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Harford Community College

Information in this catalog applies to the 2020-21 academic year. The publication is designed to provide accurate information about Harford Community College at the time of publication. It is not an irrevocable contract between the student and Harford Community College. The College reserves the right to change, at any time, any of the provisions contained herein. The College will make efforts to notify students of changes through class schedules, the HCC website, OwlNet and updated program brochures. Students are encouraged to consult with advisors to verify curriculum information before registering each semester.

Harford Community College actively encourages the enrollment of all interested students, and supports the employment of all qualified persons, regardless of race, color, religion, sex, sexual orientation, national origin, age, disability or any other characteristic protected by law or policies and practices of Harford Community College. Administrators, faculty and staff of HCC are committed to fully implementing enrollment and employment as required by specific acts of Congress and by federal and state regulations. Inquiries regarding compliance may be directed to the Office of Human Resources.

Individuals with disabilities who request academic accommodations for courses must register with Disability Support Services and must provide a copy of current documentation of the disability. A minimum notice of four weeks may be needed to provide some accommodations. Appointments can be made and questions answered by calling Disability Support Services, 443-412-2402 or 443-442-2199(TTY).

Questions, suggestions, or comments regarding the Harford Community College credit catalog should be addressed to catalog@harford.edu.
Dear Students, Colleagues, and Friends,

It is my pleasure to welcome you to Harford Community College. Since 1957, HCC has been providing a world-class, affordable education to the people of Harford County. We serve students from a variety of backgrounds: high school students getting a head-start on college coursework, established professionals looking to make a career change, retirees taking a class for fun—and everyone in between. Our goal, for each and every student, is to provide the tools, knowledge, and skills needed to grow and achieve in their personal and professional lives.

We now offer more than 90 programs of study that lead to an associate degree or certificate, along with several bachelor's degree programs through our partnership with Towson University’s Northeast Maryland Extension (TUNE). We work with local employers in both the public and private sectors to develop job training courses that equip workers with the skills they need to be successful in today's marketplace, and offer noncredit courses for anyone interested in pursuing lifelong learning and personal enrichment.

Whatever your goals, HCC is here to help you reach them. Our dedicated and innovative faculty, staff, and administrators care about the students we serve. We have a network of programs and offices in place to promote student engagement, retention, completion, and transfer. In addition to academics, we also offer a wide array of extracurricular activities; these include our 13 NJCAA Division I athletic teams, 30-plus student organizations, ample study abroad and service learning opportunities, and a lively cultural events calendar.

I invite you to visit our beautiful campus, and to get to know the people who will help you along your path to success. So many of us who work and study at HCC consider this campus our home—we hope you will consider joining us here.

Sincerely,
Dr. Jacqueline Jackson
Interim President
# ACADEMIC CALENDAR

For previous semester calendars, see Previous Catalogs (p. 238).

## 2020-2021 Academic Year

### July 2020

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Wednesday, 1st</td>
<td>Summer 2nd 5-Week Classes Start 100% Refund</td>
</tr>
<tr>
<td>Friday, July 3rd</td>
<td>College Closed</td>
</tr>
<tr>
<td>Saturday, 4th</td>
<td>College Closed</td>
</tr>
<tr>
<td>Friday, 10th</td>
<td>Summer 10-Week Classes Withdrawal Deadline</td>
</tr>
<tr>
<td>Tuesday, 14th</td>
<td>Summer 8-Week Classes Withdrawal Deadline</td>
</tr>
<tr>
<td>Thursday, 16th</td>
<td>Summer Math 3TS Withdrawal Deadline</td>
</tr>
<tr>
<td>Tuesday, 21st</td>
<td>Summer 2nd 5-Week Classes Withdrawal Deadline</td>
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### August 2020

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Saturday, 1st</td>
<td>Summer 8-Week, 10-Week, Math 3TS and 2nd 5-Week Classes End</td>
</tr>
<tr>
<td>Wednesday, 19th</td>
<td>Convocation</td>
</tr>
<tr>
<td>Monday, 24th</td>
<td>Fall 15-Week, Term 1, Term 1 TS, 1st 5-Week Classes Start</td>
</tr>
<tr>
<td>Wednesday, 26th</td>
<td>1st 5-Week Class 100% Refund Deadline</td>
</tr>
<tr>
<td>Friday, 28th</td>
<td>Term 1, Term 1 TS, 1st 5-Week Class 100% Refund Deadline</td>
</tr>
<tr>
<td>Monday, 31st</td>
<td>Fall 15-Week 100% Refund Deadline</td>
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### September 2020

<table>
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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Monday, 7th</td>
<td>College Closed</td>
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<tr>
<td>Tuesday, 8th</td>
<td>Fall 13-Week Classes Begin</td>
</tr>
<tr>
<td>Tuesday, 15th</td>
<td>Fall 13-Week Classes 100% Refund Deadline</td>
</tr>
<tr>
<td>Tuesday, 15th</td>
<td>Fall 1st 5-Week Classes Withdrawal Deadline</td>
</tr>
<tr>
<td>Thursday, 24th</td>
<td>Fall Term 1 and Term 1 TS Classes Withdrawal Deadline</td>
</tr>
<tr>
<td>Saturday, 26th</td>
<td>Fall 1st 5-Week Classes End</td>
</tr>
<tr>
<td>Monday, 28th</td>
<td>Fall 2nd 5-Week Classes Begin</td>
</tr>
<tr>
<td>Wednesday, 30th</td>
<td>Fall 2nd 5-Week Classes 100% Refund Deadline</td>
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### October 2020

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Thursday, 1st</td>
<td>Deadline for December 2020 Graduation Application</td>
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<tr>
<td>Saturday, 10th</td>
<td>Fall Terms 1 and 1 TS Math Classes End</td>
</tr>
<tr>
<td>Monday, 19th</td>
<td>Fall Term 2 and Term 2 TS Classes Begin</td>
</tr>
<tr>
<td>Tuesday, 20th</td>
<td>Fall 2nd 5-Week Classes Withdrawal Deadline</td>
</tr>
<tr>
<td>Friday, 23rd</td>
<td>Term 2 TS Math Classes 100% Refund Deadline</td>
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<tr>
<td>Saturday, 31st</td>
<td>Fall 2nd 5-Week Classes End</td>
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### November 2020

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<th>Date</th>
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<tbody>
<tr>
<td>Saturday, 2nd</td>
<td>Fall 3rd 5-Week Classes Begin, Fall 15-Week Classes Withdrawal Deadline</td>
</tr>
<tr>
<td>Wednesday, 4th</td>
<td>Fall 3rd 5-Week Classes Begin 100% Refund Deadline</td>
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### December 2020

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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Saturday, 5th</td>
<td>Fall Classes End</td>
</tr>
<tr>
<td>Monday, 7th</td>
<td>Fall Exams End</td>
</tr>
<tr>
<td>Saturday, 12th</td>
<td>Fall Semester Ends</td>
</tr>
<tr>
<td>Monday, 14th</td>
<td>Winter Term 1 Begins</td>
</tr>
<tr>
<td>Thursday, 24th</td>
<td>College Term 1 Begins</td>
</tr>
<tr>
<td>Thursday, 31st</td>
<td>College Closed</td>
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### January 2021

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<tbody>
<tr>
<td>Friday, 1st</td>
<td>College Closed</td>
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<tr>
<td>Thursday, 4th</td>
<td>Winter Term 2 Begins</td>
</tr>
<tr>
<td>Monday, 18th</td>
<td>College Closed</td>
</tr>
<tr>
<td>Saturday, 23rd</td>
<td>Winter Terms 1 &amp; 2 End</td>
</tr>
<tr>
<td>Monday, 25th</td>
<td>Spring Semester Begins - 15-Week, Term 1, Term 1TS, 1st 5-Week</td>
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### February 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Monday, 8th</td>
<td>Spring 13-Week Classes Begin</td>
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<tr>
<td>Saturday, 27th</td>
<td>Spring 1st 5 Week Classes End</td>
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### March 2021

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<th>Date</th>
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<tbody>
<tr>
<td>Monday, 1st</td>
<td>2nd 5-Week Classes Begin &amp; Deadline for May 2021 Graduation Application</td>
</tr>
<tr>
<td>Saturday, 7th</td>
<td>Spring Terms 1 &amp; 1 TS End</td>
</tr>
<tr>
<td>Saturday, 13th</td>
<td>Spring Terms 1 &amp; 1TS End</td>
</tr>
<tr>
<td>Sunday, 21st-28th</td>
<td>Spring Break - College Closed</td>
</tr>
<tr>
<td>Monday, 29th</td>
<td>Spring Term 2, Term 2 TS Classes Begin</td>
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### April 2021

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Saturday, 10th</td>
<td>2nd 5-Week Classes End</td>
</tr>
<tr>
<td>Monday, 12th</td>
<td>3rd 5-Week Classes Begin</td>
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### May 2021

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Saturday, 15th</td>
<td>Spring Classes End</td>
</tr>
<tr>
<td>Sunday, 16th</td>
<td>Study Day</td>
</tr>
<tr>
<td>Monday, 17th</td>
<td>Spring Final Exams Begin</td>
</tr>
<tr>
<td>Saturday, 22nd</td>
<td>Spring Semester Ends</td>
</tr>
<tr>
<td>Thursday, 27th</td>
<td>Commencement</td>
</tr>
<tr>
<td>Monday, 31st</td>
<td>College Closed</td>
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### June 2021

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Tuesday, 1st</td>
<td>Summer Semester Begins &amp; Deadline for August 2021</td>
</tr>
<tr>
<td></td>
<td>Graduation Application</td>
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</tbody>
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ACADEMIC POLICIES AND INFORMATION

Degree and Certificate Programs
Harford Community College (HCC) provides high quality, accessible and affordable educational opportunities for all ages. The college offers five different associate degrees and several certificates in unique programs of study (majors). The Community Education division offers training for the community, youth camps and senior programs. To learn more about HCC and the degree and certificate options HCC has for you, please see the Programs of Study (p. 125) list within the catalog. If you need further information, please contact the Office of the Vice President for Academic Affairs.

Degree Programs
ASSOCIATE OF ARTS (A.A.)
The Associate of Arts degree recognizes a curricular focus on the liberal arts (humanities, social sciences and similar subjects) and fine arts. The Associate of Arts degree not only transfers to appropriate baccalaureate programs, but also provides for career exploration and skills upgrading.

ASSOCIATE OF FINE ARTS (A.F.A.)
The Associate of Fine Arts degree recognizes a curricular focus on the fine arts (studio, graphic, digital, photographic and similar arts subjects). The Associate of Fine Arts degree not only transfers to appropriate baccalaureate programs, but also provides for career exploration and skills upgrading.

ASSOCIATE OF SCIENCES (A.S.)
The Associate of Sciences degree recognizes a curricular focus on science, mathematics, engineering and technology. The Associate of Sciences degree not only transfers to appropriate baccalaureate programs, but also provides for career exploration and skills upgrading.

ASSOCIATE OF APPLIED SCIENCES (A.A.S.)
The Associate of Applied Sciences degree recognizes a curricular focus in a specific occupational area. The Associate of Applied Sciences degree is intended primarily for immediate employment or career mobility; it also provides some opportunities for transfer to baccalaureate programs.

ASSOCIATE OF ARTS IN TEACHING (A.A.T.)
The Associate of Arts in Teaching degree recognizes a curricular focus in teacher education which meets the lower-level degree academic content, outcomes, and requirements for teacher education similar to the first two years of a baccalaureate program in teacher education. This degree requires a passing score on Praxis Core and a cumulative grade point average of 2.75 on a 4.0 scale and will transfer in total without further review by Maryland public and independent 4-year institutions.

Certificate Programs
Certificate programs offer training in skills that are specific to an occupation; they are available in several occupational fields. Certificates can be completed in six months to two years and include from 12 to 48 credits of course work.

Curriculum Advisory Committees
Harford Community College’s academic degree programs utilize Curriculum Advisory Committees to assist in the continued growth of academic programs, as well as the development of new programs. Committees include community members with an expertise in the academic area for which they serve.

The following Curriculum Advisory Committees are currently in place:

Community Education, Business and Applied Technology
- Accounting
- Business Management
- Computer Aided Design and Drafting
- Computer Information Systems
- Engineering Technology
- Information Systems and Cybersecurity

Behavioral Social Sciences
- Criminal Justice
- Paralegal

Nursing and Allied Health Professions
- Medical Assisting
- Nursing

Arts & Humanities
- Mass Communications

Requirements and Procedures for Degrees and Certificates

Student Declaration of Degree or Certificate Program
Students who choose a degree or certificate program upon admission to the College must follow the program requirements in effect for the academic year (typically September 1 to August 31) for which they are admitted.

College Modification of Degree or Certificate Requirements
If the College changes the degree/certificate requirements after a student has been admitted/readmitted, the student may complete the graduation requirements in effect at the time of admission/readmission or may choose the full requirements of the new program. Students who decide to change to the revised program requirements must complete and submit a Change of Academic Intent form online on the My Academic Life tab in OwlNet or by paper in the Registration and Records Office.

Student Change of Program
Students who change their program of study must complete the full requirements of the new program published in the College Catalog for the academic year (September - August) in which the change is made. Course substitutions and waivers previously approved for a program of study will apply to that program only. Students wishing to change their program of study are encouraged to meet with their academic advisor before completing a ‘Change in Academic Intent’ form online on the My Academic Life tab in OwlNet or by paper in the Registration and Records Office.

Requirements for the Associate Degree
To be eligible for an associate degree, students must:
1. Complete a minimum of 60 credit hours of college-level work, with a cumulative grade point average of 2.00 or higher.
2. Complete a minimum of 15 credit hours at Harford Community College.
3. Complete general education, diversity (p. 9), physical education (p. 10), testing and essential technical standards as applicable, and degree requirements in each program of study in which the degree is to be awarded.
4. All graduates must attain at least a C grade in ENG 101 English Composition (GE) or pass a standardized college-wide writing examination.
5. Be recommended by the Vice President for Academic Affairs for graduation.
6. Be conferred by the President and Board of Trustees of Harford Community College.

Requirements for Certificate
To be eligible for a certificate, students must:
1. Complete the required courses of an approved certificate program with a grade point average of 2.00 or higher and such testing as may be required by the College.
2. Earn at least 25 percent of the credit hours at Harford Community College.
3. Demonstrate basic competencies in English, reading, and mathematics by completing the following:
   - English: Scoring at or above college level on the writing assessment or passing ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing or ENG 060 ESL Basic Writing. The appropriate English course is determined by the specific certificate program requirements.
   - Reading: Scoring at or above college level on the reading assessment or passing ENG 003 Reading and Understanding College Textbooks or ENG 018 Integrated Reading and Writing.
   - Mathematics: Scoring at or above the level of MATH 021 Pre-Algebra II or passing MATH 001 Fundamentals of Mathematics or MATH 010 Pre-Algebra or MATH 020 Pre-Algebra I.
4. Complete testing and/or essential technical standards as applicable.
5. Be recommended by the Vice President for Academic Affairs for graduation.
6. Be conferred by the President and Board of Trustees of Harford Community College.

Double/Multiple Programs of Study Declaration
With the exception of General Studies and Technical/Professional Studies, students may simultaneously pursue the requirements of two or more different programs of study. Pursuit of more than one program of study should be discussed in the early stages with an advisor and must be declared on the Application for Graduation. The student must follow the requirements in effect for the same year for all programs of study. Upon successful completion of double or multiple programs of study that fall under one degree type (i.e., A.A., A.S., A.A.T., A.F.A., or A.A.S.), students will be issued one diploma for that graduation term. Duplicate diplomas may be requested for a fee. In cases where students have successfully completed requirements for programs of study that fall under two or more degree types, a diploma for each type of degree will be issued. All programs of study will be announced at commencement ceremonies and will be annotated on the student’s transcript of record.

Existing institutional policies governing graduation requirements and residency will remain in effect.

Additional Degree or Certificate
After completion of a degree or certificate, students may earn a subsequent degree or certificate by meeting the program requirements for that degree or certificate as long as the student has completed a minimum of 15 credits for the associate degree or 25 percent of the credit hours for the certificate at Harford Community College. Students must maintain a minimum grade point average of 2.0 in all courses completed for the additional degree or certificate.

Student Change of Educational Goal
Students who change their status from ‘Taking Courses’ to seek a degree or certificate must follow the program requirements in effect for the academic year (September 1 to August 31) in which the change is made. Students who change their status from ‘Taking Courses’ to seeking a degree must complete the College Academic Skills Assessment before the change of educational goal can be officially processed. Students identified as needing to improve one or more basic skills will be required to enroll in the appropriate transitional studies course(s) prior to or concurrently with the program requirements. Students who decide to seek a degree or certificate must complete and submit a Change of Academic Intent form online on the My Academic Life tab in OwlNet or by paper in the Registration and Records Office.

