | 3 |
| EL 237 | Wireless Communication Circuits | 3 | 3 |
| EL 140 | Network Cabling Systems | 3 | 4 |
| EL 220 | Electro-Mechanical Devices | 3 | 4 |
| EL 238 | Wireless Communication Systems | 3 | 4 |
| EL 260 | Internetworking with Multi-Protocol Systems | s 3 | 4 |
| | | | |

ELECTRONICS TECHNOLOGY CERTIFICATE OF PROFICIENCY

| | | Credits | Suggested Semester |
|--------|-------------------------------------|---------|-----------------------|
| EL 107 | Introduction to Electronic Circuits | 4 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| EL 114 | Semiconductor Devices | 3 | 2 |
| EL 211 | Analog Circuits | 4 | 3 |
| EL 213 | Digital Circuits | 4 | 3 |
| EL 237 | Wireless Communication Circuits | 3 | 3 |
| EL 238 | Wireless Communication Systems | 3 | 4 |

ELECTRONICS TECHNOLOGY - Telecommunications Technology ASSOCIATE IN APPLIED SCIENCE DEGREE

The future is in communications and predominantly in telecommunications. This program will provide grassroots training to develop qualified technicians, supervisors and trainers in installing, maintaining and troubleshooting modern communication networks incorporating fiber optics, cellular, microwave, and satellite systems. Hands-on skills will be emphasized to enable students to face real-world situations which will prepare them for entering industry. Students planning to transfer to a four-year technical institution should contact that institution to check transferable courses. This curriculum prepares students to sit for the A+ certification, router configuration, and internetwork expert certification exams. A certificate of proficiency is available for students seeking entry in related fields or desiring enhancement of a present position.

| | | | Suggested |
|-------------------|---|---------|-----------|
| GENERAL EDUCATION | N CORE | Credits | Semeste |
| EG 101 | Introduction to Composition I | 3 | 1 |
| Humanities | Humanities Core Course (see p. 60) | 3 | 4 |
| Social Sciences | Select GE 102, HY 111, HY 112, HY 121, | | |
| | HY 122, HY 123, PO 201, SO 101, | | |
| | or SO 105 | 3 | 2 |
| PS 100 | Technical Physics | 4 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| SH 105 | Fundamentals of Public Speaking OR | | |
| SH 110 | Interpersonal Communications | 3 | 4 |
| | | | |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| EL 103 | Introduction to Wireless and Network | | |
| | Communications | 3 | 1 |
| EL 107 | Introduction to Electronic Circuits | 4 | 1 |
| CS 105 | Personal Computer Systems Repair I | 3 | 2 |
| EL 114 | Semiconductor Devices | 3 | 2 |
| EL 140 | Network Cabling Systems | 3 | 2 |
| CS 219 | Microcomputer Operating Systems-DOS | 3 | 2 |
| CS 106 | Personal Computer Systems Repair II | 3 | 2 3 |
| EL 211 | Analog Circuits | 4 | 3 |
| EL 213 | Digital Circuits | 4 | 3 |
| EL 237 | Wireless Communication Circuits | 3 | 3 |
| EL 260 | Internetworking with Multi-Protocol Systems | s 3 | 3 |
| EL 261 | Introduction to Router Configuration | 3 | 3 |
| EL 238 | Wireless Communication Systems | 3 | 4 |
| EL 262 | Advanced Router Configuration | 3 | 4 |
| | • | | |

ELECTRONICS TECHNOLOGY - Telecommunications Technology CERTIFICATE OF PROFICIENCY

| | | Credits | Suggested Semester |
|--------|--------------------------------------|---------|-----------------------|
| EL 103 | Introduction to Wireless and Network | | |
| | Communications | 3 | 1 |
| EL 107 | Introduction to Electronic Circuits | 3 | 1 |
| MA 124 | Technical Math | 4 | 1 |
| EL 114 | Semiconductor Devices | 3 | 2 |
| EL 211 | Analog Circuits | 4 | 3 |
| EL 213 | Digital Circuits | 4 | 3 |
| EL 237 | Wireless Communication Circuits | 3 | 3 |
| EL 238 | Wireless Communication Systems | 3 | 4 |

LABORATORY SCIENCE (Biotechnology)

Please refer to the TRANSFER PROGRAMS section of the catalogue for a description of the Laboratory Science (Biotechnology) curriculum (see page 72). The growing emphasis on modern science technology has created a demand for skilled laboratory specialists in the emerging biotechnology and chemical industries. These areas include genetic engineering, pharmaceuticals, biological and biomedical research, quality control, water quality and treatment, pollution abatement, and others. The college has articulated this program with the Department of Medical and Research Technology at the University of Maryland at Baltimore which leads to a B.S. degree. The laboratory science program is suitable for students planning to seek employment as laboratory technicians in industrial and research laboratories. Graduates of this program should be able to carry out laboratory procedures, properly use laboratory apparatus and perform basic calculations.

NETWORK ADMINISTRATION - Network Engineer ASSOCIATE IN APPLIED SCIENCE DEGREE

This program is designed to meet the needs of the business community and industry in the expanding field of computer network engineering and administration. Graduates will be qualified for a variety of technical and administrative positions including client needs assessment, network design, network installation and maintenance, inter-network communication and connectivity, specialized network functions, and on-site network administration. Extensive lab instruction will provide exposure to real-world network scenarios. Completion of all courses in this career curriculum will lead to the award of the associate in applied science degree in network administration. Because the college is a Novell Education Academic Partner (NEAP), all NetWare courses are taught by Certified Novell Instructors (CNIs). HCC's membership in the Microsoft Academic Training Program assures students of having Microsoft Certified Trainers (MCTs) for all MS courses. Depending on the chosen networking option, this curriculum prepares students to sit for the following certification exams: Certified Novell Administrator (CNA), Certified Novell Engineer (CNE), Microsoft Certified Professional (MCP), and/or the Microsoft Certified Systems Engineer (MCSE).

| | | | Suggested |
|--------------------------------|---|------------|-----------|
| GENERAL EDUCATION REQUIREMENTS | | | Semester |
| EG 101 | Introduction to Composition | 3 | 1 |
| FA 102 | Arts, Cultures, and Ideas | 3 | 2 |
| SO 101/PY 101 | Introduction to Sociology or Psychology | 3 | 4 |
| Science | Science Core Course (see p. 61) | 4 | 2 |
| SH 105 | Fundamentals of Public Speaking OR | | |
| SH 110 | Interpersonal Communications | 3 | 2 |
| Mathematics | MA 122 or higher | 3-5 | 1 |
| Interdisciplinary | Interdisciplinary and Emerging Issues | | |
| | Core Course (see p. 62) | 1-3 | 2 |
| REQUIRED COURSES | RELATED TO MAJOR | | |
| CS 121 | Structured Logic and Program Design | 3 | 1 |
| CS 219 | Microcomputer Operating Systems - DOS | 3 | 1 |
| CS 113 | Intermediate Database | 3 | 3 |
| CS 180 | C-Programming | 4 | 3 |
| Related Electives | 6 Credits from the following: EG 111, BU 10 | 0, | |
| | BU 130, BU 151, CO 210, CS 110 (if needed | l , | |
| | take before NT courses), CS 114, CS 250, | | |
| | CS 280, CS 290, MN 131, MN 140 | 6 | 3-4 |
| Elective | Any Course | 3 | 4 |

NETWORK ADMINISTRATION - Network Engineer (continued) ASSOCIATE IN APPLIED SCIENCE DEGREE

Novell Networking Option

| NT 520 | NetWare 4.x Sys Man | 3 | 1 |
|----------------------|---|---|-----|
| NT 525 | NetWare 4.x Adv Sys Man | 3 | 2 |
| NT 200 | Networking Technologies | 3 | 3 |
| NT 801 | Service and Support | 3 | 3 |
| Novell Networking | NT 526, NT 532, NT 540, NT 605 | | |
| Electives | (6 credits) | 6 | 3-4 |
| | Other approved NT elective courses | 3 | 4 |
| | Microsoft Networking Option | | |
| | . . | | |
| MS 578 | Networking Essentials | 3 | 1 |
| MS 803 | NT 4.0 Administration | 3 | 2 |
| MS 922 | NT 4.0 Core Technologies 3 | 3 | |
| MS 689 | NT 4.0 Enterprise | 3 | 3 |
| Microsoft Networking | MS 688, MS 771, MS 798, MS 826, MS 867, | | |
| Electives | MS 872 (6 credits) | 6 | 3-4 |
| | Other approved MS elective courses | 3 | 4 |

NETWORK ADMINISTRATION - Network Engineer CERTIFICATE OF PROFICIENCY

Certified Novell Engineer 4 (CNE 4)

The CNE 4 certifies service technicians to provide a full range of quality support for Novell NetWare 4.x networks, including systems design, installation and configuration, maintenance, and upgrade. To earn CNE 4 certification, candidates must demonstrate mastery of networking concepts by passing a series of seven proficiency exams administered by Novell. Candidates will be tested in Networking Technologies, Service and Support, NetWare 4 System Manager, NetWare 4 Advanced System Manager, NetWare 4 Installation and Configuration (See Advanced System Manager course descriptions), NetWare 4 Design and Implementation, and an elective of the candidate's choosing in either a Network Management specialization, or an Infrastructure and Advanced Access specialization.

PREREQUISITE REQUIREMENT

Demonstrate a thorough knowledge of DOS and Microcomputer Concepts

OPERATING SYSTEM REQUIREMENTS

| NT 520 | NetWare 4.x System Manager |
|---------|----------------------------|
| 111 320 | Netware 4.x System manager |

AND

NT 525 NetWare 4.x Advanced System Manager (bundled with

NT 804 NetWare 4 Installation and Configuration)

AND

NT 532 NetWare 4.x Design and Implementation NT 540 Building Intranets with Intranetware

CORE REQUIREMENTS

NT 200 Networking Technologies NT 801 Service and Support

NETWORK ADMINISTRATION - Network Engineer LETTER OF RECOGNITION

Certified Novell Administrator (CNA)

The CNA 3 or 4 certifies users who are responsible for the day-to-day operation and administration of an existing Novell NetWare 3 or 4 network. CNAs perform tasks such as adding and deleting users, assigning rights, file management, resource management, backing up the server, loading applications and client software, and maintaining network security. To earn CNA 3 or 4 certification, the candidate need only take the system manager course and the certification exam that corresponds to that course for either NetWare 3 or 4. Candidates may attempt CNA certification in both NetWare 3.x and NetWare 4.x simultaneously. The candidate should sit for the corresponding certification exam within six weeks of completing any Novell course. The student must demonstrate a thorough knowledge of DOS and Microcomputer concepts before entering this program.

OPERATING SYSTEM REQUIREMENTS

NT 508 NetWare 3.x System Manager

OR

NT 520 NetWare 4.x System Manager

NETWORK ADMINISTRATION - Microsoft

CERTIFICATE OF PROFICIENCY

Microsoft Certified Systems Engineer (MCSE) Windows NT 4.0 Track

MCSEs are qualified to effectively plan, implement, maintain, and support information systems with the Microsoft Windows NT operating system and the Microsoft BackOffice integrated family of server software. MCSEs are required to pass four operating system exams and two elective exams. The operating system exams require candidates to prove their expertise with desktop, server, and networking components. The elective exams require proof of expertise with Microsoft BackOffice products.

PREREQUISITE REQUIREMENTS

Demonstrate a thorough knowledge of DOS, Microcomputer Concepts, Windows andmouse manipulation.

OPERATING SYSTEM REQUIREMENTS

| MS 578 | Networking Essentials |
|--------|-----------------------|
|--------|-----------------------|

MS 803 Administering Microsoft Windows NT 4.0

MS 922 Supporting Microsoft Windows NT 4.0 Core Technologies

MS 689 Supporting Microsoft Windows NT 4.0 Enterprise

ELECTIVES (Take Two Courses)

MS 688 Internetworking Microsoft TCP/IP on MS Windows NT 4.0

MS 771 Implementing and Supporting Microsoft Exchange

MS 826 Microsoft Internet Information Server

MS 867 System Administration for Microsoft SQL Server

NURSING

Please refer to the TRANSFER PROGRAMS section of the catalog for a description of the nursing curriculum. The associate in arts degree program in nursing is listed under the heading of "Nursing" (see pages 77-78). The associate in arts degree program at Howard Community College provides the graduate with the foundation for both a career and for transfer into a baccalaureate degree program. Most students successfully gain employment immediately after graduation. Graduates are prepared to work in a variety of health care settings. The curriculum is designed to allow transfer of a minimum of 66 credits to University of Maryland system institutions with baccalaureate nursing programs. The application process must begin within seven years of graduation from the nursing program, and the bachelor of science degree in nursing must be completed within ten years from graduation. Students are advised to seek assistance in planning for a career in nursing and for planning an ongoing program of study to meet specific requirements of transfer institutions.

PRACTICAL NURSING CERTIFICATE OF PROFICIENCY

This certificate program is a curriculum option within the Nursing Program available for persons interested in becoming a licensed practical nurse. Students learn through lectures, individualized study, and practice in a nursing skills laboratory. With the guidance and supervision of nursing instructors, students provide patient care in a variety of health care settings. The graduate functions as a member of a health care team and provides care to patients with commonly occurring health problems. The coursework overlaps the registered nurse (associate in arts degree nursing program) curriculum to ensure a theory-based practitioner and to facilitate educational mobility within the nursing career field. The program is approved by the Maryland Board of Nursing, 4140 Patterson Avenue, Baltimore, Maryland 21215, 410-764-5124. Graduates are eligible to be considered by the Board of Nursing to take the National Council Licensing Examination for Practical Nurse licensure.

| | | | Suggested |
|--------|--|---------|-----------|
| | | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 2 |
| PY 101 | General Psychology | 3 | 2 |
| BY 107 | Fundamentals of Microbiology | 4 | Pre-req |
| BY 203 | Anatomy and Physiology I | 4 | 1 |
| BY 204 | Anatomy and Physiology II | 4 | 2 |
| MA 105 | Drug Calculations | 1 | 1 |
| HD 200 | Life Span Development | 3 | 1 |
| NU 101 | Introduction to Patient Needs and Nursing Actions | 7 | 1 |
| NU 102 | Nursing of Patients with Common Responses to Stress | 8 | 2 |
| NU 104 | Advanced Concepts in Practical Nursing | 6 | Summer |

Admission to the Practical Nursing Program is based upon priorities associated with the completion of specific courses in the Nursing Program. Contact the Admissions Office to schedule an appointment for an information session regarding the Practical Nursing Program.

A grade of C or better is required in nursing, mathematics and science courses. An exception includes a student with a weighted exam and course average between 71-73%, "D," in NU 102. In this situation the student may enroll in NU 104.

National League for Nursing Accrediting Commission 350 Hudson Street New York, New York 10014 212-989-9393, ext. 153

¹ Students planning to apply for entry into the associate degree nursing program should consider taking MA 122 or higher in place of MA 105, if eligible.

OFFICE TECHNOLOGY ASSOCIATE IN APPLIED SCIENCE DEGREE

There is a constant demand for well-trained office personnel. This curriculum offers a variety of specializations—office management/supervision, office assistant, legal office assistant, and medical office assistant. The office management/supervision option provides the educational background necessary for a person to advance to a supervisory position. The office assistant option provides comprehensive preparation for positions in corporate and government offices. The legal office assistant option includes courses in legal document preparation, legal terminology, communications, and word processing. The medical office assistant option includes courses in medical terminology, medical transcription, medical billing and insurance processing along with the development of general office skills. The International Office Assistant option includes courses that provide an understanding of global economics and geography.

Suggested

| | | | Suggesteu |
|-------------------|-------------------------------------|---------|-----------|
| GENERAL EDUCATION | N CORE | Credits | Semester |
| EG 101 | Introduction to Composition I | 3 | 1 |
| SO 101 | Introduction to Sociology | 3 | 4 |
| Science | Science Core Course (see p. 61-must | | |
| | include one course with lab) | 4 | 2 |
| CS 126 | Introduction to Internet | 1 | 3 |
| SH 105 | Fundamentals of Public Speaking | 3 | 2 |
| SH 110 | Interpersonal Communications | 3 | 3 |
| MA 122 | Ideas in Mathematics or higher | 3 | 1 |
| | | | |
| REQUIRED COURSES | | | |
| BU 102 | Records Management | 3 | 1 |
| OT 176 | English for the Office Professional | 3 | 1 |
| CS 102 | Beginning Word Processing | 1 | 2 |
| OT 100 | Office Machines | 1 | 2 |
| AC 111 | Principles of Accounting I OR | | |
| OT 101 | Bookkeeping | 3 | 3 |
| BU 175 | Business Communications | 3 | 3 |
| CS 101 | Beginning Spreadsheets | 1 | 3 |
| CS 104 | Advanced Word Processing | 1 | 3 |
| CS 132 | Introduction to Windows | 1 | 3 |
| CS 103 | Beginning Database | 1 | 4 |
| CS 116 | PowerPoint | 1 | 4 |
| OT 289 | Office Publishing | 3 | 4 |
| | | | |

SELECT ONE OF THE FOLLOWING FIVE OPTIONS LISTED ON THE NEXT PAGE: Office Management/Supervision, Office Assistant, Legal Office Assistant, Medical OfficeAssistant, International Office Assistant

Office Management/Supervision

| | | . | Suggested |
|--------------------------------|---|----------|---------------------|
| | D | Credits | Semester |
| MN 140 | Principles of Management | 3 | 1 |
| BU 151 | Business Law | 3 | 2 |
| MN 131 | Supervisory Development | 3 | 2 |
| MN 230 | Personnel Management | 3 | 2 |
| Management | Management Elective | 3 | 4 |
| Elective | Business Elective | 3 | 4 |
| | Office Assistant | | |
| OT 279 | Keyboarding | 1 | 1 |
| OT 102 | Editing Skills for Word Processors | 3 | 2 |
| OT 171 | Formatting Business Documents | 2 | 2 |
| OT 272 | Transcription Skills for Word Processors | 2 | 3 |
| OT 275 | Office Simulation | 3 | 4 |
| OT 299 | Word Processing Simulation | 2 | 4 |
| Elective | Business Elective | 5 | 4 |
| | Legal Office Assistant | | |
| OT 279 | Keyboarding | 1 | 1 |
| OT 102 | Editing Skills for Word Processors | 3 | 2 |
| OT 171 | Formatting Business Documents | 2 | 2 |
| OT 281 | Legal Document Preparation | 2 | 3 |
| OT 280 | Legal Transcription and Terminology | 3 | 4 |
| OT 285 | Legal Office Procedures | 3 | 4 |
| Elective | Business Elective | 4 | 4 |
| Medical Office Assistant | | | |
| OT 279 | Keyboarding | 1 | 1 |
| OT 102 | Editing Skills for Word Processors | 3 | 2 |
| OT 290 | Medical Terminology | 2 | 2 |
| OT 191 | Computerized Medical Billing | 1 | 3 |
| OT 192 | Basic Coding Overview | 1 | 3 |
| OT 193 | Introduction to Medical Insurance | 1 | 3 |
| OT 293 | Beginning Medical Transcription | 3 | 4 |
| OT 295 | Medical Office Procedures | 3 | 4 |
| Elective | Business Elective | 3 | 4 |
| International Office Assistant | | | |
| BU 100 | Introduction to Business and Organization | 3 | 1 |
| EC 101 | Principles of Economics | 3 | 2 |
| PO 201 | Comparative Government | 3 | $\tilde{\tilde{z}}$ |
| EC 205 | International Economics | 3 | 3 |
| GE 101 | Introduction to World Geography | 3 | 4 |
| GE 201 | Economic Geography | 3 | 4 |
| GL 201 | Leonomie deography | J | -1 |

Office Assistant - CERTIFICATE OF PROFICIENCY

| | | Credits | Suggested Semester |
|-------------|---|---------|-----------------------|
| BU 102 | Records Management | 3 | 1 |
| CS 102 | Beginning Word Processing | 1 | 1 |
| CS 132 | Introduction to Windows | 1 | 1 |
| OT 100 | Office Machines | 1 | 1 |
| OT 101 | Bookkeeping | 3 | 1 |
| OT 176 | English for the Office Professional | 3 | 1 |
| OT 279 | Keyboarding | 1 | 1 |
| BU 175 | Business Communications | 3 | 2 |
| CS 104 | Advanced Word Processing | 1 | 2 |
| OT 102 | Editing Skills for Word Processors | 3 | 2 |
| OT 171 | Formatting Business Documents | 2 | 2 |
| OT 272 | Transrescription Skills for Word Processors | 2 | 2 |
| OT 275 | Office Simulation | 3 | 2 |
| OT 289 | Office Publishing | 3 | 2 |
| OT 299 | Word Processing Simulation | 2 | 2 |
| Word Proc | essing Specialist - LETTER OF RE | COGNI | TION |
| CS 102 | Beginning Word Processing | 1 | 1 |
| OT 102 | Editing Skills for Word Processors | 3 | 1 |
| OT 279 | Keyboarding | 1 | 1 |
| OT 171 | Formatting Business Documents | 2 | 2 |
| OT 272 | Transcription Skills for Word Processors | 2 | 3 |
| CS 104 | Advanced Word Processing | 1 | 3 |
| OT 289 | Office Publishing | 3 | 4 |
| OT 299 | Word Processing Simulation | 2 | 4 |
| Legal Offic | ce Assistant - CERTIFICATE OF PR | OFICIE | NCY |
| BU 102 | Records Management | 3 | 1 |
| CS 102 | Beginning Word Processing | 1 | 1 |
| OT 100 | Office Machines | 1 | 1 |
| OT 101 | Bookkeeping | 3 | 1 |
| OT 279 | Keyboarding | 1 | 1 |
| OT 176 | English for the Office Professional | 3 | 1 |
| BU 175 | Business Communications | 3 | 2 |
| CS 104 | Advanced Word Processing | 1 | 2 |
| OT 102 | Editing Skills for Word Processors | 3 | 2 |
| OT 171 | Formatting Business Documents | 2 | 2 |
| OT 280 | Legal Transcription and Terminology | 3 | 2 |
| OT 281 | Legal Document Preparation | 2 | 2 |
| OT 285 | Legal Office Procedures | 3 | 2 |
| Legal Of | ffice Assistant - LETTER OF RECO | GNITIO | N |
| CS 102 | Beginning Word Processing | 1 | 1 |
| OT 102 | Editing Skills for Word Processors | 3 | 1 |
| OT 279 | Keyboarding | 1 | 1 |
| CS 104 | Advanced Word Processing | 1 | 2 |
| OT 171 | Formatting Business Documents | 2 | 2 |
| OT 281 | Legal Document Preparation | 2 | 3 |
| OT 280 | Legal Transcription and Terminology | 3 | 4 |

Medical Office Assistant - CERTIFICATE OF PROFICIENCY

| | | Credits | Suggested | |
|---|---------------------------------------|-------------|----------------|--|
| DII 109 | December Management | Greats 3 | Semester 1 | |
| BU 102 OT 100 | Records Management Office Machines | 3 1 | 1 | |
| OT 100 OT 101 | Bookkeeping | 3 | 1 | |
| OT 176 | English for the Office Professional | 3 | 1 | |
| OT 279 | Keyboarding | 1 | 1 | |
| OT 290 | Medical Terminology | 2 | 1 | |
| BU 175 | Business Communications | 3 | $\overline{2}$ | |
| CS 102 | Beginning Word Processing | 1 | 2 | |
| CS 104 | Advanced Word Processing | 1 | 2 | |
| OT 102 | Editing Skills for Word Processors | 3 | 2 | |
| OT 191 | Computerized Medical Billing | 1 | 2 | |
| OT 192 | Basic Coding Overview | 1 | 2 | |
| OT 193 | Introduction to Medical Insurance | 1 | 2 | |
| OT 295 | Medical Office Simulation | 3 | 2 | |
| M. Paul Daniel Carlot a more an accompany | | | | |
| | I Receptionist - LETTER OF RECO | | | |
| CS 102 | Beginning Word Processing | 1 | 1 | |
| OT 279 | Keyboarding | 1 | 1 | |
| OT 290 | Medical Terminology | 2 | 1 | |
| OT 191 | Computerized Medical Billing | 1 | 1 | |
| Madiaal | Transcriptionist LETTER OF RE | 000NUTU | | |
| | Transcriptionist - LETTER OF REG | COGNITIO | ON | |
| CS 102 | Beginning Word Processing | 1 | 1 | |
| OT 102 | Editing Skills for Word Processors | 3 | 1 | |
| OT 279 | Keyboarding | 1 | 1 | |
| OT 290 | Medical Terminology | 2 | 1 | |
| CS 104 | Advanced Word Processing | 1 | 2 | |
| OT 293 | Beginning Medical Transcription | 3 | 2 | |
| OT 297 | Advanced Medical Transcription | 2 | 3 | |
| Office Audi | anation Operialist 1 | | | |
| | omation Specialist - LETTER OF F | RECOGN | ITION | |
| CS 101 | Beginning Spreadsheets | 1 | 1 | |
| CS 102 | Beginning Word Processing | 1 | 1 | |
| OT 279 | Keyboarding | 1 | 1 | |
| CS 103 | Beginning Database | 1 | 2 | |
| CS 104 | Advanced Word Processing | 1 | 2 | |
| CS 116 | PowerPoint | 1 | 2 | |
| CS 132 | Introduction to Windows | 1 | 2 | |

CURRICULA—CAREER PROGRAMS

PARALEGAL STUDIES ASSOCIATE IN APPLIED SCIENCE DEGREE

Anne Arundel Community College Degree

This program is offered by Anne Arundel Community College and made available to Howard Community College students through a cooperative agreement. Many of the courses may be taken at HCC and then transferred to Anne Arundel Community College. Nineteen of the sixty-four credits required must be taken as AACC credit. This agreement is tentative, pending approval by the A.B.A. accrediting body.

This program is designed to prepare students for gainful employment in the paralegal field, or to meet the requirements for promotion and additional career responsibility. Paralegal courses are taught by practicing attorneys with an emphasis on practical applications. Employment projects suggest that the paralegal field will be one of the fastest-growing career areas during the next few years. Students may enroll either full- or part-time and courses are offered in both day and evening formats.

Graduates may seek employment in a range of occupations including:

Legal or executive secretary

Legal assistant or aide

Paralegal assistant

Legislative legal assistant

Law firm office manager

Legal assistant with real estate or financial institution

| GENERAL EDUCATION CORE | | Credits | Suggested Semester |
|------------------------|-----------------------------------|---------|-----------------------|
| EG 101 | Introduction to Composition I | 3 | 1 |
| EG 102 | Introduction to Composition II | 3 | 2 |
| CS 110 | Software Applications | 4 | 1 |
| Mathematics | MA 122 or higher | 3-4 | 1 |
| | Science | 3-4 | 3 |
| SH 105 | Fundamentals of Public Speaking | 3 | 2 |
| PY 101 | General Psychology OR | | |
| SO 101 | Introduction to Sociology | 3 | 3 |
| Electives | English, Humanities, Mathematics, | | |
| | Science or Social Science | 3-4 | 4 |
| | Health/Fitness (HE) | 3 | 2 |

CURRICULA—CAREER PROGRAMS

PARALEGAL STUDIES (continued) ASSOCIATE IN APPLIED SCIENCE DEGREE

Anne Arundel Community College Degree

| REQUIRED COURSES | S RELATED TO MAJOR | Credits | Suggested Semester |
|------------------|---|----------|-----------------------|
| | redits must be taken as AACC credit (course | O. Gailo | Comocion |
| | ntheses are AACC designations) | | |
| LE 900 | Introduction to Paralegal Studies | 3 | 1 |
| BU 151 | Business Law I | 3 | 1 |
| (LGS 143)* | Legal Research | 3 | 2 |
| BU 152 | Business Law II | 3 | $\tilde{\tilde{z}}$ |
| CJ 201 | Criminal Law | 3 | 2 |
| (LGS 145)* | LEXIS/NEXIS Training | ĩ | 3 |
| (LGS 144)* | Legal Writing | 3 | 4 |
| (LGS 160) | Domestic Relations | 3 | 3 |
| (LGS 170) | Civil Procedure | 3 | 3 |
| (LGS 210) | Legal Ethics | 3 | 4 |
| CJ 210 | Evidence and Procedure | 3 | 3 |
| (LGS 171) | Tort Law | 3 | 4 |
| Elective* | (LGS 275) suggested, Paralegal Internship 1 | 3 | 4 |

^{*}Must be taken at AACC

CURRICULA—CAREER PROGRAMS

PLANT SCIENCE CERTIFICATE OF PROFICIENCY

There are many diversified fields that relate to a knowledge of plants and horticulture. Individuals with a plant science background are employed in nurseries, landscaping firms, and other retail outlets for horticultural products and services. Additionally, there are positions for trained individuals in grounds maintenance or landscaping for private or government facilities. Some students pursue this program to upgrade their skills in a present position or to plan for self-employment. The program prepares all students with basic knowledge of general horticultural principles, specifics of annuals, perennials, and woody plants, as well as basic concepts of pest and disease control. Depending on a student's goals, additional courses can be selected which provide a background in business, salesmanship, retail merchandising, or landscaping. Completion of all courses in this program will lead to the award of a certificate of proficiency in plant science.

| | | Credits | Suggested Semester | | |
|---|--|---------|-----------------------|--|--|
| PT 101 | Introduction to Horticulture | 4 | 1 | | |
| PT 102 | Annuals and Perennials | 3 | 2 | | |
| PT 103 | Pest and Disease Control | 3 | 3 | | |
| PT 105 | Woody Plants | 3 | 3 | | |
| PT 201 | Plant Science Work Experience (see CO 201-202) OR Plant Science Specialty Course | 3-4 | 2 | | |
| SPECIALTY COURSES (any two of the following courses for a total of six credits) | | | | | |
| BU 100 | Introduction to Business and Organization | 3 | 1 | | |
| PT 106 | Landscape Design and Contracting | 3 | 2 | | |
| PT 107 | Landscape and Grounds Management | 3 | 1 | | |
| PT 108 | Turfgrass Management | 3 | 1 | | |
| MN 240 | Personnel Management | 3 | 1 | | |

Course Descriptions

All course descriptions are alphabetized by category, not by course code. Courses with numbers less than 100 are developmental classes which are non-transferable. Courses numbered in the 100s are first-year level college courses. Courses numbered in the 200s are second-year level courses (Networking courses may be numbered higher than 200). Prerequisites are listed for all courses requiring them. No prerequisite is necessary where none is listed. Developmental courses require a minimum grade of "C." The Nursing and Cardiovascular Technology programs have special admission and progression requirements.

Courses designated by two code numbers separated by a hyphen are full-year courses (example: AR 211-212). The second semester course normally presupposes the first course as a prerequisite.

Complete course descriptions are on file in the admissions area in the Library Building.