Student Responsibility
Students are responsible for following their program and meeting graduation and transfer requirements. Students are encouraged to seek assistance from the advising staff if they have questions. However, meeting graduation and transfer requirements is ultimately the responsibility of the student.

Diversity Course Requirement
To be eligible for an associate degree, new and readmitted students must complete one 3-credit diversity course. Approved Diversity Courses are denoted with a D icon. The diversity course requirement enables students to explore, in depth, cultural differences based on age, ethnicity, gender, race, religion, sexual orientation, or social class. To complete this requirement, in most programs, students should select one of the 3-credit Arts/Humanities (GH), Behavioral/Social Sciences (GB), or Interdisciplinary/Emerging Issues (GI) General Education electives that also appears on the approved list of Diversity Courses (D).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Physical Anthropology and Archaeology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 102</td>
<td>Introduction to Cultural Anthropology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 203</td>
<td>Survey of World Drama (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 204</td>
<td>Survey of Modern Drama (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 201</td>
<td>World Literature: 800 B.C. to 1600 A.D. (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 202</td>
<td>World Literature: 1600 A.D. to the Present (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205</td>
<td>American Literature: Colonial Through the Civil War (GH) (D)</td>
<td>3</td>
</tr>
</tbody>
</table>
**Behavioral/Social Science Elective** - Any course in anthropology, criminal justice, economics, geography, history, paralegal studies, political science, psychology, and sociology.

**Humanities Elective** - Any course in art, communication studies, drama, English, foreign languages, mass communications, music, philosophy, photography, religion, theatre, and visual and performing arts.

**Biological/Physical Sciences Elective** - Any course in astronomy, biology, chemistry, earth science, environmental studies, forensic science, physical science, and physics.

**General Elective** - Any 100 or 200 level course in any discipline.

**Graduation Requirements**

**Changes in Graduation Requirements**

If the College changes a program in a way that prevents a student from meeting the graduation requirements in effect at the time of the student's admission, the change may necessitate appropriate course substitutions. Course substitutions must be appealed through an appeal form filed at the Registration and Records Office.

**Awarding of Degrees and Certificates**

Diplomas are conferred in August, December, and May of each year. August graduation requirements must be met by August 31; December graduation requirements must be met by December 31 and May graduation requirements must be met by May 31. Students will receive notification from the Registration and Records Office when diplomas or certificates for each graduation term are available for pick up. If the student has an outstanding financial obligation to the College, diplomas will not be issued until the obligation is resolved. The Registration and Records Office is authorized to issue letters of completion to students who need verification of program completion at other times.

The College reserves the right to award all degrees or certificates earned.

**Graduation Procedures**

To apply for graduation, students must:

1. Meet with an academic advisor to ensure they have met, or are on track to meet, the requirements of their degree and/or certificate.
2. Ensure that the Registration and Records Office has current information on their intended degree and/or certificates. To update their intended degree/certificate, students must complete and submit a Change in Academic Intent form online on the My Academic Life tab or by paper in the Registration and Records Office.
3. Complete and submit a Graduation Application online on the My Academic Life tab or by paper in the Registration and Records Office no later than:
   - March 1 for May graduation,
   - June 1 for August graduation, and
   - October 1 for December graduation.

There are no exceptions to these deadlines.

**Commencement Ceremonies**

Formal commencement ceremonies are held in May for graduating classes within the academic year. For further information, please check the Commencement webpage.
**Attendance**

The College recognizes that successful student performance in college courses is dependent upon regular attendance and participation. Therefore, students are expected to attend all classes and to participate in all learning activities. Missed class time due to obligations such as religious practice, jury duty, military service, medical issue, or participation in authorized College extracurricular activities will be considered excused absences. Students are responsible for contacting their instructors regarding all attendance matters and for completing required course work. Documentation may be required for any excused absence.

Non-attendance can result in loss of financial aid and/or impact other third-party funding sources, as well as failure or removal from the course.

**Cancelled Classes**

HCC reserves the right to cancel any class for insufficient enrollment. You will be notified of class cancellations as they occur. HCC also reserves the right to change instructor assignments. Financial Aid will not pay for cancelled classes.

**Dropping and Withdrawing from Courses**

**Dropping from Courses**

Students must drop courses during the refund period to receive a full refund. Courses dropped during the refund period will not appear on the student’s official record. To drop from classes, students must complete and submit a Credit Schedule Form to the Registration and Records Office (http://www.harford.edu/student-services/registration-and-records.aspx). Students may also drop courses online via OwlNet.

Students dropping courses due to military service should refer to the Dropping or Withdrawing From Courses Due to Military Service policy.

**Withdrawing from Courses**

After the refund period, students may withdraw from courses during the official withdrawal period. In order to withdraw from classes, students must complete and submit a Credit Schedule Form to the Registration and Records Office or withdraw online via OwlNet. Students dropping courses due to military service should refer to the Dropping or Withdrawing From Courses Due to Military Service policy. The symbol W will appear on the student's record if the following withdrawals take place:

1. A student withdraws by the official withdrawal deadline, which is approximately two-thirds through the semester, term, or session.
2. The College withdraws a student who has been identified by the official withdrawal deadline as never attending the class or stopped attending the class. See the Attendance Section (p. 11) for more information.
3. An instructor and the faculty division dean may approve a student's request for a withdrawal after the official withdrawal deadline but before the last day of the semester, term or session for documented extenuating circumstances. These circumstances include, but are not limited to, serious illness/accident/medical condition, death in the immediate family, involuntary transfer or change in working hours. Requests for late withdrawal will only be considered if they are made within one year from the last date of the semester/session in which the course was taken.
4. By filing an appeal form with the Registration and Records Office (http://www.harford.edu/student-services/registration-and-records.aspx), students may request a withdrawal after final grades are processed for documented extenuating circumstances such as, but not limited to, serious illness, death in the immediate family, involuntary transfer by one's employer, or involuntary change in working hours. Requests for late withdrawal will only be considered if they are made within one year from the last date of the semester/session in which the course was taken.

**Dropping or Withdrawing from Courses due to Military Service**

Harford Community College adheres to federal and state law on the duties to and the rights of students who are members of the U.S. Armed Forces, including the National Guard and the Reserves, when they are unable to attend classes or have to suspend their studies due to being called to active military duty or being mobilized. Students who cannot complete course requirements because of being called to active military duty or being mobilized should notify the Registration and Records Office (http://www.harford.edu/student-services/registration-and-records.aspx). With appropriate documentation, students have the following options to choose from:

1. A student may request their course(s) be dropped (removed from the student's record) and a full refund of tuition and fees will be granted
2. A student may request a withdrawal from their course(s) and will be assigned a W on the student's record and a full refund of tuition and fees will be granted.

Students attempting to complete courses during active duty assignment, but need extended time, may request an Incomplete (I) grade. Refer to the Grades and Grade Reports (p. 12) policy. If the student pursues an Incomplete (I) grade, they are still responsible for the tuition and fees associated with the course(s). Requests from prior semesters, sessions, or terms will not be granted.

Once returning from active duty or being mobilized, service members are able to continue their studies at Harford Community College.

**Involuntary Withdrawal from the College**

In cases where a student is unable or unwilling to request a voluntary withdrawal from the College, and the student poses a direct threat of harm or substantially impedes the continuance of normal College functions, the College reserves the right to involuntarily withdraw such student.

**Final Examinations**

Students are required to take the final examination in each course on the scheduled date at the end of each semester if credit is to be granted in the course. Permission for a special examination is at the discretion of the instructor.

For policies relative to prior years, please refer to the appropriate year's catalog.

**Prerequisites**

Prerequisites are courses that must be completed before attending a higher level course. Students can register for the next semester if presently enrolled in prerequisite course(s). If the student does not
successfully complete the prerequisite, the College has the right to drop administratively the student from the higher level course.

**Student Records**

Academic educational records are maintained for all students. This record contains all course work, including courses that are repeated, transfer credit, academic status, grade point average, disciplinary expulsion and degree(s) granted. This record is kept as a permanent record of the College.

Other educational records contain, but are not limited to, high school and/ or college transcripts, letters the student may have sent to the College, copies of letters sent to the student by the College, test scores, and academic appeal information. These records are kept approximately two years after the date of last enrollment.

**Transcript of Academic Record**

Official academic records are kept on permanent file in the Registration and Records Office. All requests for transcripts (http://www.harford.edu/student-services/registration-and-records/requesting-a-transcript.aspx) must be submitted in writing or online. Telephone requests cannot be honored. Any financial obligation to the College must be cleared before a transcript will be released. There is a charge per transcript copy.

**Grades and Grade Reports**

The following grading policy is in effect for all students, regardless of the year in which they enrolled at the College. Deficiency reports for D or F academic performance are available to students approximately at the midpoint of the 15-week course.

Official grades and symbols earned by students in each course will be recorded and, upon request from the student, will be issued to designated individuals or agencies after all final grade processing is complete. Grade information is also available online. If the student has an outstanding financial balance due payable to the College, transcripts will not be issued until the obligation is resolved.

**Grades and Quality Points**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent (4 Quality Points)</td>
</tr>
<tr>
<td>B</td>
<td>Good (3 Quality Points)</td>
</tr>
<tr>
<td>C</td>
<td>Average (2 Quality Points)</td>
</tr>
<tr>
<td>D</td>
<td>Poor (1 Quality Point)</td>
</tr>
<tr>
<td>F</td>
<td>Failure to meet course requirements (0 Quality Points)</td>
</tr>
</tbody>
</table>

Letter grades for transitional studies courses (courses below 100 level) will be noted with an asterisk *. D grades are not issued in transitional studies courses.

**Symbols and Quality Points**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>Withdrawal (0 Quality Points)</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete (0 Quality Points)</td>
</tr>
<tr>
<td>K</td>
<td>Audit (0 Quality Points)</td>
</tr>
<tr>
<td>N</td>
<td>No Grade Provided (0 Quality Points)</td>
</tr>
<tr>
<td>R</td>
<td>Continuing Research (0 Quality Points)</td>
</tr>
</tbody>
</table>

W - Indicates course withdrawal without a grade. Withdrawal can be initiated by the student or by the College. The symbol W is not used in computing the Grade Point Average (GPA).

I - Faculty member agrees that the student can meet course requirements without additional registration. The symbol I must be resolved by completing the requirements of the course within a period prescribed by the instructor, but in no case later than 60 days after the end of the semester in which the I was awarded. In the event the I is not resolved, the symbol will automatically convert to an F which will be used in computing the GPA.

K - Designates audit (not for credit). The symbol K will not be used in computing the GPA.

N - The N symbol is assigned by the Registration and Records Office in the event that a grade is not provided by the instructor. The N symbol must be resolved by the instructor.

R - Student is completing work on a portfolio and is awarded for satisfactory completion of APL 102 Portfolio Development Seminar, a continuing research component of the portfolio assessment program. Students may earn up to two R symbols. R is included in earned credits but is not used in computing GPA.

*M - The letter grade M is no longer processed as a grade by Harford Community College effective summer 2013 term; however, the policies applicable to the M grade will remain in effect for students who earned the M grade prior to its discontinuation. Students whose academic record shows the M grade should consult the College’s credit catalog from previous years for details regarding the College’s policies on the M grade. Students are also encouraged to meet with an advisor about how to proceed with course enrollment.

**Change of Final Grade**

In cases where a student alleges that a final course grade was unjustified, the student first attempts to resolve the conflict with the instructor by initiating the appeal process in writing no later than 60 days after the conclusion of the semester or term in which the grade was awarded. With the appeal, the student must submit in writing his/her rationale supported by appropriate documentation. If the conflict cannot be resolved, the complaint shall be presented by the student to the division leader in which the course is offered and if necessary, the division leader may request documentation about the complaint. The decision of the division leader is final.

**Audit**

Students may register for audit (not for credit) during any registration. Students may change from audit to credit only during the published schedule change period. Students may change from credit to audit with the instructor’s permission at any time before the official withdrawal deadline. An instructor and the faculty division dean may approve a student’s request for a change from credit to audit after the official withdrawal deadline but before the last day of the semester, term, or session for documented extenuating circumstance. These circumstances include, but are not limited to, serious illness/accident/medical condition, assignment to active duty in armed services, death in the immediate family, involuntary transfer or change in work hours by employer. Audit classes require the same tuition and fees as regular credit classes. Students auditing a course will be expected to meet requirements set by the instructor.

**Grade Point Average**

**Semester Grade Point Average**

The semester grade point average (GPA) is determined by multiplying the number of credit hours in each course successfully completed by the
number of points corresponding to the final grade for the course. The
total is then divided by the number of credit GPA hours completed during
that semester. The GPA is computed only on college level credit courses
complete at Harford Community College. Courses for which a symbol (W,
I, K, N, R, M (p. 12)) is awarded will not be considered in calculating the
GPA.

Cumulative Grade Point Average

The cumulative GPA is determined in the same manner as the semester
GPA. In the case of repeated courses, only the last grade earned will be
used in computing the cumulative GPA.

President’s List and Dean’s List

The President’s and Dean’s Lists are Honors are awarded at the end of
the fall and spring semesters. The following criteria will be used when
recognizing scholarship of full- and part-time students.

1. Students who receive a grade of C, D, F or I in any course that
   semester are not eligible for honors.
2. Full-time: 12 college level1 credits or more must be completed that
   semester for full-time honors.
3. Part-time: 12 college level1 credits must be accumulated prior to the
   semester under consideration to be eligible for part-time honors, and
   six college level1 credits must be completed in the current semester.
4. Credit-by-exam and transfer credit are not included. Students must
   have a 3.76 or higher GPA for placement on the President’s List (High
   Honors); a 3.50 to 3.75 GPA must be achieved for placement on the
   Dean’s List (Honors).

1 Courses 100 level or above.

Academic Renewal

Students may request to have up to 16 college-level credits of D or F
grades deleted from the calculation of their grade point average (GPA).
Approved courses are designated as XD or XF; respectively, on their
permanent record. Courses with a grade of D, which were previously used
in the last semester to award a degree or certificate, are not eligible for academic renewal. The requested D or F grades must have been earned in courses taken during the semester prior to the date of the request for academic renewal. Additionally, all college-level credits with a minimum 2.5 cumulative GPA must be completed in the current semester.

5. Credit-by-exam and transfer credit are not included. Students must
   have a 3.76 or higher GPA for placement on the President’s List (High
   Honors); a 3.50 to 3.75 GPA must be achieved for placement on the
   Dean’s List (Honors).

1 Courses 100 level or above.

Request for Credit Overload

Students in good standing may request a credit overload by meeting with
an advising staff member through walk-in appointments with Advising,
Career and Transfer Services.

Repeating Classes

Students may repeat a course only one time. Students wishing to attempt
a second repeat (third enrollment) or more must receive the approval of
an advising staff member, faculty advisor, or academic division dean.
Certain courses previously identified by divisions (e.g. music ensembles,
physical education activities, etc.) represent exceptions to the policy.

Requirements for College Readiness

English Proficiency and Requirements

Students must meet certain minimum composition requirements for
written work submitted in all courses. These requirements state:

1. All papers must demonstrate that the student has a reasonable
degree of skill in presenting material in a clear and logical
manner.
2. All papers must demonstrate college-level competence in
grammar and in the mechanics of composition, spelling, and
punctuation.
3. All graduates must attain at least a C grade in ENG 101 English
Composition (GE) or pass a standardized college-wide writing
examination.

Grades on papers that are poorly written, regardless of the course, may
be reduced for the quality of the writing alone; in extreme cases, a failing
grade in the course may be given for this reason alone.

A student whose first language is other than English will be required
to take an examination to determine proficiency in English. If it is
determined that a student is not adequately proficient in English, the
College requires appropriate remedial or language training before the
continuation of a program.

Transitional Studies

Harford Community College expects competence in reading, writing,
and mathematics as the necessary foundation for success in college.
Transitional Studies courses are offered for students who demonstrate
on the Academic Skills Assessment the need to improve one or more of
the basic skills. Transitional courses provide a supportive instructional
environment that allows students to attain the basic skills and attitudes
for effective study in college-level study.

Transitional Studies courses are listed under the English, mathematics,
student development, biology and chemistry sections in the schedule of
classes and begin with the number 0 or 00. These courses are used to
determine full-time or part-time status; however, credits earned are shown
as ‘0’ on the student’s academic transcripts and cannot be applied toward
fulfillment of a degree or certificate. Grades earned in transitional studies
courses are not computed into the student’s GPA.