ACCOUNTING

AC 111 Principles of Accounting I 3 Credits

Upon completion of this course, the student will have a comprehensive understanding of basic accounting theory, practice covering the accounting cycle, and a knowledge of basic accounting for partnerships. With emphasis on accounting concepts and principles, the student will perform the fundamentals of recording, summarizing and analyzing the transactions of a business. The student will be involved in the preparation and interpretation of working papers and financial statements. The fundamentals of accounting for payroll and assets (cash, notes and accounts receivable, inventories, plant and equipment, and intangibles) will be performed by the student. (3 hours weekly)

AC 112 Principles of Accounting II 3 Credits

Upon completion of this course, which is a continuation of AC 111, the student will have a knowledge of basic accounting for corporations, for interpretation and modifications of financial statements, for managerial accounting of costs, and for planning and controlling business operations. Prerequisite: AC 111. (3 hours weekly)

AC 201-202 Accounting Work Experiencel and II

3 or 4 Credits

See CO 201-202 Cooperative Education Work Experience I and II

AC 211 Intermediate Accounting I 3 Credits

In this course, the student will be involved in an intensive study and review of the foundations of accounting theory and the preparation of classified financial statements. The concepts of future and present value and the effects of changing prices on financial reporting will be studied. The student will perform the accounting for cash, short-term investments, receivables, liabilities, income taxes, and inventories at a high level of sophistication. The completion of a comprehensive practice set is required. Prerequisite: AC 112. (3 hours weekly)

AC 212 Intermediate Accounting II 3 Credits

In this course, which is a continuation of AC 211, the student will be involved in an intensive study of accounting for long-term liabilities, long-term investments in equity and debit securities, corporations, revenue recognition, pension costs, leases, accounting changes and error corrections, financial statements including the Statement of

Cash Flows and analysis of financial statements. Prerequisite: AC 211 (3 hours weekly)

AC 215 Cost Accounting

3 Credits

Upon completion of this course, the student will be able to apply the cost accounting principles involved in the determination of material, labor and overhead costs in job-order and process cost systems. Standard costs, analysis of variances, analysis of cost information and cost statements for administrative control purposes will be prepared by the student. Prerequisite: AC 112. (3 hours weekly)

AC 217 Tax Accounting 3 Credits

Current tax laws governing recognition of items of gross income, deductions, capital gains and losses, credits, estimated taxes, employment taxes and the calculation of taxable income. Prerequisite: AC 112. (3 hours weekly)

AC 219 Principles of Auditing 3 Credits

Upon completion of this course, the student will be able to understand the philosophy and environment of auditing. This will include an overview of the public accounting profession with special attention to auditing standards, professional ethics, the legal liability inherent in the attest function, the study and evaluation of internal control, the nature of evidence, the growing use of statistical sampling, the impact of electronic data processing (EDP), and the basic approach to planning an audit. Prerequisite: AC 112. (3 hours weekly)

AC 221 Advanced Accounting

3 Credits

Upon completion of this course, the student will be able to perform accounting for partnerships; governmental accounting; accounting for business combinations, consolidations, and branch operations; and accounting for foreign currency transactions. Prerequisite: AC 211 and AC 212. (3 hours weekly)

ART AND PHOTOGRAPHY

AR 101 Two-dimensional Basic Design 3 Credits (Humanities Core)

Students completing this course will possess a visual knowledge of art and will recognize the use of the individual two-dimensional design elements that make up a work of art. Students will gain a visual ability and an awareness and sensitivity to the observation of the visual world and to works of art. (4 hours weekly)

AR 102 Three-dimensional Basic Design 3 Credits

This course explores the unique problems of designing objects that occupy or delineate three-dimensional space. Students experience various media and approaches and learn to resolve construction problems as well as conceptual problems. Materials may include clay, cardboard, foamcore, wood, paper mache, wire, plaster, and found objects. AR 101 is not a prerequisite to AR 102; however, students with a background in Two-Dimensional Basic Design (AR 101) will find the communication of visual ideas easier. (4 hours weekly)

AR 104 Art History I

3 Credits (Fine Arts/Humanities Core)

This course is an overview of Western Art that will familiarize the student with prehistoric, Mesopatamian, Egyptian, Minoan/Mycenaean, Greco-Roman, and medieval traditions. The student will come to recognize the major styles, monuments, and artists for each period and develop a theory of the relationship of artistic style to the rest of the cultural formulation. Art historical contexts include considerations of gender and other categories of diversity. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

AR 105 Art History II

3 Credits (Fine Arts/Humanities Core)

Art from the Renaissance through the Baroque, Neoclassical, Romantic, Modern and Post-Mod-

ern periods will be studied in this course. The student will come to recognize the major styles, artists and monuments of each period. Culminating in a study of our own time, the course will emphasize the relationship of artistic style to a cultural period. Art historical contexts include considerations of gender and other categoris of diversity. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

AR 106 History of Western Architecture I 3 Credits

An examination of the development of Western architectural styles from the ancient world through the late Middle Ages. Parallel developments in the Eastern world will also be considered. Architectural design and city planning are studied as responses to religious, political, economic, and cultural needs, as well as for an understanding of their structural principles. (3 hours weekly)

AR 107 History of Western Architecture II 3 Credits

An examination of the development of Western architectural styles from the Renaissance through the 20th century and an introduction to contemporary problems in architecture and urbanism. Parallel developments in the Eastern world will also be considered. Architectural design, landscape architecture, and city planning are studied as responses to religious, political, economic, and cultural needs. (3 hours weekly)

AR 108 Environmental Design: Introduction to the Built Environment

3 Credits

Students will be introduced to the conceptual, perceptual, behavioral, and technical aspects of environmental design including methods of analysis, problem solving, and project implementation. (4 hours weekly)

AR 109 Drawing I

3 Credits (Humanities Core)

This course includes a basic introduction to the theories, practices, and techniques of drawing as

a descriptive tool and as a mode of personal expression. The student develops skills in different media and approaches, as well as an understanding of linear perspective. The emphasis is upon direct observation from life, and the subjects may include still life, interiors, portraits, and figures. (4 hours weekly)

AR 110 Drawing II

3 Credits

This course is a continuation of AR 109. The student learns to interpret more complex subjects, explores contemporary directions in drawing, and continues to develop a mastery of technique. There is also more emphasis on originality and the development of a personal style. There is a strong emphasis on drawing from life. Prerequisite: AR 109. (4 hours weekly)

AR 112 Drawing and Painting in Digital Media 3 Credits

This course focuses upon the use of the computer as a creative tool for the visual arts. Working with various painting and drawing programs, such as CorelDraw, Adobe Illustrator, and Adobe Photoshop, students will learn how to create images by drawing and painting directly with the computer and by capturing, altering, and processing images using the many transformation tools available in the different software. In addition to exploring the possibilities and limitations of digital media, students will explore the philosophical and ethical issues that electronic image-making presents. Prerequisite: AR 109. (4 hours weekly)

AR 141 Basic Photography 3 Credits

This course will focus on developing the skills necessary to identify and produce the elements of a good photograph and on acquiring a thorough knowledge of appropriate photographic equipment. The student will develop an understanding of the technical areas of photography including lenses, film types, exposure meters,

depth of field, film development and print processing. Adjustable camera is required. (2 hours lecture, 3 hours lab)

AR 142 Intermediate Photography (3 credits)

The student will use the camera as a means of creative self-expression and communication. The student will master the basic elements of design, composition, and lighting that go into making a photograph that communicates a message. Students will be assigned projects which will be critiqued during the semester. Prerequisite: AR 141 (2 hours lecture, 3 hours lab)

AR 143 History of Photography 3 Credits (Humanities Core)

This course is a study of photography as a fine art form from its beginnings to contemporary times. Individual photographers' work will be studied in some depth. Genre considerations such as portraiture, documentation, landscape, and the nude will be discussed. Emphasis will be placed on the aesthetic qualities of the photographs. Parallels will be drawn to painting and sculpture and to more recent photographs. (3 hours weekly)

AR 144 Introduction to Color Photography 3 Credits

Using color transparency and negative materials, the student will gain knowledge of the basic principles of color photography. Students will examine theory, techniques and the aesthetics of color photography. Assignments will incorporate a variety of color films and print materials and various systems of processing. Prerequisite: AR 141 and AR 142. (2 hours lecture, 3 hours lab)

AR 146 Digital Photography I 3 Credits

In this course students will gain a working knowledge of digital image creation and production. While revisiting traditional photographic themes, such a portraiture, still life, the nude, the land-scape, abstraction, montage, and the social document, students will learn the basics of scanning, selection tools, painting and editing tools, color

correction, special effects, print options, and more. With an emphasis on content as well as craft, students will learn to design, retouch, and composite images for visual communication and self-expression. Basic computer literacy is highly recommended. Prerequisites: AR 112 or AR 141. (4 hours weekly)

AR 147 Digital Photography II

3 Credits

This course is an in-depth exploration of the concepts and techniques introduced in AR 146. Students will master digital image creation and production. In addition to revisiting traditional photographic themes, students will design images that take advantage of the unique power of digital technology. Prerequisite: AR 146. (4 hours weekly)

AR 151 Ceramics I

3 Credits

This studio ceramics course incorporates information about clay, clay preparation, glazes and glazing techniques, and kiln technology. The course emphasizes handbuilding techniques and clay as a medium of expression. (4 hours weekly)

AR 152 Ceramics II

3 Credits

The student will continue to explore handbuilding techniques and clay as an expressive medium. There will also be an opportunity for a limited number of interested students to work on the potter's wheel. Students in Ceramics II will have more freedom to identify and pursue their own areas of interest. Prerequisite: AR 151. (4 hours weekly)

AR 200 Graphic Design

3 Credits

Students will acquire practical introductory knowledge of commercial art and advertising design. They will be able to solve formal problems dealing with fundamental principles and will develop the basic skills necessary to work with specific types of media, especially computer-

generated graphic design. The primary objective of this course is to teach students to prepare advertisements and commercial designs from concept to visual communication. Prerequisite: AR 101 and AR 112. (4 hours weekly)

AR 201 Advanced Color Design 3 Credits

This course provides an in-depth analysis and practical application of two dimensional design concepts through independent projects. Students will explore all aspects of color as an element of the design process, as well as learn to develop designs from simple units to more complex modules, exploring theme and variation forms. Students will gain a visual knowledge, awareness and sensitivity to the visual world and to works of art. Prerequisite: AR 101. (4 hours weekly)

AR 202 Introduction to Woodcut Printmaking 3 Credits

The student will be exposed to woodcut as a printmaking process. The student will prepare, use and care for tools and blocks, cut blocks, and print in numbered editions. The student will also understand the history of the woodcut. Prerequisite: AR 101. (4 hours weekly)

AR 209 Life Drawing

3 Credits

In this course, students learn the descriptive and expressive drawing of the human body by working from live models and studying human anatomy. Students consider proportions, the skeletal and muscular systems, surface anatomy, foreshortening, drapery, and the expressive use of lighting. Traditional and contemporary approaches to the presentation of the human figure are explored. Prerequisite: AR 109. (4 hours weekly)

AR 210 Watercolor Painting

3 Credits

The student will experience all aspects of watercolor painting, learning how to handle and control the media by applying the wet and dry brush techniques. The student will learn the history of watercolor painting and the basic elements, and color and color relationships. Prerequisite: AR 101 and AR 109. (4 hours weekly)

AR 211 Painting I 3 Credits

The student will learn the materials, tools, and approaches to painting in oil or acrylic. Color mixing and theory as it applies to painting is a central concern of the course. The emphasis in the course is on technical mastery and direct observation from life. Subjects may include still life, interiors, landscape, portraiture, and figures. Prerequisite: AR 101 and AR 109. (4 hours weekly)

AR 212Painting II 3 Credits

This course is a continuation of AR 211, Painting I. Students continue to polish their technical skills, and there is more emphasis on conceptual concerns. Contemporary approaches to representational painting are studied, and students have more latitude for stylistic exploration. Problems will challenge students' imaginations as well as their technical expertise. Prerequisite: AR 211. (4 hours weekly)

AR 220Art Museum Resources

3 Credits

This course involves student exposure in the form of approximately eight prearranged, organized field trips or tours to art museums in the Baltimore-Washington area. Museums to be included are the Walters. Baltimore Museum of Art. National Gallery East and West, Hirshhorn, Freer Gallery of Oriental Art, Corcoran, Renwick, and Phillips Collection. Lectures and discussions will be arranged on site at these various museums. Field trips are required. There will be a fee assessed to cover the bus transportation based on the number of students enrolled in the course. Students will be evaluated based upon their participation and through the combination of written summaries and response sheetsi. Museum connoiseurship includes consideraton of gender and other categories of diversity. (8 hours biweekly)

AR 221Art Museum Field Trips

1 Credit

This course involves student exposure in the form of approximately eight prearranged, organized field trips or tours to the art museums of the Baltimore-Washington area. Museums may include the Walters, Baltimore Museum of Art, National Gallery East and West, Hirshhorn, Freer Gallery of Oriental Art, Corcoran, Renwick and Phillips Collection. Lectures and discussions will be arranged on site at these various museums. Field trips are required. There will be a fee assessed to cover the bus transportation based on the number of students enrolled in the course. Students will be evaluated based upon their participation and a short summary of their experience submitted at the end of the course. Museum connoiseurship includes consideration of gender and other categories of diversity. (8 hours bi-weekly)

AR 231 Sculpture I

3 Credits

This course is an introduction to the basic elements, materials, and techniques of sculpture. Approaches may include modeling such as with clay, addition such as assemblage, or subtraction such as carving wood or stone. The student learns how to approach the basic elements of three-dimensional form including scale, mass, color, movement, and use of space in a sculptural manner. Prerequisite: AR 101 and AR 102. (4 hours weekly)

AR 232 Sculpture II

3 Credits

This course is a continuation of AR 231 with an increased emphasis on conceptual concerns. Students learn about contemporary approaches to sculpture and have more latitude for stylistic exploration. Prerequisite: AR 231. (4 hours weekly)

AR 241 Photographic Techniques I

3 Credits

This course will continue to focus on skills developed in Intermediate Photography using the camera as a means of creative self-expression and communication. The student will master the design and composition elements that are an intrinsic aspect of photography, and will learn to work independently in developing his or her photographic sense of sight. Extensive lab work will be required with emphasis on experimental darkroom techniques, and mastery of darkroom skills. Prerequisite: AR 141 and AR 142. (2 hours lecture, 3 hours lab)

AR 242 Photographic Techniques II 3 Credits

This course will examine and apply the materials and elements of experimental photographic techniques to enhance the student's artistic self-expression. Extensive lab work will be required with emphasis on experimental darkroom techniques. Prerequisite: AR 141 and AR 142. (2 hours lecture, 3 hours lab)

AR 243 Zone System in Photography 3 Credits

This course will examine and utilize a 35 mm approach to the Zone System, the photographic exposure technique developed by Ansel Adams. Students will gain a broader technical knowledge of photographic materials and expand their aesthetic awareness by learning to make conscious, pre-visualized choices in their image-making process. This course will concentrate on the black and white photographic process with a brief examination of color photography and its applications in the Zone System. Prerequisite: AR 141 and AR 142. (2 hours lecture, 3 hours lab)

AR 250 Art Portfolio Assessment 1 Credit

This course is designed to prepare advanced visual arts students for the portfolio review process at transfer institutions. Acceptance and placement into programs of advanced study are most frequently based upon a review of a portfolio of the student's work. Each student's portfolio will be reviewed, and strengths, deficiencies, and omissions will be noted. In working sessions during the course of the semester,

those deficiencies and omissions will be corrected. Students will learn how to make slides, mat, mount, and otherwise prepare work for the transfer portfolio review. They will review sample portfolios and learn about the transfer review process from admissions officers, alumni, and art instructors. At the end of the course students will have an exit portfolio review where they will have a final assessment of their preparedness for the transfer process. Prerequisites: the core courses AR 101, AR 102, AR 109, AR 110 and AR 211 (1½ hours weekly for 10 weeks)

BIOLOGY

BY 101 General Biology I 4 Credits (Science Core)

Following successful completion of Biology 101, the student will e able to describe the characteristics of living things at all levels of organization-from the atomic through the molecular, cellular, and organismal levels. The study of human genetics, development, anatomy and physiology will enable the student to relate the chemical activities to the cell to the overall function of man. Prerequisite: EG 096. (3 hours lecture, 3 hours lab)

BY 102 General Biology II 4 Credits (Science Core)

This course will enable the student to understand and recognize the evolutionary and environmental relationships that exist between all organisms. The student will be exposed to and will work with representative organisms of all five kingdoms to establish the concept of interrelatedness of all living organisms. Topics such as animal behavior and ecology will be utilized to develop this concept. Prerequisite: BY 101. (3 hours lecture, 3 hours lab)

BY 103 Human Heredity 3 Credits (Science Core)

Human Heredity is an introductory life science course designed for students who are not majoring in the life sciences. Topics in the course include the basic principles of inheritance, a survey of human hereditary characteristics and disorders, and genetic technology and gene manipulation. Current scientific and bioethical questions regarding the present and future applications of genetic analysis and genetic engineering will be considered. (3 hours lecture)

BY 104 Oceanography

3 Credits

This course is designed to introduce the student to the four major disciplines in ocean sciences: biological, chemical, geological and physical oceanography. These areas are studied by describing the composition of the oceans and then by examining the major processes which are active there, such as plate tectonics, ocean circulation, wave and tidal action and food webs. In addition, the course will cover man's use of the ocean as a natural resource and as a waste disposal site. (3 hours weekly)

BY 105 Environmental Science 3 Credits (Science Core)

Following the successful completion of Biology 105, the student will be able to describe the energy, chemistry and climate that make up the earth and its atmosphere. The student will be able to differentiate among the various biomes on earth and recognize the diversity of organisms living in these ecosystems. The study of pollution, natural resources, conservation, and the impact man has had on his environment will enable the student to relate environmental science to how our world works, and what we can do to protect it. Prerequisite: EG 096. (3 hours lecture)

BY 106 Basic Anatomy and Physiology: Biomedical Emphasis

4 Credits

This course is designed for biomedical and other students who need one semester of science which provides a learning sequence of the human body systems, fluid-electrolyte balance and tissues. The integrated approach to studying biological,

chemical and physics relationships is stressed. Special emphasis, however, is given to the physics concepts applicable to human physiology. The laboratory program will develop an understanding of the interrelationships of the human body systems. Prerequisite: PS100 or BY101. (3hours lecture, 3hours lab)

BY 107 Fundamentals of Microbiology 4 Credits (Science Core)

Fundamentals of Microbiology is a course designed with a strong emphasis towards the allied health careers. Following the successful completion of Biology 107, the student will be able to describe the characteristics of living things from the molecular to the cellular level for both prokaryotic and eukaryotic cells. The study of microbiology will enable the student to understand the biology of bacteria, fungi, protozoa and viruses in terms of morphology, classification, reproduction, metabolism, genetics, population growth, and disease production. In the laboratory, the student will gain experience with the tools and techniques used in the study of microorganisms. Prerequisite: EG 096 or appropriate placement score. (3 hours lecture, 3hours lab)

BY 115 Environmental Science Laboratory 1 Credit (Science Core)

In BY 115, students will investigate the interactions among populations and their environment using field techniques for analyzing water quality, soil formation and erosion, stream ecology, species diversity, intra and interspecific competition, and estimation of population size. Students will experience first hand environmental management problems on field trips to a waste water management site. a solid waste management site, and a recycling site. Pre- or Co-requisite: BY 105. (3 hours lab).

BY 200 Microbiology

4 Credits (Science Core)

Biology 200 is a course designed primarily for pre-medical professionals and for students planning to major in biological sciences in a four-year

institution. The study of microbiology will enable the student to understand the biology of bacteria, algae, fungi, protozoa and viruses in terms of morphology, classification, reproduction, metabolism, genetics, population growth, environmental effects on growth and disease production. In addition, the student will study basic principles of water pollution, and inhibition and killing of microorganisms. In the laboratory, the student will gain experience with the tools and techniques used in the study of microorganisms. Prerequisite: BY 101 or SC 101, and 4 credits of chemistry. (3 hours lecture, 3 hours lab)

BY 201 Genetics

3 Credits (Science Core)

Following successful completion of Biology 201, the student will be able to describe the principles of inheritance in terms of the structure and function of genetic material in viruses, bacteria, and higher organisms; the transmission and expression of genetic information; sex determination and sex chromosomes; extrachromosomal inheritance; gene mutation; recombination and regulation; genetic control of metabolism, development and behavior; and recombinant DNA techniques. The student will also utilize the principles of inheritance to solve real and simulated problems in human genetic counseling and in plant and animal breeding. For genetics lab, see BY 202. Pre-requisite: BY 101 and MA 070. (3 hours lecture)

BY 202 Genetics Lab

1 Credit (Science Core)

In BY 202, students will investigate the basic principles of genetics using various organisms, including Drosophila, bacteria, fungi, viruses, green plants and human cells. Students will utilize various laboratory techniques including microscopy, photomicroscopy, slide preparation, micro-dissection, paper chromatography, gel electrophoresis, bacterial culture and statistical analysis. Computer simulations will also be utilized. Preor Co-requisite: BY 201. (3 hours lab)

BY 203 Anatomy and Physiology I 4 Credits (Science Core)

Biology 203 is a course consisting of an integrated sequence of physical, chemical and biological principles relating to living systems. This course is designed for students whose curriculum requires a sequential two-semester science learning program (BY 203 and BY 204) which provides an in-depth study of the anatomy and physiology of the human body systems. The body topics studied in Biology 203 include histology, the integumentary system, skeletal system, muscular system, nervous system, endocrine system and special senses. The laboratory program will develop an understanding of the interrelationships of the human body systems. The laboratory includes animal and organ dissections as well as work with skeletons, models, slides and experimental studies of physiological processes. Prerequisite: BY 101 or BY107. (3hours lecture, 3 hours lab)

BY 204 Anatomy and Physiology II 4 Credits (Science Core)

This course is a continuation of BY203 and consists of an integrated sequence of physical, chemical and biological principles relating to the circulatory system, respiratory system, digestive system, urinary system, fluid-electrolyte balance, and reproductive system. This course will enable the student to describe the mechanisms of the human body in terms of the structures and functions of the systems studied. The laboratory program will develop an understanding of the interrelationships of the human body systems. The laboratory includes animal and organ dissections as well as work with skeletons, models. slides and experimental studies of physiological processes. Prerequisite: SC 102 or BY 203.(3 hours lecture. 3hours lab)

BY 205 Cell Biology

4 Credits

This is a one-semester course designed for biology majors, biochemistry majors, laboratory science majors, and pre-professional and pre-allied health science students. The course will provide

the student with an understanding of biological processes at the cellular and molecular level. Experimental approaches used in cell biology will be emphasized. Topics will include the structure and function of biological membranes, cytoskeletal elements, cell metabolism and energy transformation, cell growth and replication, second messenger systems, signal transduction, electrical properties, cell contact and adhesion and intercellular communication. An emphasis will be placed on eukaryotic cells. The laboratory component will reinforce these topics and introduce the student to techniques used in modern cell biology. Prerequisite: BY 101 and CH 101. (3 hours lecture, 3 hours lab)

BY 206 Nutrition for Health Services 3 Credits

This course, designed mainly for students in the health profession, will enable the student to examine the basic principles of normal human nutrition and concepts of applied nutrition. The student will answer questions and solve problems involving the digestion, absorption, and metabolic functions of the nutrients in the body; caloric requirements; dietary standards; nutrient composition of foods and selection of an adequate diet; and changing nutrient requirements during the different stages of development. In addition, the student will study the influence of social and economic factors on food choices. Prerequisite: CH 104 or CH201 and BY 204. (3 hours weekly)

BY 290 Biology Research - Honors 3 Credits

Biology Research is an honors course which provides students with an opportunity to engage in biological research. With the guidance of a faculty member, students select a research topic, carry out a literature search, design and execute appropriate research, write a scientific paper, and deliver a formal oral presentation to the class and science faculty. There is an emphasis on oral communication throughout the semester including weekly oral progress reports followed by class discussion and feedback as well as the final oral

presentations. Prerequisite: A or B in BY 101, EG 101 or EG 111 and consent of instructor. (3 hours weekly)

BIOMEDICAL ENGINEERING TECHNOLOGY

BT 112 Electro-Mechanical-Fluidic Devices I 3 Credits

The student, upon successful completion of this course, will be able to utilize the basic concepts to investigate the physics of and the interrelation between electrical, mechanical, fluidic and optical systems. The student will know the basic components of each system, where in the overall system they occur and what their function is toward the correct operation of the system. Prerequisite: PS 100 and EL 111. (2 hours lecture, 3 hours lab)

BT 211 Biomedical Instrumentation I 5 Credits

The student will be able to classify biomedical instruments into areas such as support, laboratory, diagnostic, patient monitoring, therapeutic, x-ray, etc. Biomedical transducers will be introduced and students will make application of the terms of sensitivity, resolution, recordability, readability, linearity and accuracy in order to effect correct usage. Prerequisite: EL 112, EL 114, BT 112 and BY 106. Co-requisite: EL 211, EL 213. (4 hours lecture, 3 hours lab)

BT 212 Biomedical Instrumentation II 5 Credits

In this theoretical-practical course, the student will utilize electronic and mechanical principles for maintenance and repair of biomedical equipment (electro-mechanical, clinical lab, ultrasonics, patient monitoring, x-ray and radiation). Students will be in a simulated clinical setting where they will perform on-site repairs and preventative maintenance. Prerequisite: BT 211, EL 211 and EL 213. (4 hours lecture, 3 hours lab)

BUSINESS ADMINISTRATION

BU 100 Introduction to Business and Organization

3 Credits

In this course, the student will be able to identify and describe current organizational and management and marketing principles and practices as they are occurring in today's business world. Students will be able to analyze various types of organizations within which they may work and the management problems encountered in these organizations. Students will also recognize changes that are presently occurring in many businesses by hearing guest speakers, watching videos, and reading current business periodicals. Some roleplaying and written reports will be required from these activities. (3 hours weekly)

BU 102 Records Management 3 Credits

After successful completion of this course, the student will be able to store, control, set retention schedules, transfer and dispose of records in a business office. Through the use of a realistic practice set, the student will be able to correctly set up and control the four basic types of paper records storage systems—alphabetic, numeric, subject, and geographic. The student will learn how to use Microsoft Access to create, use, and revise databases. (3 hours weekly)

BU 130 Principles of Marketing 3 Credits

Through lectures, videos, class analysis and writing assignments on such topics as marketing research, segmentation, product pricing, distribution and promotion strategies and marketing in the international arena, students will learn to apply basic marketing principles. Students will analyze marketing strategies used by various companies—both successful and unsuccessful strategies. Prerequisite: BU 100. (3 hours weekly)

BU 151 Business Law I 3 Credits

First in a series of two courses that survey the areas of law that are likely to affect modern business entities. After successful completion of this course, the student will be able to identify and analyze basic legal issues arising in criminal law, negligence, intentional torts, strict liability offenses, contract law, and sales. Business ethics, litigation, alternative dispute resolution techniques, and the historical aspects of the American legal system are also covered. Application of the Maryland common law will be emphasized throughout the course. (3 hours weekly)

BU 152 Business Law II 3 Credits

Second in a series of two courses. After successful completion of this course the student will be able to identify and discuss basic legal issues arising in agency and employment law; formation, operation and dissolution of various types of business entities including corporations and partnerships; the law of property and bailments; and commercial paper. Various issues concerning government regulation of business may also be covered. Prerequisite: BU 151. (3 hours weekly)

BU 175 Business Communication 3 Credits

After successful completion of this course, the student will be able to discriminate between examples of writing that have the qualities of an effective letter and those that do not. The student will be able to detect why a letter is not effective and change it into a well-written letter. The student will be able to write letters in the following areas: inquiries and replies, sales, adjustment, credit and collection, goodwill, and employment. (3 hours weekly)

BU 201-202 Business Work Experience I and II 3 or 4 Credits

See CO 201-202 Cooperative Education Work Experience I and II.

BU 230 Principles of Advertising 3 Credits

Students in this course will learn to apply the principles of advertising at an introductory level. The course will be conducted by lecture, class participation, and student involvement in projects. Movies, tapes, and guest speakers will be utilized when appropriate and available. This course covers advertising procedures and practices from early origins to multi-faceted campaigns conducted by advertising agencies and company-operated advertising departments. Included in the course will be such subjects as target marketing, media strategy, the use of various media in constructing an ad, and the laws affecting advertisers. Prerequisite: BU 100. (3 hours weekly)

CARDIOVASCULAR TECHNOLOGY

CV 101 Cardiovascular Assessments 3 credits

Includes fundamental physical assessments and cardiovascular procedures including electrocardiogram, cardiac stress test, and ambulatory monitoring. The use and maintenance of equipment and identification of arrhythmias is emphasized. Students will develop a knowledge base and skills to perform basic cardiac assessments under supervision in a clinical laboratory. Prerequisite: Admission into the Cardiovascular Technology Program. Pre or corequisite: See specific Program requirements. (2 hours lecture, 3 hours lab)

CV 103 Physical Principles of Medicine 3 credits

This course encompasses the physical principles and mathematical equations specifically applicable to the field of cardiovascular technology. The course includes studies in using mathematic formulas, chemistry and physics to evaluate the hemodynamics of the cardiovascular system. Pre-

requisite: PS 100, MA 124, and CH 103 or equivalents. (3 hours weekly)

CV 108 Advanced Anatomy and Pathophysiology 3 credits

In depth study of cardiovascular anatomy and physiology, including embryology, congenital and acquired pathological conditions, and circulation to all body systems. The anatomy and physiology of the circulatory system, neurologic, respiratory, genitourinary, hepatobiliary, lymphatic and gastrointestinal systems are reviewed in depth. Pathological mechanisms of congenital and acquired cardiac and vascular conditions with appropriate diagnostic and therapeutic measures are included. Prerequisite: BY 106. (3 hours weekly)

CV 115 X-Ray Theory

1 Credit

The student is introduced to techniques necessary to produce radiographs. This course includes discussion of the fundamentals of radiographic exposure, cine film processing, radiographic protection and x-ray theory. Prerequisite: CV 101. (1 hour weekly)

CV 201 Cardiovascular Pharmacology 2 credits

Course covers basic principles of pharmacology including governmental regulations, drug administration and IV therapy. Drugs used for the treatment of cardiac disorders and vascular/interventional imaging procedures will be emphasized. The effects of drugs will be explored for implications relative to the cardiovascular system. Prerequisite: CV 108. (2 hours weekly)

CV 203 Medical Instrumentation 2 credits

This course is intended to introduce the student to the various types of medical instrumentation. The student will learn to prepare, calibrate, operate equipment and record and measure bioelectric signals. Preventive maintenance, inspection, performance testing and trouble shooting are covered, with emphasis on electri-

cal safety. Prerequisite: CV 108. (1 hour lecture, 3 hours lab)

CV 207 Diagnostic and Interventional Procedures

9 credits

Students will work directly with patients to explain and perform procedures and to assess response to interventions. The course introduces the student to the practice of sterile technique, isolation procedures and emergency care procedures. The theory and application of vascular access and angiographic procedures is presented. Students study the indications contraindications to diagnostic and interventional adult and pediatric cardiac catheterization and specific vascular imaging examinations. Emphasis will be placed on pressure wave form analyhemodynamic measurement. and calculations, image enhancement procedures, proper operation of catheterization equipment and new technologies. Prerequisites: CV 101 and CV 108. (4 hours lecture, 15 hours lab)

CV 231Applied Clinical Practicum 3 Credits

Clinical experience in procedures performed in invasive cardiology. This includes using the equipment, performing tests, and giving patient care as it relates to the cardiovascular area. Prerequisite: CV 207. (12 hours lab weekly)

CV 251Advanced Interventional Procedures 5 credits

The student will observe and assist the physician with cardiac and vascular operative procedures such as angioplasty and pacemaker and defibrillator implantation. Various surgical procedures are covered including coronary artery bypass surgery, heart valve replacement, and the intro-aortic balloon pump. Data will be recorded and analyzed. The student will develop competency in invasive procedures and patient care techniques for adults and children. Prerequisite: CV 207. (2 hours lecture, 9 hours lab)

CV 261Clinical Internship (4 credits)

Practicum in a clinical setting. Student will refine clinical skills by active participation in a cardiovascular department. Opportunity will also be provided for observation in alternative sites for technologists in the field. On campus seminar session includes opportunity for case study presentations relative to the field of invasive cardiovascular technology. Advanced Cardiac Life Support (ACLS) certification is a required outcome of this course. Corequisite: CV 251. (24 hours lab weekly)

CHEMISTRY

CH 101General Inorganic Chemistry I 4 Credits (Science Core)

Designed mainly for science majors and pre-professional students, this course will enable the student to solve problems and answer questions involving mole concept, gas laws and kinetic theory, stoichiometry and chemical equations, solutions, and atomic structure and electronic arrangement. Independent lab experiments will provide students with data they can appraise, use, and interpret to identify properties and/or unknown chemical substances. Prerequisite: Eligible to enroll in MA 070. (3 hours lecture, 3 hours lab)

CH 102General Inorganic Chemistry II 4 Credits (Science Core)

This course, designed mainly for science majors and pre-professional students, will enable students to solve problems involving chemical thermodynamics, chemical equilibrium, ionic and heterogeneous equilibria in aqueous solutions, electrochemistry, and reaction rates. Independent lab experiments will provide students with data that they can appraise, use, and interpret to identify unknowns in qualitative and quantitative analysis. Prerequisite: CH 101. (3 hours lecture, 3 hours lab)

CH 103Fundamentals of General Chemistry 4 Credits (Science Core)

This one semester course is designed mainly for students who are interested in the allied health field. This course will provide the student with an introduction to inorganic chemistry and general chemical principles. The student will be able to answer questions and solve problems involving measurement, atomic structure, chemical bonding, molecular structure, chemical reactions, stoichiometry, gas laws, solutions, kinetics, equilibrium and nuclear reactions. Laboratory experiments will provide the student with opportunities to collect and analyze data and identify unknown chemical substances from their properties. Prerequisite: Eligible to enroll in MA 070. (3 hours lecture, 3 hours lab)

CH 104 Fundamentals of Organic and Biochemistry

4 Credits

This one-semester course is designed mainly for pre-professional science students who are interested in the allied health field. This course will provide the student with an introduction to organic and biochemistry. The student will be able to answer questions and solve problems involving nomenclature, physical properties, and the synthesis of aliphatic compounds such as alkanes, alcohols, carboxylic acids, aldehydes and ketones. The major organic biomolecules such as lipids, proteins and carbohydrates, including their function in cells and tissues, will be studied. The laboratory component will develop skills necessary to synthesize and analyze organic compounds. Prerequisite: CH 101 or CH 103. (3 hours lecture, 3 hours lab)

CH 105 Chemistry and Society

3 Credits (Science Core)

After successful completion of this course, the student will have an understanding of basic chemical concepts and knowledge of the bene-or Co-requisite: CH 105. (3 hours lab)

CH 201 Organic Chemistry I 4 Credits (Science Core)

Chemistry 201, a course designed mainly for science majors and pre-professional students, will enable the student to answer questions and solve problems involving nomenclature, physical properties and synthesis of aliphatic compounds, such as alkanes, alcohols, carboxylic acids, aldehydes and ketones. In the lab program, the student will acquire skills in laboratory techniques, prepare organic compounds, study their properties, and interpret data collected to identify unknowns. Prerequisite: CH 101. (3 hours lecture. 3 hours lab)

CH 202 Organic Chemistry II 4 Credits (Science Core)

A course designed mainly for science majors and pre-professional students, Chemistry 202 will enable the student to answer questions and solve problems involving aromatic compounds and their derivatives, carbohydrates, amino acids, and fats. In the lab program, the student will acquire skills in laboratory techniques, prepare organic compounds, study their properties, and interpret data collected to identify unknowns. Prerequisite: CH 201. (3 hours lecture, 3 hours lab)

CH 290 Chemistry Research - Honors 3 Credits

Chemistry Research is an honors course which provides students with an opportunity to engage in chemical research. The goal of this course is to develop chemical research skills. The instructor will be working closely with students as they choose, develop, and carry out a research project. Students will learn how to use state-of-the-art research equipment that can be applied to their own research project. The instructor will provide assistance with the learning of laboratory techniques, statistical methods, library research, computer-assisted data analysis, and research paper writing. Prerequisite: A or B in CH 101 and consent of instructor. (3 hours weekly)

COMMUNICATION ARTS

See English, Mass Media and Speech

COMPUTER-AIDED DESIGN

CD 100Principles of Drafting

3 Credits

The objective of this course is to introduce the student to the language of graphics used in engineering and technology. The student will acquire an understanding of orthographic projections, sections, conventions, threads and fasteners, pictorial drawings, auxiliaries and revolutions. Mechanical assembly and detail drawings, architectural plans and elevations and elements of electrical/electronic and printed circuit drawings are discussed and illustrated. Other topics covered are lettering, scaling, dimensions, holes, fillets, rounds fasteners, fittings and title block specifications. Students use drawing instruments, such as the triangle, ruler and compass and do some free-hand sketching. (2 hours lecture, 2 hours lab)

CD 101 Introduction to Computer-Aided Drafting and Design

3 Credits

This course introduces the student to the CAD system. The student will receive "hands-on" training and will develop the techniques that are essential in today's job market. The student will learn how to adapt basic technical drafting techniques to computer generated drawings of the various drafting disciplines. (2 hours lecture, 2 hours lab)

CD 103 Intermediate CAD

3 Credits

The student will learn how to adapt the principles of descriptive geometry when applied to "real-world" applications, involving using the Cadd system to create Isometric and 3-D drawings. The student will have the opportunity to work on drawings used in various technical fields, such

as mechanical engineering, architecture and electronics. The student will learn current production techniques to automate the drawing process and how to develop intelligent technical documents. Prerequisite: CD 101. (2 hours leture, 2 hours lab)

CD 104 Advanced CAD

3 Credits

The student will learn the programming methods and techniques required to develop an applications package for the Cadd system. The students will learn the Cadd system's file structure and how to manipulate its database. The students will learn how to create customized menus and macro programming applications and techniques. Prerequisite: CD 103: Pre- or corequisite: CS 120. (2 hours lecture, 2 hours lab)

CD 105 CAD Projects and Presentations 3 Credits

In this course, the student will combine all the skills and technique of the previous courses to plan and develop a project. The student will learn current production accounting techniques while developing the project. The student will experience the cost factors that directly affect a project. The student will learn the various presentation techniques using computer graphics to enhance the project. Prerequisite: Eligible to enroll in EG 101 or EG 111; CD 104. (2 hours lecture, 2 hours lab)

CD 106 CAD Systems 3 Credits

Prior to taking this course, the student would have acquired an in-depth knowledge and be well-versed in at least one CAD system used in industry. This course is intended to broaden the student's knowledge in other popular CAD packages by studying similarities and differences of the various commands and techniques. The student will experience the problems of translating between various Cadd systems. The objective of this course is to prepare the student to adapt in an industrial environment quickly and easily to any of the most widely used CAD systems. Prerequisite: CD105. (2 hours lecture, 2 hours lab)

CD 107 CAD Animation

3 Credits

This course is to introduce the student to the concepts of 2D/3D computer animation. The student will develop and apply traditional animation techniques using computer software. The applications of computer animation will include engineering, visualization, advertising, and multimedia. (2 hours lecture, 2 hours lab)

COMPUTER SYSTEMS

CS 101 Beginning Spreadsheets 1 Credit

After successful completion of this course, students will be able to use Microsoft Excel to build, revise, and enhance worksheets; to work with charts and databases; and to create macros. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work (except tests) may be done outside of class if student has compatible software.

CS 102 Beginning Word Processing 1 Credit

After successful completion of this course, the student will be able to use Microsoft Word to create, edit and print documents. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work (except tests) may be done outside of class if student has compatible software. Prerequisite: Keyboarding skills.

CS 103 Beginning Databases

1 Credit

After successful completion of this course, students will be able to use Access to create and revise databases, to sort and query, and to prepare forms and reports. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work (except tests) may be done outside of class if student has compatible software.

CS 104 Advanced Word Processing 1 Credit

After successful completion of this course, the student will be able to produce documents using advanced Microsoft Word features. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for the course (except tests) may be done outside of class if student has compatible software. Prerequisite: CS 102.

CS 105 Personal Computer Systems Repair I 3 Credits

Upon completion of this course, the student will have a basic technical understanding of the function and operation of the major elements of personal computer systems, and how to localize and correct common hardware problems. Students will have hands-on experience using 386, 486 and pentium based systems. The course will focus on broad concepts and diagnostic tools which allow the student to rapidly determine the condition of a PC system and how best to rectify a fault. Special emphasis will be placed on how systems are configured, modified, and expanded to meet new requirements. Different software tools like CheckitPro, Norton Utilities and DOS utilities will be used to diagnose the problems. This course, along with CS 106, prepares students for the hardware level of A+ certification offered by the Computer Industry Association. The material is preparatory for the follow-on course, CS106, Personal Computer Systems Repair II. (2hours lecture, 3hours lab)

CS 106 Personal Computer Systems Repair II 3 Credits

Upon completion of this follow-on course, the student will have a basic technical understanding of the function and operation of the major peripheral devices used with or connected to personal computer systems, and how to localize and correct common hardware problems associated with those devices. The major peripheral devices which are emphasized in this course include state-of-the-art data storage devices, display technology, printers, scanners, SCSI devices, multi-

media devices, modems, and local area network devices. Emphasis will be placed on techniques for installing, configuring, maintaining, testing and fault isolating these devices within the PC systems. The student will also learn IRQ conflict resolution, I/O address setting, DMA channel conflict resolution, optimizing memory, fine tuning autoexec.bat, config.sys files and Windows initializing files (.ini files) and configuring systems with Windows. This course, along with CS105 - prerequisite, prepares students for the hardware level of A+ certification offered by the Computer Industry Association. Prerequisite: CS105 (2hours lecture, 3hours lab)

CS 110 Software Applications for Micros 3 Credits

In this introductory class in uses of microcomputers, topics covered are word processing spreadsheets, databases, and an overview of the operating environment. Students will have hands-on experience using each application package on the computers available in the HCC computer labs. Keyboarding skills recommended. (2 hours lecture, 2 hours lab)

CS 113 Intermediate Database 3 Credits

By the end of this course, the student will be able to apply and use the database management software package, including custom screens, labels, multiple files and study of programming language. The student will use dBase in the fall semester and Paradox in the spring semester. Prerequisite: CS 110 or consent of instructor based on introductory experience with a database. (2 hours lecture, 2 hours lab)

CS 114 Intermediate Spreadsheets 3 Credits

By the end of this course, the student will be able to plan and create business spreadsheet applications using software such as Lotus 1-2-3 or QUATTRO. The applications will include statistical, logical, financial and string @ functions; graphics; data manipulation; macros; program-

ming custom menus and transferring data to/from other software. Documentation and testing of models is emphasized. Prerequisite: CS 110. (2 hours lecture, 2 hours lab)

CS 115 Ventura Desktop Publishing 3 Credits

Through this course, the student will learn the underlying operational principles and intricacies of Ventura publishing and how to use and apply them. The student will be able to typeset, lay out, and print typewritten text by using elements of page design and graphics. Emphasis will be on designing effective visual presentations for the simple to complex publication. Prerequisite: CS 110 or word processing experience. (2 hours lecture, 2 hours lab)

CS 116 PowerPoint

1 Credit

After successful completion of this course, the student will be able to design and prepare PowerPoint presentations, which include the graph, outline, and notes features. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for this course (except tests) may be done outside of class if student has compatible software.

CS 120 Introduction to Computer Systems 3 Credits

By the end of this course, the student will be able to describe the historical development of computers, the characteristics, components and use of computer systems as well as the major programming languages. The fundamentals of problem solving and programming in a high-level language such as BASIC will be discussed and demonstrated. Prerequisite: Eligible to enroll in EG 101 or EG 111 and MA 061.

CS 121 Structured Logic and Program Design 3 Credits

Upon completion of this course, students will have acquired the skills needed to design and

document structured solutions to various programming applications. A variety of problem solving tools will be introduced, as will data representation, documentation techniques and the use of various editors. Prerequisite: Eligible to enroll in EG 101 or EG 111 and MA 061.

CS 124 BASIC Programming

1 Credit

By the end of this course, the student will be able to flowchart the solution to simple data processing problems and write the corresponding computer program instructions using the BASIC language. Prerequisites: Eligible to enroll in EG 101 or EG 111 and MA 070. (2 hours weekly)

CS 126 Introduction to Internet 1 Credit

The Internet is an ever-growing repository of information, providing access to research databases, business forums, educational information, government and news sources, software programs, and worldwide communication capability. This course will introduce the student to several facets of the Internet, specifically, the use of popular Internet tools and applications. Additionally, we will discuss some legal, moral, ethical, and security issues associated with use of the Internet. Familiarity with a computer and file management skills are strongly recommended before enrolling in this course.

CS 129 Principles of Internet 3 Credits

The Internet is an ever-growing repository of information, providing access to research databases, business forums, educational information, government and news sources, software programs, and worldwide communication capability. This course will introduce the student to all facets of the Internet. We will begin by understanding the underlying technologies, followed by an understanding of Internet connection and use of popular Internet tools and applications. Additionally, we will discuss the legal, moral, ethical, and security issues associated with use of the

Internet. Familiarity with a computer and file management skills are strongly recommended before enrolling in this course.

CS 131 Spreadsheet Essentials

1 Credit

After successful completion of this course, students will use the database sort, query and report features; logical and other spreadsheet functions; and simple macros. This course may be completed in fewer than 14 weeks and may be started at any time during the school year.

CS 132 Introduction to Windows

1 Credit

After successful completion of this course, the student will be able to understand and use Windows with an emphasis on managing directories and files. This course may be completed in fewer than 14 weeks by attending class more hours per week. This class may be started at any time during the school year. All of the work for this class (except tests) may be done outside of class if the student has Windows. Prerequisite: Familiarity with a computer is strongly recommended.

CS 134 Introduction to DOS

1 Credit

After successful completion of this course, the student will be able to list, backup, delete, undelete and copy files; design, create, and navigate a tree-structured directory system; install software packages; and write simple batch files. This course is designed to meet the needs of students who want to increase their ability to manipulate files and backup their data. It requires less time and technical knowledge than CS 219. All of the work for this course may be done outside of class if the student has DOS 6.0 or higher. Prerequisite: Familiarity with a computer is strongly recommended.

CS 135 FORTRAN Programming

4 Credits

Upon completion of this course, students will be able to use the FORTRAN language to develop

solutions to computational problems using structured programming techniques. Students will design and write structured FORTRAN programs in areas such as science, engineering, statistics, education, and business. The specific objectives will be accomplished through the writing, compiling, debugging, documenting, and successful running of the programs assigned. Prerequisite: MA 133 or MA 135 (2 hours lecture, 2 hours lab)

CS 140 Computer Science I

4 Credits

Upon completion of this course, students will have developed skills in problem solving, algorithm design, program tracing, testing, documentation, and program verification. Supporting objectives include syntax rules, basic data types, memory storage, loop control structures, user written and library functions, parameter passing, arrays, strings, structures, and recursion. Programming projects using a modern structured programming language such as C will be assigned to accomplish these objectives. Pre- or co-requisite: MA 140 and eligible to enroll in EG 101. (3 hours lecture. 2 hours lab)

CS 150 COBOL Programming I 3 Credits

By the end of this course, the student will be able to translate problem statements into computer programs written in the COBOL language. The specific objectives that the student will accomplish will include using various documentation techniques and coding and successfully running COBOL programs, and documenting the entire process. COBOL elements will be covered such as data manipulation, editing, page headings, totals and single level control breaks. Prerequisite: CS 121. (2 hours lecture, 2 hours lab)

CS 160 PASCAL Programming I 3 Credits

Upon completion of this course, students will have acquired the skills needed to design, write, test, debug and document structured programs using top down design and covering introductory features of the Pascal language. Topics cov-

ered will include constants, variables, arithmetic operators, relational expressions, various looping and control structures, procedures and functions, one dimensional arrays, and introductory I/O and file processing. Prerequisite: CS 121 or CS 135 or CS 150 or CS 180 or CS 220. (2 hours lecture. 2 hours lab)

CS 170 Computer Science II 4 Credits

Upon completion of this course, the student will have acquired the skills needed to design, write, test and debug large structured programs through their knowledge of various design methods and various data structures. Topics covered will emphasize string processing, arrays, stacks, queues, linked lists, trees, recursion, internal searching and sorting algorithms, program development, and program implementation. Programming projects will be assigned using a structured programming language such as C, etc. Prerequisite: CS 140. (3 hours lecture. 2 hours lab)

CS 177 Microsoft Office User Proficient 3 Credits

This course provides students skills in Microsoft Office products at the intermediate level. Students will master the skills tested at the proficient level on the Microsoft Office User Specialist exams for Word and Excel. Sharing data between applications (including PowerPoint and Access) will be covered. Prerequisite: CS 110 or both CS 101 and CS 102. (2 hours lecture, 2 hours lab)

CS 180 C Programming

4 Credits

By the end of this course, the student will be able to demonstrate an understanding of and skills in the use of the C language. The student will be able to write programs of moderate complexity and length which include standard data types, control structures, user-written and library functions, arrays, pointers, structures, recursion, reading and writing of text files. Prerequisite: CS 121 or CS 135 or CS 150 or CS 160 or CS 220. (3 hours lecture, 2 hours lab)

CS 190 Introduction to Visual Basic 3 Credits

Upon completion of this course, students will have acquired the skills needed to design, write, test, debug and document programs using Visual Basic. Topics covered will include: basic instructions to include looping and array processing, VB controls and their properties and events, customized menus and simple file manipulation. Prerequisite: Eligible to enroll in EG 101 or EG 111 and MA 061. (2 hours lecture, 2 hours lab)

CS 195 Intermediate Visual Basic 3 Credits

Upon completion of this course, students will be able to incorporate intermediate coding techniques and powerful graphical controls into their Visual Basic projects. Major topics include: programming a database; mouse events, keyboard events and trappable errors; grid controls; object variables and collections; the Multiple Document Interface (MDI); and an introduction to the Windows environment. Prerequisite: CS 190. (2 hours lecture, 2 hours lab)

CS 201-202 Computer Systems Work Experience I and II

3 or 4 Credits

See CO 201-202 Cooperative Education Work Experience I and II

CS 210 COBOL Programming II 3 Credits

By the end of this course, the student will be able to successfully run COBOL programs which contain such advanced elements as table handling, sort, call, file update logic, multiple control breaks, and the use of sub-programs. As in previous courses, the student will document each program as part of the course requirement. Prerequisite: CS 150. (2 hours lecture, 2 hours lab)

CS 219 Microcomputer Operating Systems—DOS

3 Credits

In this course students will examine the operation of the system software of a microcomputer (Disk Operating System or DOS). The student will be able to use the system commands to create and alter the microcomputer environment. The goal of this course is to familiarize each student with the operating system software, define the role of the software, and to train each student in the proper use of the operating system software. DOS versions including 3.x, 5.0 and 6.0 will be referenced. Prerequisite: CS 110 or CD 101. (2 hours lecture. 3 hours lab)

CS 220 Assembly Language

3 Credits

By the end of this course, the student will be able to demonstrate an understanding of the capabilities and functions of Assembly Language in general. In addition, the student will understand the specific internal data representation and instruction set available on the particular CPU being used, an IBM-PC. Students will establish data and program areas in storage, and use processor instructions to perform calculations, inputoutput and data manipulation. Prerequisite: CS 121 or CS 135 or CS 140 or CS 150 or CS 160 or CS 180. (2 hours lecture, 2 hours lab)

CS 226 Communications Concepts andNetworking Basics (formerly EL 226)

3 Credits

In this course, the student will examine the operation of computer communications and the principles of networks. The student will review and learn the principles inherent in the creation and use of computer networks. This will include modems, terminals, multiplexing, switching, access control schemes and protocol standards. The goal of this course is to familiarize each student with the standard communications concepts and to allow each student to have hands on experience

in accessing computer communications and computer networks through a personal computer. Prerequisite: CS 219. (2 hours lecture, 3 hours lab)

CS 227 Network Design and Installation 3 Credits

Upon successful completion of this course, the student will be able to design, configure and install a Novell and 3 COM network. Students will be introduced to the 19 different hardware possibilities supported by Novell. The students will wire both an ethernet and an arcnet configuration. Prerequisite: CS 226. (2 hours lecture, 3 hours lab)

CS 228 Network Administration

3 Credits

Upon successful completion of this course, the student will be able to administer and manage a network system. The student will be able to analyze business needs in such a system, recommend hardware and configurations necessary to have an efficient and effective system, and work with the persons who design, configure and install the system. Various utilities would be covered which would include the menu, network and console commands, archiv-ROMs, soundcards, scanners, digital cameras, video capture cards, and touch screens. The course will focus on broad concepts and diagnostic tools which allow the student to rapidly configure or rectify faults in multimedia PC systems. Prerequisite: CS132 and hardware familiarity is recommended. (2 hours lecture. 3 hours lab)

CS 250 Systems Analysis and Design 3 Credits

By the end of this course, the student will be able to analyze an organization's existing procedures by using such tools as data analysis sheets, system flowcharts, process charts, GANTT charts, decision tables and documents which define system requirements and specifications. The overall goal of the course is for the student to be prepared to go through the process necessary to improve the functioning of an existing system or

to design a new one. Prerequisite: CS 121. (3 hours weekly)

CS 261 Pascal Programming II 3 Credits

Upon completion of this course, students will have acquired the skills needed to design, write, test, debug and document structured programs using advanced features of the Pascal language. Topics covered will include records, file processing, search and sort techniques and advanced dynamic data structures such as linked lists using pointers. Prerequisite: CS 160. (2 hours lecture, 2 hours lab)

CS 271 Introduction to Multimedia Applications 3 Credits

Multimedia applications use computer controlled graphics, sound, text, and video to present information. Students will learn to define multimedia (MM), to describe the uses and impacts of MM, to define and use MM objects and links, to identify the five basic MM design paradigms, and to create multimedia applications. Students will work on tutorial exercises and will create, manipulate and present their own MM applications. Emphasis will be placed on evaluating applications and their elements. Prerequisite: CS 110 or consent of instructor based upon three months experience with Windows software. (2 hours lecture, 2 hours lab)

CS 276 Multimedia Hardware

3 Credits

Upon completion of this course, the student will have a basic technical understanding of the function and operation of the multimedia devices used with or connected to personal computer systems. The student will understand how to install, test, and use multimedia devices such as mass storage devices, CD-ROMs, soundcards, scanners, digital cameras, video capture cards, and touch screens. The course will focus on broad concepts and diagnostic tools which allow the student to rapidly configure or rectify faults in multimedia PC systems. Prerequisite: CS 132 and hardware

familiarity is recommended. (2 hours lecture, 3 hours lab)

CS 277 Microsoft Office User Expert 3 Credits

This course provides students with advanced skills in Microsoft Office products. Students will master the skills tested at the Expert level on the Mircrosoft Office User Specialist exams for Word and Excel. Sharing data between applications (including PowerPoint and Access) will be covered. Prerequisite: CS 177. (2 hours lecture, 2 hours lab)

CS 280 Advanced C Programming 4 Credits

This course builds upon the "basics" of C covered in CS 180. Additional features of the C language will be discussed and applied, including creation and use of "INCLUDE" files, user-created function libraries, advanced use of disk I/O, and processing of linked lists and trees. Prerequisite: CS 180. (3 hours lecture, 2 hours lab)

CS 290 C Programming for Windows 3 Credits

By the end of this course, the student should be able to demonstrate knowledge of programming in a Graphical User interface (GUI). The GUI to be utilized for study within the class is Windows. The student should be able to develop programs which will be able to utilize the features of the GUI, including dialog boxes, scrolling text, managing mouse functions, icons, bitmaps and menus. Prerequisite: CS 180.

CS 291 Object Oriented Programming with C++ 3 Credits

By the end of this course, the student will be able to demonstrate an understanding of and skills necessary for the development of Object Oriented Programs using the C++ language. Prerequisite: CS 140 or CS 180. (2 hours lecture, 2 hours lab)

COOPERATIVE EDUCATION

CO 150 Job Search: Skills and Techniques 1 Credit

This course is designed for all students who want to develop skills for seeking and securing employment. Through this course students will enhance their skills in job hunting by concentrating efforts into such areas as resume writing, interviewing and job search techniques. (2 hours weekly, 7 weeks)

CO 160 Portfolio Development 3 Credits

This course is designed for students who wish to receive credit for learning gained from life experience. In this course students will document evidence of prior learning in a "portfolio" which will enable faculty to evaluate and award credit for specific HCC courses. The student will learn to collect, organize, document and verify evidence of prior learning as well as assess skills and abilities and clarify career goals. Prerequisite: EG 101, EG 111 and consent of the instructor. Call C.B. Lovell for further information.

CO 190 Internship I

1-2 Credits

Upon completion of this course, students will have enhanced skills by linking concepts and theories with application and understanding through experiential opportunities in a workplace setting. Registration for this course must be coordinated through Academic Support and Career Services, L140.

CO 191 Internship II

1-2 Credits

Upon completion of this course, students will have enhanced skills by linking concepts and theories with application and understanding through experiential opportunities in a workplace setting. Registration for this course must be coordinated through Academic Support and Career Services, L140. Prerequisite: CO 190.

CO 201 Cooperative Education Work Experience I

3-4 Credits

Cooperative Education is supervised work experience directly related to a student's major subject area and/or career goals and interests. Its basic purposes are to integrate classroom theory and work applications and to assist the student in making the transition from school to work. New or current positions may qualify for co-op credits. Students may work between 10 and 40 hours a week for a 10- or 15-week period, attend seven 80-minute seminars during the semester, achieve specific learning objectives, and submit reports to a faculty co-op advisor. Prerequisite: minimum of 12 credits completed at HCC with a 2.0 or better grade point average and demonstration of preemployment skills. Student placement and consent to enroll in course are to be coordinated through the Co-op Office before registering. Call the Academic Support and Career Services Office (410) 992-4840 for further information and consent to enroll.

CO 202 Cooperative Education Work Experience II

3-4 Credits

See course description above.

CRIMINAL JUSTICE

CJ 101 Introduction to Criminal Justice 3 credits

A survey of the history, philosophy and social development of police, courts and corrections in a democratic society. Identification and operations of local, state and federal agencies will be covered with criminal justice career orientation. (3 hours weekly)

CJ 102 Criminology

3 credits

This course introduces the student to the basic theories, fundamental facts, and problems associated with the science of criminology, while pro-

viding a systematic basis for the study of criminals, and criminal behavior as it relates to the criminal justice system in America. (3 hours weekly)

CJ 103 Juvenile Delinquency

3 credits

This course studies youthful crime; its volume, causes, and trends. The prediction, prevention, treatment and control of juvenile delinquency by social control agencies is examined relative to social policies needed to reduce its incidence. The organization and procedures of the juvenile justice system will be explored. (3 hours weekly)

CJ 105 Introduction to Corrections 3 credits

This course introduces the student to the field of corrections, as it relates to the justice system. The course will focus on the history of corrections and the forms of criminal sanctions at the federal, state and local levels. Prerequisite: CJ 101. (3 hours weekly)

CJ 190-191 Criminal Justice Internships I and II 3-4 Credits

See CO 201-202 Cooperative Education Work Experience I and II. The internship is a practicum with measurable learning objectives designed to broaden the educational experience. Students are assigned to appropriate governmental and private criminal justice agencies.

CJ 200 Law Enforcement and the Community 3 credits

A study of the relationship between police and the community with recommendations for ways of working together to reduce crime. Emphasis is placed on policing in a culturally diverse society. Prerequisite: CJ 101. (3 hours weekly)

CJ 201 Introduction to Criminal Law 3 credits

The study of substantive criminal law as applied to the local, state and federal systems. Crimes as prosecuted in a court of law are examined. Court decisions are used to address various sources and types of criminal laws. Prerequisite: CJ 101. (3 hours weekly)

CJ 210 Criminal Evidence and Procedure 3 Credits

Examines the principles and techniques of criminal procedure employed during trials to determine the admissibility of physical and testimonial evidence. An analysis of laws and court decisions relating to the admissibility is emphasized. Prerequisite: CJ 101. (3 hours weekly)

DANCE

DA 181 Ballet I

2 Credits

An introduction to the fundamentals of classical ballet with emphasis on placement and alignment of body, and other preparatory work necessary for the establishment of a basic technical foundation. Introduction to ballet history and terminology - includes barre work. (3 hours weekly)

DA 182 Ballet II

2 Credits

A continued study of the technical fundamentals of classical ballet. Prerequisite: DA 181. (3 hours weekly)

DA 186 Modern Dance I

2 Credits

An introduction to the basic principles of modern dance. Course work includes floor-work and body alignment as well as discussion of dance technique and major modern theories. (3 hours weekly)

DA 187 Modern Dance II

2 Credits

An expanded study of basic modern dance technique involving concepts of spatial awareness and other movement fundamentals. Modern dance will also be analyzed from a theoretical and historical perspective. Prerequisite: DA 186. (3 hours weekly)

DA 188 African Dance 2 Credits

Dance movements from primitive African and Caribbean as well as contemporary jazz dance with the physiological benefit of aerobic exercise. Students will become aware of the ancient origin of all movements performed. Course work will include stretching to improve flexibility, body alignment to foster good posture, sustained movement to increase cardiovascular fitness. Much of class time will be spent in developing stamina, flexibility and in learning and performing choreography. (3 hours weekly)

DA 189 Jazz Dance 2 Credits

An introduction to jazz dance for the beginning student including a Broadway show dance. In addition to practicing, dance students will trace jazz history from Afro-Caribbean to Vaudeville forms to Broadway show styles. (3 hours weekly)

DA 190 Dance Appreciation 3 Credits (Fine Arts/Humanities Core)

An introductory survey of dance as a performing art which will prepare the student for greater enjoyment and appreciation of various dance forms including ballet, modern, jazz, and diverse ethnic/folk dances. Through discussion, lecture, demonstrations and especially through live and filmed dance performances, students will develop an ability to evaluate and appreciate the various types of dance—as dynamic art forms. (3 hours weekly)

ECONOMICS

EC 101 Principles of Economics (Macro) 3 Credits (Social and Behavioral Sciences Core)

This course introduces students to important economic issues which affect an entire economy. Students will more comfortably read and understand books, newspapers, and magazines with economic content. Topics include demand and

supply theory; gross domestic product determination; inflation; unemployment; the role of the government and public choice; fiscal and monetary policy and foreign exchange rates and trade. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

EC 102 Principles of Economics (Micro) 3 credits (Social and Behavioral Sciences Core)

Micro economics introduces students to economic decision making at the individual firm, consumer and industry level. Topics include demand and supply theory; elasticity; cost and production functions; profit maximization analysis; government regulation and anti-trust; and international trade. It is not necessary to take EC 101 previous to EC 102. Prerequisite: Eligible to enroll in EG 101 or EG111. (3 hours weekly)

EC 201 Money and Banking 3 credits

Money and Banking provides an analysis of our monetary and banking systems and their relationships to the United States Economy. Topics include the origin and nature of money, the development and functions of commercial banking and other financial industries, the Federal Reserve System, and the relationship between fiscal and monetary policies in our economy. Prerequisite: EC 101. (3 hours weekly)

EC 205 International Economics 3 Credits

International Economics provides the student with the foundations of the theory and practice of international trade and finance necessary for understanding the nature and consequences of linking the domestic economy and the world. Topics covered include: introduction to classical and modern international theories of trade; analysis of the economic effects of commercial policies like tariffs and quotas; economics of custom unions; balance of payments, spot and forward foreign exchange markets and exchange rate systems; balance of payments problems and the adjustment mechanisms; flexible and fixed exchange

rate systems; and international monetary systems. Prerequisite: EC 101 (3 hours weekly)

EDUCATION

ED 110 Introduction to Education 3 credits

The student will examine the basic principles and philosophical traditions of Western and American Education. The student will also evaluate the trends, issues and career opportunities and options in contemporary education. (3 hours weekly)

ED 111 Introduction to the Early Childhood Years

3 credits

Through the study of the early childhood years, the student will be able to describe the language, cognitive, physical, social, and emotional development of young children. Instruction will focus on theories of child development, research methods, and developmental milestones. Knowledge learned in this course can be applied to parenting and to careers in child care, early childhood education, and nursing. (3 hours weekly)

ED 112 Methods and Materials in Early Childhood Education

3 credits

This course is designed to teach the methods and proper use of materials for presenting creative learning experiences to young children in the areas of art, music, movement, creative dramatics,, language, outdoor, cooking, academic preliminaries, and science. (3 hours weekly)

ED 113 Working with Infants and Toddlers 3 credits

This course introduces the philosophy and implementation of infant and toddler caregiving in a group setting. This RIE (Magda Gerber) influenced course reviews care routines, appropriate activities, and group management techniques. The health, safety and nutritional needs of infants and toddlers are also examined. (3 hours weekly)

ED 120 Observing and Recording Children's Behavior

3 credits

This course is designed to increase the student's understanding of young children through the development of skills in making written observations and through the development of student's self-understanding. Emphasis is placed upon objectivity and proficiency in observing and explaining children's behavior from the data collected. Students observe a child one hour per week in a child care setting at an off-campus location. Written observations are shared and discussed in class weekly. A case study is completed using information collected from teachers, text findings, and observations done by the student. (2 hours lecture, 1 hour lab)

ED 130 Learning Environments for Young Children

3 credits

This course is designed to increase the student's understanding of various curriculum models and approaches in Early Childhood Education. Techniques for implementing and evaluating these models and approaches will be presented through lectures, classroom visits, and guest speakers. The student will explore contemporary issues and problems affecting young children such as discipline, single parent families, homelessness, child abuse and neglect, sexism, AIDS, mainstreaming, accountability, and stress in children. (3 hours weekly)

ED 140 Child Health, Safety and Nutrition 3 credits

This course will examine the health, safety, and nutritional needs of children, ages 2 - 6 years, in the child care setting. Attention will be directed to the study of common childhood illnesses, chronic conditions, prevention through personal hygiene, good safety practices, and nutritious snacks and meals as they impact on the child care setting. (3 hours weekly)

ED 150 Practicum in Early Childhood Development

4 credits

This course is designed to teach the student how to implement and evaluate a quality child care program. Students are assigned to one child care setting where they will spend 9 hours per week assisting as a teacher or an aide. Students meet at the college every other week for 2 hours to discuss lecture topics and classroom observations. Prerequisites: ED 111, ED112. (1 hour lecture, 3 hours lab)

ED 200 Exceptional Children: An Introduction to Special Education

3 credits

Exceptional Children: An Introduction to Special Education, which has been approved by the Maryland State Department of Education as meeting the special education requirements for teacher recertification, is designed to introduce students to the field of special education. The course provides a theoretical framework for understanding exceptional children, and examines the nature and characteristics of various disabling conditions. As the educational rights of exceptional youth under the Individuals with Disabilities Education Act are explored, every effort will be made to present multidisciplinary and multicultural perspectives on special education programming. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

ED 210 Language Development and Activities in Early Childhood Education

3 credits

This course is designed to provide a strong understanding of language development and related activities for the preschool child. The students will explore each stage of language development and examine strategies for facilitating language. Common language disorders will be discussed along with early identification procedures for children with special needs. A variety of quality children's literature will be reviewed along with methods for using children's literature to enhance

language development. Prerequisites: ED 111 and ED 112. (3 hours weekly)

ED 212 Advanced Methods and Materials in Early Childhood Education

3 credits

This course is designed to expand and integrate the methods and materials presented in ED 112 with program planning for young children. The course will emphasize collecting and preparing a variety of activities and materials using a thematic approach. The course will present a variety of issues relevant to curriculum planning in an early childhood program. Prerequisites: ED 111 and ED 112. (3 hours weekly)

ED 230 Child Care Center Administration and Management

3 credits

Students are instructed in meeting state requirements for physical facilities, licensing, insurance, and staffing child care programs. Other topics include record keeping, budget and bookkeeping, personnel selection, training and managing staff, food services, equipment, materials, and community involvement. Prerequisites: ED 111, ED 112 and ED 150. (3 hours weekly)

ED 240 Successful Classroom Management 3 credits

This course is designed to teach how to effectively manage a classroom for two through five year old children. The student will be able to set up the physical environment, plan the schedule, incorporate age-appropriate program planning, and learn strategies for working with parents and other staff members in a child care setting. Specific behavior management techniques will be explored as they relate to dealing with children in a classroom setting. Prerequisites: ED 111 and ED 112. (3 hours weekly)

ED 250 Advanced Practicum in Early Childhood Development

4 credits

This course is designed to teach how to effectively manage a classroom for two through five year old children. The student will be able to set up the physical environment, plan the schedule, incorporate age-appropriate program planning, and learn strategies for working with parents and other staff members in a child care setting. Specific behavior management techniques will be explored as they relate to dealing with children in a classroom setting. Prerequisites: ED 111, ED 112, ED 120 and ED 150. (1 hour lecture, 3 hours lab)

ED 260 Educational Psychology (formerly PY 201)

3 credits

Educational Psychology is an advanced course which surveys current psychological research and theory to address issues of teaching and learning. Instruction will focus on developmental theories, research methods, classroom management, and instructional techniques. The course will utilize readings, films, lectures, guest speakers, and small group projects, and is well suited for anyone interested in learning more about children, schools, learning, and/or teaching. Prerequisites: Eligible to enroll in EG101 or EG 111. (3 hours weekly)

ELECTRONICS

EL 103 Introduction to Wireless and NetworkCommunications

3 Credits

This course is designed to introduce the student to the principles and applications of wireless technology—cordless, cellular, telephony, Personal Communications Systems (PCS), mobile data networks, and Wireless Local Area Networks (WLAN). The principles of Local Area Networks (LAN) and Wide Area Networks (WAN) will be covered. Technical material is thoroughly integrated with specific applications and focuses on wire-

less standards, descriptions of systems and products, and wireless transmission techniques. (3 hours weekly)

EL 105 Fundamentals of Electronics 3 Credits

This course teaches students fundamentals of DC and AC circuits, digital electronics, and interconnection technology. Lectures and laboratory exercises emphasize basic electronics test equipment use and electronics safety procedures. Students will get "hands on" training in building and testing twisted pair (10 base - T), Co-axial (Thinnet), ribbon and fiber optics cables used in computer networking. Students will practice obtaining information from manufacturer's data sheets and catalogs for various types of networking hardware. This course includes an overview of LAN systems and LAN connectivity. (2 hours lecture, 3hours lab)

EL 107 Introduction to Electronics Circuit 4 Credits

Upon completion of this course, the student will have a thorough understanding of fundamentals of electronics. The student will study passive components and their behavior in DC circuits as well as in AC circuits. The student will learn fundamental laws that govern the electronics circuits such as Ohm's law, Kirchhoff's current/voltage laws, and Thevenin's Theorem. Analysis of electric circuits with computer techniques will be covered as part of laboratory experiments. Basic electronics safety will be stressed. The student will have hands-on experience and a good understanding of laboratory test instruments and basic troubleshooting techniques. Prerequisite: Eligible to enroll in MA 061. (3 hours lecture, 3 hours lab)

EL 114 Semiconductor Devices

3 Credits

The student will learn and apply solid state theory of diodes and bipolar transistors across the following topics: diode rectifiers and filtering, zener regulation, clippers and clampers, biasing circuits, small signal amplifiers, frequency effects,

Class A amplifiers and the transistor switch. The student will be able to analyze with equivalent circuits, single-stage and multi-stage amplifiers and understand the characteristics of diodes and transistors. Prerequisite: Eligible to enroll in EG 101 or EG 111; Pre- or Co-requisite: EL 107 or EL 112. (2 hours lecture, 3 hours lab)

EL 140Network Cabling Systems 3 Credits

This course is designed to train individuals in the fundamentals of installing, connecting and certifying network cabling systems. Students will learn to apply the basics of network cable and connector selection, installation and termination. Fundamental testing, certification, and documentation practices will be covered. Labs include hands-on experience with terminating and testing coaxial, unshielded twisted pair (UTP), and fiber optic cables in accordance with current industry and EIA/TIA standards. (2 hours lecture, 2 hours lab)

EL 211 Analog Circuits

4 Credits

The student will become capable of assembling and analyzing analog circuits. Topics include: FET characteristics and circuits, differential amplifiers, integrated circuit fabrication, negative and positive feedback, operational amplifier characteristics, analysis of common operational amplifier circuits, Class B power amplifiers; power supply characteristics, and circuits using discrete and integrated circuit technology. Prerequisite: EL 114. (3 hours lecture, 3 hours lab)

EL 213 Digital Circuits

4 Credits

Principles of solid state devices will be utilized to study logic circuitry. The student will analyze, design, build and troubleshoot logic gates, pulse and switching circuits, arithmetic circuits, counters, registers, input/output, clock and control circuits, and memory units. Digital TTL integrated circuits and other logic families will be compared. The principles learned will be applied

to various digital instruments and digital computer circuitry. Prerequisite: EL 107 or EL 112. (3 hours lecture, 3 hours lab)