Students enrolling in transitional courses should allow one hour per week
on campus in addition to class time. This time is necessary to complete
tests and quizzes in the Test Center and to take advantage of other
support services.
If Academic Skills Assessment results indicate that a student needs to enroll in transitional courses, such courses must be completed prior to or concurrently with other college courses. If enrolled in a degree or certificate program with an ENG 101 English Composition (GE) requirement or college level math requirement (100 level or above), the student must complete these courses before they attain 24 college-level credits. Furthermore, transitional courses required as prerequisites to college level English and math must be continued in sequence once begun until college level courses in English and math are complete. It is strongly recommended that students consult with an advisor before withdrawing from any Transitional Studies course.

Procedures on Transfer Courses

Transfer Students

Credit may be granted for coursework completed at regionally accredited institutions and from institutions that are candidates for regional accreditation. Course work completed at degree-granting and non-degree-granting higher education institutions that are not regionally accredited but hold national or specialized accreditation recognized by the U.S. Department of Education and/or the Council for Higher Education Accreditation may be considered for transfer credit on a case by case basis.

Students pursuing a degree or certificate at HCC should provide an official transcript to the Registration and Records Office prior to the completion of their first semester at HCC. Transcripts are considered official only if received by HCC in the issuing institution's sealed envelope within one year of the print date. Transfer courses are accepted based upon the student's declared program of study at HCC. Students who have previously earned an associate's or bachelor's degree will not be evaluated for General Studies.

A student is required to complete fifteen credit hours in residency at HCC in order to graduate with an associate degree and/or must complete 25 percent of the required credit hours for a certificate.

See Assessment for Prior Learning for policies regarding the awarding of credit through non-traditional learning.

All transcripts received by the Registration and Records Office are the property of the College and cannot be released to the student; they will not be duplicated, returned to the applicant, or forwarded to any other college, university, individual, or agency.

Since it may be difficult to assess transfer credit from another institution unless adequate information is available, it is the student’s responsibility to supply the Registration and Records Office with a catalog and/or course syllabi from each institution previously attended, if requested.

If a student changes a program of study and wishes to have transcripts re-evaluated for consideration of additional transfer credit, a Request for Re-Evaluation of Transfer Credit (http://ww2.harford.edu/CMS/OnlineForms/Registration/Transcript-reevaluation.asp) form must be submitted electronically on OwlNet or in person to the Registration and Records Office (http://www.harford.edu/student-services/registration-and-records.aspx)

Transfer students pursuing an associate degree or certificate are strongly encouraged to meet with an academic advisor in the Student Center prior to registering for credit courses. A review of assessment results, previous college credits and grades, and the length of time away from college should be taken into consideration when planning an appropriate course load.

Students seeking information about receiving credit through non-traditional learning should see the policy for Assessment for Prior Learning (p. 99) in the catalog.

Transfer of General Education Courses

HCC adheres to the general education and transfer policies of the Maryland Higher Education Commission (MHEC) and complies with Maryland COMAR 13B.02.02.16. All applicable general education courses are acceptable for credit with an earned grade of 'D' or higher with the exception of ENG 101 English Composition (GE), which requires students to attain at least a 'C' grade (HCC requires a 'C' or higher in ENG 101 English Composition (GE)). Courses designated as General Education at non-MHEC institutions will be designated as General Education at HCC if applicable; however, a course cannot be accepted for General Education credit if less than three semester credit hours. Please note that some HCC programs of study require a grade of 'C' or higher in specific courses. These are noted in the 'Programs of Instruction' section of the college catalog.

Transfer of Non-General Education Courses

Non-general education credit applicable to the student's declared program of study will be transferred in as long as the cumulative grade point average of the block of courses is 2.0 or higher. Please note that some HCC programs of study require a grade of 'C' or higher in specific courses.

Transfer of Diversity Courses from Other Institutions

The College recognizes diversity courses completed at other institutions as long as they satisfy a Behavioral/Social Science, Arts/Humanities, or Interdisciplinary or Emerging Issues general education requirement at the sending institution.

Foreign College and University Credit

HCC does not evaluate documents issued directly from an out-of-country school. Documents must be evaluated and translated by a credential evaluation service. HCC requires a course-by-course evaluation and recommends the use of AACRAO or WES (World Education Service) but does accept official evaluations from members of the National Association of Credentialing Evaluation Services. Evaluations must be received by HCC directly from the issuing agency. Courses may be considered on a case-by-case basis.

Repeating of Transfer Courses

Transfer students with multiple repeats of the same course at previous institutions will have the most recent attempt, regardless of the grade or previous institution's repeat policy, reviewed for transfer credit. If you received transfer credit for a HCC equivalent course and then repeated the same course at HCC for credit, the transfer course credit will be excluded from your transfer record and the HCC grade becomes permanent. The HCC course will be included in the student’s grade point average regardless if higher transfer grade was higher.

Repeating HCC Course by Transfer

A student who failed a course at HCC and then earned credit at another institution for the same course may use the transferred credit to satisfy the credit requirement for that particular course. In such cases the F grade will remain on HCC’s permanent record, but will be noted as TF (repeated in transfer) and will no longer affect the cumulative Grade Point average.
Average. Students must submit an official transcript to the Registration and Records Office.

A student who received a passing grade (C or better) for an HCC course cannot transfer the equivalent course to HCC. The credit will not be accepted.

**Current Students Attending Other Institutions**

Students who plan to take course work at other institutions after enrolling at HCC should have the courses approved in advance by an academic advisor. This process will assure that courses taken to meet program or General Education requirements will transfer to HCC.

**Academic Standards for Credit Students**

At the end of each semester, each student’s academic standing is reviewed. Academic Standing is determined by the relationship between a student’s GPA and the total cumulative GPA hours attempted.

Transitional Studies courses numbered below 100 are not included in the calculation to determine institutional Academic Standing. Students receiving any form of financial support must meet satisfactory academic standards in both transitional and credit courses for Financial Aid. See Financial Aid (http://www.harford.edu/student-services/financial-aid.aspx) in this catalog.

There are four levels of academic standing: Good Academic Standing, Academic Warning, Academic Restriction and Academic Suspension.

### Academic Progress Table

<table>
<thead>
<tr>
<th>Total Cumulative GPA Hours Attempted</th>
<th>Good Standing if GPA is</th>
<th>Academic Warning if GPA is below</th>
<th>Academic Restriction if GPA is below</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 - 6.5</td>
<td>1.40 or higher</td>
<td>1.40</td>
<td>--</td>
</tr>
<tr>
<td>7.0 - 12.5</td>
<td>1.40 or higher</td>
<td>--</td>
<td>1.40</td>
</tr>
<tr>
<td>13.0 - 17.5</td>
<td>1.50 or higher</td>
<td>--</td>
<td>1.50</td>
</tr>
<tr>
<td>18.0 - 22.5</td>
<td>1.60 or higher</td>
<td>--</td>
<td>1.60</td>
</tr>
<tr>
<td>23.0 - 27.5</td>
<td>1.70 or higher</td>
<td>--</td>
<td>1.70</td>
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<tr>
<td>28.0 - 32.5</td>
<td>1.80 or higher</td>
<td>--</td>
<td>1.80</td>
</tr>
<tr>
<td>33.0 - 37.5</td>
<td>1.90 or higher</td>
<td>--</td>
<td>1.90</td>
</tr>
<tr>
<td>38.0 and above</td>
<td>2.00 or higher</td>
<td>--</td>
<td>2.00</td>
</tr>
</tbody>
</table>

**Good Academic Standing**

Students must maintain the minimum cumulative GPA as indicated on the Academic Progress Table to be placed in good academic standing. Students are required to earn a minimum GPA of 2.00 in order to be awarded an associate degree or certificate.

During fall and spring semesters, students in good academic standing may register for a maximum of eighteen (18) credits which may include a combination of:

- Nine (9) credits during a seven (7) week session.
- Twelve (12) credits during a ten (10) week session.
- Six (6) credits during a five (5) week session.

During the entire summer session, students in good academic standing may register for a maximum of twelve (12) credits which may include a combination of six (6) credits during any single summer session. If the session dates overlap, no more than six (6) credits may be taken. During the winter session students in good academic standing can register for a maximum of four (4) credits.

**Academic Warning**

Students who have attempted from 0.5 to 6.5 total cumulative GPA credit hours with a GPA less than 1.4 are placed on Academic Warning.

Students placed on Academic Warning will have this fact noted on their grade reports and transcripts and they are required to:

- Meet with advising staff before registering for any credit or transitional courses.
- Meet with advising staff before making any changes to their class schedule.

Placement on Academic Warning will continue until the student’s cumulative GPA increases above the level indicated on the Academic Progress Table (p. 15).

**Academic Restriction**

Students placed on Academic Restriction will have this fact noted on their transcripts and they are required to:

- Meet with an academic advisor before registering for any credit or transitional courses.

Students placed on academic restriction must meet with an academic advisor before registering for courses. Placement on Academic Restriction will continue until the student’s cumulative GPA increases above the level indicated on the Academic Progress Table.

**Academic Suspension**

After a student is on Academic Restriction for one semester and does not achieve the minimum GPA as listed on the Academic Suspension Table the next semester of enrollment, the student will then be placed on academic suspension.

Students will not be placed on Academic Suspension at the end of any review period in which they have achieved a GPA of 2.00 or higher.

Students placed on Academic suspension after the spring or summer semesters will not be allowed to re-enroll until the following winter semester. Students placed on Academic Suspension after the fall or winter semesters will not be allowed to re-enroll until the following summer semester.

After the semester of non-enrollment lapses:

- Students must see an advising staff member to request re-enrollment.
- Students who are removed from Academic Suspension will be on Academic Restriction and may not register for more than seven (7) credits until they earn status of Good Standing.

### Academic Suspension Table

<table>
<thead>
<tr>
<th>Total Cumulative GPA Hours Attempted</th>
<th>Suspension if GPA is below</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0 - 12.5</td>
<td>1.20</td>
</tr>
<tr>
<td>13.0 - 17.5</td>
<td>1.30</td>
</tr>
<tr>
<td>18.0 - 22.5</td>
<td>1.40</td>
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<tr>
<td>23.0 - 27.5</td>
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<tr>
<td>28.0 - 32.5</td>
<td>1.60</td>
</tr>
<tr>
<td>33.0 - 37.5</td>
<td>1.70</td>
</tr>
<tr>
<td>38.0 - 42.5</td>
<td>1.80</td>
</tr>
</tbody>
</table>
Alternative Instructional Delivery Modes

Service Learning
At Harford Community College students have the opportunity to explore service projects both in and out of the classroom. Academic Service Learning courses provide the student an interactive opportunity to engage in meaningful service in the community that is integrated into his/her course curriculum. Academic Service Learning courses are designed in a way that ensures the service enhances the student’s learning and, in turn, this reciprocated knowledge benefits the community. Faculty ensure that purposeful civic learning opportunities are available which intentionally direct the student’s learning while promoting active civic participation in the community. Student participation in Academic Service Learning is a component of the course that requires time outside of the classroom as determined by each faculty member’s course requirements that are of reasonable expectations. For information call the course instructor or the:

Academic Service Learning Faculty Liaison
443-412-2375
jodonahue@harford.edu

Compressed Courses
Compressed courses are offered during a shorter period of time than a traditional 15-week fall and spring semester. These courses are designed for students who want to take courses for periods of time between approximately 3 to 13 weeks. These courses offer the same content and clock hours as full 15-week semester courses, but the term of instruction is compressed and is offered within a traditional semester and during the winter and summer sessions.

Visit the schedule of classes for more information on compressed courses.

Online and Hybrid Course Learning
Four degree programs can be completed entirely online: General Studies, Business Administration, Computer Information Systems, and Psychology.

As a member of Maryland Online (MOL), the College participates in course sharing with other community colleges in Maryland, providing students the opportunity to take classes throughout the state without leaving Harford County.

The College supports several online models for course delivery including:

Online Courses: For online courses, instruction, course materials, and learning activities are delivered completely online. Students may be required to complete activities at a location other than their home (e.g., assignments which require an activity within the community or courses which may include but is not limited to a field placement or internship, attend orientations, and/or take proctored exams at a testing center). To be successful in an online course, you must be an independent learner who is motivated, has good time management, has good computer skills, and have reliable Internet access.

Hybrid Courses: Hybrid courses deliver some course materials and learning activities online and some course materials and learning activities face-to-face. Students will be required to come on campus for scheduled classes, labs, or other activities and to complete mandatory online work. To be successful in a hybrid course, you will need to be motivated to work independently between class meetings, have good time management skills, and have reliable Internet access and basic computer skills.

Web-Enhanced Courses: These courses require regularly scheduled attendance on campus but include online components.

A listing of all online and hybrid courses can be found in the schedule of classes and on the eLearning website.

Honors Program
The Honors Program is a selective program open to students who meet admissions requirements. To be eligible, new students must meet the requirements to enroll in college-level English and reading courses and must possess a minimum high school GPA of 3.2, or be recommended by a dean or Honors faculty. Current or transfer students must be eligible to enroll in college-level English and reading courses and must possess a minimum cumulative GPA of 3.2 in at least nine credits of college-level courses, or be recommended by a dean or Honors faculty member. Once admitted, students may select Honors courses along with courses unique to their degree programs. In order to be accepted into the program, eligible students must submit a program application to the Registration and Records Office. Once accepted, students must maintain a cumulative GPA of no less than 3.0 in Honors courses.

Students who successfully complete nine credits of Honors coursework with a 3.2 GPA will receive the 'Honors' designation on their academic transcripts and be recognized at graduation. See the schedule of credit classes for the course listings.

Visit the Honors Program webpage for more information on the Honors Program at HCC.

Independent Study Courses
Independent Study courses (courses numbered 191-194; worth 1-4 credits) enable students to delve into areas of special interest. The design of an independent study course is based on the needs and interests of the student and is created in cooperation with a faculty member. The course must be approved by the faculty member and the appropriate division dean. Only six credits (total) per student will be awarded for independent study. Students who have completed fifteen hours of college-level course work are eligible for Independent Study courses.

Independent Study courses must have the appropriate approval and be registered in the Registration and Records Office by the third week of classes of a semester in which credit is to be granted.

Global Education and Engagement
There is significant national support for community colleges pursuing international education initiatives. The American Association of Community Colleges states, ‘the ability to live and work productively in a networked, global society is now demanded of everyone.’ The U.S. Departments of State and Education co-sponsor International Education Week with the goal of promoting ‘programs that prepare Americans for a global environment and attract future leaders from abroad to study, learn and exchange experiences in the United States.’ Harford Community College supports these goals through the Office of Global Education and Engagement.

Working collaboratively with the entire campus community, the mission of the Office of Global Education and Engagement is to prepare students
and the community to actively participate in and help shape the future of the interconnected global society. Our activities stem from HCC’s dedication to fostering ‘lifelong learning, global awareness, and social and cultural enrichment,’ and include creative experiences for students, staff and Harford County residents. Our programs include opportunities to travel and study abroad through credit, noncredit, and service-learning options; campus and community events highlighting global themes; student clubs that encourage multicultural integration; and a wide variety of activities in celebration of International Education Week each November.

Visit HCC’s Global Education and Engagement webpage for more information on Global Education and Engagement and Travel/Study opportunities.

**Special Topics Courses**

Special Topics courses (1-9 credits) are intended to meet the needs of students, business and the community and will vary each semester depending on identified needs. The topic for study and course description will appear in the current Schedule of Credit Classes.

**Weekend Courses**

The College offers a variety of courses on weekends. Class schedules vary, but may involve attendance on Friday evening, Saturday, and Sunday. Weekend courses are scheduled over the regular 15-week semester and in compressed formats, meeting for only four to seven weekends. See the current schedule of credit classes for more details.
ACCOUNTING (ACCT) (p. 19)

ACCT 101 Accounting Principles I (3 credits)
This course is an introduction to accounting theory and practice with an emphasis on accounting for assets. The complete accounting cycle is presented and end-of-period financial reports are prepared.
ACCT 102  Accounting Principles II  (3 credits)
This course focuses on accounting for the corporate form of organization. Emphasis is placed on the corporate capital structure, investments, liabilities, the cash flow statement, budgeting and managerial accounting for costs.
Prerequisite(s): ACCT 101

ACCT 104  Payroll Accounting  (1 credit)
This course introduces the student to the personnel and payroll records that provide the information required by the numerous laws affecting the operation of a payroll system. The student prepares state and federal tax forms and documents and appropriate internal records to support those documents.
Prerequisite(s): ACCT 101

ACCT 105  Financial Statement Interpretation and Analysis  (1 credit)
This course introduces the student to the elements of financial reporting and the techniques used to analyze and interpret financial statements.
Prerequisite(s): ACCT 101

ACCT 107  Spreadsheet Applications For Accounting  (1 credit)
This course introduces spreadsheets as an accounting tool. Students learn to design and prepare electronic spreadsheets used in solving accounting problems and making managerial decisions.
Prerequisite(s): (CIS 102 and ACCT 101) or (BA 210 and ACCT 101)

ACCT 108  Computerized Accounting  (3 credits)
This course is an introduction to the concepts and uses of computerized accounting information systems. The student learns to apply accounting principles in recording business transactions and generating accounting reports and financial statements using general ledger accounting software.
Prerequisite(s): ACCT 101

ACCT 109  Tax Accounting I  (3 credits)
This course provides the student with an exposure to federal taxation and laws governing gross income, deductions, credits, and other areas relating to individual taxpayers, as well as familiarity with tax forms and concepts.