EL 220 Electro-Mechanical Devices 3 Credits

Upon completion of this course, the student will be able to analyze electro-mechanical systems from a variety of applications in industrial and hospital environments. Students will learn the construction, characteristics and applications of relays, motors and other electro-mechanical devices along with associated circuits to control them. Automatic controllers (servomechanisms, PLC's, etc.) will be studied. The actual devices learned in theory will be utilized during the laboratory sessions with emphasis on proper operation and measurement techniques will appropriate test instruments. Prerequisite: EL 211 and EL 213. (2 hours lecture, 3 hours lab)

EL 237 Wireless Communication Circuits 3 Credits

Upon completion of this course, the student will understand the fundamentals of electromagnetic wave propagation in the real world environment and how information is transmitted and received through that medium. An overview of many types of wireless communication systems will be presented. The numerous problems in selecting the method of transmission and reception will be considered, and the impact of noise, power, and impedance on system performance will be addressed. Specific circuits unique to this branch of electronics will be examined. Pre- or co-requisite: EL 211 and EL 213. (2 hours lecture, 3 hours lab)

EL 238 Wireless Communication Systems 3 Credits

Upon completion of this course, the student will have an understanding of the principles of the major wireless communication systems in use throughout the world today. The course will focus on understanding and troubleshooting equipment common to these systems and will

investigate concepts unique to wireless communication systems such as cellular, microwave, and satellites. A section on electromagnetic compatibility, RF interference, and spectrum analysis will be particularly valuable in understanding how systems interact. Prerequisite: EL 237. (2 hours lecture, 3 hours lab)

EL 260 Internetworking with Multi-Protocol Systems

3 Credits

This course emphasizes the physical, datalink, and network layers of Local Area Networks (LANs) and Wide Area Networks (WANs). Topics include: network components employed in bus, ring, and star topologies; coaxial, twisted pair, and fiber optic transmission media; transmission standards and multiple protocol interfacing. Labs will include hands-on configuration of repeaters, bridges, routers, and gateways in client-server and peer-to-peer environments. SNMP network management tools will be used to configure, optimize, and troubleshoot stand-alone and internetworked systems. Prerequisite: EL 105 and CS 106 or EL 140 and CS 106. (2 hours lecture, and 3 hours lab)

EL 261 Introduction to Router Configuration 3 Credits

This course covers basic internetworking principles and configuration of routers for multiprotocol networks. Students will have hands-on experience in loading internet operating system, configuration and image files of routers. Students will also have hands-on experience in basic Cisco commands and configure Cisco routers for internetworking that uses LAN and WAN interfaces. This course will help you prepare for exams associated with CCIE (Cisco Certified Internetwork Expert) certification. Prerequisite: EL 260. (2 hours lecture, 3 hours lab)

EL 262 Advanced Router Configuration 3 Credits

This course covers Wide Area Networking concepts, components, services, connectivity options

and protocols. Students will have hands-on experience in connecting, configuring, managing complex internetwork using routers, Students will become familiar with Cisco diagnostic tools and commands to manage the internetwork efficiently. This course will help to prepare for exams associated with CCIE (Cisco Certified Internetwork Expert) certification. Prerequisite: EL 261. (2 hours lecture, 3 hours lab)

ENGINEERING

EN 100 Introduction to Engineering Design 3 Credits

In this course, students are introduced to the engineering design process by working on a product design project. Working in teams, students will design and build a product that satisfies specified functional, or operational, requirements. The design will involve a variety of topics from engineering, technology and the sciences. Topics, with which students must become familiar in order to complete their project, will be drawn from various disciplines, such as mechanics, fluidics, energy concepts, thermodynamics, electrical circuits, and chemistry. In addition, students will use CAD software and other computer applications, such as word processors, spreadsheets and computer languages. Prerequisite: Eligible to enroll in MA 131 or above. (2 hours lecture, 2 hours lab)

EN 120 Statics

3 Credits

Students will study the equilibrium of stationary bodies under the influence of various kinds of forces. Topics studied include: forces, moments, couples, equilibrium, frames and machines, centroids, moment of inertia, and friction. Vector and scalar methods are used to solve problems. Prerequisite: PS 110; Pre- or Co-requisite: MA 150. (2 hours lecture, 2 hours lab)

EN 130 Dynamics

3 Credits

This course will enable the student to acquire knowledge dealing with systems of heavy particles and rigid bodies in motion. In order to study such systems, it is necessary to learn force, acceleration, work, energy and impulse-momentum relationships. In addition, material will be discussed which covers motion of one body relative to another in a plane and in space. Prerequisite: EN 120 and MA 150. (2 hours lecture, 2 hours lab)

EN 140 Mechanics of Materials

3 Credits

The student will acquire a knowledge of the distortion of engineering materials in relation to changes in stress or temperature. The geometry of internal strain and external displacement will be studied. Applications will be presented and discussed which cover beams, columns, shafts, tanks and other structural machine and vehicle members. Prerequisite: EN 120 and MA 150 or equivalent. (3 hours weekly)

EN 160 Systems and Circuits 3 Credits

Designed mainly for electrical engineering students, this course will enable the student to acquire knowledge of Kirchoff's Law, linear, non-linear, time variant, node and mesh analysis. In order to study such systems, it is necessary to learn the solution of circuit differential equations, zero input, zero state and complete response. Prerequisite: MA 150 and PS 111. (4 hours weekly)

EN 180 Thermodynamics 3 Credits

This course is designed for the student planning to transfer to an engineering program. Topics covered include the following: Properties, characteristics and fundamental equations of gases and vapors. Work and heat transfer, first and second laws of thermodynamics, entropy, irreversibility, availability, and the thermodynamics

of mixtures. Prerequisite: MA 150 and PS 112. (4 hours weekly)

ENGLISH

EG 082 Oral Communication for Non-native Speakers of English

3 Credits

In this course students will develop the pronunciation, listening comprehension and conversational skills needed to function successfully in American schools and society. Class work will consist of pronunciation practice, listening activities, role-playing, small group and class discussions, informal oral presentations and the study of common idioms. This course meets three hours per week. Students who place into both EG 083 and EG 084 are required to take EG 082. Students can be exempted from this requirement by passing an oral exam.

EG 083 Intermediate Reading for Non-native Speakers of English

4 Credits

In this course students will improve their reading skills. Reading is approached as an integral part of an ESL student's overall English language learning, not as an isolated skill. As a result, while the major areas of study include vocabulary, idioms, and comprehension skills, speaking and writing about assigned readings are also important activities. This course will meet for five hours per week. Prerequisite: Appropriate score on English placement tests. (3 hours class time and 2 hours lab time).

EG 084 Intermediate Writing and Grammar for Non-native Speakers of English

4 Credits

This course will allow students to acquire the English language skills needed to produce multiparagraph compositions at an intermediate proficiency level. Contemporary reading selections and discussion activities will serve to prepare students to write narrative, descriptive and exposi-

tory compositions. Grammatical skills will be developed through formal instruction, group editing and computer-assisted instruction. This course will meet for five hours per week. Prerequisite: Appropriate score on English placement tests. (3 hours class time and 2 hours computer lab time).

EG 085 Academic Oral Communication for Non-native Speakers of English

3 Credits

In EG 085, students will develop the listening and speaking skills needed to succeed at an American college. Class work will consist of pronunciation practice, listening activities, small group and class discussions of selected readings and lectures, oral presentations and simulations of aspects of academic life. This course will meet three hours per week. Students who place into both EG 086 and EG 087 are required to take EG 085. Students can be exempted from this requirement by passing an oral exam.

EG 086 Advanced Reading for Non-native Speakers of English

4 Credits

ESL students will continue to strengthen their reading skills in EG 086 with emphasis on academic material. In this class, reading is also approached as an integral component of the larger communicative system that is the English language. In addition to reading comprehension and vocabulary skill building, students will improve their ability to communicate the information and concepts contained in assigned materials orally and in writing. This course will meet for five hours per week. Prerequisite: Appropriate score on English placement tests or completion of EG 083; Co-requisite: EG 106 or EG 901. (3 hours class time and 2 hours lab time).

EG 087 Advanced Writing and Grammar for Non-native Speakers of English

4 Credits

In EG 087 students will acquire the English language skills needed to write multi-paragraph

compositions at a level of correctness and fluency appropriate for an advanced learner of English who will soon enroll in a freshman composition class. Readings and discussions will prepare students to write narrative, descriptive, expository and argumentative compositions. Relevant grammatical skills will be developed through formal instruction, group editing and computer-assisted instruction. This course will meet for five hours per week. Prerequisite: Appropriate score on English placement tests or completion of EG 084 (3 hours class time and 2 hours computer lab time).

EG 093 Directed Studies in Reading 3 Credits

Directed Studies in Reading is a three-credit developmental course designed to strengthen students' reading skills. In this course, the student in need of intensive reading instruction will complete prescribed activities to improve reading comprehension and vocabulary development. Credits awarded for the completion of EG 093 do not fulfill degree requirements in any degree or certificate program. EG 093 meets four hours weekly, 2 hours of classroom instruction and 2 hours in a networked computerized environment. Prerequisite: Appropriate score on reading placement tests. (4 hours weekly)

EG 094 Directed Studies in Writing 3 Credits

Directed Studies in Writing is a three-credit developmental course designed to strengthen students' writing skills. In this course, students in need of intensive writing instruction will complete prescribed activities to improve their writing skills. Beginning with sentences and progressing to paragraphs, students learn to construct clearly written, logically organized, grammatically correct papers. Credits awarded for the completion of EG 094 do not fulfill degree requirements in any degree or certificate program. EG 094 meets four hours weekly in a networked, computerized environment. Prerequisite: Appropriate score on the writing placement test. (4 hours weekly)

EG 096/097 Combined Fundamentals of Reading and Writing

6 Credits

EG 096/097 COMBINED is a fully integrated approach to teaching reading and composition. Working with one instructor, students respond to assigned readings through written assignments. Beginning with one-paragraph assignments and progressing to multi-paragraph essays, students learn to construct clearly written, logically organized, grammatically correct papers. Students work in a networked, computerized environment. Reading assignments center around topical issues, and students focus on the skills of recalling details, identifying main ideas, drawing inferences, thinking critically, increasing reading speed, and expanding vocabulary. EG 096/097 meets eight hours per week. Students whose placement test scores require them to take both EG 096 and EG 097 should enroll in EG 096/097 COMBINED to fulfill both requirements. Prerequisite: Appropriate score on English placement tests. Co-requisite: EG 106 or EG 901. (8 hours weekly)

EG 096 Fundamentals of Reading 3 Credits

In EG 096 students will demonstrate proficiency in the fundamental communication skill of reading. This course will meet for four hours weekly (2 hours of class and two hours in a networked, computerized environment). The reading skills emphasized include recalling details, identifying main ideas, drawing inferences, thinking critically, increasing reading speed and expanding vocabulary. Prerequisite: Appropriate score on English placement tests. Co-requisite: EG 106 or EG 901. (4 hours weekly)

EG 097 Fundamentals of Writing 3 Credits

In EG 097 students will demonstrate proficiency in the fundamental communication skill of writing. The writing skills emphasized include: writing clearly and convincingly by using logical organization and good sentence skills. This course meets in a networked, computerized environment. Prerequisite: Appropriate score on English placement tests.(4 hours weekly)

EG 101 Introduction to Composition I 3 Credits

EG 101 is the first of a two-semester required sequence of college-level expository writing courses. (EG 102 is the second course in the required sequence.) EG 101 focuses on informative prose and builds toward the art of argument and persuasion. Students develop an understanding of themselves as writers. They participate in public discourse about writing; examine the relationship among writer, audience, and purpose; and practice writing prose through a recursive process. Students completing this course should be able to write essays (of at least 500 words) demonstrating the conventions of standard written English and manuscript presentation. Prerequisite: Eligibility to enroll in EG 101 is based on English placement test scores or the successful completion of required English developmental course work.

EG 102 Introduction to Composition II 3 Credits

EG 102 is the second of a two-semester required sequence of college-level expository writing courses. (EG 101 is the first course in the required sequence.) EG 102 focuses on formal argumentative and persuasive prose. Students advance their understanding of themselves as writers, including understanding that they participate with others in responsible public discourse and have moral and ethical responsibilities in that discourse. Approaching writing as a recursive process, this course emphasizes scholarly inquiry and research and includes literary analysis. Students completing this course should be able to write an extended piece of expository and persuasive prose (of at least 2,000 words) demonstrating effective communication and the conventions of standard written English and manuscript presentation. (A variety of thematic orientations will be available in different sections. of the course.) Prerequisite: Eligibility to enroll in

EG 102 is based on successful completion of EG 101 or on English placement test scores.

EG 106 Successful Learning Strategies 2 Credits

This course is designed to enhance the learning potential and success of college students. Students will demonstrate proficiency with a number of study techniques. The topics to be covered include: time management, notetaking, the SQ3R study technique, effective listening, concentration and memory improvement, test taking techniques, introduction to the Library and Howard Community College services and facilities. (2 hours)

EG 115 Creative Writing

3 Credits

In this course students will write and discuss their writing in one or more of the following genres: poetry, short story, and drama. Students are encouraged to draw on their own backgrounds and experiences in shaping their poetry and fiction. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 120 Introduction to Literature

3 Credits (Literature, Humanities Core)

The purpose of this course is to introduce students to the conventions and characteristics of three literary genres: the short story, poetry, and drama. Students will gain an understanding of literary concepts so that they will be able to interpret, analyze and critically evaluate selections from these genres. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 180 Vocabulary Development

1 Credit

In this course, students will increase reading, writing, listening and speaking vocabularies. Students will be given resources to add a minimum of 300 words to their adult vocabularies. Students will also develop, through the study of context clues, the dictionary, and the thesaurus, the necessary skills to increase their vocabularies

throughout their lives. This course is recommended for students who have an interest in increasing their vocabularies. Students who are required to take EG 096 should not register for this course while taking EG 096. (1 hour class, 1 hour lab)

EG 181 Speed Reading

1 Credit

In this course, the student will develop a flexible reading rate which is essential to success in college and important for both personal and professional reading throughout life. Students will learn, through independent and classroom activities, to choose an appropriate reading strategy and rate for various types of reading. Through computer-assisted practice in a lab setting, students will increase their reading speed while maintaining good comprehension. The class will meet two hours a week in the Reading Lab. A minimal comprehension and vocabulary level are necessary to handle the materials in this program. This course is recommended for students who feel a need to increase their reading rate. Students who are required to take, or are taking, EG 096 should not register for this course. (2 hours weekly)

EG 200 Children's Literature 3 Credits

This study of children's books will enable the student to describe the historical background of the development of children's literature. The student will also be presented with criteria for making critical assessments of the text and illustrations in children's books. In addition, the student will be asked to write evaluations of classic and contemporary children's books. The idea is to familiarize oneself with what is available for different kinds of children at different ages and to judge the quality of books. The scope of the course covers beginning books to young adult books. This is a writing intensive course with time also needed for selection and reading of the books. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 201 American Literature I

3 Credits (Literature/Humanities Core)

This course is a study of the literature of the United States of America from the time of the European immigrations beginning in the 16th century through the 19th century post-Civil War era. Representative literary works from diverse ethic, racial, and social groups are studied in their historical, social, political, and economic context for what they both reflect and reveal about the evolving American experience. Representative works include fiction and nonfiction by Native Americans and by European settlers, the documents of the American Revolution, slave narratives and fictional works by African-Americans, the 18th century works of the first American novelists, the works of the American Transcendentalists, and other significant authors of the late 19th century. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 202 American Literature II

3 Credits (Literature/Humanities Core)

The second semester of the American Literature sequence is a general survey of the literature of the United States of America from the mid-19th century to recent times. Representative literary works from diverse ethic, racial, and social groups are studied in their historical, social, political, and economic context for what they both reflect and reveal about the evolving American experience and character. Representative works include the major Realist and Naturalist literature in the 19th century, the literature of the Native-American experience in the 19th and 20th centuries, immigrant literary expressions, classic works from the post- WWI and WWII eras, and feminist expressions, among others. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 203 English Literature I

3 Credits (Literature/Humanities Core)

English Literature I is a study of the best writers from the Anglo-Saxon Age to the beginning of the Romantic Age. Students have the opportunity to read great works and to better understand Western literary tradition and influence. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 204 English Literature II

3 Credits (Literature/Humanities Core)

English Literature II is a study of the best writers from the Romantic Age to modern times. The works of these writers and their contributions to today's literary landscape will be studied. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 205 The Short Story 3 Credits

This basic introduction to the short story as a literary form focuses on critically evaluating representative short stories by authors from around the world, with special emphasis on American and European writers of the nineteenth and twentieth centuries. Representative writers include writers from diverse cultural and ethnic heritages. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 206 African-American Literature 3 Credits (Humanities Core)

This course is an introduction to oral and written literature of African-American writers from the earliest times through the Harlem Renaissance to present times. The class sessions will consist of lecture, discussion, and small group activities. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 208 Twentieth Century Poetry 3 Credits

Students will read the works of twentieth century American poets. The course will emphasize the richness and diversity of America's finest poets from Wallace Stevens to Rita Dove. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 209 Modern Drama

3 Credits (Humanities Core)

This course is a study of major modern European and American drama. After completing the course, the student will be able to discuss and critically appraise modern and contemporary plays; identify the basic elements which distin-

guish modern drama from earlier periods of drama; evaluate live performances of modern and/or contemporary plays; and know what the playwrights have said about the nature of drama. Major philosophical and scientific achievements and their impact on the drama will also be discussed. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 211 Science through Science Fiction 3 Credits (Interdisciplinary and Emerging Issues Core)

This course focuses on the literature of scientific discovery, exploring the wonders and the dangers of these discoveries. Students will view two class films, read three to five short stories and study several novels. Students will illustrate their comprehension of the scientific background employed in the literature as well as the literary concepts themselves through class discussion, essay exams, and literary projects. This course is sometimes offered as an honors course. Prerequisite: EG 101 or EG 111. (3 hours weekly)

EG 212 By and About Women 3 Credits (Humanities Core)

This course provides a historical sampling of literature written by and about females. Through group discussion, students will critically evaluate a series of six novels for literary form and technique. Class discussion will also analyze the validity of the female experience as portrayed in the literature. Students are expected to gain insight into not only the challenges but also the power of women in literature and in life. Prerequisite: EG101 or EG 111. (3 hours weekly) NOTE: Also listed as WS212

EG 215 Advanced Creative Writing 3 Credits

The course is designed for those students who have mastered the fundamental elements of creative writing. Students will writie in at least one

of the following literary genres: poertry, short story, and drama. Students are encouraged to draw on their own backgrounds and experiences in shaping their writing. This course differs from EG 115 in terms of proficiency expected; that is, students of Advanced Creative Writing are expected to achieve a higher level of proficiency in their writing and/or be further along in their work. Prerequisite: EG115. (3 hours weekly)

EG 220 History and Literature of Victorian and Edwardian Britain

3 Credits

The student will be able to discuss and evaluate the historical and cultural epochs of nineteenth and early twentieth century Britain as expressed through its literature. The student will accomplish these objectives through their studies of the major trends and dominating influences of the romantic movement, the social upheaval of the industrial revolution, the Victorian age of affluence, the era of imperialism, the Edwardian age, and the trauma of the First World War epoch. This cross disciplinary course is a team-taught class. Prerequisite: EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as HY220

EG 225 Introduction to World Literature 3 Credits (Literature/Humanities Core)

Introduction to World Literature examines important works of world literature from antiquity to modern times. The course offers students the opportunity to study major literary works in the context of how these works reflect the cultural values of their times and places and how these works have influenced the evolution of western literature in general. Students also will learn some the basic language and structural devices of literature. The course will focus on a variety of literary genres. In addition to the regular section, there also will be a section of this course that is only available to Rouse Scholars. Prerequisite: EG 101 or EG 111. (3 hours weekly)

FILM

FM 171 Introduction to the American Cinema 3 Credits (Fine Arts/Humanities Core)

As a result of taking this course, the student should be able to demonstrate knowledge of aesthetic principles as they apply to the film as an art medium. The student will view a wide variety of selected films including films directed by women and directors of color. Films will be discussed in class. The student will show a prescribed level of mastery of technical terms and concepts on examination. (3 hours weekly)

FM 172 Introduction to Foreign Cinema 3 Credits (Fine Arts/Humanities Core)

This course will focus on the thematic and technical concerns of great European and Asian directors from the Soviet Eisenstein's ground-breaking ideas about editing in the 1920s to Rainer Werner Fassbinder's founding of the New German Cinema in the 1970s. Films from Japan, Italy, France, Sweden, Brazil and India will be featured. (3 hours weekly)

FINE ARTS

FA 101 Humanities Through the Arts 3 Credits (Fine Arts/Humanities Core)

In this course, the humanities are approached through an interdisciplinary study of nine major arts: film, theatre, music, dance, painting, sculpture, photography, architecture, and art in literature. Each of these arts is considered from the perspectives of the meaning and form expressed as well as criticism or critical evaluation. As a study of the creative process a broad range of methods in the various arts will be explored through diverse presentations by guest lecturers, professionals in the arts. The challenge to the student in this course is to develop perceptual awareness and aesthetic sensitivity as well as a foundation for a life-long relationship with the arts regardless of his/her major field of study. (3 hours weekly)

FA 102 Arts, Cultures and Ideas

3 Credits (Fine Arts/Humanities Core)

Arts, Cultures and Ideas is an interdisciplinary, team taught course whose purpose is to introduce to the student how the humanities and their arts address ways of thinking about what is human-about our diverse histories and cultures. imaginations, values, words, and dreams. The approach of the course is to root cultural achievements in their historical settings, showing how the political, social, and economic events of each period influence their creation. The course will focus on at least three of the following areas of the humanities appropriate to the period of history and the specific culture being studied: architecture, criticism, dance, ethics, film. literature, music, painting, philosophy, photography, religion, sculpture, and theatre. Historical periods that will be a part of this course as it changes focus and individual cultures to be studied within these periods will be determined each semester. Options for this course are Special Issues and Honors Options. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

FA 193 Introduction to Women's Studies: Women, Art, and Culture

3 credits (Fine Arts/Humanities Core)

An introduction to the ideas and issues central to Women's Studies, feminism, gender and diversity with emphasis on women's art and culture. The course will examine how women have been represented and how gender has been constructed in the dominant culture as well as the role of the arts and of women themselves in developing an alternative women's culture. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as WS 193.

FA 200H Twentieth Century Arts, Cultures and Ideas - Rouse

3 Credits (Fine Arts/Humanities Core)

This Rouse Scholars honors course is an interdisciplinary, team-taught course the purpose of which is to introduce the student to the ways of thinking about what is human about our diverse

histories and cultures, imaginations, values, words, and dreams. Specifically, this course will focus on how the art, music, and literature of twentieth century expressionism through postmodernism reflect the diverse cultures and human values of this unique period in history. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

FA 222 Survey of Art and Music/Field Trips 3 Credits

This course is a general survey highlighting both the history of art and the history of music from 4000 B.C. to the twentieth century, including an in-depth analysis of the similarities and contrasts between both areas. The student will develop an ability to interpret a work of art based on the arrangement of the elements of design. The student will develop the ability to listen to music critically and to interpret the various characteristics (fundamental elements) within a musical composition and to analyze particular forms of music. The course is designed to provide on-site lectures at required field trips to art museums and concerts in the Baltimore-Washington area and to expose the student to the high-quality museum exhibits and concerts available, providing the student with a fine arts experience.

FINANCIAL PLANNING

FP 101 Personal Financial Planning Principles 3 Credits

This course will cover the principles of financial planning in the following areas: the financial planning process; insurance; investment decisions; income tax planning; retirement and estate planning. After completion of this course a student will understand the terminology and concepts of financial planning, and will be prepared to study specialized information in any of the above mentioned areas. (3 hours weekly)

FP 201 Investment Analysis and Portfolio Selection

3 Credits

Upon the completion of this course a student will understand the variety of investment vehicles which are offered today. He/she will better self-advise or advise others in financial investments in the following areas: long-term securities; stocks and bonds; limited income securities; treasury bills; mutual funds. An overview of analytical techniques, construction of investment portfolio and tax considerations will be presented as well. (3 hours weekly)

FP 202 Risk Management and Insurance 3 Credits

An introduction to the field of insurance. The student will examine the various types of risks and the approaches taken by insurance firms. The course provides an analysis of life, health, property and liability insurance, fire insurance, homeowners and personal auto policies, as well as employee benefit plans and determination of insurance needs. (3 hours weekly)

FRENCH

FR 101 Elementary French I 3 Credits (Humanities Core)

In this introductory course, students learn to listen, speak, write and read on a basic level. They also learn about the diverse cultures of the French-speaking world. Instruction focuses on oral communication, and is supported by a computerized classroom and peer learning groups. This course meets for 3 hours per week; an additional weekly lab visit is required.

FR 102 Elementary French II 3 Credits (Humanities Core)

Students continue to develop the four basic skills, particularly oral communication, and to look inside the cultures of France, West Africa, Canada the Caribbean. They will develop a project which reflects personal goals for learning French. This

course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

FR 201 Intermediate French I 3 Credits (Humanities Core)

Students in this second year course will use the skills needed to listen, speak, write and read in French in the context of a series of communicative activities. They will expand their knowledge of the peoples of the French-speaking world and will, through the use of multimedia technology, create a personalized project reflective of individual interests in French. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

FR 202 Intermediate French II 3 Credits (Humanities Core)

This final course of the 4 semester sequence fulfills the language requirement at most four-year institutions. Students will produce a mini-project in each of the four skill areas as they acquire the basics of intermediate French. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

GEOGRAPHY

GE 101 Introduction to World Geography 3 Credits (Social and Behavioral Sciences Core)

This course will focus on the effects of spatial relationships on the earth's human population. We will study the location of people, relative to each other. The student will examine the physical environment and how it influences spatial decision-making processes. We will analyze the geo-economic relationships which influence the earth's settlement patterns. The student will develop an understanding of the increasingly interdependent and interconnected world in which we live, and the relationship between the actions of the individual and the impact which these actions have on other places in the world. Prereq-

uisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

GE 102 Elements of Cultural Geography 3 Credits (Social and Behavioral Sciences Core)

In Cultural Geography the student will be able to demonstrate how the surface of the earth has been changing during the time span of human occupancy and how, in using that surface, human technology has grown and prospered. Eligible to enroll in EG 101 or EG 111 (3 hours weekly)

GE 201 Economic Geography 3 Credits

This course will focus on the interdependence and interrelationships of the global economy. We will study the location of economic activity at the local, national and world scale. We will examine the distribution of economic activity, the use of the world's resources, and the spatial organization and evolution of the world economy. The student will be able to demonstrate a knowledge of the issues of pollution and resource depletion, food and famine, accessibility and isolation, land use, production processes, economic development, and global trade relationships. Prerequisite: GE 101 or GE 102. (3 hours weekly)

GERMAN

GR 101 Elementary German I 3 Credits (Humanities Core)

In this introductory course, students learn to listen, speak, write and read on a basic level. They also learn about the diverse cultures of the German-speaking world. Instruction focuses on oral communication, and is supported by a computerized classroom and peer learning groups. This course meets for 3 hours per week; an additional weekly lab visit is required.

GR 102 Elementary German II 3 Credits (Humanities Core)

Students continue to develop the four basic skills, particularly oral communication, and to look inside the cultures of German, Austria and German-speaking Switzerland. They will develop a project which reflects personal goals for learning German. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

GR 201 Intermediate German I 3 Credits (Humanities Core)

Students in this second year course will use the skills needed to listen, speak, write and read in German in the context of a series of communicative activities. They will expand their knowledge of the peoples of the German-speaking world and will, through the use of multimedia technology, create a personalized project reflective of individual interests in German. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

GR 202 Intermediate German II 3 Credits (Humanities Core)

This final course of the 4 semester sequence fulfills the language requirement at most four-year institutions. Students will produce a mini-project in each of the four skill areas as they acquire the basics of intermediate German. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

HEALTH CARE

HC 110 The Health Care Professional 2 Credits

Explores the role of the health care professional and includes an overview of careers in the field.

HC 111 The Health Care Delivery System 3 Credits

This course is an overview of the health care system. Common practices and trends within the

health care delivery system including patient care techniques, the hospital environment, infection control, legal and ethical issues, and professionalism are presented. The influence of interpersonal relationships and technology is a major focus while students observe the health care worker in the sale delivery of health care. An introduction to anatomy and physiology of the cardiopulmonary systems is included and correlated with diagnostic and interventional procedures observed in a clinical setting. (2 hours lecture, 3 hours lab)

HC 212 Health Care Issues in BMET 3 Credits

At the completion of this course, the student will be prepared to function independently and effectively in a work environment. She/he will be able to incorporate appropriate observational, interpersonal and communication skills into the profession. The BMET student will possess a working knowledge of health care and roles in the team approach. Prerequisite: HC 111. (1 class hour and 6 laboratory hours weekly)

HEALTH EDUCATION

HE 100 Introduction to Lifetime Fitness 1 Credit (Interdisciplinary and Emerging Issues Core

This course is designed to provide the student with the principles and methods necessary to maintaining personal fitness and health. The concept of wellness, and the roles of physical fitness, nutrition, weight management, and stress play in personal wellness development are examined. Participation in labs, classroom activities, and take-home assignments will assist the student in evaluating their personal fitness levels as well as developing a strategy for improvement. (1 hour weekly

HE 102 Introduction to Weight Management 1 Credit (Interdisciplinary and Emerging Issues Core)

This course is designed to provide students with the knowledge and means for developing a personal weight control plan. The course will examine commercial diet programs, fad diets, and effective weight loss strategies. Students will study the role body composition and weight have in health/wellness. (1 hour weekly)

HE 104 Personal Nutrition Assessment 1 Credit (Interdisciplinary and Emerging Issues Core)

Students are introduced to a computerized nutritional assessment program. Students evaluate their current nutritional status and develop strategies for improvement. Various group discussions, lectures, and labs provide students with the means to critically evaluate their dietary practices. (1 hour weekly)

HE 109 Basic CPR and First Aid 2 Credits (Interdisciplinary and Emerging Issues Core)

This course is designed to acquaint students with theories and techniques of CPR and First Aid and Safety. After the successful completion of this course a one-year card will be awarded in Infant, Child and Adult CPR (valid one year) and certification in First Aid and Safety (valid three years). (2 hours weekly)

HE 110 Introduction to Personal Wellness 1 credit (Interdisciplinary and Emerging Issues Core)

This course is designed to provide the student with an overview of the components of wellness. These components will include stress, physical fitness, nutrition, safety, and weight management. The principles, concepts, and practices necessary to improve one's personal wellness will be examined. Students will participate in presentations, laboratories, and assessments designed to evaluate their individual wellness plan to improve areas of concern. (1 hour weekly)

HE 111 Introduction to Health Education 3 Credits (Interdisciplinary and Emerging Issues Core)

Health education theories are foundational for this course and provide the framework for students to integrate concepts fundamental to health, health education and wellness. Areas of personal health which need improvement will be identified. Opinions of health policy leaders are discussed in relationship to the outcomes on society and objectives for health promotion and disease prevention. (3 hours weekly).

HE 112 First Aid and Safety 3 Credits (Interdisciplinary and Emerging Issues Core)

A study of techniques of cardiopulmonary resuscitation, including one- and two-person rescue for infants, children and adults and actions for emergency situations. This course will prepare you to make appropriate decisions regarding first aid care and to act on those decisions. Students will be eligible to receive CPR and First Aid Certification.(3 hours weekly)

HE 113 Drug Use and Abuse 3 Credits (Interdisciplinary and Emerging Issues Core)

This course will examine drug use relevant to the use and abuse of drugs. Upon completion of this course the student will be able to identify the physiological, psychological, social and cultural implications of drug use. In addition the historical and legal aspects of drug use will be presented in the context of this course. (3 hours weekly)

HE 115 Personal and Community Health 3 Credits (Interdisciplinary and Emerging Issues Core)

This course will synthesize the important facts and concepts of a variety of college level courses including biology, physiology, anatomy, ecology, psychology, and sociology into a meaningful dialogue that will motivate the student to modify their health practices to a high level of effective and enjoyable living. (3 hours weekly)

HE 120 Medical Aspects of Chemical Dependency

3 Credits

Upon completion of this course, the student will be able to identify concepts relevant to alcoholism and the medical aspects of addiction. In addition, the course will include the pharmacology of alcohol and other addictive substances. (3 hours weekly)

HE 121 Introduction to Chemical Dependency Treatment

3 Credits

This course provides students with the opportunity to study the various modalities of addiction therapy. Counseling skills and the philosophical aspects of addiction will also be presented in this course. (3 hours weekly)

HE 122 Basic Chemical Dependency Counseling Skills

3 Credits

Focuses on counseling skills needed to establish and maintain an effective helping relationship with substance abusers and their families. Course includes outside site visits and/or class projects. (3 hours weekly)

HE 123 Group Counseling Skills (Chemical Dependency

3 credits

Students will receive training in using a group counseling model with chemically dependent individuals. Emphasis will be on group, client and counselor contributions to the group process and how these factors influence and interrelate with each other. (3 hours weekly)

HE 124 Family Counseling (Chemical Dependency)

3 credits

The family as a complex interactive system is defined in this course. Traditional views of individual pathology will be re-explored and redefined as students come to view substance abuse, mental abuse, and other psycho-social problems as

family problems. Students will think diagnostically about families utilizing theory and various techniques, strategies, and approaches that are relevant to work with families.

HE 160 The Aging Process: Gerontology 3 Credits (Interdisciplinary and Emerging Issues Core)

This course will focus on the physiological, psychological and social changes that impact upon the aging population. In addition the student will be able to discuss concepts and analyze factors relevant to preserving independence in the aged, and meeting the health needs of the aging population. (3 hours weekly)

HE 200 Health/Fitness Leader 3 Credits (Interdisciplinary and Emerging Issues Core)

This class is designed to provide the student who is interested in the wellness field with the knowledge and skills necessary to function as an exercise/fitness leader. The class covers core behavioral objectives set up for the following certifications: American College of Sports Medicine's Exercise Leader, the National Strength and Conditioning's Certified Personal Trainer, and the American Council for Exercise Personal Trainer. Students will be introduced to various aspects of the exercise/fitness field including risk factor evaluation, fitness assessment, exercise prescription, and program development. (3 hours weekly)

HE 211 Nutrition

3 Credits (Interdisciplinary and Emerging Issues Core)

This course focuses on the basic concepts of nutrition and the application of nutritional principles to wellness across the lifespan. Methods will be used to evaluate and meet nutritional norms and include application to weight management. (3 hours weekly)

HE 212 Current Health Issues 3 Credits (Interdisciplinary and Emerging Issues Core)

This course will examine issues and trends relevant to consumer health decisions. Environmental health, the health care system and mental health are topics included in the course. Upon completion of the course the student will be able to identify current consumer health issues related to health of the nation. (3 hours weekly)

HE 213 Stress Management 3 Credits (Interdisciplinary and Emerging Issues Core)

This course is designed to provide the student with the principles and methods necessary to developing a personal stress management plan as well as experience various means of stress reduction and relaxation. The concept of wellness, and the role stress and stress management play in personal wellness development are examined. (3 hours weekly)

HISTORY

HY 111 American History to 1877 3 Credits (History Core/Social and Behavioral Sciences Core)

As a result of having taken this course, the student will be able to describe the major political, diplomatic, economic, and social developments from the fifteenth century through the Reconstruction period. In particular, the student will study the Red, Black and White cultures of pre-Revolutionary America; the American Revolution and the development of American republicanism; the Transportation Revolution and the emergence of a market economy; territorial expansion and wars; 1783-1860; antebellum reformers; Civil War, 1861-1865; Reconstruction, 1865-1877. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

HY 112 American History Since 1877 3 Credits (History Core/Social and Behavioral Sciences Core)

As a result of having taken this course, the student will be able to describe the major political, diplomatic, economic, and social developments in American history from the end of the Reconstruction period to the present. In particular, the student will study: the rise of industrial capitalism, the mechanization of agriculture; the end of the frontier and the wars with the Native-Americans; immigration; urbanization; the changing role of the family; the history of women; the history of Afro-Americans; the political party system; the Populist, Progressive and New Deal reforms; the impact of the New Deal on current domestic politics; and the impact of World War II and the Cold War on American Foreign Policy. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

HY 121 The Ancient World: Prehistory to the Middle Ages

3 credits (History Core/Social and Behavioral Sciences Core)

The student will be able to describe the history and development of early world civilizations through the 13th century. The student will be able to identify and analyze the major political, economic, and intellectual movements that influenced these civilizations. The student will be able to analyze and discuss, from primary and secondary sources, the impact Middle Eastern, Asian, African, and Classical cultures had on Western Civilization. This course was formerly HY 101. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly

HY 122 Western Civilization and the Pre-Modern World

3 credits (History Core/Social and Behavioral Sciences Core)

The student will be able to describe the major features of the development of western civilization and its relationship to non-western cultures from the late Middle Ages to 1815. The course

will include the use of primary and secondary sources to focus on social, economic, political, and cultural factors influencing the relationship of western and non-western societies. Prerequisites: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

HY 123 Western Civilization and the Modern World

3 credits (History Core/Social and Behavioral Sciences Core)

The student will be able to describe the history and development of Western Civilization and its impact on the world from 1815 to the present. The student will identify and analyze the political. economic and intellectual movements that influenced the Western European mind. The student will examine the character of the evolving modern nation state system through the wars of unification, overseas expansion, and the competitive national rivalries. The student will evaluate the underlying factors influencing the events that shaped the modern world, including two World Wars and the Cold War. The student will examine how the post-1945 conditions affect the attitudes and makeup of the former colonial world. This course was formerly HY 102. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

HY 200 History of Maryland 3 Credits

As a result of having taken this course, the student will be able to describe and critically evaluate the major developments in the history of Maryland and Howard County from colonial times to the present. The student will also be able to examine the major primary source materials used in the study of local history. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 201 Europe in the Twentieth Century 3 Credits (Social and Behavioral Sciences Core)

The student will be able to describe the political, economic, intellectual and cultural development

in Europe beginning with the events and conditions that led to the breakdown of European stability and World War I. The student will examine the diplomatic maneuverings of the Peace of Paris and its consequences, the roots and impacts of the Bolshevik Revolution in Russia and the evolution and development of totalitarianism in Germany and Italy. The student will also explain the origins, events, and results of World War II, the Cold War, the collapse of the Soviet Empire, and the quest for a united Europe. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 205 A History of Race and Ethnicity in the United States

3 Credits

This course focuses on a "neglected dimension" in American History and society, namely the study of the diverse racial and ethnic and other non-traditional communities in the United States. The impact of the Anglo-core culture on our political, religious and economic institutions - Democracy, Protestantism, Capitalism - is the major frame of reference. Assimilationist and power conflict sociological models are applied to white, ethnic, Native-American, Afro-American, Hispanic-American and Asian- American groups. Immigration policies and hatred towards diverse groups are studied from historical and contemporary perspectives. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 211 Asian Civilization - China, Japan and Korea

3 Credits (Social and Behavioral Sciences Core)

This study of East Asian history will enable the student to describe the major political, economic, intellectual and cultural developments in the Pacific region from antiquity to the present. The student will concentrate on the events of the Nineteenth and Twentieth Centuries and will develop an understanding of East Asia from the historical perspective of China and Japan rather than from the West. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 213 History of Modern Russia

3 Credits (Social and Behavioral Sciences Core)

The student will be introduced to the history and development of the modern state of Russia from the establishment of the Romanov dynasty through the Revolution of 1917 to Stalin, Perestroika and the collapse of the Soviet Union. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 215 Celtic Ireland

3 Credits

The student will be able to describe the history and development of Ireland from the Celtic settlements to the Cromwellian occupation. The student will be able to evaluate the impact and response of native Irish society and culture to Celtic, Christian, Norse, Anglo-Saxon and British influences. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 220 History and Literature of Victorian and Edwardian Britain

3 Credits

The student will be able to discuss and evaluate the historical and cultural epochs of nineteenth and early twentieth century Britain as expressed through its literature. The student will accomplish these objectives through their studies of the major trends and dominating influences of the romantic movement, the social upheaval of the industrial revolution, the Victorian age of affluence, the era of imperialism, the Edwardian age, and the trauma of the First World War epoch. This cross disciplinary course is a team-taught class. Prerequisite: EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as EG220.

HY 221 American History Since 1945 3 Credits

The student will study the major political, economic, social and cultural trends from the end of World War II to the present. In particular, students will focus on the origins, implementation, and the end of our Cold War foreign policies as well as study changes on the recent domestic

scene such as the imperial Presidency, the welfare state, the technetronic economy, the Black Revolution, Women's Liberation and the evolving social, cultural, and moral landscape. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 225 Women in American History: Colonial Times to 1880

3 credits (Interdisciplinary and Emerging Issues Core)

An in-depth study of the lives and experiences of American women from the early seventeenth century to 1880. This course examines three major cultures—native, African and European as they met and mixed in colonial America with particular attention to women's experience in this cultural mixing. Focus will be on wealthy merchant families, slave holding planter families, indentured servants, slaves, factory workers, and immigrants and will include women's relationships with husbands, children and other women. Prerequisite: EG 101 or EG 111 (3 hours weekly) Note: Also listed as WS 225.

HY 226History of African American Experience 3 credits (Social and Behavioral Sciences Core)

This course will examine the African American experience in the United States from slavery to the present era. The student will study the chronology of black history, the African heritage, the crucible of slavery, the struggle for equality, Pan Africanism, and the development and evolution of the African American community. Special attention will be given to African American personages and their contributions to American society. The evolution of contemporary race relationships will be evaluated. Prerequisite: EG 101 or EG 111. (3 hours weekly)

HY 227Women in American History: 1880 to the Present

3 Credits (Interdisciplinary and Emerging Issues Core)

An in-depth study of the lives and experiences of American women from diverse racial and ethnic

groups from 1880 to the present. This course examines the experiences of women in the modern world from the end of the nineteenth century through the twentieth. Focus will be on the varying experiences of reformers, workers, organizers, and immigrants with particular attention to differences between married and single women and between those living in the cities and those living in rural areas. During this time period, women have gained the legal right to vote and run for office, regulate the size of their families, and receive equal pay for equal work. And yet women retain primary responsibility for house-keeping and child care. This course considers the roots of some of these contradictions. Prerequisite: EG 101 or EG 111. (3 hours weekly) Note: Also listed as WS 227.

HUMAN DEVELOPMENT

HD 100 Introduction to Human Relations 3 Credits

The purpose of this course is to promote personal growth and to improve relationships with others. Skills in active listening and group process will be developed. Students will identify values, strengths and positive life experiences as a means of enhancing self-confidence. The thrust of the class activities and presentations will be directed at personal life, college and on the job situations. The emphasis is on an integration of thoughts and feelings about oneself and others, and expressing feelings and receiving feedback from others. (3 hours weekly).

HD 120 Career Development and Decision Making

3 Credits

The purpose of this course is to provide a setting for students to systematically examine the skills required to make effective career decisions and formulate life goals. Through a process of selfassessment and exploration of career information resources, the student will consider career possibilities and develop a probable career choice. (3 hours weekly)

HD 130 Adult Development 3 Credits

The purpose of this course is to examine the physical, intellectual, emotional and social development of individuals from ages 18 through old age. Students will examine the predictable

and unpredictable life changes throughout adulthood. (3 hours weekly)

HD 150 Scholars Seminar I 1 Credit

This course is a special one credit course for students enrolled in the Rouse Scholars Program. The purpose of this course is to cover selected leadership, group and interpersonal development topics designed to help students explore their personal and leadership attributes. A significant component of the HD 150 also involves career exploration through work with a community mentor.

HD 151 Scholars Seminar II 1 Credit

This course is a special one credit course for students enrolled in the Rouse Scholars Program. The purpose of this course is to extend topics taught in HD 150 and will cover selected leadership, group and interpersonal development topics designed to help students explore their personal and leadership attributes. A significant component of HD 151 also involves career exploration through work with a community mentor.

HD 200 Life Span Development 3 Credits (Interdisciplinary and Emerging Issues Core

The purpose of this course is to examine the growth and development of an individual throughout his/her life. Beginning with the prenatal period and continuing through old age, development from a physical, intellectual, emotional and social perspective will be studied. Theories on development and current research in the

field will be reviewed with an emphasis on application of individual case histories and personal experiences. Prerequisite: Eligible to enroll in EG 101 or EG 111.

HD 250 Scholars Seminar III

1 Credit

This course is a special one credit course for students enrolled in the Rouse Scholars Program. The purpose of this course is to extend topics taught in HD 150 and HD 151. The seminar will cover selected leadership, group and interpersonal development topics designed to help students explore leadership capabilities. A significant component of HD 250 involves applying leadership skills to complete an extended community service project.

HD 251 Scholars Seminar IV 1 Credit

This course is a special one credit course for students enrolled in the Rouse Scholars Program. The purpose of this course is to extend topics taught in HD 250 and will cover selected leadership, group and interpersonal development topics designed to help students explore leadership capabilities. A significant component of HD 250 involves applying leadership skills to complete an extended community service project.

LIFE FITNESS

LF 110 Swimming - Beginning 1 Credit

This course is designed to orient students to the aquatic environment and teach them elementary skills which can be built on as they progress in swimming skills. Students will build on the fundamental aquatic locomotion, safety, and rescue skills as they advance through the course. (2 hours weekly)

LF 112 Lifeguard Training

1 Credit

This course is designed to provide the necessary minimum skills training for a person to qualify as a non-surf lifeguard. This training should be supplemented with training specific to the facility. This course provides ample opportunity for participants to learn and practice new skills, and to build their endurance so that these skills can be accomplished, and the course successfully completed. Prerequisite: persons are eligible who have passed their fifteenth birthday, are in sound physical condition, and can perform a standing front dive in reasonably good form; swim 500 yards continuously using a front crawlstroke, sidestroke, an elementary backstroke and breaststroke: dive from surface to minimum of eight feet and swim 20 feet under water; and tread water for one minute. (2 hours weekly)

LF 113 Water Safety Instructor 1 Credit

This course is designed to train instructor candidates to teach the Infant and Preschool Aquatics Program; the seven levels of the Learn to Swim Program; the Basic Water Safety, Emergency Water Safety, and Water Safety Instructor Aide courses; and, for the eligible individuals, the Safety Training for Swim Coaches course. This course teaches instructor candidates how to use course materials, conduct training sessions, evaluate student progress, and prepare and submit records and reports. Prerequisite: Passed seventeenth birthday and currently certified in advanced lifesaving. (2 hours weekly)

LF 114 Basic Scuba

1 Credit

This course is designed for the novice skin and scuba diving enthusiast. Emphasis is placed on physical conditioning, perfection of essential skills, and study of the physics and physiology of diving. Also, external hazards of diving and care and maintenance of equipment are studied. All course activities take place in the classroom and pool of Howard Community College. Prerequisite:

Minimum age for participation is 12 years. If under 16 years of age, must register for the course with an adult. Pass a Watermanship Skills Test. (2 hours weekly)

LF 115 Intermediate Scuba

1 Credit

Students will perfect skills in emergency ascents, maintenance of equipment and boat diving; they will learn intermediate techniques such as underwater navigation, diving with limited visibility and night diving. Course activities take place in the classroom and pool of Howard Community College and consist of lectures, exercises, pool sessions and conditioning. Prerequisite: completion of a basic SCUBA course. (2 hours weekly)

LF 116Fitness through Swimming

1 Credit

This course is designed to provide the student with an introduction to swimming and aquatic activities as a means of fitness development and maintenance. In addition to pool sessions, the student will be presented with a series of lectures designed to present to them the basic concepts of fitness development in general, as well as how they relate specifically to swimming. The student will also have the opportunity to learn the techniques and skills involved in snorkeling. Prerequisite: Swim 25-yards, non-stop, using any of the standard swimming strokes. (2 hours weekly)

LF 117 Aquafit

1 Credit

Aquafit is a vertical water fitness program designed to improve cardiorespiratory endurance, muscular strength, and flexibility of participants. The course will help the student increase fitness level, improve muscle tone, and look and feel better. Aquafit will be individualized to fit each student's fitness level and swimming ability. (2 hours weekly)

LF 120 Aerobic Dance

1 Credit

This course is designed to provide continuous movement through exercise and dance routines.

Emphasis will be placed on the physiological benefits of aerobic dance. The course will provide students with the opportunity to maintain an intermediate level of cardiovascular fitness. (2 hours weekly)

LF 123 Step Aerobics

1 Credit

This course will introduce you to the fundamentals of Step Aerobics, including information on the science, technique and footwork. Exploration of the "physiological" effects and "biomechanical" effects will be covered. There is no prerequisite for this course. (2 hours weekly)

LF 124 Conditioning

1 Credit

This course is designed to help students develop an understanding of conditioning techniques through weight training and endurance training. Students will be exposed to exercise bikes, the universal gym and jogging techniques. Specific exercises will be recommended for the development of a personal conditioning program. (2 hours weekly)

LF 125 Golf

1 Credit

This course is designed to introduce the student to the various aspects of golf. The use of the different types of clubs including the various woods and irons. Proper stroke and putting skills will also be covered. Scoring, course etiquette, and golfing safety will be covered. Students will receive instruction and playing time on a regulation golf course. (2 hours weekly)

LF 127 Tai Chi

1 Credit

This course is designed to provide the students with a knowledge and ability to perform the ancient Chinese martial art Tai Chi. The health aspects of Tai Chi practice will be emphasized. Students will also be presented with the history and philosophy of Tai Chi. (2 hours weekly)

LF 128 Martial Arts I

1 Credit

This course is designed to provide the student with an understanding of the martial arts of the World. Students will be presented with and practice, in class, the Indonesian martial art of Pentjak Silat. This form of martial art involves the use of hand strikes, kicking, elbowing, takedowns, throws, and locks. The historical and cultural basis of various martial arts in general, as well as Pentjak Silat specifically, will be presented. (2 hours weekly)

LF 129 Self Defense

1 Credit

This course is designed to introduce the student to the principles and concepts of personal safety and self defense. The theories, strategies, and techniques of the Burmese martial art of Bando will form the base used to develop physical self-defense competency. Development of self-protective awareness will be emphasized. The philosophy, history, legality, and psychology of self defense will be presented. (2 hours weekly)

LF 130 Skiing

1 Credit

This course will enable students to learn and/or improve skiing skills such as snowplow, traverse maneuver, side slip, pole plant, rebound turns, step turns, parallel turns, and proper recovery from falls. In addition, instruction will be given on the proper selection and care of equipment. The practical application of skills will be conducted at selected ski resorts. This course is designed for beginner, intermediate, and advanced skiers. (2 hours weekly)

LF 133 Tennis - Beginning

1 Credit

This course is designed to provide students who have never participated in, or have had limited formal instruction in, the sport of tennis. Students will be taught the various tennis strokes, as well as the rules, etiquette, and strategies for playing tennis. (2 hours weekly)

LF 134 Tennis - Intermediate

1 Credit

This course is designed to provide the student with the opportunity to develop advanced stroke techniques as well as advanced player strategies for both singles and doubles play. Instruction will include advanced drills and alternate scoring methods, and singles and doubles tournament play. It is assumed that students in this course have previous experience in playing tennis. (2 hours weekly)

LF 135 Volleyball

1 Credit

This course is designed to provide the student the knowledge and basic skills of the recreational sport of volleyball. Students will receive instruction on the proper execution of the set, bump, serve and block. In addition, the history, rules, and various, offensive and defensive strategies of game play will be stressed. (2 hours weekly)

LF 137 Circuit Weight Training

1 Credit

This course is designed to improve muscle strength/endurance and cardiovascular fitness through participation in weight training and aerobic activities. (2 hours weekly)

LF 139 Intermediate Golf

1 Credit

This course is designed to inform the student of the proper etiquette and safety on the course, basic rules of play, understanding the procedures of playing a golf course, reading a score card, handicapping and types of matches. Students will be instructed in putting, chipping, use of short and long irons and woods. Emphasis will be placed on the procedures of playing golf and how to practice. Prerequisite: It is assumed that students in this course have previous experience in playing golf. (2 hours weekly)

LF 151 Introduction to Outdoor Survival Skills 2 Credits

This course is designed to help students develop outdoor survival skills and increase their envi-

ronmental awareness. At the completion of the course, the student will be aware of concepts relating to creative use of leisure time in outdoor recreation, wilderness survival skills, natural disaster survival skills and environmental awareness. In addition, each student will be able to demonstrate essential wilderness survival skills and participate in a wilderness exploration. (3 hours weekly)

LF 177 Rock Climbing 1 Credit

The purpose of this course is for the individual to learn the basic skills of top rope rock climbing. This course is designed to provide the student with the principles and methods necessary to maintaining personal fitness and health. The concept of wellness, and the roles of physical fitness, nutrition, weight management, and stress play in personal wellness development are examined. Participation in labs, classroom activities, and take-home assignments will assist the student in evaluating their personal fitness levels as well as developing a strategy for improvement. (2 hours weekly)

LF 202 Nautilus Fitness Development 2 Credits

This course is designed to provide the student with the knowledge and skills necessary to participate in Nautilus weight training. Students will learn to develop and implement personal Nautilus training programs based on the principles and procedures learned in class. The student will also receive instruction in related areas including basic anatomy and physiology as it relates to Nautilus training, nutrition, stress, relaxation, and safety concepts. (2 hours weekly)

MANAGEMENT

MN 101 Sales and Sales Management 3 Credits

The student will have an understanding of the sales process from preparation through the follow-up stage. The student will be able to demonstrate the skills of a sales presentation. From a sales management perspective, the student will be able to recruit, select and train a sales force. The student will be able to motivate and compensate a sales force and organize the force for effective operation. The student will be able to evaluate, supervise and communicate with the sales staff. (3 hours weekly)

MN 102 Small Business Management 3 Credits

Students will have an understanding of the major problems they will face and the pitfalls they must avoid if success is to be assured in the management/ownership of a small business. The student will be able to identify those factors critical in making small business decisions. The student will be able to plan, organize and lead small business operations. The student will develop skill in analyzing management problems and controlling them. (3 hours weekly)

MN 131 Supervisory Development 3 Credits

Through this course, the student will develop a successful supervision in business, industry and government. Emphasis in MN 131 is on the understanding and demonstration of basic supervisory concepts as they relate to motivating individuals, maintaining group morale, building loyalty, and interpretation of attitude and supervisor/employee relations. Also, fundamental skill development will include activities in leadership, goal setting, decision making, individual and group communication, performance appraisal, time management, and assertiveness training. (3 hours weekly)

MN 140 Principles of Management

This course will enable the student to identify and describe the major functions of management which include planning, organizing, leading and controlling. The student will also participate in individual and group activities which will provide practice in exercising these functions. Within this

framework the student will be able to describe and apply the concepts of major contributors to the field of management such as Drucker, Hertzberg, McGregor, McClelland, Maslow, Deming and Crosby. (3 hours weekly)

MN 200 Management 2000: Managing for the Future

3 Credits

This course addresses a growing interest on the part of those in management to develop a more efficient workplace, where new communication media and different management skills will need to be utilized. Demographics of a changing labor force and of a changing customer base will be analyzed. The implications for managers as a result of these changes will be explored. Various trends in collecting, analyzing and disseminating information on a domestic as well as a global environment will be analyzed. Prerequisite: BU 100 or MN 140 or management experience. (3 hours weekly)

MN 240 Personnel Management 3 Credits

Management concepts are focused on the human element in business enterprises using lectures, videos, case studies and class discussions. Specific topics include employment, employee motivation, training, human relations and employee representation. Techniques of supervision will be emphasized. Prerequisite: BU 100. (3 hours weekly)

MN 241 Project Management 3 Credits

As a result of taking this course, the student will be able to estimate the time, manpower needs and equipment costs for the life cycle of a project. The student will be able to utilize various planrelationships of the industry to the audience, advertisers, and government regulators. Prerequisite: EG 101 or EG 111. (3 hours weekly)

MASS MEDIA

MM 129 Mass Media

3 Credits

The major forms of mass media are studied both historically and in their present forms. Emphasis is on the effects of radio, television, and film in our society. Eligible to enroll in EG 101 OR EG 111. (3 hours weekly)

MM 220 Introduction to Broadcasting

This course is a survey and introduction that concentrates on the historical development, scope, and influence of radio and television in America. Discussion in the course will focus on the philosophy, structure, organization and operation of the broadcasting medium, and will acquaint students with the inter-relationships of the industry to the audience, advertisers, and government regulators. Prerequisite: EG 101 or EG 111. (3 hours weekly)

MM 221 Writing for Television and Radio 3 Credits

This course focuses on a basic approach to the different kinds of writing done for all types of television and radio programs. Students enrolled in this class will learn to write using standard and accepted broadcast script formats. Treatments, drafts and full scripts for a variety of program types will be explored in this class. Prerequisite: EG 101 or EG 111. (3 hours weekly)

MATHEMATICS

MA 060 Basic Mathematics

2 Credits

In this course students will improve their arithmetic skills as well as their ability to solve applications of arithmetic. The subject areas will be addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and integers. Also included are factoring numbers into

the products of primes; conversion between decimals, fractions and percents; ratio and proportion problems; place value and least common multiples. The use of a scientific calculator as a problem solving tool is also taught. Prerequisites: Appropriate score on math placement test; and EG093 or appropriate score on the English placement test. (2 hours weekly)

MA 061 Basic Algebra & Geometry 4 Credits

In this course students will be introduced to algebraic topics such as working with integers, simplifying numeric expressions with exponents, combining similar terms, multiplying polynomials and evaluating algebraic expressions. They will learn to distinguish among examples of the commutative, associative and distributive properties. Students will solve first degree equations, solve and graph linear inequalities, graph lines and investigate slope, point-slope and the x- and y- intercepts. They will become familiar with elementary topics in geometry such as basic definitions and classification of triangles and quadrilaterals. Application problems will include perimeter, area, and angle measurement. Prerequisites: MA060 or appropriate score on the math placement test; and EG093 or appropriate score on the English placement test. (4 hours weekly)

MA 064 Integrated Algebra and Geometry I (3 Credits)

In this course students will develop skills in manipulating algebraic expressions with integer exponents and in simplifying polynomials and rational expressions. Systems of equations will be solved graphically and algebraically. The student will become familiar with geometric terms associated with prisms and solve application problems involving those figures. Methods of factoring second degree polynomials will be emphasized. Factoring applications will also be included. The ability to solve equations will be expanded to include rational expressions and factorable quadratics. Prerequisite: MA061 or appropriate score on the math placement test. (3 hours weekly)

MA 065 Integrated Algebra and Geometry II (2 credits)

In this course students will extend basic algebraic skills to include simplifying, performing operation with, and solving equations involving square roots. The quadratic formula as a method for solving quadratic equations will be presented. Application problems will include use of the Theorem of Pythagoras and 30-60-90 and 45-45-90 triangles. Prerequisite: MA064 (2 hours weekly)

MA 064/065 Integrated Algebra &Geometry I, II 5 Credits (3, 2)

In this course students will develop skills in manipulating algebraic expressions with integer exponents and in simplifying polynomials, rational expressions and square roots. Systems of equations will be solved graphically and algebraically. The student will become familiar with geometric terms associated with prisms and solve application problems involving those figures. Methods of factoring second degree polynomials will be emphasized. Applications involving factoring will also be included. The ability to solve equations will be expanded to include rational expressions, radicals, and quadratic equations. The quadratic formula will be introduced. Application problems will include 30-60-90 and 45-45-90 triangles. Prerequisite: MA061 or appropriate score on the math placement test. (5 hours weekly)

MA 070 Intermediate Algebra

3 Credits

The emphasis of this course is on using algebraic and graphical techniques to model and solve real world application problems. The use of a graphing calculator is required. Topics will include functions, absolute value equations, rational equations (both linear and quadratic), exponential equations, radical equations, linear and nonlinear systems, complex numbers, right triangle trigonometry, and an introduction to probability and statistics. Prerequisite: MA065 or appropriate score on math placement test. (4 hours weekly)

MA 105 Drug Calculations 1 Credit

Students will develop skills in the metric, apothecary and household systems of measurement. Drug calculation problems will provide the student with the opportunity to practice conversions between systems. Prerequisite: MA 060 or appropriate score on math placement test. (2 hours weekly for 7 weeks)

MA 108 Business Math 3 Credits

In this course, students will develop skills in the practical applications of arithmetic and mathematical concepts appropriate to the various occupational programs in business. The student will develop the ability to work with percentages, proportions, ratios, tables, charts, graphs, and the scientific calculator, in the solution of business problems. The student will also be able to represent data by the use of basic statistical measures. This learning program will also acquaint students with some of the terminology of business and some of the ways in which they can benefit as consumers by an increased awareness of simple business mathematics. Prerequisite: MA 061 or appropriate score on math placement test. (3 hours weekly)

MA 122 Ideas in Mathematics 3 Credits (Mathematics Core)

In this course, students will study dimensional analysis, learn the language of sets and Venn Diagrams, be introduced to probability and counting theory, approximate the value of a binomial using the normal curve, and be shown how to apply these skills to various real-life problems. This course is intended for students who do not plan to major in math or the sciences. A scientific calculator is required. Prerequisite: MA 070 or appropriate score on math placement test. (3 hours weekly)

MA 124 Technical Math

4 Credits (Mathematics Core)

Students will develop skills dealing with functions and graphs, systems of linear equations,

quadratic equations, vectors, exponents and radicals, complex numbers, and trigonometric, exponential and logarithmic functions. Problem solving using technology applications will be an integral part of the course. The use of a graphing calculator is required. Prerequisite: MA 070 or appropriate score on math placement test. (4 hours weekly)

MA 127 Concepts of Mathematics I 4 Credits (Mathematics Core)

This course is primarily for students in the elementary education and early childhood education programs. Students will study the structural aspects of mathematics and the "why" of arithmetical computations. Topics include sets, functions, logic, numeration systems, algorithms and their historical development, estimation, mental computations, and elementary number theory. Special emphasis is given throughout the course to problem solving techniques. Appropriate use of computers and calculators will be integrated into the course. Prerequisite: C or better in MA 070 or appropriate math placement score.

MA 128 Concepts of Mathematics II 4 Credits (Mathematics Core)

This course is the second course in a sequence intended primarily for students in the elementary and early childhood education programs. Topics include statistics probability, metric and non-metric geometry, dimensional analysis, congruence and similarity, and coordinate and transformational geometry. Special emphasis is given throughout the course on problem-solving techniques including the appropriate use of calculators and computers. Prerequsite: C or better in MA 070 or appropriate math placement score. (Concepts I, II may be taken in either order but sequential order is recommended.)

MA 131 College Algebra

3 Credits (Mathematics Core)

In this course, students will develop additional skills in algebra and new skills in the complex number system. Non-linear inequalities, polynomials, logarithms, exponentials, functions and

their inverses will be discussed. In addition, students will be able to graph both the basic and special math functions to include translation, reflection, etc. Students will also be able to find the roots of polynomial equations. The use of a graphing calculator is required. Prerequisite: MA 070 or appropriate score on math placement test. (3 hours weekly)

MA 133 College Trigonometry

3 Credits (Mathematics Core)

In this course, the student will develop skills in the complex number system, solving systems of equations, trigonometry, and analytic geometry. Areas covered in trigonometry will be the basic definitions, reference angles, radian and degree measurement, the laws of sines and cosines, trigonometric identities, and the solution of trigonometric equations. Graphing will include trig and inverse trig functions which may have an amplitude, period and/or phase shift. Also included will be conics, series and sequences. The use of a graphing calculator will be required throughout the course. Prerequisite: MA 131 or appropriate score on math placement test or equivalent. (3 hours weekly)

MA 135 Precalculus

5 Credits (Mathematics Core)

In this course, students will develop skills in the analysis and the synthesis of mathematical concepts and procedures. The course will discuss the areas of inequalities, polynomials, logarithms, exponentials, trigonometrics and conics. The student will use the complex number system and the trigonometric form of complex numbers to solve truth sets and the cartesian coordinate system to graph relations and functions. In addition, non-linear systems of equations will be solved. Applications may include maximum and minimum problems and problems whose solutions require exponential and logarithmic equations. Exposure will be given to mathematical induction, the binomial theorem, series and sequences. The use of a graphing calculator will be required throughout the course. Not open to students who have completed MA 133. Prerequisite:

Appropriate score on math placement test or equivalent. (5 hours weekly)

MA 140 Calculus I

4 Credits (Mathematics Core)

In this course, students will develop skills in the initial content of both differential and integral calculus. Students will be able to find limits of functions, be exposed to the epsilon-delta process, and learn about continuous and discontinuous functions. They will be able to find derivatives and integrals of both polynomial, rational, radical, trigonometric, exponential and logarithmic functions. This includes the chain rule, the rules dealing with operations, and u-substitution for both definite and indefinite integrals. Applications dealing with maximum, minimum, velocity, acceleration, cost and profit will be presented. Graphing (asymptotes, increasing, decreasing, concavity, maximum, minimum) will also be discussed. Theorems used in the class will include the mean-value theorem for derivatives and integrals, the squeeze theorem and the fundamental theorem of calculus. Implicit differentiation, differentials and summations of area will be used when appropriate. A graphing calculator is recommended. The use of a computer algebra system will be an integral part of the course. Prerequisite: MA 135 or MA 133 or equivalent. (4 hours weekly)

MA 145 Business Calculus

3 Credits (Mathematics Core)

In this course, students will develop skills in the initial content of both differential and integral calculus. Students will be able to find limits of functions and learn about continuous and discontinuous functions. They will be able to find derivatives and integral of polynomial, rational, radical, exponential, logarithmic and some special functions. They will use the chain rule and the rules dealing with operations in finding derivatives and u-substitution in finding definite and indefinite integrals. Applications dealing with optimization, related rate, revenue, cost, profit, supply and demand and areas will be presented. Graphing functions will be an integral part of the

course and will contain a discussion of asymptotes, increasing, decreasing, concavity, maximum and minimum. Theorems will be used in the class to justify and explain the concepts. Some of the theorems may include the mean-value theorem for derivatives and integrals, and the fundamental theorems of calculus. Implicit differentiation and differentials will be used when appropriate. Students will use the computer algebra system, DERIVE, and/or spreadhseets to complete projects. Prerequisite: MA 131 or equivalent. (3 hours weekly)

MA 150 Calculus II

4 Credits (Mathematics Core)

In this course, students will develop additional skills in calculus (see MA 140 and MA 240). Derivatives and integrals are extended to hyperbolics, inverse trig, inverse hyperbolics, and power series. Integration techniques taught include parts, partial fractions, trigonometric substitution and u-substitution. Limits are supplemented with L'Hopital's rule. Convergent and divergent integrals are discussed in the class. Applications deal with area bounded by curves, work, volume by rotating and slicing, surface area, arc length, and force. Numerical techniques of integration are briefly discussed. Infinite series material covers both sequences and series, convergence and divergence of alternating, power, Taylor and MacLaurin series. In addition, it will include polar and parametric equations. A graphing calculator is recommended. The use of a computer algebra system will be an integral part of the course. Prerequisite: MA 140 or equivalent. (4 hours weekly)

MA 186 Introductory Numerical Analysis 3 Credits (Mathematics Core)

In this course, students will develop skills necessary to design and implement algorithms to solve problems using digital computers. The FORTRAN or an equivalent language will be used to program solutions to these problems. Techniques will include data input and storage, selection of relevant numerical and non-numerical methods for problem solution, and the efficient ordering

of data for meaningful output presentation. Some problems will be fundamental to engineering design, but non-engineers interested in numerical analysis methods along with the construction and description of effective procedures to solve the problem should gain knowledge which can be used in their respective fields of interest. Prerequisite: MA 150 and CS 135 or equivalent. (2 hours lecture, 2 hours lab)

MA 200 Statistics

3 Credits (Mathematics Core)

In this course, students will develop the skills necessary to examine basic statistical terminology; develop pictorial and analytical distributions; and use statistics tables, a calclator, and a computer to calculate measures of central location and measures of variation. The student will additionally examine the normal distribution, correlation, and regression analysis, sampling, testing hypotheses (including parametric and nonparametric methods), the chi square test, and probability related to statistics. The use of a graphing calculator is strongly recommended. Prerequisite: MA 122 or higher. (3 hours weekly)

MA 220 Discrete Structures

3 Credits (Mathematics Core)

Upon completion of this course, the student will develop skills in fundamental mathemtical concepts related to computer science. The course will discuss the areas of finite and infinte sets, relations, functions, propositional logic, permutations, combinations, proof techniques, graphs, and trees with selected applications. Prerequisite: MA 133 or MA 135. Co-requisite: MA 140. (3 hours weekly)

MA 240 Calculus III

4 Credits (Mathematics Core)

In this course, students will develop the skills necessary to conclude the calculus sequence. It contains vector calculus in both two and three dimensional space along with the classical theorems of Green, Stokes and Gauss. It will also include a discussion of partial derivatives and multiple integrals along with a number of appro-

priate applications. A graphing calculator is recommended. The use of a computer algebra system will be an integral part of the course. Prerequisite: MA 150 or equivalent. (4 hours weekly)

MA 250 Linear Algebra

4 Credits (Mathematics Core)

In this course, students will develop skills in the basic concepts of linear algebra. These skills will cover areas such as vector spaces, applications to line and plane geometry, linear equations and matrices, similar matrices, linear transformations, eigenvalues, function spaces, determinants, and quadratic forms and complex vector spaces. Prerequisite: MA 150 or equivalent. (4 hours weekly)

MA 260 Differential Equations

3 Credits (Mathematics Core)

In this course, students will develop the skills necessary to use the basic methods of solving differential equations. The student will be asked to solve linear and specific non-linear differential equations. The Laplace transform, power series solutions and undetermined coefficients will be included. Prerequisite: MA 240 or equivalent. (3 hours weekly)

MICROSOFT

MS 578 Networking Essentials 3 Credits

This course serves as a general introduction for students who need a foundation in current networking technology for local area networks (LANs), wide area networks (WANs), and the internet. Students will learn to identify the components of a LAN, distinguish network topologies, communication media, standards, protocols, resources, internet components, and operating system features, and learn to determine how to implement and support the major networking components. Prerequisite: CS 219 (3 hours weekly)

MS 688 Internetworking Microsoft TCP/IP on MS Windows NT 4.0

3 Credits

This course is intended for network integrators, system engineers, and support professionals who implement and support Transmission Control Protocol/Internet Protocol (TCP/IP) in local (LAN) and wide-area network (WAN) environments, and provides the student with the knowledge and skills required to install, configure, use, and support Microsoft TCP/IP on Microsoft Windows NT operating system version 4.0. Prerequisite: MS 687 or MS 922. (3 hours lecture, 1 hour lab)

MS 689 Supporting Microsoft Windows NT 4.0 Enterprise

3 Credits

This course provides the core foundation for supporting MS Windows NT 4.0 operating system in a complex environment such as capacity planning on a server and a network, multiple domain management, and trust relationships. Students should be familiar with NT 4.0 administration concepts, DOS, microcomputer concepts, and Windows 95. Prerequisite: MS 687 or MS 922.