ACCT 104  Payroll Accounting  (1 credit)
This course provides an exposure to the federal tax laws governing partnerships, corporations, and employers and Maryland state tax laws and forms. Time permitting, additional areas and types of taxation will be discussed.

ACCT 205  Auditing  (3 credits)
This course is an introduction to auditing theory and standards. The student will learn the complete audit process including: risk assessment, internal control systems, audit evidence, working papers, quality control, statistical sampling, implications of computer-based systems to the audit process, and the preparation of audit reports.
Prerequisite(s): ACCT 102

ACCT 206  Cost Accounting  (3 credits)
This course is the study of cost accounting with emphasis on cost accumulation, the flow of costs through the accounts, cost allocation and control in job order, process, and activity-based cost systems.
Prerequisite(s): ACCT 102

ACCT 208  Managerial Accounting  (3 credits)
This course emphasizes planning and control, stressing the cost-benefit philosophy. Managerial accounting deals with providing information to internal decision-makers through (1) routine reporting to management, primarily for planning and control, and (2) special reporting to management, primarily for long-range planning and nonrecurring decisions. Students are expected to perform basic algebraic calculations in this course.
Prerequisite(s): ACCT 101

ACCT 210  Capstone - Certified Bookkeeper Preparation  (3 credits)
This course prepares students for the Certified Bookkeepers Certification exam. The student learns and applies accounting theory and practices to all major areas covered by the Certified Bookkeepers exam, including: adjusting entries, error correction, payroll, depreciation, inventory, and internal control and fraud prevention.
Prerequisite(s): ACCT 101, ACCT 104

ACCT 211  Intermediate Accounting I  (4 credits)
This course provides an in-depth application of the generally accepted accounting principles to cash, short-term investments, receivables, inventories, current liabilities, long-term liabilities, plant assets, and intangible assets, along with a review of basic accounting theory and statement preparation.
Prerequisite(s): ACCT 102

ACCT 212  Intermediate Accounting II  (4 credits)
This course provides an in-depth application of the generally accepted accounting principles to investments, stockholders’ equity, revenue recognition, accounting for income taxes, pension costs, leases, accounting changes and error analysis, the calculation and presentation of earnings per share, and the statement of cash flows.
Prerequisite(s): ACCT 211

ACCT 213  Intermediate Accounting I  (3 credits)
The course provides an in-depth application of the generally accepted accounting principles to stockholder’s equity, investments, statement of cash flows, dilutive securities and earnings per share, income taxes, and accounting changes and errors.
Prerequisite(s): ACCT 102

ACCT 214  Intermediate Accounting II  (3 credits)
The course provides an in-depth application of the generally accepted accounting principles to acquirement, service, and allocation of long-term assets, time value of money, financing liabilities, accounting for leases, and employee compensation and benefits.
Prerequisite(s): ACCT 213

ACCT 215  Intermediate Accounting III  (3 credits)
The course provides an in-depth application of the generally accepted accounting principles to stockholder’s equity, investments, statement of cash flows, dilutive securities and earnings per share, income taxes, and accounting changes and errors.
Prerequisite(s): ACCT 214
ACCT 263 Special Topics: Fraud Examination (3 credits)
This course provides accounting fraud examination education to accounting and non-accounting students. Basic accounting and auditing theory as it relates to fraud schemes as well as internal control to deter fraud is presented. This course examines fraud as it relates to financial statements and financial reporting. Emphasis is also given to elements of fraud investigation including interviews, gathering evidence, tracking transactions, evaluating deception, and reporting results.

Prerequisite(s): ACCT 102

ACCT 271 Cooperative Education I: Accounting (1 credit)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

ACCT 272 Cooperative Education II: Accounting (2 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

ACCT 273 Cooperative Education III: Accounting (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

ACCT 274 Cooperative Education IV: Accounting (4 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

AHS 149 Introduction to Electroneurodiagnostics (4 credits)
This course is designed for students in the Electroneurodiagnostic (END) Program and requires students to spend 12 hours per week in a clinical setting. The student will learn the basics of taking a patient history and infection control and will be introduced to the terminology and skills needed to become familiar with the equipment that may be used by an END technician. Course includes 180 hours in a clinical setting per semester. Course fee.

Prerequisite(s): AHS 101 and ELEC 105 and BIO 203

AHS 150 Histology Practicum I (7 credits)
This course involves an individual assignment of 21 hours/week in a cooperating hospital histology laboratory to provide the student with the opportunity to learn the histological procedures used in a clinical laboratory. Particular emphasis is placed on the preparation and sectioning of tissues for staining. Course includes 315 hours in a clinical setting per semester. Permission of instructor required.

AHS 151 Histology Practicum II (7 credits)
This course involves an individual assignment of 21 hours/week in a cooperating hospital laboratory to provide the student with the opportunity to refine those skills acquired in AHS 150 in a clinical setting. Particular emphasis is placed on staining procedures and tissue identification. Course includes 315 hours in a clinical setting per semester. Permission of instructor required. Usually offered in spring semester.

AHS 152 Electroencephalographic Practicum I (11 credits)
This course is designed for students in the END program. The student spends 33 hours per week in a clinical setting and learns the fundamental techniques necessary to accurately obtain an EEG on a patient. The student also learns how to document the working conditions of the EEG equipment and identify a normal EEG. Course includes 495 hours in a clinical setting per semester. Course fee.

Prerequisite(s): AHS 149

AHS 153 Electroencephalographic Practicum II (11 credits)
This course is designed for students in the END program. The student spends 33 hours per week in a clinical setting refining and expanding on the fundamental skills learned in AHS 152. Course includes 495 hours in a clinical setting per semester. Usually offered in spring semester.

AHS 160 Advanced Histotechnology Practicum (2 credits)
This course involves an individualized advanced clinical experience in a cooperating hospital laboratory to provide the opportunity to complete the requirements for the practical portion of the Histology Technician Registry Examination. Emphasis is on advanced techniques in tissue processing, routine staining and special staining. Permission of instructor required. Offered in first five weeks of summer session.

AHS 161 Histotechnology Seminar (1 credit)
A series of lectures and discussions on current and emerging procedures in the field of histotechnology. Each class meeting will be devoted to a new procedure. Possible topics: 1) Special Stains, 2) Immunohistochemistry, 3) Electron Microscopy.

AHS 162 Histotechnology Seminar (2 credits)
A series of lectures and discussions on current and emerging procedures in the field of histotechnology. Each class meeting will be devoted to a new procedure. Possible topics: 1) Special Stains, 2) Immunohistochemistry, 3) Electron Microscopy.
AHS 163 Histotechnology Seminar (3 credits)
A series of lectures and discussions on current and emerging procedures in the field of histotechnology. Each class meeting will be devoted to a new procedure. Possible topics: 1) Special Stains, 2) Immunohistochemistry, 3) Electron Microscopy.

American Sign Language (ASL)

ASL 101 American Sign Language I (3 credits)
Students learn American Sign Language basic syntax and vocabulary, enabling them to communicate effectively with members of the deaf community. This course is designed for hearing persons.

ASL 102 American Sign Language II (3 credits)
Building on the skills developed in American Sign Language I, students expand their sign vocabulary and knowledge of syntax. Students also become familiar with the subculture of the deaf community. This course is designed for hearing persons.

Prerequisite(s): ASL 101

ASL 193 Independent Study:ASL (3 credits)

ASL 201 American Sign Language III (3 credits)
Students continue to refine and develop their sign vocabulary and knowledge of syntax at an advanced level. Students also experience the subculture of the deaf community. This course is designed for hearing persons.

Prerequisite(s): ASL 102

Anthropology (ANTH)

ANTH 101 Introduction to Physical Anthropology and Archaeology (GB) (D) (3 credits)
This course is an introduction to the origins and development of humans, emphasizing physical evolution and cultural development. Consideration is given to the principles and concepts of physical anthropology and interpretation of archeological discoveries.

ANTH 102 Introduction to Cultural Anthropology (GB) (D) (3 credits)
The focus of this course is an objective examination of the wide variations of human cultures using the scientific method. Cross-cultural analysis of kinship, stratification, association, age/sex groups and cultural change is stressed.

ANTH 193 Independent Study: Anthropology (3 credits)

ANTH 211 The Archaeology of Maryland (3 credits)
In this course, bits of stone, pottery, bricks, and nails are used to piece together Maryland's past. This course involves students in the discovery of Maryland's 'history in the ground' through a combination of classroom instruction, independent research, and participation in an archaeological excavation in Harford County, such as at the on-campus historic Hays-Heighe House site. Students develop analytical skills, knowledge of Maryland life from early prehistory through the 19th century, and an appreciation of historical and archaeological research.

ANTH 263 Special Topics: Food, Culture, & Society (3 credits)
This course is a holistic examination of the production, consumption, and symbolic meaning of food throughout time and across the globe. Specially, this course examines food and its relationship to society's social structures and gender, cultural identity, religion, politics, economics, and social movements. The course includes food demonstrations, guest lecturers, films, and a field trip. This course is cross-listed as an anthropology and sociology course, but credit can only be obtained for one, not both designations.

Art + Design (ART)

ART 101 Fundamentals of 2D Design (3 credits)
This course is an introduction to conceptual and formal issues in contemporary art and design and color theory through the hands-on creation of two-dimensional studio projects using a wide variety of media and processes. Course work includes readings, lecture, studio work, and critique. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

ART 103 Introduction to Graphic Communications (3 credits)
This course is an introduction to graphic design concepts and the application of design principles in the creation of visual communication, primarily for print media. Concepts include fundamentals of type use, creation of graphics, graphic and type integration, layout design, preparation of art for reproduction, and fundamentals of the printing process. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

ART 106 Mixed Media (3 credits)
This course provides an opportunity to expand existing knowledge of basic fundamentals involved in art. By exploring various media, students are encouraged to develop flexible attitudes and skills with drawing, painting and collage projects. The exercises are directed at stimulating creativity and encouraging personal vision, integrating traditional media, found objects, photographs and new possibilities. This course focuses on historical, international and contemporary references. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

ART 107 Fundamentals of 3-D Design (3 credits)
Fundamentals of 3-D Design is an introductory course in the study of the formal elements of art — line, plane, mass, volume, texture, color, and composition — as they relate to form in space. Various materials and processes are used throughout the course. Course work includes lecture, studio work and critique for both art majors and non-majors. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

ART 108 Digital Media Culture (Gi) (3 credits)
This course is an introduction to digital media and its culture. Through hands-on assignments, lectures, and readings, students learn the language of new media and its many applications within the fine arts. Topics include media theory, history of the computer, digital imaging, interdisciplinary arts, net art and the use of computer technologies in the creation of fine art. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

ART 109 Sculpture I (3 credits)
This course is an introduction to sculptural concepts, techniques and processes. Emphasis is on the development of an understanding of sculpture through the use of various media and methods including clay modeling, plaster casting and fabrication with wood and other materials. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

ART 111 Studio Drawing I: Observation (3 credits)
This course is intended for Art + Design majors and anyone with passion for art. Emphasizing both observational drawing and concept development, students increase competency in drawing through development of perceptual skills and ability to create believable imagined forms. Students use traditional black-and-white media to create effective compositions and communicate ideas. This course introduces historical and contemporary concepts in drawing and explores how drawing connects to multiple artistic disciplines. Students draw from an unclothed model as part of this coursework. Course fee.

ART 113 Painting I (3 credits)
This course is an introduction to basic painting concepts and media using oil and/or acrylic, techniques in preparing canvas or other support, and color theory, particularly as it pertains to color mixing. Working primarily from observation in subjects such as, but not limited to, still-life, landscape, and the figure (may be clothed or unclothed), students also briefly explore non-objective painting and work from the imagination. Integration of form and content is emphasized. Completion of or co-enrollment in ART 111 is recommended, but not required. Course includes 30 hours of lecture and 30 hours of studio per semester. Course Fee.

ART 115 Ceramics I (3 credits)
This course provides an opportunity to learn the fundamentals of working with clay. Emphasis is on hand building techniques used in creating ceramic forms. The course includes an introduction to glaze formulation and application and various firing processes. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

ART 120 Digital Foundations I (3 credits)
This course establishes the foundation for all other computer-based classes within the Art & Design program. Students are introduced to the computer as an art-making tool. Through a series of lectures, demonstrations and studio work, students learn basic computer navigation/practices, scanning, printing, and a variety of select software packages used for image creation/manipulation, graphics and page layout. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

ART 121 Introduction to Drawing—Non-Majors (GH) (3 credits)
Intended for those with little to no drawing experience, this course focuses on observational drawing and right brain/left brain modes of seeing. Students draw using traditional black and white media, learn to analyze drawings by a diverse group of artists, and use drawing as a tool for creative thinking. Students may draw from a nude model. Course includes 30 hours of lecture and 30 hours of studio per semester. Course Fee.

ART 122 Color: Art, Science & Culture (GH) (3 credits)
Through a series of lectures, demonstrations, visual/technical projects and critiques, students learn the theory and application of the physical and psychological effects of color. Students will develop problem-solving, critical thinking, art historical knowledge, and craftsmanship through art and design projects. Students will also investigate how color is used to influence the emotional and intellectual responses of the viewer and research how culture profoundly influences those reactions. Course includes 30 hours of lecture and 30 hours of studio per semester.

ART 160 Time-Based Media (3 credits)
This course introduces the concepts, theory, and fundamental practices of working with time-based media as an expressive and communicative art form. Students creatively explore sequencing, transformation, and motion through time and space, using images, video, sound, and text. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

ART 191 Independent Study:Art (1 credit)
ART 192 Independent Study:Art (2 credits)
ART 193 Independent Study:Art (3 credits)
ART 201 History of Art—Ancient and Medieval (GH) (D) (3 credits)
This course is a study of prehistoric, ancient and medieval art from a cultural perspective. The recognition of major art works and styles is emphasized. The development of art concepts and techniques is considered. This course may require field trips.

ART 202 History of Art—Renaissance to Modern (GH) (D) (3 credits)
This course is a study of art from the Early Renaissance to the twenty-first century from a cultural perspective. The recognition of major art works and styles is emphasized. The development of art concepts and techniques is considered. This course may require field trips.

ART 203 Art and Architecture in the United States (GH) (3 credits)
This course is a study of art and architecture in America from the Colonial era to today. Contributions of Americans to world art, the role of art in American life, and the work of outstanding artists and architects are stressed. The recognition of major art works and styles is emphasized. The development of art concepts and techniques is considered. This course may require field trips.

ART 204 Typography I (3 credits)
This course is a study of the genesis and evolution of alphabets, typeface and typographic design. This course analyzes the graphic designer's working relationship with the commercial printing industry. Emphasis on graphic techniques, desktop publishing, and videographic imaging, as well as course practice in handlettering, sign-writing, transfer type, and copy-fitting. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

ART 207 Graphic Design (3 credits)
This course continues the development of visual communication skills begun in ART 103. Emphasis is on creative problem solving and the creation, execution and presentation of graphic design primarily for print media. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

Prerequisite(s): ART 103
ART 208 Digital Foundations II (3 credits)
This course refines the students’ understanding of the computer and digital imaging software as art-making tools. Through a series of lectures, demonstrations, visual/conceptual problem-solving projects and critiques, students expand their technical and aesthetic skills in the creation and manipulation of digital images, design and text. Emphasis is placed on visual content development strategies for both print and digital media. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.
Prerequisite(s): ART 120

ART 213 Studio Drawing II: Contemporary Practice (3 credits)
In this course, students further explore the language of drawing and how it relates to contemporary art practice, with an emphasis on color and figurative work. Through research, practice and critique, the student will extend their range of concept and expression in drawing. Students will draw from an unclothed model in this class. Course fee.
Prerequisite(s): ART 111

ART 214 Painting II (3 credits)
A concentrated study of the human figure and other observable forms, this course emphasizes the spatial, compositional and expressive functions of color and form. Through practice and critique, the student will extend his or her range of concept and expression in painting. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 113

ART 218 Printmaking (3 credits)
This course is an introductory study of a variety of printmaking processes including relief printing, intaglio, collagraph and monoprinting. Emphasis is on the development of technical facility in printmaking methods and on an understanding of the aesthetic differences between various types of printed images. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

ART 219 Sculpture II (3 credits)
This course is a continued development of sculptural concepts, techniques and processes. Emphasis is on further technical development in modeling, casting and fabrication, using a variety of methods and materials, as well as on the continued exploration of sculpture as an art form. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 109

ART 220 Ceramics II (3 credits)
A continuation of the development begun in Ceramics I, this course emphasizes wheel thrown forms and an increased study of glaze formulation and firing processes. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 115

ART 221 Studio Drawing: Illustration (3 credits)
This course is an introduction to illustration with a focus on various drawing media. Students familiarize themselves with the history of illustration, watch demonstrations of and make projects using both traditional and digital media, and complete problem-solving drawing-based studio projects directly tied to various industries which commission illustrations. This course also focuses on the role of artists throughout history as storytellers and culture producers. Course fee.
Prerequisite(s): ART 213

ART 222 Studio Drawing: Special Projects and Portfolio Building (3 credits)
Advanced individualized study of the student’s specialized interests in terms of subject, style and medium in drawing, this course emphasizes developing a strong transfer or professional portfolio. Course fee.
Prerequisite(s): ART 213

ART 223 Painting III (3 credits)
Emphasis is placed on creative initiative, technical experimentation and independent research. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 214

ART 224 Painting IV (3 credits)
An advanced, individualized study of the student’s particular interests, this course emphasizes developing professional work and methods of exhibiting and marketing. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 223

ART 225 Ceramics III (3 credits)
This course provides specialization in the student’s particular area of interest with emphasis on a more detailed study of glaze formulation and firing cycles. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 220

ART 226 Ceramics IV (3 credits)
This course is an advanced individualized study in the student’s particular area of interest. Emphasis is on developing a body of work for exhibit. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 225

ART 227 Sculpture III (3 credits)
A continuation of the development of sculptural ideas, techniques and methods, this course emphasizes choosing and combining materials in order to best suit the development of individual sculptural ideas. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 219

ART 228 Sculpture IV (3 credits)
This course is an advanced individualized study in the student’s specialized area of interest in terms of subject, style and medium in sculpture. Emphasis is on developing a body of work for exhibit. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.
Prerequisite(s): ART 227
ART 229 Design for the Web (3 credits)
This course expands the students’ knowledge, skills, and aesthetics in the use of digital media. Through a series of lectures, demonstrations, visual/conceptual problem-solving projects, and critiques, students learn the principles and techniques involved in planning, designing, and creating Web sites using visual HTML editing software. Emphasis is placed on design principles and aesthetics as they apply to Web page development. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

ART 230 2-D Computer Animation (3 credits)
This course expands the students’ knowledge, skills and aesthetics in the use of digital media. Through a series of lectures, demonstrations, visual/conceptual problem-solving projects and critiques, students learn the principles and techniques for creating 2-D computer animations. Topics include vector-graphic animation, bit-mapped animation, and the use of montage, collage, motion and transformations as forms of expression. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

Prerequisite(s): ART 101 and ART 120

ART 231 3-D Modeling and Animation (3 credits)
This course expands the students’ knowledge, skills and aesthetics in the use of digital media. Through a series of lectures, demonstrations, visual/conceptual problem-solving projects and critiques, students learn the principles and techniques for creating 3-D computer models and animations. Topics include 3-D modeling, rendering, compositing, animation, and an investigation of perception and illusion as it pertains to 3-D on the computer. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

Prerequisite(s): ART 107 and ART 120

ART 233 Portfolio Workshop (3 credits)
This course investigates the professional practice of preparing and creating art portfolios. Students will learn to apply their aesthetic and technical skills to the development of an art portfolio for transfer, the job market, college art school program admissions, or for gallery exhibition and/or grant opportunities. Topics include resume development and an examination of the methods for employment, networking, and opportunities in the arts. This course is taught in the Macintosh Digital Arts Lab using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Prerequisite(s): ART 120 or permission of instructor. Course fee.

Prerequisite(s): ART 120

ART 238 Art and Architecture of the Ancient World (3 credits)
This course is an on-site study of the art and architecture of the ancient world, with focus on Greece and Rome, c. 1300 BCE - 476 CE. Travel in Greece and Italy provides students firsthand experience with the art, architecture, culture, physical remnants and historical legacies of these civilizations. Students examine the art and architecture of these civilizations and the cultural, social and political history that shaped their development and laid the foundation for the creation of the modern western world. Course fee.

ART 239 Asian Art and Culture (GH) (3 credits)
This course is a study of the art and culture of Asia from the Neolithic period to the early modern era. The focus is on the traditions of India, China, and Japan. Topics may include the connections between the arts and religion, nationalism, and major philosophical traditions. Usually offered fall semester. This course may require field trips.

ART 240 Modern Art and Culture (GH) (3 credits)
This course is a study of the art, architecture, and cultural forms from the middle of the 19th century to the present day. The focus is on the art and culture that defined the modern age. Topics discussed may include industrialization and consumerism, nature and science, ‘modernism’ and the avant-garde, and the impact of wars and revolutions. Usually offered spring semester. This course may require field trips.

ART 251 Ceramics Workshop (3 credits)
Ceramics Workshop is designed for the experienced ceramic artist to create a forum for the exchange of aesthetic, philosophical and technical ideas and theories. Along with creating personal work, students contribute to the development of a professional studio ambiance and structure with responsibilities for kiln firing, glaze formulation, exhibits, shows and sales. Students must purchase clay and tools.

Prerequisite(s): ART 226

ART 281 Art and Design Field Project (1 credit)
Art and Design Field Project is an individual assignment in a selected local commercial art studio which provides the student with experience in practical applications of previously studied processes and techniques.

Prerequisite(s): ART 204 and ART 207 and ENG 209

ART 282 Art and Design Field Project (2 credits)
Art and Design Field Project is an individual assignment in a selected local commercial art studio which provides the student with experience in practical applications of previously studied processes and techniques.

Prerequisite(s): ART 204 and ART 207 and ENG 209

ART 283 Art and Design Field Project (3 credits)
Art and Design Field Project is an individual assignment in a selected local commercial art studio which provides the student with experience in practical applications of previously studied processes and techniques.

Prerequisite(s): ART 204 and ART 207 and ENG 209

ART 284 Art and Design Field Project (4 credits)
Art and Design Field Project is an individual assignment in a selected local commercial art studio which provides the student with experience in practical applications of previously studied processes and techniques.

Prerequisite(s): ART 204 and ART 207 and ENG 209

**Arts Management (ARTM)**

**ARTM 101 Arts Management Seminar I (3 credits)**
This seminar provides an introduction to arts management. Topics include arts leadership and management philosophies, organizational structures, financial practices, strategic planning and programming, marketing, fundraising, and arts and entertainment law. Attention is given to the application of management principles common to arts organizations in both the nonprofit and commercial sectors.
ARTM 201 Arts Management Seminar II (1 credit)
This seminar provides a capstone to the arts management degree. Special attention is given to preparing student portfolios in anticipation of transfer to a four-year school or entry into the field of arts management. Toward the end, students continue to explore topics of arts leadership and management philosophies, organizational structures, financial practices, strategic planning and programming, marketing, fundraising, and arts and entertainment law.

Prerequisite(s): ARTM 101

Assessment for Prior Learning (APL)

APL 101 Portfolio Development (2 credits)
Students learn how to identify, analyze, and document prior experiential learning for academic credit in a portfolio format. Essential portfolio components include a chronological record of life experiences since high school, a life experience analysis of college level learning and documented evidence that this learning has occurred. Students also identify and equate their knowledge of courses taught at Harford Community College. Course fee.

APL 102 Portfolio Development Seminar (1 credit)
In this seminar, students work one-on-one with the instructor to develop a comprehensive portfolio. Students develop appropriate goal statements, chronological tables, autobiographies, and delineation of college-level learning for each course to be assessed for credit.

Astronomy (ASTR)

ASTR 151 Introduction to Astronomy (GS) (3 credits)
A course in the fundamentals of descriptive astronomy is especially appropriate for nonscience majors. Students study the solar system, stars, nebulae, galaxies, and universe and their relation to the earth.

ASTR 152 Sky and Telescope Laboratory (GL) (1 credit)
An introductory laboratory course in the fundamental measurement techniques of astronomy. This course is especially appropriate for nonscience majors. Instruction focuses on selected portions of the solar system, nebulae and galaxies. Course fee.

Biology (BIO)

BIO 099 Biology for Allied Health (3 credits)
This preparatory course is designed for students who plan to enroll in BIO 203, Anatomy and Physiology I. The course examines fundamental principles in general, organic, nuclear and biochemistry, cell biology and genetics. The development of academic skills required for the study of the sciences is emphasized throughout the course. May not be used to meet the graduation requirements. A qualifying score on the Biology for Allied Health Assessment Test also meets the prerequisite requirements of BIO 203, Anatomy and Physiology. The course meets for a total of 30 lecture hours and 30 laboratory hours per semester. Course Fee.

Prerequisite(s): CHEM 010

BIO 100 Fundamentals of Biology (GL) (4 credits)
In this introductory course for nonscience majors, a general survey of the characteristics of life is presented, including such topics as cellular biology, metabolism, organ systems, genetics, development, evolution, behavior and ecology. A brief examination of both the plant and animal kingdoms is presented. NOTE: BIO 100 will not satisfy the science requirement for science majors. The course meets for a total of 90 contact hours per semester. Course fee.

BIO 107 General Zoology (4 credits)
This introduction to the animal kingdom includes a survey of the taxonomy, morphology, anatomy and physiology of animals using selected organisms. Primary laboratory emphasis is concerned with physiological processes, survey of phyla and field studies. The course meets for a total of 30 lecture hours and 60 laboratory hours per semester. Course fee.

Prerequisite(s): BIO 120

BIO 108 Human Body in Health and Disease (GS) (3 credits)
Designed for nonscience majors, this course includes a survey of the structure and function of human body systems and the disorders in those systems which result from disease processes.

BIO 109 Human Genetics (GS) (3 credits)
This is an introductory genetics course for nonscience majors emphasizing the fundamental genetic concepts and how they affect humans. Topics such as genetic engineering, genetic diseases and gene repair are discussed.

BIO 110 Introduction to Plant Sciences (GL) (4 credits)
This course investigates the fundamentals of plant science. Included topics are plant anatomy and physiology, classification, genetics, ecology, and the importance of plants to society. Students conduct laboratory investigations, observe local plant communities, examine the relationships between plants and animals and evaluate the relationships between soil and plant health. The course meets for a total of 45 lecture and 45 laboratory hours per semester. Course fee. Field trips may be required.

BIO 116 Human Body in Health and Disease Laboratory (GL) (1 credit)
This laboratory course provides hands-on learning using dissection, physiology exercises, models and slides, science technology, computer activities, and experimentation to reinforce the concepts in BIO 108, Human Body in Health and Disease. The course meets for a total of 30 laboratory hours per semester. Co-requisite: BIO 108. Course fee.

Prerequisite(s): BIO 108

BIO 119 Biology for Health Professionals (GL) (4 credits)
This course is intended for students who plan to enroll in BIO 203, Anatomy and Physiology I. This course is not for biology majors. This course examines fundamental principles in general, organic, nuclear and biochemistry, cell biology, metabolism, development, molecular biology, epigenetics, biotechnology, and inheritance. The application of these topics in the health science field is stressed. The development of academic and reasoning skills required for the study of the sciences are emphasized throughout the course. Three lecture hours and three laboratory hours per week. Course fee.

Prerequisite(s): CHEM 010 or (ENG 003 or (ENG 003 and CHEM 010) or (ENG 018 or (ENG 018 and CHEM 010)
**BIO 120** General Biology I (GL) (4 credits)
An introduction to biology (cellular/molecular) for the science major. Basic biological principles common to plants and animals, cell structure and function, biochemical processes, heredity, cell reproduction, and gene expression are presented. Laboratory emphasizes open-ended experimental methods of inquiry. The course meets for 45 lecture/discussion hours and 45 laboratory hours per semester. Course fee.
Prerequisite(s): CHEM 010 or (CHEM 111)

**BIO 121** General Biology II (GL) (4 credits)
An introduction to biology (organismic/evolutionary) for the science major. This course emphasizes basic biological principles of evolution, ecology, and behavior. Laboratory emphasizes open-ended experimental methods of inquiry and field studies. The course meets for 45 lecture/discussion hours and 45 laboratory hours per semester. Course fee.
Prerequisite(s): (CHEM 010 and (BIO 120 or BIO 100)

**BIO 124** Foundations of Biotechnology (3 credits)
This course is designed to introduce students to the concepts of biotechnology. Included are overviews of the history and development of biotechnology, applications of DNA and protein technology in the biomanufacturing and biopharmaceutical industries, bioinformatics, and bioethics.
Prerequisite(s): (BIO 120 and MATH 026 or (BIO 120 and CHEM 111), CHEM 111

**BIO 125** Laboratory Methods for Biotechnology (1 credit)
This course allows students to gain practical knowledge of commonly used biotechnology laboratory techniques, including specialized laboratory instruments, preparation of common solutions and reagents, and methodology. The student learns techniques used in laboratory maintenance, equipment calibration, and laboratory safety. This laboratory-based course is designed to accompany Foundations of Biotechnology (BIO 124). The course meets for 45 laboratory hours per semester. Corequisite or prerequisite: BIO 124. Course fee.
Prerequisite(s): BIO 124

**BIO 126** Advanced Techniques in Biotechnology (4 credits)
This course is designed to introduce students to the current methods used in the study and application of nucleic acids and proteins. Topics include an overview of the techniques used to manipulate DNA and RNA in industry and research, protein purification, and production of a biotechnology product. The applications of this technology in agriculture and medicine will be addressed. Laboratory techniques parallel lecture and expand on the topics addressed. The course meets for 45 hours of lecture and 45 hours of laboratory per semester. Course fee.
Prerequisite(s): BIO 124 and BIO 125

**BIO 127** Biomanufacturing and Biosafety (2 credits)
Discoveries in biotechnology and pharmaceutical companies are being used to manufacture new products for the improvement of health and the diagnosis and treatment of disease. This course provides an introduction to the processes involved in the development, manufacturing, and testing of biomedical products through the exploration of drug development. Safety, quality control, and compliance issues related to local, state, and federal regulations in biotechnology will also be addressed.
Prerequisite(s): BIO 124

**BIO 191** Independent Study: Biology (1 credit)

**BIO 192** Independent Study: Biology (2 credits)

**BIO 193** Independent Study: Biology (3 credits)

**BIO 202** Biodiversity (3 credits)
This course introduces the science major to the diversity, structure and function of organisms and the processes that generate diversity, emphasizing phylogeny and the evolution of major groups of organisms.
Prerequisite(s): BIO 120 and BIO 121

**BIO 203** Anatomy and Physiology I (GL) (4 credits)
This course provides a comprehensive study of the structure and function of the human body. The course focuses on the histology, gross anatomy and physiology of the integumentary, skeletal, muscular, nervous (including special senses), and endocrine systems. Emphasis is placed on the anatomy of the organ systems and the maintenance of homeostasis for optimal functioning of the human organism. The course includes a total of 45 hours of lecture and 45 hours of laboratory. Course fee.
Prerequisite(s): (BIO 099) or (BIO 119) or (BIO 120)

**BIO 204** Anatomy and Physiology II (GL) (4 credits)
This course provides a comprehensive study of the structure and function of the human body. The course focuses on the histology, gross anatomy and physiology of the cardiovascular, immune, respiratory, digestive, urinary and reproductive systems. It also provides students with an understanding of the crucial functions of energetics, thermoregulations, fluid, electrolyte and acid-base balance. Emphasis is placed on the physiology of the organ systems and the maintenance of homeostasis for optimal functioning of the human organism. The course includes a total of 45 hours of lecture and 45 hours of laboratory time. Course fee.
Prerequisite(s): (BIO 103) or (BIO 203)

**BIO 205** Microbiology (GL) (4 credits)
This course is for those students requiring a college level microbiology course. The general characteristics of microorganisms are presented, emphasizing host-parasite relationships, details of morphology and physiology, methods of control and problems of virulence. Consideration is given to the nonpathogenic forms. The laboratory parallels the discussion and provides experience in microbial technique. The course includes a total of 45 hours of lecture and 45 hours of laboratory. Course fee.
Prerequisite(s): BIO 103 or (BIO 120) or (BIO 119) or (BIO 203) or (BIO 203)

**BIO 208** Genetics (4 credits)
This course presents the principles of inheritance in prokaryotic and eukaryotic organisms and the application of these principles to contemporary issues. Major topics include Mendelian inheritance, gene mapping, molecular genetics, regulation of gene expression, population genetics, and the applications of genetics in biotechnology. Upon completion, students demonstrate a broad understanding of genetics and the principles of heredity. Course meets for 45 hours of lecture and 45 hours of laboratory per semester. Usually offered in the fall semester.
Prerequisite(s): (BIO 119 and MATH 026) or (BIO 119 or (BIO 120 or (BIO 120 and MATH 026) and (BIO 119) and (BIO 120)
BIO 210 Nutrition (GS) (3 credits)
This course is a basic nutrition course for biology or nursing students or those in related health fields. The functions of the nutrients, their utilization throughout the various stages of life, and the effects of nutrient excesses and deficiencies are studied. Current nutritional topics are discussed, including food fallacies, weight control, and cultural, social and psychological influences on food habits.
Prerequisite(s): (BIO 100) or (BIO 103) or (BIO 108) or (BIO 119) or (BIO 120) or (BIO 203)

BIO 271 Cooperative Education I: Biology (1 credit)

BIO 272 Cooperative Education II: Biology (2 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

BIO 273 Cooperative Education III: Biology (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

BIO 274 Cooperative Education IV Biology (4 credits)

Business Administration (BA)

BA 101 Introduction to Business (GI) (3 credits)
This course introduces students to the American private enterprise system and the forms of businesses that operate within it. Students study the role of business in American society, international business activity, the impact of ethics and social responsibility on business, entrepreneurship and small business, and emerging trends in technology, organization, and management. Topics covered include economics, management, marketing, accounting, and financial management.