MS 771 Implementing and SupportingMicrosoft Exchange 5.0

3 Credits

This course provides an introduction to the core technologies of Microsoft Exchange Server, preparing students to plan, implement and administer Microsoft Exchange in a single-site environment. Knowledge of the X.400 Messaging Standard and the X.500 Directory Service Standard is recommended. Prerequisite: MS 687 or MS 922.

MS 798 Updated Implementing and Supporting Microsoft Windows 95

3 Credits

This course helps students gain the knowledge and skills needed to support Microsoft Windows 95. These skills include installation, configuration, customization, optimization, network integration, administration, troubleshooting,

messaging, and other support issues. Prerequisite: CS 219. (3 hours lecture, 1 hour lab)

MS 803 Administering Microsoft Windows NT 4.0

3 Credits

This course teaches network administrators how to perform day-to-day administrative and maintenance tasks such as setting up and administering user and group accounts, securing network resources, setting up and administering network printers, auditing and monitoring network resources and events, and backing up and restoring data on a Windows NT 4.0-based network. Prerequisite: CS 219.

MS 867 Updated System Administration for Microsoft SQL Server 6.5

3 Credits

This course provides students with the knowledge and skills required to install, configure, administer and troubleshoot Microsoft SQL Server client/server database management system version 6.5 Prerequisite: MS 687 or MS 659 or MS 922. (3 hours lecture, 1 hour lab)

MS 872 Microsoft Visual Basic 5 Fundamentals 3 Credits

This course provides necessary intermediate-level skills to developers new to Microsoft Windows based programming. Students will learn to write solid event driven code, create stand-alone multiform applications, create an effective interface, and to access and modify a database. Prerequisite: CS 180 or CS 140. (3 hours weekly)

MS 922 Updated Supporting Microsoft Windows NT 4.0 Core Technologies 3 Credits

This course provides the core foundation for supporting Microsoft Windows NT operating system version 4.0. The goal of this course is to provide support professionals with the skills necessary to install, configure, customize, optimize, network, integrate, and troubleshoot Windows NT 4.0. Prerequisite: MS 803. (3 hours lecture, 1 hour lab)

MUSIC

MU 100Fundamentals of Music

3 Credits (Fine Arts/Humanities Core)

Primary concepts of note reading, rhythm, scales, key signatures and intervals will be studied. Fundamental keyboard, melodic and rhythmic dictation will be practiced. This class is an introduction to beginning concepts of music theory and is intended for that student wishing to study music theory, but who has a limited knowledge or background. (3 hours weekly)

MU 101Music Appreciation

3 Credits (Fine Arts/Humanities Core)

An introduction to musical elements, forms and stylistic periods from the Middle Ages to rock music of today. While concentrating primarily on Western Art Music and its representative composers, the course also touches on the increasing importance of different forms of popular music in the last century and its roots in various ethnic musical expression. Attention will also be given to historical events, sociological influences and encounters with non-European cultures within each historical period and their effect on musical development. This course is designed for the non-music major. (3 hours weekly)

MU 102A Survey of Music Literature

3 Credits (Fine Arts/Humanities Core)

An in-depth study of the evolution of Western music through a chronological presentation of master composers and their works. Emphasis will be given o the study of form and analysis, recognition and identification of the characteristics of stylistic periods, as well as individual research concerning the cultural context of various compositions. This course is recommended for he music major after completion of MU 110. (3 hours weekly

MU 103The Business of Music

3 Credits

This course is designed to be a study of the field of music as a continually changing and dynamic

commercial profession. It is designed to aid the performer as well as the "moonlighter" and the music hobbyist in their interaction with the "business" of music. The student will interact with professionals in the music and arts fields. (3 hours weekly)

MU 107 American Popular Music 3 Credits

This course offers a panoramic view of the history of American popular music from 1875 to the present. Upon completion of this course the student will be able to identify and discuss each of the following aspects of American popular music: specific styles and style periods, pivotal compositions and composers, ethnic traditions which have been major contributors in the development and evolution of popular music, song forms and their contribution to style period development, influences on American history, and historical influences on popular music. (3 hours weekly)

MU 108 African-American Music 3 Credits (Humanities Core)

This course will examine the heritage of African American music from the colonial era through the jazz age to the present. Upon completion of this course the student will be able to identify the characteristic elements of African music, trace the development of the major idioms such as religious and ragtime music, identify important African-American composers and performers, and articulate the role of African-American music in ritual and ceremony, as transmitter of culture and as a social and political tool. (3 hours weekly)

MU 109 Techniques of Electronic and Computer Music

3 Credits

An introduction to the techniques of electronic music production. Students will be exposed to the principles of sound synthesis with an emphasis on computer control via the Music Digital Interface Standard (MIDI). Various software programs for the direct programming of synthesizers and sequencing of music will be utilized. Audio recording production techniques will be employed

by students in the realization of final projects. Each student will have a two-hour lab period per week. Prerequisite: MU 110. (4 hours weekly)

MU 110 Music Theory I

4 Credits

Theory I is an introduction to the theory of music. It offers an integrated approach that combines written work, knowledge of the keyboard, and sight singing. The student will develop knowledge and understanding of the fundamentals of music including musical acoustics, notation of rhythm and major and minor scales, form in melody, basic introduction to harmony, including intervals, chords and their inversions; the writing of four-part harmony; sight reading, melodic, harmonic, and rhythmic structures. (4 hours weekly)

MU 111 Music Theory II 4 Credits

This course continues the integrated approach introduced in Theory I. Selected topics include functional harmony, harmonic spacing and doubling, chord connection, cadences, modulating, seventh chords, melody and bass writing. The practice of sight singing, rhythm reading and melodic dictation will be continued. Prerequisite: MU 110. (4 hours weekly)

MU 112 Applied Music (Non-Music Majors) 2 Credits

Individual instruction for pre college or personal enrichment. (1 one-hour lesson per week)

MU 113 Applied Music (Non-Music Majors)

1 Credit

Individual instruction for pre-college or personal enrichment. (1 half-hour lesson per week)

MU 117 Applied Music I

2 Credits

First semester of private college level music study. Required for music major. (1 one-hour lesson per week)

MU 118 Applied Music II 2 Credits

Second semester of private college level music study. Required for music major. (1 one-hour lesson per week)

MU 119 Applied Music 1 Credit

First semester of private college level study. (1 half-hour lesson per week)

MU 120 Applied Music 1 Credit

Second semester of private college level study. (1 half-hour lesson per week)

MU 130 Chorus (Major Ensemble) 1 Credit

Chorus is a vocal performing ensemble which will explore traditional and contemporary choral literature through the medium of performance. (3 hours weekly) (This course may be repeated for a total of four credits.)

MU 140 Chamber Singers (Minor Ensemble) 1 Credit

Chamber Singers is a small vocal ensemble which performs traditional and contemporary small vocal ensemble literature. (2 hours weekly)

MU 150 Jazz Ensemble (Major Ensemble) 1 Credit

Jazz Ensemble is a performance oriented course which will explore different styles of jazz, such as swing, be-bop and fusion. (3 hours weekly)

MU 170 Guitar Ensemble (Minor Ensemble) 1 Credit

Guitar Ensemble performs traditional and contemporary literature. (2 hours weekly)

MU 180 Specialized Ensemble (Major) 1 Credit

Specialized ensembles will be created as need demands. (2 hours weekly)

MU 191 Class Voice I 2 Credits

Upon successful completion of this course, the student will have a basic understanding of the vocal function in singing. He/she will begin to learn the principles of reading music at sight. The main focus of this course is the technical development of the singing voice through exercise and song. The skills acquired in the class will serve as a foundation for more in-depth vocal study on the private level. (2 hours weekly)

MU 192 Class Voice II

2 Credits

Class Voice II will be a continuation of Class Voice I. Prerequisite: MU 191. (2 hours weekly)

MU 193 Class Piano I

2 Credits

This course offers the student an opportunity to learn the basic principles of piano playing. Beginning with note reading, it progresses to sight reading, technical exercises to aid in the development of skills used in playing of instrument, and the addition of beginning piano repertoire. This class will also serve as a foundation for more in-depth study on the private level. (3 hours weekly

MU 194 Class Piano II

2 Credits

Class Piano II will be a continuation of Class Piano I. Prerequisite: MU 193. (3 hours weekly)

MU 195 Class Guitar I

2 Credits

Upon successful completion of this course, the student will learn to read music and be able to play the guitar. A practical "hands-on" approach with emphasis on ensemble music reading and individual development is used. The main focus will be the discipline of classical guitar. Some instruction will be offered in other forms of guitar music. The acquired skills will serve as a foundation for further exploration and enjoyment of the instrument. (3 hours weekly)

MU 196 Class Guitar II 2 Credits

This course is a continuation of Class Guitar I. Prerequisite: MU 195. (3 hours weekly)

MU 210 Music Theory III 4 Credits

Theory III will build on the concepts of analysis and writing studied in MU 111. The student will develop knowledge and understanding of advanced tonal analysis, altered non-harmonic tones and secondary dominants, augmented and Neapolitan sixth chords, foreign modulations and extended chords. The study of form will be included through chosen examples. The practice of sight singing, rhythm reading and melodic dictation will be continued. Prerequisite: MU 111. (4 hours weekly)

MU 211 Music Theory IV

4 Credits

Theory IV will continue the study of harmonic concepts pursued in MU 210. The student will develop further knowledge and understanding of foreign modulations, extended chords, chromaticism, non-diatonic music and form through the study of the music of late nineteenth and twentieth century. An introduction to late Renaissance polyphony and eighteenth century counterpoint will also be included. The practice of sight singing, rhythm reading and melodic dictation will be continued. Prerequisite: MU 210. (4 hours weekly)

MU 217 Applied Music III

2 Credits

Third semester of individual college level music study. Required for music major. (1 one-hour lesson per week)

MU 218 Applied Music IV

2 Credits

Fourth semester of individual college level music study. Required for music major. (1 one-hour lesson per week)

MU 219 Applied Music

1 Credit

Third semester of individual study program. (1 half-hour lesson per week)

MU 220 Applied Music

1 Credit

Fourth semester of individual study program. (1 half-hour lesson per week)

NOVELL

NT 200 Networking Technologies

3 Credits

In this course, students will develop a technical level of understanding in the areas of mainframe networking connectivity, data communication concepts and data communication protocols. This course will provide a technical foundation for students pursuing CNE (Certified Novell Engineer) certification. Students must have a thorough knowledge of DOS and microcomputers prior to registration. Prerequisites: NT 508 or NT 520. (4 hours lecture)

NT 520 NetWare v 4.x System Manager 3 Credits

In this course students will gain first hand experience with routine management tasks that will be required of them as a network administrator. Topics include network configuration, file and directory configuration, network security, backup and recovery system, print server, printer, print queue, and automation. Prerequisite: CS 219 (working knowledge of DOS, WINDOWS, mouse and general knowledge of micro computer hardware). (2 hours lecture, 2 hours lab)

NT 525 NetWare v 4.x Advanced System Manager

3 Credits

This course teaches students experienced with NetWare 4.x administration the skills and knowledge necessary to oversee a complex enterprise network. Topics include planning and implement-

ing Novell Directory Services (NDS), enhancing network security, auditing capabilities, printing on a complex network, backup systems and considerations, client management, and performonitoring optimization. mance and Administration tasks covered in the course include installing NetWare 4.x servers, performing basic workstation skills, configuring basic network resources, creating an effective security system, setting up network printing and creating workstation automation. When the student completes this course, the student will receive a certificate of completion for Novell courses 525 and 804. Prerequisite: NT 520. (2 hours lecture, 2 hours lab)

NT 526 NetWare v 3.x to 4.x Update 3 Credits

This course introduces to students experienced with the NetWare 3.x operating system the new features and functionality of NetWare 4.x. A major focus of the course is on Novell Directory Services. It also covers new utilities, utility changes, an overview of the auditing capabilities, and installation and upgrade procedures. Prerequisite: NT 515 or NT 518 (working knowledge of MS-WINDOWS, mouse. (2 hours lecture, 2 hours lab)

NT 532 NetWare 4 Directory Services Design 3 Credits

This course teaches the knowledge and skills NetWare 4 administrators need to design both workgroup-wide and enterprise-wide networks. The course examines the steps to follow and guidelines to consider in designing and implementing a NetWare 4.x network. Prerequisite: NT 525 or NT 526.

NT 540 Building Intranets with IntranetWare 3 Credits

This course is designed to provide students with the necessary skills to implement the web services components of IntranetWare. Students will receive step-by-step instruction on how to incorporate an Intranet on their existing Novell network, including the implementation of Multi protocol Router (IPX/IP Gateway), Novell Web Server and Novell FTP services. Most important, students will learn how to design an Intranet that provides real-world business solutions. Prerequisite: NT 525. (2 hours lecture, 2 hours lab)

NT 605 NetWare TCP/IP Transport

This course introduces to students experienced with NetWare 4.x network administration the features and benefits of Novell's TCP/IP software. Students will install the software on a NetWare file server and learn how to configure the NetWare file server to perform routing of TCP/IP packets. This course covers diagnosing and troubleshooting common problems that occur in a TCP/IP environment. Prerequisite: NT 525 or NT 526. (2 hours lecture, 2 hours lab)

NT 801 Service and Support 3 Credits

This course introduces students to installing, maintaining and troubleshooting NetWare network hardware and software. The course covers installation and upgrade procedures. Topics include network adaptor configurations, network cabling, disk expansion, troubleshooting technique. This course will give students hands-on experience to implement the skills they learn in class. Prerequisites: NT 518 or NT 525 or NT 526. (4 hours lab)

NURSING

NU 099 Transition into Nursing I 1 Credit

At the completion of this course the student will utilize major theoretical and clinical constructs required of a student in the Howard Community College Nursing Program. The course will focus on the framework of Responses to Stress and its application to written assignments, the approach to theory and to clinical functioning. Prerequisite: Acceptance into Nursing Program at a level higher than NU 101.

NU 100 The Career and the Challenge 1 Credit

This one-credit course is for learners considering a career in nursing. The beginning of the course discusses self-perception, current trends in nursing, and the influence of nursing history on the role of nursing. Perceptions and positive interventions related to communicating and working with patients will be explored and discussed. The learner will get a feel for practicing lab skills in the campus laboratory and will observe in two clinical settings.

NU 101 Introduction to Patient Needs and Nursing Actions

7 Credits

The student will develop and attain attitudes, knowledge and skills, both interpersonal and psychomotor, which are necessary to assist the patient in meeting health care needs. The influence of the stress-adaptation process on basic needs and nursing care is emphasized. The student will provide safe nursing care relative to the basic health needs of a patient of any age group. Prerequisite: Formal admission into the Nursing Program. Pre or Co-requisite HD 200, BY 203, MA 105 for PN students and MA 122 or higher for RN students. (4 hours theory, 9 hours lab)

NU 102 Nursing of Patients with Common Responses to Stress

8 Credits

Students will develop those competencies required to administer safe, technical nursing care to patients of all ages who have common health problems. Through consideration of major categories of patient response to stress (immobility, obstruction, infection, bleeding, alteration in perception) the student will select general nursing actions pertinent to each of the responses. Prerequisite: NU 101, HD 200, MA 105 for PN students and MA 122 or higher for RN students; Pre or Co-requisite: EG 101 or EG 111, PY 101 and BY 204. (4 hours theory, 12 hours lab)

NU 103 Transition into Nursing II 5 Credits

At the completion of this course, students will be capable of applying theory to provide safe care for patients with common health problems. Selection of nursing actions is directed at variations resulting from five major categories of patient responses to stress (immobility, obstruction, infection, bleeding and alterations in perception). Prerequisites: Admission into the LPN pathway and completion of BY 204, EG 101 or EG 111, HD 200, PY 101, and MA 122 or higher. (3 hours theory, 6 hours lab)

NU 104 Advanced Concepts in Practical Nursing

6 Credits

This course will prepare the practical nurse student to provide direct and indirect nursing care for individuals of all ages experiencing more complex health care problems resulting from the major responses of stress: obstruction, immobility, infection, bleeding, and alteration in perception. The student will explore the role of the practical nurse in health care and utilize the phases of the nursing process to provide safe nursing care to a small group of patients. Experience in managing the care provided by auxiliary nursing personnel will be integrated into clinical assignments. Prerequisites: BY 204, PY 101, EG 101 or EG 111 and NU 102. (3 hours theory, 9 hours lab)

NU 110 Survival Tactics for Beginning Nursing Students

1 Credit

This is a one-credit course designed to enhance student performance and success in the first clinical nursing course. Enrollment is limited to those students accepted into NU 101. This course will introduce students to study and test-taking skills, which enhance success in courses which test application of theory. In addition, students will receive instruction in stress and time management. Students will also be introduced to collaborative learning, which is used extensively in the nursing curriculum.

NU 120 Introduction to Pharmacology 1 Credit

This course introduces the student to the important basic concepts of pharmacology. The focus will be the discussion of applications of drug therapy. (1 hour weekly)

NU 150 Basic Pharmacology 3 Credits

This course will increase your knowledge of pharmacology and pharmacodynamics. The focus will be on drug actions and their nursing implications. Prerequisite: NU 101 (3 hours weekly)

NU 170 Nursing Co-Op Work Experience 3 Credits

See CO 201-202 Cooperative Education Work Experience I and II

NU 201 Nursing of Patients with Complex Responses to Stress I

9 Credits

Building on theoretical knowledge and clinical competencies from NU 101 and NU 102, the student will become more proficient in providing nursing care for patients experiencing complex, recurrent health problems. The nursing process and other curricular structures will help students to examine three types of responses to stress: immobility, obstruction and infection and related nursing interventions to meet the patient's needs. Through this course and NU 202, the student will develop competencies necessary to administer safe nursing care at the associate degree level. Prerequisites: NU 102 or 103, BY 204 and PY 101; Pre- or Co-requisite: EG 102 and SO 101. (4 hours theory, 15 hours lab)

NU 202 Nursing of Patients with Complex Responses to Stress II

9 Credits

At the completion of this course, students will be prepared to assume beginning roles as technical nurses in caring for patients experiencing complex health problems. Theoretical study and clinical application of knowledge will focus on patient

needs and nursing actions resulting from the responses to stress: bleeding and alteration in perception. Students will demonstrate their ability to competently care for a small group of patients within the nursing care team. Prerequisite: NU 201. (4 hours theory, 15 hours lab)

NU 211 Enhancing Clinical Competence 1-2 Credits

The student will work as a member of a nursing team in association with a designated R.N. preceptor. Within various shifts, the students will identify patients' responses to stress and factors which may affect differences. The nursing process will be used to determine appropriate nursing intervention with foci on organization and quality patient care. Increased understanding of the complexities of the clinical setting is expected as well as heightened levels of self-awareness and self-confidence. Prerequisite: Completion of NU 201 within the past year. (3-6 hours lab)

OFFICE TECHNOLOGY

OT 100 Office Machines

1 Credit

After successful completion of this course, the student will be able to use a business calculator with proficiency. The student will be able to add, subtract, multiply, divide, use whole numbers and fractions, do accumulative and constant multiplication and division, percentages, complements and chain discounts, gross and net profit, mark up, proration and interest problems. Emphasis is placed on the ability to take basic machine operations and apply them to practical business math problems. This course may be completed in fewer than 14 weeks and may be started at any time during the school year.)

OT 101 Bookkeeping

3 Credits

After successful completion of this course, the student will be able to demonstrate an understanding of the sole proprietorship form of busi-

ness organization through the completion of a practice set. Emphasis will be placed on bookkeeping procedures, payroll bookkeeping, receivables and payables, and financial statements. (3 hours weekly)

OT 102 Editing Skills for Word Processors 3 Credits

After successful completion of this course, the student will improve his or her proofreading and spelling skills and develop a business vocabulary. This will include learning proofreading techniques and capitalization, grammar, punctuation, spelling, and word usage principles. An intensive study of spelling rules is included. This course does not take the place of an English course. It is a review (brush-up) of previously acquired skills. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for this course (except tests) may be done outside of class.

OT 171 Formatting Business Documents 2 Credits

After successful completion of this course, the student will be able to correctly type formal letters, tables, and reports. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. Prerequisite: CS 102.

OT 176 English for the Office Professional 3 Credits

After successful completion of this course, the student will be able to demonstrate an understanding of English. This includes correctly using all parts of speech and applying grammar and punctuation rules. (3hours)

OT 191 Computerized Medical Billing 1 Credit

After successful completion of this course, the student will be able to use MediSoft software to enter patient databases and do patient and insurance billing and financial recordkeeping. This

course may be completed in fewer than 14 weeks and may be started at any time during the school year. (3 hours weekly)

OT 192 Basic Medical Coding Overview 1 Credit

After successful completion of this course, the student wil be able to use the ICD-9 and CPT-4 code books. Topics include: current procedural terminology (CPT) overview, review of conventions used in ICD-9, and fundamental coding guidelines. Students will become familiar with coding principles and practices using exercises and case studies. This course is not intended to provide indepth knowledge or skills in the coding process. A variety of reference materials will be discussed. Prerequisite: OT 290.

OT 193 Introduction to Medical Insurance 1 Credit

After successful completion of this course, the student will be able to complete medical insurance forms in a physician's office, clinic or a similar health care setting. This includes learning the fundamental skills required to receive the highest benefit allowed from HMOs, government and other commercial insurance groups. Topics include: types of insurance, legal considerations, electronic claim submission, RBRVS, and HMO laws and referral process. The latest updates and reforms will also be covered. Prerequisite: OT 192.

OT 201 Office Technology Work Experience 3 or 4 Credits

See CO 201 Cooperative Education Work Experience I

OT 272 Transcription Skills for Word Processors

2 Credits

After successful completion of this course, the student will be able to transcribe material from prerecorded dictation. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. Approximately 50% of the work for this course may be done out-

side of class if the student has compatible word processing software. Prerequisites: CS 102 and OT 176.

OT 275 Office Simulation

3 Credits

After successful completion of this course, the student will be able to use Microsoft Office software to complete an office simulation project. This will include setting priorities, organizing tasks, and problem solving. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All work for this course may be done outside of class. Prerequisites: CS 101, CS 103, CS 104, CS 116, and CS 126.

OT 279 Keyboarding

1 Credit

After successful completion of this course, the student will be able to touch type and use correct keyboard technique. Speed and accuracy development are stressed. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All work for this course (except tests) may be done outside of class on any compatible computer.

OT 280 Legal Transcription and Terminology 3 Credits

After successful completion of this course, the student will be able to transcribe legal material from prerecorded dictation. Also included is an overview of legal procedures and an in-depth study of terminology. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. Approximately 50% of the work for this course may be done outside of class if the student has compatible word processing software. Prerequisites: OT 281.

OT 281 Legal Document Preparation 2 Credits

After successful completion of this course, the student will be able to prepare various legal forms and documents using Microsoft Word. Included

is an introduction to legal terminology and procedures. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for this course (except tests) may be done outside of class if the student has compatible word processing software. Prerequisite: CS 104.

OT 285 Legal Office Procedures 3 Credits

After successful completion of this course, the student will be able to demonstrate proficiency in general office procedures including telephone technique, postal services, work priority schedules and planning meetings and travel arrangements. The student will be able to keep client financial records and appointment schedules, explain the purpose of various legal documents, and prepare them with little assistance. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for this course (except tests) may be done outside of class. Prerequisies: OT 281, CS 101, CS 103, CS 104, CS 116, and CS 126.

OT 289 Office Publishing 3 Credits

After successful completion of this course, the student will be able to use Microsoft Word to do desktop publishing documents. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for this course (except tests) may be done outside of class if student has compatible word processing software. Prerequisite: CS104.

OT 290 Medical Terminology

2 Credits

After successful completion of this course, the student will be able to spell and define medical prefixes, suffixes, and terminology peculiar to various medical specialties. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of the work for this course (except tests) may be done outside of class.

OT 293 Beginning Medical Transcription 3 Credits

After successful completion of this course, the student will be able to transcribe medical material from prerecorded, dictated material using a cassette transcribing machine. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. If the student has access to compatible word processing software, about 50% of the work may be done outside of class. Prerequisites: CS 102 and OT 290.

OT 295 Medical Office Simulation 3 Credits

After successful completion of this course, the student will be able to handle patient reception, keep an appointment schedule, handle the mail, use the telephone efficiently and properly, maintain the financial records for a medical office, plan meetings and travel arrangements, and order supplies for a medical office. Microsoft Office and MediSoft skills will be used to prepare documents. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All work for this course (except tests) may be done outside of class. Prerequisites: CS 101, CS 103, CS 104, OT 191, and OT 293.

OT 297 Advanced Medical Transcription 2 Credits

After successful completion of this course, the student will be able to transcribe medical reports from prerecorded dictation that includes background noises and dictation from doctors with accents. In addition to broadening the student's experience with transcribing, the student's knowledge of vocabulary in 15 medical specialties will be enhanced. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. Prerequisite: OT 293.

OT 299 Word Processing Simulation 2 Credits

After successful completion of this course, the student will be able to format a variety of ad-

vanced-level production problems using word processing software. This course enables the student to use all of the skills learned in CS 102 and CS 104 to create realistic office documents. Planning and decision making are required. This course may be completed in fewer than 14 weeks and may be started at any time during the school year. All of this work (except tests) may be done outside of class if the student has compatible word processing software. Prerequisite: CS104.

PHILOSOPHY

PL 101 Introduction to Philosophy 3 Credits (Humanities Core)

An introduction to world philosophy which begins with the western tradition and includes Asian and African philosophies as well as the voices of women philosophers and the peoples of the Americas. Focus on mahjor theories of reality (metaphysics), knowledge (epistemology), value (axiology), and logic. Eligible to enroll in EG 101 or EG 111 (3 hours weekly)

PL 103 Introduction to Ethics 3 Credits (Humanities Core)

Upon completion of this course students will be familiar with most important ethical theories of Western philosophy. Students will have the necessary tools to discuss and evaluate various contemporary moral issues, as well as a moral ethical stance. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

PL 110 Introduction to Chinese Taoism 1 Credit

An interdisciplinary introduction to Chinese Taoism, using the methods and categories of philosophy but including the historical and cultural milieu of China, traditional Chinese landscape painting as expressive of Taoist philosophy and an examination of the wisdom tests Tao Te Ching and Chuang-tzu. Prerequisite: Eligible to enroll in EG 101 or EG 111. (1 hour weekly).

PL 111 Introduction to Japanese Zen Buddhism 1 Credit

An interdisciplinary introduction to Japanese Zen Buddhism, using the categories and methods of philosophy but including the historical and cultural milieu of Japan, Zen painting, haiku, and sand gardens, and ancient, medieval, and modern Zen wisdom texts from around the world. Prerequisite: Eligible to enroll in EG 101 or EG 111. (1 hour weekly)

PL 112 Introduction to African Philosophy 1 Credit

An interdisciplinary introduction to African philosophy using the categories and methods of Western philosophy but including the historical and cultural milieu of Africa as well as African visual arts and proverbs, African drumming, dance, and song as repositories of and ways to express African philosophy. Prerequisite: Eligible to enroll in EG 101 or EG 111. (1 hour weekly).

PL 201 Religions of the World 3 Credits (Humanities Core)

A study of the major religions of the world with emphasis on their origins, development, and significance in the modern world as well as their sacred texts. Focus on Hinduism, Buddhism, Confucianism, Taoism, Judiaism, Christianity, and Islam. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

PL 202 Logic and Critical Thinking 3 Credits (Humanities Core)

Students will examine the principles of logic with the purpose of developing an ability to think critically, reason clearly and use language precisely. Primary emphasis will be placed on the practical applications of logic in the experimental sciences as well as in the examination and evaluation of information obtained through newspapers and books, advertising, political campaigns, television and other media. Prerequisite: EG 101 or EG 111. (3 hours weekly)

PHOTOGRAPHY (See ART)

PHYSICS

See listings in Science (SC) for courses in astronomy and geology.

PS 100 Technical Physics 4 Credits (Science Core)

Technical Physics is a course designed for twoyear technology majors such as BMET, Cardiovascular, Computer Support, Electronics, Telecommunications Technology, etc., to meet their basic physical science requirement. It consists of an integrated sequence of physical and chemical (both inorganic and organic) principles relating to living and non-living systems. This course will enable the student to become aware of, to identify, and to evaluate situations and/or problems in contemporary physical science which include: basic chemical and physical principles with some application to the human body; properties and states of matter; science measurement and dimensional analysis techniques. Special emphasis is placed upon learning physics principles and solving mathematical problems in motion, vectors, force, momentum, work and energy, fluids, heat, basic electricity, waves, magnetism, light and optics, and the atom. The laboratory program will allow the student to develop an understanding of the fundamental principles of the above mentioned areas, including problem solving, and their application to physical phenomenon observed. Pre- or Co-requisite: MA 124. (3 hours lecture, 3 hours lab)

PS 103 Fundamentals of Physics I 4 Credits (Science Core)

Physics 103, a course designed mainly for science majors and pre-professional students, will enable the student to solve problems involving the major concepts in physics to include measurement: vector concepts; forces; mechanics (both statics and dynamics); fluids; heat concepts; and some thermodynamics. The students will develop the ability to interpret and apply the experimental laws and fundamental principles of physics to describe the behavior of the physical

world. In the laboratory program, the student will develop the ability to appraise, use, and interpret data collected (often by MBL) to express mathematically and/or explain the physical phenomena observed. Pre- or Co-requisite: MA 133 or equivalent. (3 hours lecture, 3 hours lab)

PS 104 Fundamentals of Physics II 4 Credits (Science Core)

Physics 104, a course designed mainly for science majors and preprofessional students, will enable the student to solve problems involving the major concepts in physics to include wave motion, sound, electrostatics, electric currents, circuits, electronics, magnetism, electromagnetic interactions, nature and properties of light, optics, and some modern physics. The student will develop the ability to interpret and apply the experimental laws and fundamental principles of physics to describe the behavior of the physical world. In the laboratory program, the student will develop the ability to appraise, use and interpret data collected (often by MBL) to express mathematically and/or explain the physical phenomena observed. Prerequisite: MA 133 and PS103. (3 hours lecture, 3 hours lab)

PS 105 Introduction to Physical Science 3 Credits (Science Core)

PS 105 is a course designed for the non-science major outside the allied health area. The student will become knowledgeable of the contributions of physics and chemistry to man's understanding of basic physical science concepts and will expose the student to the basic scientific vocabulary in these sciences. The course emphasis is on the basic scientific principles and their applications in today's society. Basic math skills will be used to illustrate some of these principles. Prerequisite: Eligible to enroll in MA 070. (3hours lecture)

PS 110 General Physics I (Calculus)

4 Credits (Science Core)

General Physics 110 is the first semester of a three-semester calculus-based physics course mainly for physics, physical science, engineer-

ing and related science majors. The course will enable the student to solve problems, using calculus methods when applicable, for the major concepts in physics to include: measurement; vector concepts; laws of motion, force, energy; principles of mechanics and statics; linear momentum; rotation; and fluid statics and dynamics. The student will develop the ability to interpret and apply the experimental laws and fundamental principles of physics to describe the behavior of the physical world. In the laboratory program, the student will develop the ability to appraise, use, and interpret data collected (often by MBL) to express mathematically and/ or explain the physical phenomena observed. Prerequisite: Eligible to enroll in EG 101 or EG 111; Pre- or Co-requisite: MA 140. (3 hours lecture, 3 hours lab)

PS 111 General Physics II (Calculus) 4 Credits (Science Core)

General Physics 111 is the second semester of a three-semester calculus-based physics course. The course will enable the student to solve problems, using calculus methods when applicable, for the major concepts in physics to include: oscillatory motion; wave motion; sound; electrostatics: DC and AC circuits; magnetism; and electro-magnetic interactions. The student will develop the ability to interpret and apply the experimental laws and fundamental principles of physics to describe the behavior of the physical world. In the laboratory program, the student will develop the ability to appraise, use and interpret data collected (often by MBL) to express mathematically and/or explain the physical phenomena observed. Prerequisite: PS 110; eligible to enroll in EG101 or EG 111; Pre- or Co-requisite: MA 150. (3 hours lecture, 3 hours lab)

PS 112 General Physics III (Calculus) 3 Credits

General Physics 112 is the final semester of a three-semester calculus-based physics course. The course will enable the student to solve problems, using calculus methods when applicable, for the major concepts in physics to include: heat;

kinetic theory; thermodynamics; advanced electromagnetic wave theory including Maxwell's Equations; geometric and some physical optics; special theory of relativity; and topics in modern physics. In the laboratory/recitation program, the student will develop the ability to appraise, use and interpret data collected to express mathematically and/or explain the physical phenomena involved. Prerequisite: MA 150 and PS 111, and eligible to enroll in EG 101 or EG 111. (2 hours lecture, 3 hours lab)

PS 115 Introduction to Physical Science Lab 1 Credit (Science Core)

PS 115 is the laboratory option of PS 105, Introduction to Physical Science. In this course, students will develop skill with equipment, laboratory techniques and procedures, plus laboratory investigative skills to solve physics and chemistry-related problems. The lab emphasis is on the application of basic physical science principles in studying and solving practical problems plus operation of basic equipment, e.g., motors, etc. The use of mathematics is held to a minimum. Prerequisite: Eligible to enroll in MA 070. Pre- or co-requisite: PS 105. (3 hours lab)

PLANT SCIENCE

PT 101 Introduction to Horticulture 4 Credits

Introduction to Horticulture is an introductory course which provides a broad spectrum of topics in the field of plant science. Specific topics covered are: plant structures, classification, soils, plant growth and development, propagation, pesticides, insects, diseases and plant protection. The course's objective is to make the students well-rounded in all aspects of plant science and prepare them for future classes of a more specific nature in the curriculum. This course is geared for commercial horticulture workers as well as for the homeowner. The subject matter is covered scientifically and practically so that the student can put into practice what is learned. (3 hours lecture, 3 hours lab)

PT 102 Annuals and Perennials 3 Credits

Annuals and Perennials is designed for the student who is working or who wants to work in the plant science industry as well as for the home owner who takes a special interest in plants and the landscape. It is designed to provide the student with a working knowledge of herbaceous plants, their identification, maintenance and culture and proper use in the landscape. In addition, propagation and marketing techniques will be identified. Prerequisite: PT 101. (2 hours lecture, 2 hours lab)

PT 103 Pest and Disease Control

Entomology and plant disease control is a basic course for plant science majors. It provides the basic understanding of insects and diseases that attack ornamental plant materials and turf grasses. Details of the nature and structure of insects, effects of insect destruction and insect classification are major components. Plant diseases, weed identification and respective controls are also discussed as they apply to trees, shrubs, herbaceous plants, roses and turf. Prerequisite: PT 101. (2 hours lecture, 2 hours lab)

PT 105 Woody Plants

3 Credits

Woody Plants is an introductory course for nursery and landscape purposes and also covers plants founds in arboretums, forests and fields in various regions of the United States. The purpose is to provide a practical understanding of woody plant characteristics so students can relate knowledge taught to the field of ornamental horticulture. A study of plant taxonomy, groupings, plant material terminology and data and an introduction to plant ecology constitute course topics. Prerequisite: PT 101. (2 hours lecture, 2 hours lab)

PT 106 Landscape Design and Contracting 3 Credits

In this course, the student will be introduced to the art, aesthetics and science of residential and

commercial landscape design and contracting. In addition, the student will be able to proceed with a design plan and install a proper soil, grasses, plant materials, shrubs and structures that will be manageable and lasting. The student will also be introduced into legal responsibilities and cost estimation relative to landscape contracting. (2 hours lecture, 2 hours lab)

PT 107 Landscape and Grounds Management 3 Credits

The student should be able to develop a complete grounds management program which will include equipment, supplies, manpower, scheduling and costs. Emphasis will be placed on care and cultural practices of trees, shrubs and other plants; professional maintenance, amenities and selection of equipment. Economical maintenance and improvement of site installations will be stressed. Typical tasks include care of plants, shrubs and equipment on both public and private property. (2 hours lecture, 2 hours lab)

PT 108 Turf Grass Management 3 Credits

This course involves the management of turf grasses for both landscape and recreational uses. At the end of the course, the student should have a working knowledge of grass varieties and their uses; use of a key in plant grass identification; growth requirements, including temperature, fertilizers, irrigation and drainage; pest identification and control including fungi, nematodes, insects and weeds; cultivation (planting and mowing), thatch management and auxiliary practices, sod establishment; and golf course practices. (2 hours lecture, 2 hours lab)

PT 201 Plant Science Work Experience 3-4 Credits

See CO 201-202 Cooperative Education Work Experience I and II.