BA 103 Public Relations (3 credits)
Students explore the basic concepts of public relations and its relationship to mass communication media and advertising. Students have the opportunity to acquire the basic skills necessary to conduct public relations projects.

BA 104 Advertising and Sales Promotion (3 credits)
Students study the importance of advertising and sales promotion to both consumers and industry. The choice of media and creative strategy as it relates to the consumer and product/service is discussed. Also included is the role of research in the development of the advertising message. Students examine how to judge what and how well an ad communicates to consumers.

BA 105 Professional Selling (3 credits)
Students study the principles upon which successful selling is based. Topics covered: sales in our economy, opportunities in selling, analysis of buyer motives and product selection, the sales process and ethics in selling.

BA 106 Principles of Retailing (3 credits)
This course takes a middle management approach, with emphasis in six major areas: (1) the retail environment and the consumer; (2) human resource management; (3) retail institutions; (4) researching the location; (5) merchandising mix; and (6) retail promotion.

BA 107 Principles of Supervision (3 credits)
This course offers insight into effective management for first-time supervisors or those who will hold supervisory positions. The course identifies the needs and realities of the supervisor's working world and deals with such responsibilities as work planning, interviewing, selecting, training, motivating, developing and appraising employees. Emphasis is placed on providing specific guidance for tasks generally assigned to supervisors.

BA 108 Human Resource Management (3 credits)
This course includes a survey of personnel procedures, employee management relations, collective bargaining, grievance procedures, wage and salary administration, manpower development, human relations and organizational development.

BA 109 Principles of Management (3 credits)
This introductory management course enables students to identify and describe the major functions of management which include planning, organizing, leading and controlling. Students participate in individual and group activities providing practice in exercising these functions. Attention also focuses on the ideas, thoughts and theories of major contributors to the field of management such as Drucker, Maslow, Herzberg, McGregor and McClelland.

BA 111 Purchasing and Materials Management (3 credits)
This course looks at the role of purchasing in industry and government with topics including organization, personnel selections, pricing, negotiation and quality assurance. The student learns the process of inventory management, value engineering, make-or-buy, traffic management and purchasing of capital equipment. Ethical decision making, policy and procedures in the purchasing industry, legal aspects, and computer-based inventory systems are an integral part of this course.

BA 112 Business Innovation Economics (3 credits)
This course is designed to enable teams of students to successfully complete the facets of technology transfer. Students will be able to proceed through the phases of technology transfer to include identifying, assessing, marketing, and determining licensing opportunities of innovations. Students will examine technology overviews prepared by participating research labs and select one invention to take through the technology transfer cycle.
BA 113 Introduction to Casino Management (3 credits)
This course provides a basic introduction to careers in the field of casino management. The course provides students with detailed information about the gaming industry and the socio-economic impact of gaming in the United States. The course includes material that will develop student awareness of problem gambling, its impact, treatment and the gaming industry’s responsible gaming programs.

BA 115 Employee Relations (3 credits)
This course enables students to identify regulations, practices, and policies in the field of human resources, with particular emphasis on federal human resources management. Students examine Equal Employment Opportunity laws, position management principles, position descriptions, employee benefits, labor/management relations, the Fair Labor Standards Act, and performance management.

BA 116 Employee Training and Development (3 credits)
This course enables students to learn a systematic approach to improving individual and organizational performance. Students study position management in succession planning to support a high-performing organization. Special emphasis is placed upon the importance of employee training and development in the federal government.

BA 117 Strategic Human Capital Management (3 credits)
This introductory course enables students to acquire a foundation in strategic human capital management concepts, principles, and best practices, with particular emphasis on federal human capital management. Students develop skills and use metrics to align human resources goals, budgets, and outcomes with departmental missions.

BA 130 Introduction to Supply Chain Management (3 credits)
This course introduces students to the role of supply chain management in the global economic system. Students examine the role of supply chain components, logistics concepts, warehousing practices and distribution management.

Prerequisite(s): BA 101 and MATH 026

BA 140 Introduction to Leadership (GI) (3 credits)
This course is designed to provide students the opportunity to explore leadership through multiple modes of inquiry and learning experiences. Students identify and develop leadership skills and philosophies through study, observation, and application. Students are encouraged to make real-world connections and apply their leadership theory to their own leadership experience and leadership goals. This course integrates readings, experiential exercises, films, and contemporary readings on leadership. Three lecture hours per week.

BA 145 Farm and Agribusiness Management (3 credits)
This course introduces students to principles of effective farm and agribusiness management. Students examine the evolution of agriculture and agribusiness, learn application of business management tools, and analyze agribusiness management problems through case studies. Study includes the specific challenges facing farm and agribusiness managers, such as changes in weather conditions or government policies.

BA 150 Inventory Management (3 credits)
This course introduces students to the importance of inventory management in the global supply chain. Students examine the role of managing inventories, forecasting demand levels, computing break even points, cycle counting, material requirements planning, warehousing practices and distribution management.

Prerequisite(s): BA 130

BA 203 Principles of Marketing (3 credits)
Students are introduced to fundamental marketing concepts and techniques related to product, pricing, distribution and promotional strategy. Students explore trends in the marketplace and identify opportunities for creating value for customers through marketing strategy.

BA 205 Business Law (3 credits)
This course focuses on a study of the Uniform Commercial Code as it applies to negotiable instruments and secured transactions. The course emphasizes agency, business organizations, and employment law. It examines creditors’ rights, bankruptcy, property law (real and personal), and estates.

BA 206 Entrepreneurship and Small Business (3 credits)
This course is designed for those who want to go into business for themselves and for those already in business for themselves who wish to strengthen their entrepreneurial and management skills. In this course, students receive an overview of entrepreneurship followed by a comprehensive study of the steps of managing a new small business venture. Course includes 45 lecture hours per semester.

BA 208 Retail Merchandising (3 credits)
This course is designed to give students interested in becoming a buyer or merchandise manager the background and knowledge necessary to profitably buy merchandise. Emphasis is on the techniques and internal planning that take place within a retail organization in order to present merchandise to the customer. The course is given from the buyer's point of view with the accent on exercises that reflect real-life situations.

Prerequisite(s): BA 106

BA 209 Agricultural Marketing (3 credits)
This course analyzes the agricultural marketing system from several perspectives. Students learn about the marketing process, food markets, international markets, pricing, food quality grading standards, and regulations in the food industry. The course addresses issues impacting commodity marketing in areas such as livestock, dairy, poultry, grain, cotton, textile, tobacco, fruits, and vegetables.

Prerequisite(s): BA 101

BA 210 Business Computer Applications (3 credits)
This course introduces the student to the uses of the PC for analysis, critical thinking, problem solving, electronic data management and for the reporting/presentation of results. Business, accounting, and financial problems and application are emphasized. Students develop competence with word processor, data base, spreadsheet, charting, graphics and communication tools in a visually-oriented computing environment. Integration of the tools or packages is emphasized. Course fee.

BA 212 Internet Research (1 credit)
This course provides the novice, as well as the experienced microcomputer user, with a working knowledge of the World Wide Web to do research and tap an abundance of resources available on the Internet. Course fee.
BA 225 Project Management (3 credits)
This course addresses the basic nature of successful project management. Emphasis is placed on project planning, Work Breakdown Structures, time and resource management, and cost estimation in industries such as public administration, business, engineering, manufacturing, health care, construction, and information systems.
Prerequisite(s): MATH 023 or MATH 026

BA 242 Introduction to International Business (3 credits)
In this introductory course in international business, the student acquires an overview of current international business patterns, different social systems within countries as they affect trade, and the major theories which explain how trade develops. The student is also introduced to material about how institutions, countries and individual corporate strategy are affected by trade patterns.
Prerequisite(s): BA 101

BA 244 Principles of Quality Improvement (3 credits)
This course introduces the basic principles and techniques of quality improvement. It provides the basic concepts, terminology and history of quality improvement and management, with emphasis on relevant costs and benefits of quality improvements, and organization policies and procedures as they relate to quality enhancement.
Prerequisite(s): BA 101

BA 245 Contemporary Issues in Business (3 credits)
Contemporary Issues in Business is the capstone course for students completing a business management certificate. This course integrates the principles of business management that students have acquired within their specific certificate concentration. Students complete research, projects, and a portfolio to demonstrate their business competencies.

BA 246 Legal Environment of Business (3 credits)
The student is introduced to the legal environment in which businesses operate. The course covers sources of law and the application of law to business. Areas examined include business crimes, contracts (under common law and the Uniform Commercial Code), sales, torts (including product liability), administrative, antitrust, environmental, and consumer protection laws.

BA 263 Special Topics: Women and Business (3 credits)
Special Topics: Women and Business This course emphasizes critical issues, attitudes and practices which influence the successful integration of women into mid- and senior-level management. Through readings, case studies, and special projects, students explore the nature of gender related topics and their impact on effective management practices and business organizations. Relevant topics include power and authority, legal issues, communication, sexual harassment, and time and stress management.

BA 271 Cooperative Education I: Business Administration (1 credit)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.
Prerequisite(s): MATH 023 or MATH 026 or (MATH 018) or (MATH 101) or (MATH 109) or (MATH 203) or (MATH 103) or (MATH 102) or (MATH 216) or (MATH 204)

BA 272 Cooperative Education II: Business Administration (2 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

BA 273 Cooperative Education III: Business Administration (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

BA 274 Cooperative Education IV: Business Administration (4 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Chemistry (CHEM)

CHEM 010 Preparatory Chemistry (3 credits)
This preparatory course is designed to permit access to other science courses. Basic principles of atomic structure and chemical change are presented as a foundation for the study of freshman chemistry or biology. May not be used to meet the graduation requirements.
Prerequisite(s): MATH 023 or MATH 024 or MATH 010

CHEM 100 Chemistry for Changing Times (GL) (4 credits)
A course for nonscience majors which allows students to enter the fascinating world of chemistry, the science of molecular change. Students gain an understanding of basic chemical principles and applications that promote an appreciation for the interface between chemistry, technology and society. Topics include air and water pollution, the natural world of organic-biochemistry, food, agriculture, nutrition, synthetic materials, drugs, medicine, nuclear power and radioactivity. The course includes a total of 45 lecture and 30 laboratory hours per semester. Course fee.

CHEM 111 General Chemistry I (GL) (4 credits)
An introduction for students requiring a full year of chemistry. The structure of matter and its behavior from a chemical perspective is presented. Topics include atomic and molecular structure, chemical bonding, stoichiometry, periodic relationships, principles of chemical reactions, and properties of state and solutions. The laboratory illustrates the principles discussed in lecture. Course includes 45 hours of lecture and 45 hours of laboratory per semester. In addition, it is recommended that students have completed one year of high school chemistry or CHEM 010. Course fee.
Prerequisite(s): MATH 023 or MATH 026 or (MATH 018) or (MATH 101) or (MATH 109) or (MATH 203) or (MATH 103) or (MATH 102) or (MATH 216) or (MATH 204)
CHEM 112 General Chemistry II A (GL) (4 credits)
The second semester course for students who require a full year of chemistry. Topics are chemical thermodynamics, kinetics, chemical equilibrium, electrochemistry, acid-base theory, nuclear reactions, and an introduction to basic principles and structures in organic and biochemistry. The laboratory consists of applications of topics discussed in lecture and introduction to the qualitative analysis of some common metals and nonmetals. Course includes 45 hours of lecture and 45 hours of laboratory per semester. Course fee.
Prerequisite(s): CHEM 111

CHEM 114 General Chemistry IIB (GL) (4 credits)
The second semester course for students who require one year of chemistry for transfer to Nursing or Physical Therapy and Allied Health programs. A survey of additional chemical principles, acids, bases and buffers, nuclear chemistry with special emphasis given to organic chemistry, a study of the chemistry of carbon compound—hydrocarbons, alcohols, aldehydes, ketones, carboxylic acids, and esters—and the chemistry of the major classes of biologically important compounds. The course meets for a total of 45 lecture and 45 laboratory hours per semester. Usually offered in spring semester. Course fee.
Prerequisite(s): CHEM 111

CHEM 135 Chemistry for Engineers (4 credits)
Chemistry for Engineers is a one-semester course, with laboratory, covering general chemistry topics designed specifically for engineering students. Topics include atomic/molecular structure, the periodic table, chemical reactions, chemical bonding, equilibrium, kinetics, thermodynamics, electrochemistry, and gas laws. A mathematical approach will be used throughout the course emphasizing data acquisition and manipulation, uncertainty and significant figures. The course includes an introduction to basic laboratory techniques, obtaining measurements, and safety. This course is for non-chemical engineering students; science majors needs to complete the CHEM 111 - CHEM 112 sequence. This course meets 45 lecture and 45 laboratory hours per semester. Course fee.
Prerequisite(s): MATH 026

CHEM 204 Analytical Chemistry (4 credits)
An introduction to the basic theories and techniques of analytical chemistry for the science major. Gravimetric, volumetric, and common instrumental techniques are included. The course meets for a total of 30 hours of lecture and 60 hours of laboratory per semester. Course fee.
Prerequisite(s): CHEM 112

CHEM 207 Organic Chemistry I (4 credits)
This course, along with CHEM 208, presents a comprehensive survey of organic chemistry. The first semester stresses the physical and chemical properties of aliphatic and aromatic hydrocarbons. Emphasis is given to organic nomenclature, synthesis, stereochemistry, reaction mechanisms and spectroscopy of organic compounds. The laboratory illustrates the common techniques used in the preparation, purification and characterization of typical compounds. Course includes 45 hours of lecture and 45 hours of laboratory per semester. Course fee.
Prerequisite(s): CHEM 112

CHEM 208 Organic Chemistry II (4 credits)
A continuation of CHEM 207, this course covers the alcohols, ethers, aldehydes, ketones, carboxylic acids, and their derivatives and selected special topics. Syntheses and reaction mechanisms are stressed throughout the course. The laboratory includes organic syntheses and an introduction to organic qualitative analysis. Course includes 45 hours of lecture and 45 hours of laboratory per semester. Course fee.
Prerequisite(s): CHEM 207

Communication Studies (CMST)

CMST 101 Speech Fundamentals (GI) (3 credits)
Students develop skills in this performance-based course of public communication concepts and techniques, including audience analysis, topic selection and research, organization of speech materials, delivery skills, and critical evaluation of speeches.

CMST 105 Interpersonal Communication (GI) (D) (3 credits)
This course explores the basic elements and theories of interpersonal communication and provides students with the foundation for effective dyadic communication skills to establish and maintain personal and professional relationships. Culture and its influence on communication are highlighted throughout the course. Students are provided opportunities to refine their interpersonal communication skills through role-plays and other activities.

CMST 106 Business & Professional Speech (3 credits)
This course is designed to teach skills necessary for effective oral presentations in business and professional settings. Students present a variety of presentational forms including those for meetings, informative and persuasive speeches, and technical presentations. All activities are designed to provide maximum opportunity for practical application of skills learned.