POLITICAL SCIENCE

PO 101 American Federal Government 3 Credits (Social and Behavioral Sciences Core)

The student will evaluate and critically analyze the following areas of American Government: first, the origins, principles and interpretation of the American Constitution including the tensions between federalism and nationalism; secondly, politics and the people: public opinion, political parties, elections and interest groups; thirdly, the institutions of government which include the presidency, congress, judiciary and federal bureaucracy; fourthly, issues in public policy including economic policy, foreign policy and social issues such as crime, energy, obscenity, and affirmative action. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

PO 102 State and Local Government 3 Credits

The student will evaluate, debate, and critically analyze the public policies which emerge from the political processes of state and local government by examining the following: (1) the constraints on state and local governments in making and implementing policy; (2) the policy roles of the legislative, executive, judicial, and administrative branches: (3) the successes and failures of state and local governments in dealing with the following public policy areas - criminal justice, welfare, education, housing, transportation, and the environment; (4) the role of citizen influence on public policy and an examination of some alternatives to the conventional channels of state and local government. Prerequisite: Eligible to enroll in EG 101 or EG111. (3 hours weekly)

PO 201 Comparative Government 3 Credits

The student will be able to compare and contrast the political, military, social, and economic characteristics of governments in three different environments. They are: nations in transition (developing Third World States to be selected in

class); countries in a western democratic setting (United States, Britain and France) and post Cold War communist governments. The student will also be able to examine and evaluate modern political thought and ideologies such as rational philosophies; liberal and conservative doctrines; socialistic and Marxist ideologies; Fascism, anarchism, terrorism and nationalism. Prerequisite: EG 101 or EG 111. (3 hours weekly)

PSYCHOLOGY

PY 101 General Psychology 3 Credits (Social and Behavioral Sciences Core)

Through this introduction to the field of psychology, the student will be able to describe how psychologists do their research and gain an appreciation of how psychologists view people through studying the views of Freud, Skinner, and Maslow. The student will be able to summarize, interpret and evaluate psychological information, especially as it appears in films and non-technical articles. Upon completion of this course, the student will be able to describe psychological concepts and facts on the major topics of psychology. Pre- or Co-requisite: EG 101 or EG 111. (3 hours weekly)

PY 102 Advanced General Psychology 3 Credits

After studying the topics of abnormal psychology, learning, psychological research methods, intelligence, social psychology, and aggression, the student will be able to objectively describe behavior, distinguish between normal and abnormal behavior, apply basic learning concepts and principles, critically evaluate secondary psychological sources, write a psychological research paper, identify important issues and problems concerning research, describe research on a variety of psychological topics and critique an article on a current social issue. This course is designed primarily for persons who are interested in taking additional psychology courses or wish

an introduction to scientific psychology. Students may proceed through this course at their own pace. Prerequisite: PY 101. (3 hours weekly)

PY 103 Child Growth and Development 3 Credits

Introduction to Child Growth and Development examines key features of developmental change. The course offers students the opportunity to study the fundamental themes of developmental psychology, which is a coherent framework for explaining and understanding the various changes—both of qualitative and quantitative nature—that an individual goes through as he or she grows. Students will learn the basic research concepts and the current research findings on factors contributing to child development, i.e. physical, cognitive, emotional, and social development. The course will focus on the child's interpretation, preference, emotional reaction and social interaction to different home, community, school, and health changes from conception to the completion of adolescence. Prerequisite: PY 101. (3 hours weekly)

PY 202 Social Psychology 3 Credits

In addition to understanding and applying major concepts, facts, principles, and theories of social psychology, the student will be able to interpret, analyze and critically evaluate social psychological materials. The student will be able to explain the important research on these topics: T-groups, conformity, obedience, attraction, attitude change, cognitive dissonance, prejudice, and aggression. Students will study several social psychological topics of their own choosing. Prerequisite: PY 101. (3 hours weekly)

PY 203 Abnormal Psychology 3 Credits

Through this introduction to the field of abnormal psychology, the student will be able to describe both historical and current issues involved with defining and recognizing mental illness, to describe the causes of mental illness, to compare and contrast the major treatments of mental ill-

ness, and to describe some of the ways to prevent mental illness. In addition, the student will learn to be more critical of abnormal psychology information as found in the mass media. Prerequisite: PY 101. (3 hours weekly)

RETAILING

RE 103 Retail Merchandising 3 Credits

Through lectures, class group work, and outside reading, students will learn something of the development of retailing and the major components of a functioning retail establishment. These include the physical facility, the selection and promotion of merchandise, the people involved in retailing, and the future of retailing. (3 hours weekly)

RE 105 Fashion Merchandising 3 Credits

Through this course students will learn some of the fundamentals of fashion theory and consumer demands, with emphasis on how these apply to the merchandising and retailing of fashion goods. Through class projects, students will engage in analyzing merchandising plans, store images, promotions and retail management philosophies. Students will also have the opportunity throughout the course to examine career opportunities in retailing/merchandising. (3 hours weekly)

RE 201-202 Retail Work Experience I and II 3 or 4 Credits

See CO 201-202 Cooperative Education Work Experience I and II.

RUSSIAN

RU 101 Elementary Russian 3 Credits (Humanities Core)

As a result of taking this course the student will be able to utilize the basic elements of the Russian language, which will include reading Russian with acceptable pronunciation, writing Russian words and phrases in script, speaking Russian to include making statements and answering simple Russian statements. Throughout these experiences, the student will utilize correct cases, conjugations and declensions in forming Russian sentences. Prerequisite: Eligible to enroll in EG101 or EG 111. (3 hours weekly)

RU 102 Elementary Russian II 3 Credits (Humanities Core)

This course is a continuation of first-semester Russian. Upon completion, the student will be able to use Russian when speaking about every-day topics and will be able to read and understand texts of average difficulty. Greater concentration will be placed on speaking in complete sentences and on grammatical usage, especially compound sentences, adjectives, and cases. Prerequisite: RU 101. (3 hours weekly)

SCIENCE

SC 104 Elementary Astronomy 3 Credits (Science Core)

Elementary Astronomy is a one-semester elementary course in descriptive astronomy, especially appropriate for non-science students. The student will become knowledgeable in the areas of historical astronomy, basic tools and methods of astronomy, earth and celestial body motions, characteristics of the sun and its planets, composition and evolution of stars, nature and distribution of galactic systems, role of the space program, and the possibility of life in the universe. For astronomy lab, see SC 114. Prerequisite: Eligible to enroll in MA 070. (3 hours lecture)

SC 107 Introduction to Physical Geology 3 Credits (Science Core)

This course is designed as an introduction to the composition and structure of the earth, its rocks and minerals, surface erosional and depositional features, and the agents that form them. Topics include plate tectonics, volcanoes, weathering

and erosion, earthquakes, streams and groundwater, glaciers, shorelines, faults and geologic structures. For Introduction to Physical Geology Laboratory, see SC 117. (3hours lecture)

SC 109 Historical Geology 4 Credits

This is a course in which the principles of physical geology and stratigraphy are used to study the history of the earth and its inhabitants. The formations and geologic periods of North America will be emphasized. In the lab, the student will become familiar with fossils, rocks, minerals and the use of maps in geologic interpretations. There will be several field trips to local sites. (3 hours lecture, 3 hours lab)

SC 111 Meteorology 3 Credits (Science Core)

This course is designed as an introduction to the study of weather, climate and the atmosphere. Topics will include solar and terrestrial radiation, temperature and humidity, cloud formation, air pressure and winds, circulation and weather patterns, tornadoes, hurricanes, air pollution, and climatic change. (3 hours lecture)

SC 114 Elementary Astronomy Lab 1 Credit (Science Core)

In this course the student will acquire elementary observational, measurement, and experimental experiences in astronomy. The student will utilize the metric system to measure given objects, make a simple telescope, plot the moon's orbit from phase photos, identify spectral lines, use a microcomputer for simulations and CAI, make and record observations of the sunset location and moon's phases for several weeks, etc. Experiments will be performed to demonstrate scientific concepts used in astronomy. At least one night time observation is required. Prerequisite: Eligible to enroll in MA 070; Pre- or corequisite: SC 104. (2 hours lab)

SC 117 Introduction to Physical Geology Lab 1 Credit (Science Core)

In this course, students will utilize the basic materials and tools of physical geology to identify common minerals and rocks. Students will learn to recognize surface erosional and depositional features on aerial photographs and topographic maps, and will interpret geologic faults and structures on geologic maps and models. There will be several field trips to local sites. Preor co-requisite: SC 107. (3 hours lab)

SOCIOLOGY

SO 101 Introduction to Sociology 3 Credits (Social and Behavioral Sciences Core)

Through this introduction to sociology, the student will develop an understanding of the basic concepts of sociology including culture, socialization, social stratification and social change and be able to apply these concepts to social problems and everyday life experiences. Students will be exposed to sociological information and ideas which will help them understand and clarify their own norms, values and attitudes. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

SO 103 Marriage and the Family 3 Credits

Marriage and the Family will introduce the student to the sociological study of the family. In part one of the course, we will examine the American family in historical and cross-cultural perspective, and in the process achieve a clearer understanding of what the family is and how it has changed. Part two will examine the various paths to family formation and the responsibilities and expectations we have as family members. In part three we will shift focus to the larger social forces that shape families and the implications this has for a social policy of the family. Finally we will turn to the stresses the contemporary family endures and the possibilities this

holds for the future of the family. Prerequisite: EG 101 or EG 111 (3 hours weekly)

SO 104 Introduction to Physical Anthropology and Archaeology

3 Credits

The student will be able to describe the evolution of humankind from early hominids through present day Homo Sapiens. The student will be able to identify and assess the role of archaeology in discovering, preserving and analyzing fossils and artifacts. The student also will be able to identify the physical traits, behaviors and tool technology necessary for diverse populations to evolve into modern forms. Prerequisite: Eligible to enroll in EG 101 or EG111. (3 hours weekly)

SO 105 Introduction to Cultural Anthropology 3 Credits (Social and Behavioral Sciences Core)

Through this introduction to cultural anthropology, the student will be able to identify the basic concepts anthropologists use in describing the economic, family, political and religious systems of preliterate cultures. Students will use these concepts in analyzing the specific preliterate culture and will apply the anthropological perspective to their own culture. Prerequisite: Eligible to enroll in EG 101 or EG111. (3 hours weekly)

SO 110 Human Sexuality 3 Credits

Through this introduction to the field of human sexuality, the student will be able to recall and describe historical and current research knowledge related to physiological, psychological, anthropological, and sociological aspects of human sexuality across the life span. Students will discuss and evaluate their own beliefs and values relevant to the topics of various types of sexual behavior, sexual problems and their treatments. In addition, the student will be able to describe important legal and ethical sexual issues. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

SO 111 Introduction to Women's Studies: Women, Gender and Society

3 credits (Interdisciplinary and Emerging Issues Core)

An interdisciplinary study of the construction of gender and its intersection with race and class in the United States. Based primarily in the social sciences and social history, this course also draws on the arts, media, and popular culture in examining the impact of gender on society. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as WS 111.

SO 120 Comparative World Cultures 3 Credits (Interdisciplinary and Emerging Issues Core)

This course is a study of several non-western European societies. Its emphasis is on the comparison of the various facets of these societies; their history, customs, economics, religions, and values. Students will have the opportunity to do individual research and thereby gain an understanding and appreciation of a major culture other than their own. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

SO 201 Minorities in American Society 3 Credits

Minorities in American Society will introduce students to a sociological investigation of the racial, ethnic and gender stratification system found in the United States. This course will introduce the student to concepts essential to the sociological analysis of the American stratification system such as prejudice, discrimination, minority, race, ethnicity and gender. This course will examine the historical process through which the American racial and ethnic stratification system was socially constructed, and it will examine the various theoretical perspectives that have emerged in the attempt to understand this historical process. It will also teach the student to apply these concepts and theories to an analysis of contemporary social problems and to his or her everyday life experiences. The student will be exposed to sociological information and ideas that will help

him or her to understand and to critically analyze the world we live in. Prerequisite: EG 101 or EG 111 (3 hours weekly)

SO 202 Urban Sociology

3 Credits

Urban Sociology is a lecture and discussion course in which the student will analyze the social relationships of man in his urban environment. The student will examine the way in which spacial and physical dimensions of urban areas have been shaped; describe the various life styles of urbanized man; analyze the growth, development and planning of suburbs and new towns; and examine a number of social problems facing urban America including effective government, zoning and land use, housing, education, urban planning and crime. Prerequisite: EG 101 or EG 111. (3 hours weekly)

SPANISH

SP 100 Cultures of Latin America 1 Credit

Spanish 100 is a one-credit course offered in English for those who are interested in the various cultures of Latin America. This course is organized around a variety of themes which touch upon all of the countries of Central and South America. The themes are explored and discussed from both present and past perspectives. (1 hour weekly)

SP 101 Elementary Spanish I 3 Credits (Humanities Core)

In this introductory course, students learn to listen, speak, write and read on a basic level. They also learn about the diverse cultures of the Spanish-speaking world. Instruction focuses on oral communication, and is supported by a computerized classroom and peer learning groups. This course meets for 3 hours per week; an additional weekly lab visit is required.

SP 102 Elementary Spanish II 3 Credits (Humanities Core)

Students continue to develop the four basic skills, particularly oral communication, and to look inside the cultures of Spain, the Caribbean and Latin America. They will develop a project which reflects personal goals for learning Spanish. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

SP 201 Intermediate Spanish I 3 Credits (Humanities Core)

Students in this second year course will use the skills needed to listen, speak, write and read in Spanish in the context of a series of communicative activities. They will expand their knowledge of the peoples of the Spanish-speaking world and will, through the use of multimedia technology, create a personalized project reflective of individual interests in Spanish. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

SP 202 Intermediate Spanish II 3 Credits (Humanities Core)

This final course of the 4 semester sequence fulfills the language requirement at most four-year institutions. Students will produce a mini-project in each of the four skill areas as they acquire the basics of intermediate Spanish. This course meets for 3 hours per week in a computer classroom; an additional weekly lab visit is required.

SPEECH

SH 105 Fundamentals of Public Speaking 3 Credits (Humanities Core)

Students will gain skill in public speaking and overcome visible nervousness when speaking in front of an audience. Students will learn how to structure informative and persuasive messages for the maximum effect and will experience using audio-visual aids effectively. Students will practice critical listening in learning to evaluate the content, delivery and style of speeches. Pre-

requisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

SH 110 Interpersonal Communication 3 Credits (Humanities Core)

Students will learn basic theories of oral communication, studying the types of verbal exchanges each of us has every day. The course begins with an overview of the human use of communication, including perception (with emphasis on inter-gender and intercultural communication), listening, verbal and non-verbal language, and sending and receiving feedback. Students will practice communication skills in pairs and write extensively about their experiences. When a student's curriculum requires HD100, it should be completed before this course is taken. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

SMALLTALK

ST 300 Fundamentals of Object Oriented Design Using Smalltalk

2 Credits

The student will use a Smalltalk learning laboratory environment to master the con-on exercises will address the VisualWorks development environment and tools. Prerequisite: ST 300. (3hours lecture, 1 hour lab)

ST 310 Advanced Smalltalk Development 2 Credits

The student will build on knowledge gained in ST 305, "Introduction to Smalltalk Development," by extensively exploring the VisualWorks class library, creating new classes and methods, developing more robust user applications, learning the model-view-controller approach, user interface creation, and work with real world problems such as modeling a small LAN. Extensive handson exercises are assigned in all aspects of VisualWorks. Prerequisite: ST 305.

ST 315 Relational Databases in Smalltalk Applications

2 Credits

The student will use a relational database to form data models for various Smalltalk projects. In laboratory exercises, students will work with small to intermediate sized real world problems, transaction oriented applications and creation of a database in which to access information. Database interfaces, persistent storage, and record locking issues will be studied. Version management tools to support team development will be studied and the ParcPlace ENVY will be used in the exercises as an example. Distribution of business logic, database storage, and client/server configuration issues will be examined. Prerequisite: ST 310.

ST 320 Object Oriented Databases in Smalltalk Applications

2 Credits

The student will be introduced to concepts of designing and using object oriented databases. In laboratory exercises, the student will write and execute Smalltalk applications to exercise and extend their object oriented database skills. A popular object oriented database environment will be used. Comparison of the use and performance of object oriented databases versus relational databases will be made. Prerequisite: ST 310.

THEATRE

TH 131 Theatre Appreciation

3 Credits (Fine Arts, Humanities Core)

This course is designed to help students not majoring in theatre develop an appreciation of the art form by understanding the relationship of theatre to society and diverse cultures. Students become familiar with components of stage art including play-writing, acting, directing, and design through practical experiences and viewing of live productions and films. Students will be prepared for greater enjoyment of theatre by

developing a more critical eye for the many facets of the art form. (3 hours weekly)

TH 135 Stagecraft

3 Credits

This course will train the student in construction techniques and painting of theatrical scenery and properties. Safe operation of power tools and back stage machinery are also covered. (4 hours weekly)

TH 136 Lighting I

3 Credits

The purpose of this course is to enable students to safely work with basic stage lighting equipment. This will include working with electrical wiring, hand and power tools, stage lights and dimmer boards. (4 hours weekly)

TH 137 Sound I

3 Credits

The purpose of this class is to enable students to safely work with basic sound equipment for the stage. This will include working with microphones, amplifiers, mixers, tape decks and equalizers. (4 hours weekly)

TH 141 Basic Acting I

3 Credits (Fine Arts, Humanities Core)

This course will include a brief survey of theatre concepts and terminology. The student will develop acting skills and techniques including oral communication, improvisation and stage movement. The student will participate in brief dramatic presentations. (3 hours weekly)

TH 142 Basic Acting II

3 Credits

This course is a continuation of TH 141 with an emphasis on character development, stage movement and direction, and the integration of physical and verbal stage presentations. Emphasis will be placed on the development of at least two contrasting monologues which could be used by the student in future audition situations (at college,

community or professional levels). The course will include basic character work, script analysis, vocal production and improvisation in conjunction with each monologue. Prerequisite: TH 141. (3 hours weekly)

TH 150 Oral Interpretation

3 Credits

The course will focus on methods of analyzing prose, poetry, dramatic literature, and children's literature for the purpose of performing literary selections orally. The emphasis will be upon communicating the beauty, meaning and emotional impact to others. Especially recommended for all public performers, education, English and recreation majors. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly)

TH 160, 161, 162, 163 Theatre Practicum 1 Credit

Students will practice their knowledge and skills in designated areas of theatre production. Handson experience with different phases of production is the method of instruction. Students will concentrate their efforts in one of the following areas - lighting, sound, set construction, costuming, theatre management, stage management, directing, props, or acting. Acting is by audition only. The student may take theatre practicum four times for credit. Each registration should be for the next numbered course. Prerequisite: consent of instructor required. (2-3 hours weekly)

TH 190 Theatre History I 3 credits (Fine Arts/Humanities Core)

A study of the evolution of theatre from primitive origins through Greek and Roman traditions, the medieval worlds of England and Japan, The Renaissance through Romanticism, examining Elizabeth and Jacobean drama, Restoration and Neo-Classical traditions, as well as the 17th and 19th century Italian, German, French, Spanish, and early American Theatre. Emphasis is on the play in performance reflecting the changing physical theatre, as well as the social, political, and artistic currents of each period. (3 hours weekly)

TH 191 Theatre History II

3 credits (Fine Arts/Humanities Core)

A study of the evolution of theatre from the development of Realism in the late 19th century through the Theatre of the Absurd in the 1960s examining Naturalism, Idealism, Symbolism, Expressionism, and Surrealism, continuing to the highly diversified contemporary theatre from the 1960s to the present, examining Off and Off-Off Broadway, regional theatres, black theatre, feminist theatre, the Living Theatre, the Polish Laboratory Theatre, the Open Theatre, environmental theatre, and postmodernism. Emphasis is on the play in performance reflecting the changing physical theatre, as well as the social, political, and artistic currents of the period. (3 hours weekly)

TH 241 Acting for Television 3 Credits

This class will prepare students to present themselves in a professional manner in any of the mass media. Voice, appearance, movement and the technical aspects of the mass media performance will be covered through comprehensive exercises and on-camera evaluation. Prerequisite: TH 141. (4 hours weekly)

WOMEN'S STUDIES

WS 111 Introduction to Women's Studies: Women, Gender and Society

3 credits (Interdisciplinary and Emerging Issues Core)

An interdisciplinary study of the construction of gender and its intersection with race and class in the United States. Based primarily in the social sciences and social history, this also draws on the arts, media, and popular culture in examining the impact of gender on society. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as SO 111.

WS 193 Introduction to Women's Studies: Women, Art, and Culture

3 credits (Fine Arts/Humanities Core)

An introduction to the ideas and issues central to Women's Studies and feminism with emphasis on women's art and culture. The course will examine how women have been represented and how gender has been constructed in the dominant culture as well as the role of the arts and of women themselves in developing an alternative women's culture. Prerequisite: Eligible to enroll in EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as FA 193.

WS 212 By and About Women

3 Credits (Humanities Core)

This course provides a historical sampling of literature written by and about females. Through group discussion, students will critically evaluate a series of six novels for literary form and technique. Class discussion will also analyze the validity of the female experience as portrayed in the literature. Students are expected to gain insight into not only the challenges but also the power of women in literature and in life. Prerequisite: EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as EG 212.

WS 225 Women in American History: ColonialTimes to 1880

3 credits (Interdisciplinary and Emerging Issues Core)

An in-depth study of the lives and experiences of American women from the early seventeenth century to 1880. This course examines three major cultures—native, African and European as they met and mixed in colonial America with particular attention to women's experience in this cultural mixing. Focus will be on wealthy merchant families, slave holding planter families, indentured servants, slaves, factory workers, and immigrants and will include women's relationships with husbands, children and other women. Prerequisite: EG 101 or EG 111 (3 hours weekly) NOTE: Also listed as HY 225.

WS 227 Women in American Hisaules DESCRIPTIONS

the Present

3 Credits (Interdisciplinary and Emerging Issues Core)

An in-depth study of the lives and experiences of American women from diverse racial and ethnic groups from 1880 to the present. This course examines the experiences of women in the modern world from the end of the nineteenth century through the twentieth. Focus will be on the varying experiences of reformers, workers, organizers, and immigrants with particular attention to differences between married and single women and between those living in the cities and those living in rural areas. During this time period, women have gained the legal right to vote and run for office, regulate the size of their families, and receive equal pay for equal work. And yet women retain primary responsibility for housekeeping and child care. This course considers the roots of some of these contradictions. Prerequisite: EG 101 or EG 111. (3 hours weekly) NOTE: Also listed as HY 227.

College Staff

(Date after name indicates year of initial employment at Howard Community College)

ADMINISTRATIVE STAFF

Mary Ellen Duncan (1998)

B.A., St. John's University; M.A., Ph.D., University of Connecticut President

James D. Ball (1978)

B.S., M.Ed., North Texas State University Dean of Students; Associate Professor, Psychology

Lynn C. Coleman, CPA (1986)

B.S., Michigan State University; M.B.A., Atlanta University Vice President and Dean of Administration and Finance

Benay C. Leff (1977)

B.S., Utica College; M.S., Syracuse University Vice President and Dean of Institutional Advancement

Henry F. Linck, Jr. (1992)

B.A., Gettysburg College; M.A., Morgan State University; CAS.LA, Johns Hopkins University; Ed.D., University of Maryland Vice President and Dean of Instruction; Professor, English

Randall R. Bengfort (1989)

B.S., B.A., Iowa State University

Director of Public Relations and Marketing

Philip Chenier (1987)

Director of Student Life

Janet L. Cullison, CPA (1983)

A.A., Howard Community College; B.S., University of Maryland Director of Finance

Lucy K. Gardner (1986)

B.A., Edge Cliff College; M.L.S., University of Pittsburgh *Director, Library*

Barbara C. Greenfeld (1984)

B.S., University of Maryland; M.S., Johns Hopkins University Director of Admissions and Advising

JoAnn D. Hawkins (1982)

B.J., University of Texas; M.A., University of Southern California; Certified Program Planner (CPP) Director of Lifelong Learning and Professional Education

Patricia M. Keeton (1983)

B.S., University of Maryland; M.S., Johns Hopkins University Director of Business and Economic Development

Eric A. Lampe (1990)

B.S., University of Maryland; M.A., Wayne State University Director of Records and Registration

Janice L. Marks (1986)

B.A., University of Maryland; M.A., Bowie State University, National Certified Counselor; Maryland Certified Professional Counselor Director of Academic Support and Career Services

Daniel D. McConochie (1996)

B.A., M.A., Florida State University Director of Planning and Evaluation

Jack R. McVeigh (1990)

A.A., Dundalk Community College Director of Plant Operations

Margaret M. Mohler (1977)

B.S., R.N., Mount St. Agnes College; M.S.N., University of Maryland; Ph.D., The American University

Director of International Business and Education Center and Special Programs

Dawn Y. Mosisa (1994)

B.A., M.B.A., University of Rhode Island
Director of Financial Aid and Veterans' Affairs

George T. Petasis (1993)

B.A., Gettysburg College; M.B.A., American University

Director of Academic Computer Support

Susan K. Radcliffe (1981)

B.A., Upsala College; M.A., University of Maryland; Senior Human Resources Profession (SPHR) Certification Institute, Society for Human Resources Management Director of Human Resources

Nancy L. Smith (1995)

A.A., Villa Julie College Executive Director of Continuing Education

Herman Thompson (1986)

Director of Security Services

Arla J. Webb (1977)

Director of Auxiliary Services

PROFESSIONAL STAFF

Elizabeth T. Alexander (1986)

B.A., University of Wisconsin; M.Ed., University of Virginia; Ed.D., Penn State University; Cerified Program Planner (CPP) Coordinator of Career Programs/Professional Development

Sara M. Baum (1984)

B.S., University of Nebraska; M.L.S., University of Maryland; Certified Program Planner (CPP) Continuing Education Coordinator

Cheryl A. Bower (1998)

B.A., Westminster College; M.L.S., Clarion University of Pennsylvania Technical Services Librarian

Rachel L. Brinkley (1995)

B.S., San Jose State University Assistant Director of Financial Aid and Veterans' Affairs

Jane Hemberger Brown (1994)

B.A., Villanova University; M.A., University of North Carolina, Chapel Hill Assistant Director of Admissions

Kasi S. Campbell (1984)

B.S., Indiana University of P.A.; M.A., University of Connecticut Performing Arts and Rep Stage General Manager and Associate Artistic Director

Linda J. Elengold (1997)

B.A., Queens College of the City University of New York; M.A. Candidate, Marymount University Advanced Technology Training Specialist

Marilyn L. Estes (1988)

B.S., Southern Connecticut State University; M.A., University of Connecticut; Certified Program Planner (CPP) Manager of Career Programs and Community Development

Roxanne C. Farrar (1990)

B.F.A., Southern Methodist University; M.S., Southern Illinois University; Certified Program Planner (CPP) Continuing Education Specialist

Michael J. Farrell (1995)

B.S., University of Maryland Coordinator of Academic Computer Support

Dina Glazer (1995)

B.S., M.S., University of Maryland *Network Engineer*

Bertha O. Hamilton (1988)

B.S., Hampton University; M.Ed., Howard University

Coordinator of Career Development

Beverly H. Johnson (1993)

B.A., University of Pennsylvania; M.A., Columbia University Business Training Specialist

Kathleen M. Jones (1990)

R.N., St. Francis Hospital School of Nursing; B.S.Ed., California State University; M.S., University of Maryland Coordinator, Professional Nursing and Allied Health

Quentin L. Kardos (1972)

B.F.A., Rochester Institute of Technology; M.S., Northern Illinois University Coordinator of Audiovisual Services

Julie E. Knox-Brown (1987)

B.S., Morgan State University; M.Ed., University of Cincinnati Assistant Director of Advising

Constance M. Kuwamoto (1996)

B.A., Columbus College Assistant Director of Admissions, Outreach and International Admissions

Becky G. Lessey (1993)

B.S., University of Illinois; M.Ed., University of Maryland

Basic Skills Training Specialist

Diane M. Loiselle (1997)

B.A., M.L.S., University of Maryland Coordinator of Test Center

Brenda A. Lorick (1991)

B.S., Morgan State University; M.A., St. John's College; M.Ed., Howard University; Ed.D., Texas A & M University *Coordinator of Retention*

Cheryl Magill (1989)

B.S., Towson University TV Studio Manager

Robert R. Marietta (1980)

B.A., Eckerd College; M.F.A., George Washington University Performing Arts and Rep Stage Production Manager and Resident Designer

Melissa L. Mattey (1981)

Executive Assistant to the Board of Trustees

Dorothy B. Plantz (1979)

B.A., State University of New York; M.A., Michigan State University Assistant Director of Admissions, Transfer

Marla J. Schreck (1994)

B.A., Washington State University; Certified Program Planner (CPP) Continuing Education Specialist

Edward L. Smith (1978)

Chief of Housekeeping Services

Ronald Somervell (1986)

B.B.A., Spicer Memorial College; M.Com., University of Poona Assistant Director of Finance

Marie J. Westhaver (1996)

B.A., University of Maryland; M.A., University of Baltimore

Webmaster

FACULTY

Margaret R. Armitage (1976)

A.B., The Catholic University of America; M.S., St. Bonaventure University; National Certified Counselor (N.C.C.) Associate Professor, Psychology

Gabriel B. Ayine (1995)

B.S., University of Cape Coast; M.Phil., University of Ghana Instructor. Mathematics

Russell L. Baker (1991)

B.S., M.S., Fredonia State College Associate Professor, Mathematics

Sandra A. Balcer (1982)

B.S., M.S., University of Baltimore, C.P.A. *Professor, Accounting*

Susan R. Bard (1971)

A.B., Goucher College; M.S., University of Maryland *Professor, Biology*

Dawn C. Barnes (1989)

B.A., University of Michigan; M.A., University of New York/Hunter College; Ph.D., University of Maryland
Associate Professor, Performing Arts;

Associate Professor, Performing Arts; Artistic Director, Aurora Dance Company; Resident Choreographer, Rep Stage

James E. Bell (1971)

A.B., Ph.D., University of Minnesota *Professor, Psychology*

Cheryl L. Berman (1987)

B.A., M.A., University of Maryland Assistant Professor, Foreign Language

John Bouman (1983)

B.A., Indiana University of Pennsylvania; M.A., University of Maryland Professor, Economics

William Brown (1994)

B.S., Morgan State University; M.A., Ph.D., Johns Hopkins University Associate Professor, Chemistry

Andrew A. Bulleri (1971)

B.S.E., M.S.E., University of Michigan *Professor, Mathematics*

Guy G. Bunyard (1993)

B.S., Stanford University; M.A., California State University, Long Beach, Assistant Professor. Mathematics

Georgene A. Butler (1992)

B.S.N., University of Maryland School of Nursing; M.S., University of Maryland Associate Professor, Nursing

William Campas (1986)

B.S.E.E., M.S.E.E., Johns Hopkins University; M.B.A., Fairleigh Dickinson Associate Professor, Engineering

Jerrold I. Casway (1971)

B.A., M.A., Temple University; Ph.D., University of Maryland Professor, History; Division Chair, Social Sciences; Director, Rouse Scholars Program

Barbara G. Cooper (1991)

B.A., M.A., University of Maryland Professor, English/Foreign Languages

Pamela M. Cornell (1978)

B.S., M.A.C.T., S.C.T., Murray StateUniversity; Ph.D., Virginia Polytechnic Institute Professor, Human Development and Psychology

Valerie E. Costantini (1982)

A.A., Essex Community College; B.A., M.A., The Catholic University of America; M.A., Morgan State University Associate Professor, Theatre; Division Chair, Performing Arts; Producer and Artistic Director, Rep Stage; Producer, Aurora Dance Company

Victor H. Cummings (1992)

B.A., M.A., University of Maryland; M.Ed., Ed.D., Columbia University Teachers College Professor, English as a Second Language

Mary Jo Deets (1979)

B.A., Drury College Assistant Instructor, Secretarial Science

Elizabeth B. Doggette (1978)

A.A., Howard Community College; B.S., Columbia Union College; M.S., National Louis University

Associate Professor, General Studies

Mary Patricia English (1995)

B.A., University of Maryland; M.S., Central Michigan University Associate Professor, Cardiovascular Technology

Patrick L. Finley (1987)

B.G.S., University of Maryland; M.A., George Washington University
Associate Professor, Health and Physical
Education

Susan H. Frankel (1982)

B.S., University of Maryland; M.S., Johns Hopkins University *Professor, English/Foreign Languages*

Daniel Friedman (1970)

B.S., University of Maryland; M.S., Syracuse University Professor, Chemistry/Science; Division Chair, Science and Technology

Elizabeth A. Fryman (1997)

A.D.S., Brunswick Junior College; B.S.N., M.S.N., Bowie State University Instructor, Nursing

Yifei Gan (1992)

B.F.A., M.F.A., Southwest China Teachers University; M.S., University of Tennessee Associate Professor, Art

Mary W. Gardner (1986)

B.S., University of Maryland, University College; C.P.A.

Professor, Accounting

Brian E. Gray (1997)

B.S., University of Michigan; M.A., University of Montana

Associate Professor, Mathematics

Mark H. Grimes (1993)

B.A., Frostburg State University; M.A., West Virginia University

Assistant Professor, English/Literature

Rita W. Guida (1986)

B.A., University of Maryland; M.M.S., Loyola College

Professor, English/Foreign Languages

Yoseph Gutema (1993)

B.A., Pacific University; M.S., University of Idaho; Ph.D., Washington State University Associate Professor. Economics

M.J. Patricia Harley (1989)

B.S., University of Maryland; M.B.A., University of the District of Columbia Associate Professor, Computer Systems

Tara J. Hart (1997)

B.A., Bucknell University; M.A., Ph.D., University of Maryland Instructor, English

Lee L. Hartman (1980)

B.S., University of Maryland; M.A., M.L.A., Johns Hopkins University *Professor, Humanities*

Roger R. Hartman (1993)

B.A., Indiana University; B.S.E.E., Sec. Cert., Cleveland State University; Diploma, Engineering Science, Westinghouse School Applied Engineering; M.S., Johns Hopkins University

Associate Professor, Mathematics

David M. Hinton (1992)

A.A., Ret's Technical Training Center Assistant Professor, Computer Aided Design

Steven J. Horvath (1997)

B.S., M.A., Indiana University of Pennsylvania *Instructor, English*

Zoe A. Irvin (1982)

B.A., University of Maryland; M.S., Johns Hopkins University Professor, Mathematics; Division Chair, Mathematics

Mary Alice Jost (1987)

A.A., Howard Community College; B.S., M.S., Towson University Assistant Professor, Biology

Virginia K. Kirk (1971)

B.A., M.A., Michigan State University *Professor. Humanities*

Donna B. Kirkley (1970)

A.A., Averett College; B.A., The College of William and Mary; M.A., University of Maryland Professor, Speech

Fran P. Kroll (1990)

B.A., University of Florida; M.A., George Washington University Associate Professor, Early Childhood Development and Teacher Education Beverly A. Raab Lang (1993) B.S.N., University of Maryland; M.Sc.N., Johns Hopkins University Assistant Professor, Nursing

Judith A. Law (1975)

A.S., Robert Morris Jr. College; B.S., M.S., University of Akron Professor, Office Technology

Robert I. Levene (1971)

B.S., University of Scranton; M.A., University of Nebraska; M.S., Shippensburg State College; Ed.D., The George Washington University *Professor, History*

Carolyn B. Lovell (1980)

B.A., Goucher College; M.S., Johns Hopkins University Professor, English/Foreign Languages

Lawrence H. Madaras (1970)

B.A., Holy Cross College; M.A., Ph.D., New York University *Professor, History*

Theresa A. Madden (1991)

B.A., Silver Lake College; M.A., University of Chicago
Associate Professor, English/Foreign
Languages

Vladimir G. Marinich (1970)

B.A., City College of New York; M.A., New York University; C.A.S., Johns Hopkins University Professor, Social Science

Martha A. Matlick (1971)

Diploma, Mercy Hospital School of Nursing; B.S., M.S., St. John's University; Ed.D, Virginia Polytechnic Institute and State University

Professor of Nursing; Associate for Instructional Assessment; Division Chair, Learning Centers Division

Christine R. McMurtrie (1993)

R.N., McKeesport Hospital School of Nursing; B.S.N., M.S., University of Maryland Associate Professor, Nursing

Ruby Kay Meyers (1984)

B.S., Mary Washington College; M.S., George Washington University; M.S., Johns Hopkins University

Associate Professor, Mathematics

Rebecca W. Mihelcic (1986)

B.S., Penn State; M.S., Kansas State University; M.A., Ph.D., University of Maryland

Professor. Business

Paula J. Mikowicz (1989)

B.A., State University of New York at Albany; M.S., Johns Hopkins University Associate Professor, Mathematics

Helen B. Mitchell (1974)

B.A., Hood College; M.Ed., M.M.S., Loyola College; Ph.D., University of Maryland Professor, Philosophy; Director of Women's Studies

Roxanne Moran (1986)

B.S.N., M.S.N., University of Maryland *Professor, Nursing*

Donna M. Musselman (1990)

B.S., University of Maryland; M.S., Medical College of Virginia of Virginia Commonwealth University

Professor, Nursing

Vinitha A. Nithianandam (1989)

B.E., College of Engineering, Gundy, India; M.S., University of Scranton Associate Professor, Electronics/

Patrick J. O'Guinn (1993)

B.S., San Jose State University; J.D., University of California, Hastings College of Law

Associate Professor, Criminal Justice and Business Law

Jennifer L. Penniman (1995)

B.S., M.Ed., University of Maryland Assistant Professor, Mathematics

Sharon J. Pierce (1990)

B.S., M.S.N., University of Maryland at Baltimore Associate Professor, Nursing

Russell A. Poch (1972)

B.S., Western Illinois University; M.S., Michigan State University; A.G.S., University of Maryland *Professor, Physical Science*

Deborah T. Randolph (1995)

B.S., Skidmore College; M.S., Villanova University; CNE and CNI Certified Assistant Professor, Information Systems

Bruce M. Reid (1970)

A.A., Howard Community College; B.S.E.E., Milwaukee School of Engineering; M.S.E., Johns Hopkins University Professor, Biomedical Engineering Technology

Ronald X. Roberson (1989)

B.A., Morgan State College; M.F.A., Maryland Institute College of Art Professor, Art; Division Chair, Humanities; Director, Art Gallery

Bernadette B. Sandruck (1991)

B.S., Towson State College; M.S., Johns Hopkins University
Associate Professor, Mathematics

Sharon L. Schmickley (1980)

B.S., Springfield College; M.S., Southern Connecticut State College Professor, Computer Systems; Division Chair, Business and Computer

Laura C. Sessions (1997)

A.A., Anne Arundel Community College; B.A., University of Maryland; M.S.N., Johns Hopkins University Instructor, Nursing

Andrea D. Shanklin (1993)

B.A., M.A., Mississippi State University Assistant Professor, English

Patricia R. Sipe (1994)

B.S.N., Russell Sage College; Ed.M., Teachers College, Columbia University Assistant Professor, Nursing

Emily T. Slunt (1976)

B.S.N., Johns Hopkins University; M.S., Ph.D, University of Maryland Professor, Nursing; Division Chair, Health Sciences/Director of Nursing

Consuelo F. Stewart (1991)

B.S., Towson University; M.S., Johns Hopkins University

Associate Professor. Mathematics

ASSOCIATE Professor, Mathematics

Sharon B. Stewart (1982)

B.A., Skidmore College; M.Ed., Johns Hopkins University; M.B.A., Loyola College *Professor, Computer Systems*

Patricia J. Turner (1974)

B.A., University of Maryland; M.S., Towson University Professor, Anatomy/Physiology

Patricia Van Amburg (1988)

B.A., Nazareth College; M.M.S., Loyola College Associate Professor, English/Foreign Languages

Philip J. Vilardo (1993)

B.A., Penn State University; M.A., Ph.D., Johns Hopkins University Instructor, Sociology

Marquis T. Walker (1994)

B.S., Morgan State University Assistant Instructor, Biology

Peggy L. Walton (1981)

B.A., Wheaton College; M.Ed., Rutgers University; Ph.D., Union Institute Associate Professor, English

Dan F. Whitaker (1995)

B.A., Washington College; M.A.S., West Chester University; Ed.D., Temple University; CNE and CNI Certified Associate Professor, Information Systems

Linda D. Wiley (1990)

B.S., M.S., Towson University; M.Ed., West Chester University Assistant Professor, Reading

Jane M. Winer (1979)

B.F.A., M.F.A., University of Arizona *Professor, Art*

Wei Xie (1997)

B.S., Shandong Medical University; M.S., University of Missouri Assistant Instructor, Chemistry/Physics

PART-TIME PROFESSIONAL STAFF

Marjorie A. Cangiano (1987)

B.A., Bowling Green State University; Certified Program Planner (CPP) Continuing Education Specialist

Barbara B. Livieratos (1987)

B.S., Castleton State College; M.A., University of Maryland; Certificate Public Policy Assistant Director of Planning and Evaluation

FACULTY—GRANT FUNDED

Margaret H. Garroway (1988)

B.A., State University of New York at Binghamton; M.Ed., Northeastern University Student Support Services/Learning Assistance Center Instructor

Soledad P. Townsend (1991)

A.A., Hagerstown Junior College; B.A., Hood College; M.S., Shippensburg University Career/Transfer Counselor

PROFESSIONAL—GRANT FUNDED

Joan B. King (1994)

B.A., Swarthmore College; M.S.W., University of Pennsylvania

Assistant Director/Counselor, Student Support Services

Elizabeth B. Mahler (1994)

B.A., Susquehanna University; M.A., University of Maryland Tech Prep Grant and Special Programs Coordinator

Linda M. Oliva (1996)

B.S., University of Maryland; M.Ed., Ed.D., Boston University New Focus Program Coordinator

Linda Schnapp (1989)

B.A., M.A., Brooklyn College, City University of New York; M.Ed., Ph.D., University of Maryland Coordinator, Project Access

PART-TIME PROFESSIONAL— GRANT FUNDED

Rebecca C. Price (1986)

B.A., Kansas State University; M.A., San Jose State University English as a Second Language Specialist

EMERITI

Mark M. Canfield (1972)

B.A., Denison University; M.A.T., Johns Hopkins University; Ph.D., University of Maryland *Professor Emeritus, Sociology*

Bernadene C. Hallinan (1971)

B.S., M.S., Elmira College; R.N., St. Joseph's Hospital

Professor Emeritus, Allied Health

Alfred J. Smith, Jr. (1969)

B.S., University of Buffalo; M.A., Columbia University; Ed.D., Indiana University President Emeritus

Curriculum Advisory Committees

ACCOUNTING

RUSSELL B. CONOVER, CPA—Auditor,
Administrative Office of U.S. Courts
ELIZABETH GERKIN, CPA—Accountant/
Auditor, Main Hurdman
SALLY GORDON—Alumni, Finance
Department, Equitable Bank
RUTH HUTCHINSON
SUZANNE MARSH—Tax Consultant, Deloitte
Haskins & Sells
GAIL SPAHN—Alumni

GAIL SPAHN—Alumni
GERTRUDE REICHLE, CPA—National
Education Center, Temple School Campus
JUDITH WHEELER—Talles Construction
Company

BIOMEDICAL ENGINEERING TECHNOLOGY

RICK APPLEGATE—Field Support Engineer, General Electric Medical

KEVIN CRAVEN—Production Manager, Applied Specialties, Inc.

JOSEPH HARRISON—Supervisor, Biomedical Engineering, DC General Hospital

JAMES V. JONES—Field Service Engineer, Beckman Instruments

GLEN MARROW—Biomedical Engineering
Technician Supervisor, Children's Hospital

ROBERT SHARP—Electronics Instructor, Howard Vocational Technical Center ROBERT STIEFEL—Director, Clinical Engineering, The Johns Hopkins Hospital

BUSINESS MANAGEMENT

King

MARY BECKER—Senior Corporate Banking Officer, First American Bank of Maryland ROBERTA E. DILLOW—Director Metropolitan Affairs, Baltimore Gas and Electric Company MURRAY GOLDSTEIN—C.E.O. (Retired) Dairy JOSEPH GUILFOYLE—Director of Personnel, Rascal Communications, Inc. JANET HADDAD—Director of Personnel, Howard County Government JAMES KNOWLES—Personnel Manager, Technical Services Department, Johns Hopkins Applied Physics Laboratory LYNN PETERSON NORFOLK—Manager and Assistant Treasurer, Citizens Savings and Loan Association, Inc.

CARDIOVASCULAR TECHNOLOGY

DANIELE CARTWRIGHT, RCVT—Clinical Preceptor, Washington Hospital Center BARBARA CHRISTENSEN, BSN, RN— Manager, Cardiac Cath Lab, Washington Hospital Center

GRACE COLE, RTR—Manager, Cardiac Cath Lab, Central Maryland Heart Center at Howard County General Hospital

PEG COOPER, BA, RTR, CV—Acting Technical Manager, (CVDL) Cardiovascular Diagnostic Lab, Johns Hopkins Hospital

HERMAN DAWSON, RCVT—Director of Cardiology and Neurology, Holy Cross Hospital

MICHELLE FISCHER, RCVT—Manager, Radiology Imaging

MARIE McGINN, CVT—Supervisor, Cath Lab, St. Agnes Hospital

VONCILLE MORROW, RT—Director, Invasive Cardiology Services, Washington Hospital Center

DENI OECHSLE, RN—Acting Nursing Manager, (CVDL) Cardiovascular Diagnostic Lab, Johns Hopkins Hospital

FLOYD OSTERMAN, MD—Medical Director, CVT Program, Howard Community College BARBARA PEARSON. RCVT—Alumni

CURRICULUM ADVISORY COMMITTEES

COMPUTER AIDED DESIGN (CAD) TECHNOLOGY

- WEBSTER BAILEY-RICHTER—Cornbrook and Gribble, Architects
- JOHN CLEMSON—Chairman of Maryland Division, American Institute of Architects
- TOM FAUCHER—RTKL Associates, Inc.
- DAVID HINTON—D.M.H. CAD Applications EARL MANN—S & C CADD Service
- EARL MANN—S & C CADD Service
- **CAROL NOBLE—Burton Associates**
- T. MICHAEL SWEENEY—Stuart Medical, Inc.
- CHUCK VENABLE—Howard County Public School System
- ALLEN WAINGER—Department Head, CADD Systems
- ROGER L. WEST—JHU Applied Physics Laboratory

CONTINUING EDUCATION: ADULT BASIC EDUCATION

- CONSTANTINE BITSAS—Executive Director, Careerscope
- JANET CARSETTI—Director, Project Literacy, Howard County
- CARMEN H. JONES-BURKE—Parent Involvement Coordinator, Howard County Head Start
- PATRICIA M. KEETON—Director, Business and Economic Development, Howard Community College
- DOROTHY LEHMAN—Administrator, Howard County Employment and Training Center
- BECKY LESSEY—Continuing Education Coordinator, Howard Community College
- ELIZABETH MAHLER—Coordinator of Special Programs, Howard Community College
- SAM MARSHALL—Director, Howard County Department of Social Services
- DAVE MORROCCO—Director of Staff Development, Howard County Board of Education
- JANET ROTH—Job Services Specialist, Howard County Job Service

CONTINUING EDUCATION: CAREER PROGRAMS AND COMMUNITY DEVELOPMENT

- CONSTANTINE BITSAS—Executive Director, Careerscope
- DR. JOYCE BOYD—Director, Howard County Health Department
- JOYCE BROWN WEDDINGTON— Coordinator, Howard County Office of Substance Abuse
- PATTY CAPLAN—Public Information Officer, Howard County Board of Education
- PATRICK FINLEY—Associate Professor, Health Sciences Division, Howard Community College
- JANICE VANISKO, R.N.—Education Specialist, Howard County General Hospital
- JOAN WOLFF, R.N.—Director of Staff Development, Staff Builders Health Care Services

CRIMINAL JUSTICE

- ELIZABETH DOOLEY—HCC Adjunct Faculty LAWRENCE A. GREENFELD—Associate Director, U.S. Department of Justice, Office of Justice Programs
- MARK MAGGIO—Training Specialist, Federal Judicial Center
- JAMES ROBEY—Former Chief of Police, Howard County Police Department
- JAMES ROLLINS—Former Director, Howard
 County Detention Center
- JOSEPH SLERT—Deputy Chief, U.S. Probation Office
- JAY ZUMBRUM, JR.—Captain, Howard County Police Department

DATA PROCESSING

- GARY DIKE—Deputy Director of Operation-Production Controls, National Computer Center
- JOSEPH HUNTER—Manager, Information Systems, Baltimore Gas & Electric
- MICHAEL JECKO—Vice President and Director, MIS, The Rouse Company

CURRICULUM ADVISORY COMMITTEES

- LEE R. MATOUSEK—Technical Director, Morgan Technologies
- MORTEN L. PETERSEN—Manager, Data Processing and Computer Control, Niro Atomizer, Inc.
- RICHARD RAVER—Manager, Computer Services, W.R. Grace and Company, Research Division
- PAUL RUDMAN—President, Wagner's Office Products
- JUDY RYBIKOWSKY—Technical Training Advisor, Social Security Administration
- R. W. TOWNSEND—President, Personal Computer Repairs, Inc.

EARLY CHILDHOOD

- BONNIE BRICKER—President, Play Pals, Inc. DOROTHY ERNST—Licensing Specialist, Department of Human Resources, Child Care Administration
- GERRY FEILD—Center Director, Columbia Kindercare
- JEAN GRINSPOON—Executive Director, Bet Yeladim. Inc.
- RAE ELLEN LEVENE—Coordinator Chapter I, Howard County Public Schools
- SUSAN MORRIS—Early Childhood Specalist, Howard County Library
- FRANCES STERNER—Regional Manager,
 Department of Human Resources, Child
 Care Administration
- WAFA STURDIVANT—The Partnership for Children
- NANCY WEBER, R.N.—Executive Director, Hospice Services of Howard County
- DEBBIE YARE—Howard County Department of Citizen Services
- JOANNE YOUNG—Owner, Young Care Child Development Centers/The Young School

ELECTRONICS TECHNOLOGY

ROBERT BARD—Professor of Electronics Technology, Prince George's Community College

- MATTHEW J. BELOVARICH—Automated Graphic Supervisor, Bendix Field Engineering
- RICHARD BROCATO—Manager of Technical Services, Johns Hopkins Applied Physics Lab
- JEREMIAH HETHERINGTON—Principal Professional Staff, Staff Group Supervisor, Satellite Communications Engineering Group, Johns Hopkins Applied Physics Laboratory
- ROBERT SHARP—Electronics Instructor, Howard County Vo-Tech Center

FINANCIAL PLANNING

- CHARLES BARR—Investment Broker and Branch Manager, Paine Webber Andrea Gould - Associate Dean, Robert G. Merrick School of Business, University of Baltimore
- FRANCES MAKINO—Adjunct Faculty, Howard Community College
- HOWARD MIRVIS—Vice President of Investments, Legg, Mason, Wood, Walker, Inc
- BARRY SCHUTTLER, CFP—President, FSC Securities
- MARY J. STEPHENSON, CFP—Family Resource Management Specialist, University of Maryland
- CAROL VAUGHN—Financial Consultant & Vice President, Meryl Lynch Pierce Fenner & Smith. Inc.
- JOHN S. WHITESIDE—President, Commercial & Farmers Bank

LABORATORY SCIENCE

- GAIL GARDNER—Personnel Representative, Research Division, W. R. Grace
- SHERRY HIPPEN—Human Resource Manager, Pharmacia Diagnostic, Inc.
- LYNDA KEIFER—Senior Research Scientist, Westvaco
- ROBERT OBST—Manager, Employment, W. R. Grace
- JENNIFER QUIRK—Manager, Technical Products

CURRICULUM ADVISORY COMMITTEES

DENISE TESTER—Program Manager, Pharmacia Diagnostic, Inc.

ANN VILECE—Personnel Services Supervisor, Westvaco

HENRY WELLS—Senior Research Biochemist, New Horizons

NURSING

LINDA FISH, R.N., Director of Medical Specialty Programs, Maryland Health Enterprises

JUDITH HORENSKY—Director of Clinical Services, Personal Touch Home Care of Baltimore, Inc.

BARBARA FEAGA LARIMORE—Health Director, Association of Retarded Citizens

DONALD LEWIS—Instructional Facilitator for Technology Magnet Program, Howard County Board of Education

STUART MAYNARD, Ph.D., R.N.C.S.—Nurse, Psychotherapist

JOAN McWILLIAMS—Director, Medical-Surgical Nursing, Maryland General Hospital

PEGGY MOHLER, R.N., Ph.D.—Director of Special Programs

WANDA MURRAY-GOLDSCHMIDT— Neighborhood Pharmacy

GLORIA RODGERS—Director of Nursing, Manor Care

NORA SCANLON—Counselor, Wilde Lake High School

LORI SCHRAMM—Director of Nursing, Catonsville Commons

JEAN TROTTER, R.N., M.S.—Health Care Consultants

OFFICE TECHNOLOGY

FREDERICK G. ANTENBERG, ESQ.—Attorney

CHARLES J. BROIDA, ESQ.—Attorney NANCY CAMPBELL—Columbia, Medical Plan, Orthopedics Department

LINDA DOWNEN—Alumni

DOLORES FALLON—Technical Services
Dept., Johns Hopkins Applied Physics Lab

Specialist
EDWIN M. HENRY, JR., ESQ.—Attorney
LOUISE KENNEDY—Alumni
JUDIE KNISELEY—Alumni
RICHARD R. MARCHESIELLO, ESQ.—

CAROL A. HARTMAN—Clerical Search

Attorney, Inter-County Law Center ADELE MIHM—Director of Medical Records, Howard County General Hospital

KAREN SHIFLETT—Alumni

BILLIE VAN WAGONEN - Legal Secretary, Reese & Carney

PLANT SCIENCE

NICK ADAMS—Owner, Ten Oaks Nursery RAY BOSMANS—Extension Agent, Howard County Extension Service

JOSEPH DYMYK—Instructor of Horticulture, Howard County School of Technology

LEE GRANT—Professor of Agriculture, University of Maryland

CHIP McDONALD—President and Owner, Columbia Grounds Management

JOHN METZLER—Owner, Metzler's Nursery RETAILING

JACQUELINE BARTON—Manager, Cosmetic Center

ROGER BOYLE—Manager, Sears, Roebuck & Company

ELIZABETH P. BUCKLEY—Marketing Manager, Columbia Management, Inc. JOE CRAIG—Divisional Vice President and General Manager, Woodward & Lothrop, Inc. LOU FRANCESCHINA—Manager, Giant Food

TELECOMMUNICATIONS

MAGDELENA C. BENITEZ—Communications
Specialist Manager, MCI
Telecommunications Corporation
DONORA DINGMAN—Manager, C&P
Telephone Company
TIM LEAGUE—Telecommunications
Specialist, ROLM

ROBERT WEILER—Chairperson of Electronics and Telecommunications Department, Capitol College

INDEX

| A | • |
|---|---|
| A+ Certification, 118 | C Calendar, iii |
| Academic Advising, 36 | , |
| Academic Computer Support, 7 | Cancellation of Courses, 31 |
| Academic Honesty, 33 | Cardiovascular Technology, 109, 151 |
| Academic Information, 23 | Career Services, 37 |
| Academic Procedures, 28 | Challenge Evernination, 26 |
| Academic Standards, 31 | Challenge Examination, 26 |
| Accounting, 103, 141 | Chemical Dependency Counseling, 113 |
| CPA Exam, Preparation for the, 103 | Chemistry, 153 |
| Accreditation, 2 | College Level Examination Program 26 |
| Administrative Staff, 219 | College Level Examination Program, 26 |
| Admission Policies and Procedures, 11 | College Map, 237 |
| Advanced Placement Exam, 26 | College Mission, 2 |
| Advising, Student, 36 | College Profile, 1 |
| Affirmative Action, 1 | Computer Aided Design 114 154 |
| Alumni and Friends Association, 2 | Computer-Aided Design, 114, 154 |
| Art, 67, 142 | Computer Services, 7 |
| Arts and Sciences, 66-92 | Computer Support Technology, 116 |
| Architecture, 66 | Computer Systems, 155 |
| Art, 67 | Consolidated Student Fee, 4 |
| Criminal Justice, 68 | Continuing Education, 53 |
| Environmental Science, 69 | Core Requirements, 60 |
| Health and Fitness Education, 70 | Core Requirements, 60 |
| Laboratory Science, 72 | Costs, 4 |
| Liberal Arts, 73 | Course Descriptions 141 218 |
| Life Sciences, 75 | Course Descriptions, 141-218 |
| Music, 76 | Accounting (AC), 141 |
| Nursing, 77 | Art and Photography (AR), 142 |
| Photography, 79 | Biology (BY), 147 |
| Physical Sciences, 80 | Biomedical Engineering (BT), 150 |
| Pre-Allied Health, 81 | Business Administration (BU), 150 |
| Pre-Dentistry, 82 | Cardiovascular Technology (CV), 151 |
| Pre-Medicine, 83 | Chemistry (CH), 153 |
| Pre-Medical Technology, 84 | Computer Systems (CS), 155 |
| Pre-Nuclear Medicine Technology, 85 | Computer Systems (CS), 155 Cooperative Education (CO), 162 |
| Pre-Optometry, 86 | Criminal Justice (CJ), 162 |
| Pre-Pharmacy, 87 | Dance (DA), 163 |
| Pre-Veterinary Medicine, 88 | Economics (EC), 164 |
| Psychology, 89 | Education (ED), 165 |
| Social Sciences, 90 | Electronics (EL), 167 |
| Theatre, 91 | Engineering (EN), 169 |
| Associate in Applied Science Degree, 23 | English (EG), 170 |
| Associate in Arts Degree, 23 | Film (FM), 176 |
| Attendance Policy, 29 | Fine Arts (FA), 176 |
| Audit, 30 | Financial Planning (FP), 177 |
| | French (FR), 177 |
| | Geography (GE), 178 |
| В | German (GR), 178 |
| Basic Skills, 53 | Health Care (HC), 179 |
| Biology, 147 | Health Education, 179 |
| Biomedical Engineering, 104, 150 | History (HY), 182 |
| Biotechnology, 72 | Human Development (HD), 185 |
| Board of Trustees, ii | Life Fitness (LF), 186 |
| Business Administration, 93, 150 | Management (MN), 189 |
| Business Management, 106 | Mass Media (MM), 190 |
| Business Training, 53 | Mathematics (MA), 190 |

| C (continued) | C (continued) |
|--|---|
| Course Descriptions (continued) | Curricula (continued) |
| Microsoft (MS), 195 | Early Childhood Development, 119 |
| Music (MU), 196 | Electronics Technology, 121 |
| Novell (NT), 199 | Telecommunications Technology, 123 |
| Nursing (NU), 200 | Engineering, 97 |
| Office Technology (OT), 202 | General Studies, 98 |
| Philosophy (PL), 205 | Network Administration, 126 |
| Physics (PS), 206 | Novell Certification, 128 |
| Plant Science (PT), 208 | Microsoft Certification, 130 |
| Political Science (PO), 209 | Office Technology, 133 |
| Psychology (PY), 210 | Paralegal Studies, 137 |
| Retailing (RE), 211 | Plant Science, 139 |
| Russian (RU), 211 | Teacher Education, 100 |
| Science (SC), 211 | Curriculum Advisory Committees, 229 |
| Sociology (SO), 212 | Curriculum Profile, 56 |
| Spanish (SP), 214 | CustomClass, 30 |
| Speech (SH), 214 | D |
| Smalltalk (ST), 215 | Dance, 163 |
| Theatre (TH), 215 | Dean's List, 28 |
| Women's Studies (WS), 217 | Directory for Assistance, ix |
| CPA Examination, Preparation for, 103 | Disabled Student Services, 7 |
| Credit for Formal Military Education and | Dismissal, 31 |
| Training, 25 | Dismissal Appeal Process, 31 |
| Credit for Programs Completed at Non-Collegiate | Drug and Alcohol-Free Campus, 9 |
| Organizations, 25 | - |
| Credit Free Division, 53 | E |
| Credit, Non-traditional, 25 | Early Childhood Development, 119 |
| Criminal Justice, 68, 162 | Economics, 164 |
| Curricula, 65-139 Accounting - Preparation for CPA | Education, 165 |
| Examination, 103 | Educational Foundation, 2 |
| Arts and Sciences, 66-92 | Electives, 63 |
| Architecture, 66 | Electronics Technology, 121 |
| Art, 67 | Employment, Student Programs, 20 |
| Criminal Justice, 68 | Engineering, 97, 169 |
| Environmental Science, 69 | English, 170 |
| Health and Fitness Education, 70 | F |
| Laboratory Science, 72 | Faculty/Administration, 219 |
| Liberal Arts, 73 | Fees, 4 |
| Life Sciences, 75 | Film, 176 |
| Music, 76 | Financial Aid, 15 |
| Nursing, 77 | Financial Planning, 177 |
| Photography, 79 | Fine Arts, 176 |
| Physical Sciences, 80 | Foreign-Born Programming, 53 |
| Pre-Allied Health, 81 | Foreign Languages, 177, 178, 211, 214 |
| Pre-Dentistry, 82 | Foundation, HCC Educational, 2 |
| Pre-Medicine, 83 | French, 177 |
| Pre-Medical Technology, 84 | G |
| Pre-Nuclear Medicine Technology, 85 | General Educational Development (GED), 31 |
| Pre-Optometry, 86 | General Education Requirements, 59 |
| Pre-Pharmacy, 87 | General Information, 1 |
| Pre-Veterinary Medicine, 88 | General Studies, 98 |
| Psychology, 89 | Geography, 178 |
| Social Sciences, 90 | German, 178 |
| Theatre, 81 | Grading System, 32 |
| Biomedical Engineering, 104 Business Administration, 93 | Graduation Petitions, 29 |
| Business Management, 106 | Н |
| Cardiovascular Technology, 109 | Health and Fitness Education, 70 |
| Chemical Dependency Counseling, 113 | Health Care, 179 |
| Computer Aided Design, 114 | Health Education, 179 |
| Computer Support Technology, 116 | History, 182 |

| H (continued) Home Page, ix, 8 Honors, Graduation with, 28 Honors Program, 27 Human Development, 185 | R Readmission, 14, 32 Records, 28 Refunds, Tuition, 5 Registration and Enrollment, 30 Retailing, 211 Russian, 211 |
|--|---|
| | |
| Incomplete Grades, 32 | S |
| Insurance, Medical, 4 | Schedule Change Fee, 4 |
| | Scholarships and Loans, 19 |
| J | Science, 211 |
| Job Assistance, 37 | Senior Citizen, Tuition Waiver for, 5 |
| | Semester Schedule, 31 |
| L | Sexual Harassment, 8 |
| Learning Centers, 6 | Smalltalk, 215 |
| Letter of Recognition, 23 | Social/Personal Counseling, 39 |
| Liberal Arts, 73 | Sociology, 212 |
| Library, 6 | Spanish, 214 |
| Life Fitness, 186 | Speech, 214 |
| Loans and Scholarships, 18 | Statement of Beliefs, 2 |
| LPN Pathway Sequence, 78 | Statewide Instructional Programs, 55 |
| | Student Address Change, 30 |
| M | Student Conduct, 8 |
| Management, 189 | Student Records, Confidentiality, 28 |
| Maps, 236 | Student Residency, 3 |
| Mass Media, 190 | Student Rights and Responsibilities, 19 |
| Mathematics, 190 | Student Services, 35 |
| Microsoft, 195 | Admissions, 35 |
| Microsoft Certification, 130 | New Student Orientation, 36 |
| Music, 196 | Advising Services, 36 |
| | Career Services, 37 |
| N | Academic Support Services, 38 |
| Network Administration, 126 | Personal Counseling, 39 |
| New Focus, 39 | Test Center, 39 |
| Non-Credit Courses, 53 | Student Life, 40 |
| Non-Traditional Credit, 25 | - |
| Novell, 199 | Taskar Education 100 |
| Novell Certification, 128 | Teacher Education, 100 |
| Nursing, 77, 131, 200 | Telecommunications Technology, 123 |
| | Theatre, 91, 215 Transfer Evaluations, 13 |
| 0 | Transfer Information and Articulation, 13, 43 |
| Office Technology, 133, 202 | Transfer Policies, 43 |
| Online Courses, 8 | Tuition and Fees, 4 |
| | Tuition Refunds, 5 |
| P | Taltion Witalias, o |
| Paralegal Studies, 137 | V |
| Personal Counseling, 39 | Veterans Affairs, 22 |
| Philosophy, 205 | , |
| Photography, 79 | W |
| Physics, 206 | Weekend College, 53 |
| Placement Testing, 23 | Withdrawal from Classes, 30 |
| Plant Science, 139, 208 | Women's Studies, 215 |
| Political Science, 209 | |
| Practical Nursing, 132 | |
| Probation, 31 | |
| Professional Staff, 220 | |
| Proficiency Examination, 26 | |
| Psychology, 89, 210 | |
| • | |
| Q Overlite: Beint Avenuese 22 | |
| Quality Point Average, 33 | |

| | COLLEGE LOCATION | | |
|-----|------------------|--|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| 232 | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| COLLEGE MAP | | |
|-------------|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

NOTES

NOTES

NOTES