CMST 200 Communication Theory (3 credits)
This is an introductory course addressing the major theories related to various branches of Communication Studies that includes interpersonal, group, organizational, rhetorical, mass, gender, and intercultural communication.
Prerequisite(s): ENG 101 or (CMST 101 or CMST 105 or CMST 106)

CMST 210 Group Communication and Leadership (GH) (3 credits)
This course examines issues of physical and virtual teamwork. The course challenges students' understanding of their leadership competence and conflict resolution skills. Students explore the relationships among members, the processes they use, and the purposes for which they are together.
Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060) or ENG 101

CMST 230 Nonverbal Communication (3 credits)
Students will examine the theory and research in nonverbal communication to help develop nonverbal skills. Areas of study include body, facial, and eye messages, artificial and space messages, touch communication, paralanguage and silence, and time messages.
Prerequisite(s): ENG 101 and (CMST 101 or CMST 105 or CMST 106)
Computer Aided Design & Draft (CADD)

CADD 101 Introduction to CADD (3 credits)
The content of the basic course includes learning CADD commands and working with the user-interface. File maintenance and plotting are used to create two-dimensional design models in a CADD environment using AutoCAD software. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

CADD 102 Intermediate CADD (3 credits)
A continuation of Introduction to CADD with main emphasis on using CADD software to produce Advanced 2-D and introductory 3-D drawings. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

Prerequisite(s): CADD 101

CADD 131 Revit 1 (3 credits)
CADD 131 introduces students to 3-dimensional Building Information Modeling (BIM) using the Revit software package. Students create and edit 3-dimensional building models. Students use these models to create complete sets of construction documents and presentation drawings. Course fee.

Prerequisite(s): CADD 101

CADD 222 Geometric Dimensioning and Tolerancing (3 credits)
An in-depth print reading course stressing the rules and methods used to interpret engineering drawings according to ANSI Y14.5M-1994 standards. Course includes 30 lecture hours and 30 labs hours per semester. Course fee.

Prerequisite(s): CADD 102

CADD 250 Solid Modeling (3 credits)
This course provides the student with the skills to develop three-dimensional solid models of a mechanical nature. Students learn to generate complex composite solids by performing Boolean operations on solid primitives. This building block approach to modeling utilizes constructive solid geometry and boundary representation concepts as the basis for defining the model. Course includes 30 lab hours and 30 lecture hours per semester. Course fee.

Prerequisite(s): CADD 102

CADD 252 Customizing AutoCAD (3 credits)
This course explores the variety of tools that AutoCAD provides to customize the drawing environment. Students learn to set and understand system variables, customize the screen environment, create and install custom menus, and write simple AutoLISP programs. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

Prerequisite(s): CADD 102

CADD 260 AutoLISP for AutoCAD (3 credits)
AutoLISP for AutoCAD is a continuation of Customizing AutoCAD. The primary focus is on building a functional knowledge of the AutoLISP programming language and applying it to uses within AutoCAD. Students develop new AutoCAD commands and functions to automate the CADD process. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

Prerequisite(s): CADD 102 and CADD 252

CADD 263 Special Topics: Revit 2 (3 credits)
This course will provide an in-depth look at Building Information Modeling (BIM) using Revit software. Topics introduced in Revit 1 will be explored more thoroughly and concepts important to developing a project level understanding of Revit will be introduced. Course Fee.

Prerequisite(s): CADD 101

CADD 265 Solidworks (3 credits)
This course is an introductory course in the use of Solidworks CADD software. It focuses on developing an understanding of the program interface and methods of developing 3-dimensional solid models. Students produce a series of 3D models to test and explore the various methods of assembling a model in Solidworks. Course includes 30 lecture hours and 30 lab hours per semester. Course fee.

CADD 273 Cooperative Education III: Computer Aided Design and Drafting (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Computer Information Systems (CIS)

CIS 011 Basic Computer Skills (1 credit)
This course is designed to develop the basic computer skills needed as preparation for college courses requiring facility with basic computer applications. The course focuses on computer navigation skills, word processing and file management skills, email, and Internet navigation. May not be used to meet graduation requirements.

CIS 102 Introduction to Information Sciences (GI) (3 credits)
This is a survey course of the characteristics, functions and applications of computers. It includes the concepts and principles of problem solving and computer programming. Emphasis is placed on microcomputers and application software packages, such as word processors, spreadsheets, and graphics. Course fee.

CIS 104 Computer Operating Systems (3 credits)
This course examines the importance of computer operating systems. Discussion includes how basic computer concepts relate to an operating system and what functions the systems perform. Operating systems for PCs and UNIX-based systems are discussed. Course fee.

Prerequisite(s): CIS 102

CIS 106 Microsoft Office Applications (3 credits)
This course presents the principles of a family of application software. The student examines and uses Microsoft word processing, spreadsheet, presentation, and data base software to design and implement solutions to business problems. Although the course introduces a basic introduction to the applications, advanced skills are presented throughout the course. Course fee.
CIS 110 Introduction to UNIX/Linux (4 credits)
This is an introductory course designed for users of UNIX. It is taught using the Linux operating system. The student learns to create, remove, edit and rename files, directories and subdirectories; compose, send, receive and print electronic messages; and compose, edit and format short text files using the UNIX editors. The UNIX shell, kernel and utility programs are covered. Shell programming is introduced. Course fee.

Prerequisite(s): CIS 116

CIS 111 Programming I: C/C++ (4 credits)
This is an introductory course taught in the C/C++ language. Students learn to define, solve, code, enter, test, debug and document solutions to programming problems. The imperative/procedural programming standard is used for software design in the course. Course Fee.

Prerequisite(s): CIS 102

CIS 113 Introduction to PowerPoint (3 credits)
This course presents the fundamentals of designing, creating, modifying and enhancing computerized presentations using Microsoft PowerPoint. The student examines the various applications for computerized presentations and employs advanced techniques including links to other applications and multimedia elements. Course fee.

Prerequisite(s): CIS 102

CIS 114 Introduction to Computer User Support (3 credits)
This course introduces the responsibilities of a computer user support specialist and emphasizes PC troubleshooting. Students examine how to support, communicate with, and train non-computer professionals to use computers effectively. Students develop problem-solving skills and install, configure and troubleshoot microcomputers. Course fee.

Prerequisite(s): CIS 102

CIS 115 Fundamentals of Programming (3 credits)
This course is designed to develop problem-solving skills in relation to designing computer programs. The student examines and uses program development techniques by developing hierarchy charts, flowcharts and pseudocode to solve common programming problems. This course is a co-requisite for programming languages classes. It is strongly recommended that students complete CIS 115 prior to taking a programming language.

Prerequisite(s): CIS 102

CIS 116 Microsoft Project: Basic (1 credit)
This course introduces students to the basic fundamentals of Microsoft Project software. Addressed are the basic systematic applications and techniques used to manage projects efficiently, including planning, scheduling, and controlling organizational activities; task management, resource management, and cost estimation. Course fee.

Prerequisite(s): CIS 102

CIS 117 Microsoft Project: Advanced (1 credit)
This course covers advanced procedures involved in the use of Microsoft Project software, including applications that are used to manage projects efficiently with respect to schedules, resources, time and cost constraints, and controls. Fundamentals of managing multiple projects, formatting, printing, and customizing projects are introduced. Course fee.

Prerequisite(s): CIS 116

CIS 118 Introduction to Microsoft Access (3 credits)
This course provides an introduction to databases, including database design, creation, joining, tables, forms, reports, labels and queries. The student solves a variety of business problems using database products to design and create database files, locate and edit data, organize and display data, and modify and expand a database. Course fee.

Prerequisite(s): CIS 102

CIS 119 Programming I: Java (4 credits)
This is an introductory programming course taught in the popular language Java. Students learn basic program logic, design, testing, and debugging skills, as well as the specifics of program implementation in the Java language. Object Orientation is used throughout the course. Course fee.

Prerequisite(s): CIS 102

CIS 125 Document Processing: MS Word (3 credits)
Students use word processing software as a tool to prepare various business letters, memos, tables and reports. Decision-making skills are used to evaluate document formats and mailable. Course projects emphasize both the application of written communication skills and the ability to produce quality documents efficiently. Course fee.

Prerequisite(s): CIS 102

CIS 126 Introduction to Networks (3 credits)
This course presents the principles of data communications and computer networks. The student examines network hardware, topologies, communications protocols and network operating systems, emphasizing TCP/IP networks for the microcomputer environment. The course provides a foundation for those preparing for the Computing Technology Industry Association's (CompTIA) Network+ Certification exam. Course fee.

Prerequisite(s): CIS 102

CIS 135 Introduction to Internet Technologies (3 credits)
This course presents the applications and technologies of the Internet. The student examines the history, current issues and functions of the Internet and examines and uses Internet technologies including Web browsers, XHTML, FTP, HTML, TCP/IP, CSS and Java-script. The student explores strategies for successful Web site development and designs and creates Web sites. One semester. Course fee.

Prerequisite(s): CIS 102

CIS 145 Introduction to Microsoft Excel (3 credits)
This course presents an introduction to Microsoft Excel, including designing structured spreadsheets, building formulas and functions, using spreadsheet publishing techniques, creating charts and a spreadsheet database. Also examined are advanced topics such as integrating Excel with other products and macros. Emphasis is placed on designing structured spreadsheets and developing spreadsheet solutions for a variety of business problems. Course fee.

Prerequisite(s): CIS 102

CIS 161 Introduction to Health Information Systems (3 credits)
This course familiarizes students with healthcare information systems including an introduction to the organizational structure, function and issues related to the healthcare environment. It emphasizes the structure and use of health information, health record data tools, data sources, storage and retrieval. It also includes system implementation and support, as well as security requirements for health information systems. Course fee.
CIS 162 Database Management in Healthcare (3 credits)
This course introduces students to the analysis of data and information generated by health services and public health organizations. While focusing broadly on database design, development, and management of database systems, students will concentrate on healthcare application. Students will also be introduced to the use and structure of data elements, data sets, data standards, their relationships to primary and secondary record systems and examples of applications in health information processing.
Prerequisite(s): CIS 161

CIS 184 Special Topics: Introduction to C#.NET Programming (4 credits)
Special Topics: Introduction to C#.NET Programming This programming course introduces students to C#.NET and graphical user interface design using C#.NET. Students learn procedural structures and graphical design layouts. In addition, students learn about generating software requirements and the software life cycle ranging from understanding the problem to deploying the solution.
Prerequisite(s): CIS 102

CIS 201 Assembly Programming Language (4 credits)
This course covers the characteristics and functions of a microcomputer Assembly language. The student learns how to solve application problems using Assembly language. Laboratory consists of coding, keying and debugging programs. It is recommended that students have programming experience in at least one other programming language prior to taking this course. Course fee.
Prerequisite(s): CIS 111, CIS 119, CIS 131

CIS 203 Computer Systems and Procedures (3 credits)
This course presents the principles of the Systems Development Life Cycle (SDLC): systems planning, analysis, design, implementation, and operation/support. Students apply systems analysis skills, techniques, and concepts by analyzing case studies. The role of the systems analyst in developing IT (Information Technology) projects such as a payroll system, a student information database system, or a healthcare system is discussed.
Prerequisite(s): CIS 102 and CIS 115

CIS 205 Introduction to Visual Basic.NET Programming (4 credits)
This course is an introduction to application programming using Visual Basic.NET. The students learn the fundamentals of object-oriented technology and learn to define, solve, code, enter, test, and document programs. Topics include Graphical User Interface (GUI) controls and design concepts, calculations, decisions, menus, sub procedures, object-oriented programming, lists and objects, and arrays. Course fee.
Prerequisite(s): CIS 102, CIS 115

CIS 207 Advanced Visual Basic.NET Programming (4 credits)
This course provides the student with an advanced set of tools for programming with Visual Basic.Net. The student studies advanced object-oriented programming design and development techniques using Multitier programs, Web Forms, web services, databases, and collections. Course fee.
Prerequisite(s): CIS 205

CIS 210 Fundamentals of Network Security (3 credits)
This course offers in-depth coverage of the current risks and threats to an organization’s data as well as the strategies for safeguarding critical electronic assets. The course provides a foundation for those responsible for protecting network services, devices, traffic, and data. Additionally, Fundamentals of Network Security prepares students for further study in more specialized security fields. The course provides a foundation for those preparing for the Computing Technology Industry Association’s (CompTIA) Security+ Certification exam. Course fee.
Prerequisite(s): CIS 135

CIS 211 MS Windows Server Operating System (3 credits)
This course provides an in-depth presentation of the capabilities of MS Windows Server Operating System. Topics include protocol configuration, name resolution, network services, remote access, routing, and security. The course provides a foundation that maybe useful for Microsoft Certification, but is not keyed to a particular Microsoft Exam. Course fee.
Prerequisite(s): CIS 102

CIS 214 Programming II: Java (4 credits)
This is a second-semester programming course in the Java language. Students learn to design, create, and test Java programs using Object Orientation and other sophisticated programming strategies. Course fee.
Prerequisite(s): (CIS 119) or (CIS 111) or (CIS 205) or (CS1 131)

CIS 215 Advanced Java Programming (4 credits)
This course develops advanced concepts in the Java programming language. The student studies programming design and development techniques in object-oriented technology using graphics, exception handling, multithreading and input/output streams. Course fee.
Prerequisite(s): CIS 214

CIS 217 Introduction to Web Programming (3 credits)
This course is an introduction to the development of programs for the web. Students study good programming design and development techniques for the web using advanced HTML, DHTML, JavaScript, and Perl. Course fee.
Prerequisite(s): (CIS 111) or (CIS 119) or (CIS 131)

CIS 219 Server-Side Web Programming (4 credits)
This course introduces the basic principles of developing Server-Side Web programs. Students learn to design, develop, test and debug Web applications using Server-Side technologies. Course fee.
Prerequisite(s): CIS 217

CIS 221 C++ Programming Language (4 credits)
This course in computer programming uses the C++ language. The student learns the fundamentals of object-oriented technology and learns to define, solve, code, enter, test and document programming problems. Course fee.
Prerequisite(s): CIS 111, CIS 119, CIS 131

CIS 225 Introduction to Shell Programming (4 credits)
An introductory course designed for those knowledgeable in the UNIX operating system. Students create Shell programs as an interpreted programming language and write programs using UNIX commands. In addition, students modify and debug programs using shell variables, commands, arguments, filter, looping, positional parameters, nesting and debugging procedures. Course fee.
Prerequisite(s): CIS 110, CIS 115
CIS 264 Advanced Microsoft Office (3 credits)
This course presents advanced concepts and techniques of Microsoft Office, including MS Word, MS Excel, MS Access and MS PowerPoint. Integration between software packages is emphasized and the role of the Internet is examined. Students solve a variety of advanced business problems. Course fee.

Prerequisite(s): CIS 102

CIS 264 Special Topics: Python Programming Language (4 credits)
Python is a 'light-weight', general purpose, object-oriented programming language ideal for rapid prototype development, scripting, and cross-language software development. In this course, the student will learn how to define, solve, code, test, and document programming problems using Python. Course fee.

Prerequisite(s): CIS 102 and CIS 106

CIS 271 Cooperative Education: Computer Information Systems (1 credit)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Prerequisite(s): CIS 102

CIS 272 Cooperative Education: Computer Information Systems (2 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

CIS 273 Cooperative Education: Computer Information Systems (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

CIS 274 Cooperative Education: Computer Information Systems (4 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experiences may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Copper Science (CSI)

CSI 131 Computer Science I (4 credits)
This is the first course in a sequence of two courses in computer science utilizing the syntax and semantics of the C programming language with emphasis on applications for Science, Mathematics and Engineering disciplines. The course provides an introduction to the principles of program design and development using procedural programming techniques. The course will provide an introduction to the following topics: life cycle program development, modularization, simple algorithm analysis, aggregated derived data types and sequential and random file processing. Usually offered in spring semester. Prerequisite/Note: Computer Science students completing CIS 111 cannot receive credit for CSI 131.

Prerequisite(s): MATH 203

CSI 132 Computer Science II (4 credits)
The second in a two-course sequence in computer science utilizing the syntax and semantics of the object-oriented C++ programming language. Topics include classes, dynamic data structure, overloading, inheritance, stream input/output and file processing. Usually offered in fall semester.

Prerequisite(s): CSI 131 and MATH 203, MATH 204

Criminal Justice (CJ)

CJ 101 Introduction to Criminal Justice (3 credits)
This course is an introduction to the criminal justice system from its ancient origins to reform in England and its present development in the United States. The course covers agencies involved in the administration of justice at all levels of government. Students are oriented to the purposes, requirements and opportunities in this field.

CJ 103 Introduction to Corrections (3 credits)
This course is a study of the treatment, security, custody and discipline of the convicted law violator. The course covers the development of correctional theory and practice, philosophical and social frameworks, the administrative function, community-based corrections, and the analysis of the correctional client.

CJ 104 Procedural Law and Evidence (3 credits)
The constitutional aspects of arrest, search and seizure are considered, together with interrogation and confession, self-incrimination and right to counsel. Students learn rules of evidence as they apply to law enforcement officers in the performance of their investigatory duties and their testimony in court.
CJ 109 **Police Organization and Administration** (3 credits)
The purpose and activities of the police component of the criminal justice system are examined. Included is an analysis of the following concepts, issues or problems: police organization and management; the functions of the police; the relationship of police operations to function, including patrol, investigation, traffic, juvenile service and special units; and the evaluation of police efficiency, budgeting and utilization of resources.
Prerequisite(s): CJ 101

CJ 111 **Principles of Criminal Law** (3 credits)
The substantive law is discussed: how and why laws are created with emphasis on specific offenses against persons and property. Also covered: what constitutes a violation of the law and how police must satisfy the legal requirements imposed by the elements of the statutes so that the state may successfully prosecute a criminal case. Landmark U.S. Supreme Court and selected state court cases are studied.

CJ 112 **Introduction to Crime Scene Technology** (3 credits)
This course is an introduction to crime scene investigation techniques. Emphasis is placed on how to collect and preserve physical evidence, examine the evidence and record the crime scene.

CJ 201 **Police-Community Relations** (3 credits)
Social complexities and problems facing today's police officer are studied in light of the sociological factors operating in urban, suburban and rural areas. Also included are police community relations programs such as review boards and civil disorder control procedures.

CJ 207 **Criminal Investigation** (3 credits)
Topics include the fundamental principles and concepts of investigation, methods of investigation, search of the crime scene, and collection and preservation of evidence. Interviews and interrogations, sources of information, techniques of surveillance, stakeouts and raids are also included as are investigative techniques in specific crimes. Three lecture hours per week.

CJ 213 **Criminology (same course as SOC 213)** (3 credits)
Criminology is a sociological study of the causes of crime and the relationships between criminal behavior and various social factors such as age, sex, race, religion, socioeconomic status, etc. Included are studies of crime rates, white-collar crime and victimless crimes.
Prerequisite(s): SOC 101

CJ 214 **Police Problems and Practices** (3 credits)
This course is designed to analyze the traditional and contemporary issues and problems in the law enforcement community. Topics include such areas as police corruption, use of deadly force, computer crime, terrorism and other forms of criminal behavior.

CJ 215 **Police Conduct** (3 credits)
This course analyzes the decision-making process in criminal justice as it relates to discretion, due process, truthfulness, corruption and discrimination.

CJ 216 **Terrorism** (3 credits)
This course reviews the history, the current state of affairs, and the potential future of terrorism in the world. Students will become familiar with what terrorism and counter-terrorism are and how our society and the individual are dealing with the threats.

CJ 283 **Field Practicum in Criminal Justice** (3 credits)
This is a program of supervised, on-the-job experience, selected in accordance with the career objective of the student. The goal of this course is to provide the student an opportunity to earn college credit for performing direct service to the community and simultaneously applying classroom learning to daily situations such as interviewing clients, collecting data, and working with public service workers in police departments, courts, juvenile service, states' attorney's office, corrections, etc. Nine classroom discussion hours, one hundred laboratory hours.

**Drama (DRAM)**

DRAM 203 **Survey of World Drama (GH) (D)** (3 credits)
This course is a chronological and critical study of the development of drama from the early Greeks until the Restoration. Students explore a broad range of dramatic works from around the world. Usually offered in fall semester.
Prerequisite(s): ENG 101

DRAM 204 **Survey of Modern Drama (GH) (D)** (3 credits)
This course is a chronological and critical study of the development of drama from the nineteenth and twentieth centuries. Students explore a broad range of dramatic works from around the world. Usually offered in spring semester.
Prerequisite(s): ENG 101

**Earth Science (ES)**

ES 105 **Earth Science (GS)** (3 credits)
A survey of the physical earth for nonscience majors is presented with emphasis on the waters and the atmosphere, including principles and concepts of geology; plate tectonics; environmental phenomena; earthquakes, volcanoes, seismic sea waves, landslides, surface processes, earth resources, wastes and hazards. Designed for students who share with the scientist the curiosity, wonder, and interest in the earth and the atmospheric changes.

ES 106 **Earth Science Laboratory (GL)** (1 credit)
This is an introductory laboratory course in the fundamentals of earth science and is especially appropriate for students new to earth science. Topics include earthquakes, hydrology, geology, weather phenomena and the oceans. The course meets for a total of 30 laboratory hours per semester. Course Fee.

Prerequisite(s): ES 105

ES 107 **Earth and Space Science** (4 credits)
This course provides an exploration of selected topics in the earth and astronomical sciences. Studies will include plate tectonics, hydrolgic cycle, earth history, earth resources, and fundamental characteristics of stars, galaxies, and planets. Students will investigate how this all fits together and our place in the universe. The course is taught in a 'hands-on,' inquiry based, constructivist method. Students completing ES 107 cannot earn credit for graduation for ES 105/106 or ASTR 151/152. Course meets Associate of Arts in Teaching (AAT) degree requirements. The course meets for a total of 45 lecture hours and 30 laboratory hours per semester. Course fee.
ES 108 General Meteorology (GL) (4 credits)
This introductory course surveys the structure, weather, and climate in our Earth’s atmosphere. Topics include solar energy input and distribution to the Earth; the role of atmospheric moisture in cloud development and precipitation; the development of winds, global circulation, and the motion of air masses and fronts; severe weather processes, and human impact on climate changes. Course work includes laboratory experiences and a collaborative field exercise that includes weather observations. The course meets for a total of 45 lecture hours and 30 laboratory hours per semester. Course fee.

Economics (ECON)

ECON 101 Macroeconomics (GB) (3 credits)
Macroeconomics is an introduction to economic principles with emphasis on the analysis of aggregate income and employment. Topics include theory of income and employment, role of money and banking system, monetary and fiscal policies, and the problems of economic growth and fluctuations. Students completing ECON 101 or 102 cannot earn graduation credit for ECON 107. Prereqs: Eligibility for ENG 101.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 101)

ECON 102 Microeconomics (GB) (3 credits)
Microeconomics deals with resource allocation under the price system, price and output determination when markets are characterized by perfect and imperfect competition, and price and employment determination in the resource market. Current problems of poverty, environment, energy and urbanization are analyzed. Students completing ECON 101 or 102 cannot earn graduation credit for ECON 107. Prereqs: Eligibility for ENG 101 and college-level math.

Prerequisite(s): ENG 012 or ENG 018 or ENG 101

ECON 105 United States Economic History (3 credits)
This course is a history of the U.S. economic development from Colonial times to the present in a world context. Major topics are geography and natural resources, the agrarian age, the factory system, the industrial revolution, and the new post world war society.

ECON 106 Consumer Economics and Personal Finance (3 credits)
This course studies economic theory as it applies to consumer decision making. Theory will be complemented by practical examples of consumer decisions on investing, saving and budgeting. Use of credit, insurance, housing, career and retirement planning within the decision-making process will be emphasized.

ECON 107 Introduction to Economics (3 credits)
This course is an introduction to modern macro and microeconomic theory and practice. The micro concepts of supply and demand, cost structure, profit maximization and wage determination make up the first half of the course. The remainder covers macroeconomic problems of unemployment and inflation with theoretical and applied policy solutions: fiscal, monetary and supply-side. Students completing ECON 101 or 102 cannot earn graduation credit for ECON 107.

Education (EDUC)

EDUC 090 Teacher Ed Field Placement I (1 credit)
This course is intended for students who are transferring in a course with outcomes equivalent to one of the following: EDUC 101 or EDUC 113 but is lacking the field placement experience. Students will spend 30 hours in a school placement with a mentor teacher and teach at least two lessons. Field placement experiences take place sometime during regular school hours, generally between 8:00 AM and 3:30 PM. A criminal record record check will be conducted prior to students entering a school setting.

EDUC 101 Introduction to Education (3 credits)
This course is a survey of the role of education in America. Consideration is given to basic philosophies underlying the requirements of effective learning -- teaching situations, developmental aspects of school age children, current trends in education, and the selection of education as a profession. Participants should anticipate spending the equivalent of four days in field placement with a minimum of 30 hours in a public school classroom.

EDUC 103 The Young Child (3 credits)
This course is designed to provide students with knowledge of child development from birth to age twelve. Emphasis is placed on development and learning theories, factors which influence the development of young children, and the identification of children who are at risk for developmental delays. Other important issues related to the development of young children are also addressed including: school readiness, developmental assessment, families, developmentally appropriate practices and current trends in the field. Additional Information Required by State Regulations **Child Care Credentialing Information: This course includes 45 hours in core of knowledge training including 3 hours in Child Development: Introduction to Observation and Assessment of Children; 24 hours in additional core of knowledge training in Child Development; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in additional core of knowledge training in Curriculum; 3 hours in Health, Safety & Nutrition: Nutrition & Active Learning; 3 hours in Special Needs; 3 hours in Community: Anti-bias/Cultural Competence; and 3 hours in Community: Family & Community Partnerships.
EDUC 104 Materials and Curriculum in Early Childhood (3 credits)
This course will explore best practices in the field of early childhood education. Emphasis will be placed on fostering development of the whole child through developmentally appropriate practices. Other issues pertinent to the education of young children will be addressed including: family partnerships, diversity, relationships, brain development, and current trends in early childhood education. Additional Information Required by State Regulations Students who complete both EDUC103 and EDUC104 are eligible for the 90-hour Preschool Certificate required by the Maryland State Department of Education, Office of Child Care. **CHILD CARE CREDENTIALING INFORMATION: This course includes 45 hours in core of knowledge training including 3 hours in child Development: Introduction to Observation and Assessment of Children; 3 hours of Curriculum: Resources that Guide Daily Planning; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in Curriculum: Taking Learning Outside; 15 additional hours in Curriculum; 3 hours in Special Needs: Supporting Children with Disabilities, Delays, or Special Health Care Needs; 3 hours in Professionalism: Environmental Rating Scales; 3 hours in Professionalism: The Child Care Provider as Professional; 3 additional hours in Professionalism; 3 hours in Community: Anti-Bias/Cultural Competence; and 3 hours in Community: Family & Community Partnerships. **CHILD CARE CREDENTIALING INFORMATION: This course includes 45 hours in core of knowledge training including 3 hours in child Development: Introduction to Observation and Assessment of Children; 3 hours of Curriculum: Resources that Guide Daily Planning; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in Curriculum: Taking Learning Outside; 18 additional hours in Curriculum; 3 hours in Special Needs: Supporting Children with Disabilities, Delays, or Special Health Care Needs; 3 hours in Professionalism: Environmental Rating Scales; 3 hours in Professionalism: The Child Care Provider as Professional; 3 additional hours in Professionalism; 3 hours in Community: Anti-Bias/Cultural Competence; and 3 hours in Community: Family & Community Partnerships.

EDUC 108 Classroom Management: Early Childhood (3 credits)
This course focuses on the theories and skills necessary for classroom management in an early childhood setting. Students are introduced to specific skills that support classroom management, including problem solving skills, record keeping, and observational skills, while emphasizing child development issues. This course is designed for people working with children in daycare centers, nursery schools, pre-kindergarten, and kindergarten. **CHILD CARE CREDENTIALING INFORMATION: This course includes 27 hours in core knowledge training including 3 hours in Child Development: Introduction to Observation and Assessment of Children; 3 hours in Child Development: Developmentally Appropriate Supervision; 9 hours in Child Development: Positive Child Guidance and Discipline Theory; 3 hours in additional core of knowledge training in child Development; 3 hours in additional core of knowledge training in Curriculum; 3 hours in Professionalism: Conflict Resolution Strategies; and 3 hours in additional core of knowledge training in Professionalism.

EDUC 109 Paraprofessional Success (3 credits)
This course explores the role of the paraprofessional in education and introduces skills the paraprofessional needs to be successful. A variety of techniques for assisting with instruction, modifying instruction, fostering appropriate behavior, and collecting documentation are all covered. Professionalism and collaboration are stressed throughout. Usually offered during the fall semester.

EDUC 110 Infant and Toddler Curriculum (3 credits)
This course will explore best practices for the care of infants and toddlers. The importance of nurturing relationships will be discussed, along with how to turn caregiving routines into learning opportunities. Attention will be given to how partnerships can be formed with families and children, including those from diverse backgrounds. Issues important to the effective care of very young children will be addressed including: special needs, breastfeeding, SIDS prevention, effective environments, and equity. Additional Information Required by State Regulations Students who complete both EDUC103 and EDUC110 are eligible for the 90-hour Infant and Toddler Certificate required by the Maryland State Department of Education, Office of Child Care. **Child Care Credentialing Information: This course includes 45 hours Core of Knowledge training including: 3 hours in Child Development: Introduction to Observation and Assessment of Children; 3 additional hours in child development; 3 hours in Curriculum: Resources the Guide Daily Planning; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in Curriculum: Taking Learning Outside; 12 additional hours in Curriculum; 3 hours in Health Safety and Nutrition: Special Considerations for Infants including supporting breastfeeding and SIDS prevention; 3 hours in Special Needs: Supporting Children with Disabilities, Delays, or Special Health Care Needs; 3 hours in Professionalism: Environmental Rating Scales; 3 hours in Professionalism: The Child Care Provider as Professional; 3 hours in Community: Anti-Bias/Cultural Competence; and 3 hours in Community: Family & Community Partnerships.

EDUC 113 Introduction to Early Childhood Education (3 credits)
This course introduces students to the early childhood profession. It provides a historical perspective as well as current issues and trends in the field. Various roles of the early childhood professional are presented. Participants should anticipate spending the equivalent of four days in field placement with a minimum of 30 hours in an early childhood public school classroom. **CHILD CARE CREDENTIALING INFORMATION: This course includes 21 hours in core of knowledge training including 3 hours in Child Development: Introduction to Observation and Assessment of Children; 3 hours in Curriculum: Resources that Guide Daily Planning; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hour in additional core of knowledge training in Curriculum; 3 hours in additional core of knowledge training in Professionalism; 3 hours in Community: Anti-Bias/Cultural Competence; and 3 hours in Community: Family & Community Partnerships.

EDUC 191 Health, Safety & Nutrition (3 credits)
This course introduces students to training of staff, accounting for funds, purchasing, recruiting, staffing, budgeting, communicating with parents, fundraising, locating community resources and making positive referrals. **CHILD CARE CREDENTIALING INFORMATION: This course includes 30 hours in core of knowledge training including 3 hours in Child Development: Introduction to Observation and Assessment of Children; 3 hours in additional core of knowledge training in Child Development; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in additional core of knowledge training in Health, Safety & Nutrition; 3 hours in Professionalism: Environmental Rating Scales; 3 hours in Professionalism: Child Care Provider as a Professional; 3 hours in Professionalism: Conflict Resolution Strategies; and 9 hours in additional core of knowledge training in Professionalism.

EDUC 200 Introduction to Child Care Administration (3 credits)
This course addresses the management skills necessary when functioning as a site manager in a child care facility. Students are introduced to training of staff, accounting for funds, purchasing, recruiting, staffing, budgeting, communicating with parents, fundraising, locating community resources and making positive referrals. **CHILD CARE CREDENTIALING INFORMATION: This course includes 30 hours in core of knowledge training including 3 hours in Child Development: Introduction to Observation and Assessment of Children; 3 hours in additional core of knowledge training in Child Development; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in additional core of knowledge training in Health, Safety & Nutrition; 3 hours in Professionalism: Environmental Rating Scales; 3 hours in Professionalism: Child Care Provider as a Professional; 3 hours in Professionalism: Conflict Resolution Strategies; and 9 hours in additional core of knowledge training in Professionalism.
EDUC 201 Field Placement I (3 credits)
This field placement experience requires that the student spend a minimum of 135 hours in an early childhood setting teaching under the supervision of a site manager and a faculty member. This experience is a capstone course and is intended to offer the student a hands-on opportunity to apply information learned throughout the degree program including, but not limited to, developmentally appropriate practices. Students should be enrolled in the Early Childhood Education AAS degree program or have the permission of the instructor.

Prerequisite(s): EDUC 108 and EDUC 103 and EDUC 104

EDUC 202 Field Placement II (3 credits)
This field placement experience requires that the student spend a minimum of 135 hours in an early childhood setting completing administrative tasks under the supervision of a site manager and a faculty member. This experience is a capstone course and is intended to offer the student a hands-on opportunity to apply information learned throughout the degree program including, but not limited to, developmentally appropriate practices, management tasks and supervision skills. Students should be enrolled in the Early Childhood Education AAS degree program or have the permission of the instructor.

Prerequisite(s): EDUC 200 and EDUC 201

EDUC 205 Instruction of Reading (3 credits)
This course uses criteria consistent with findings of scientific research to select, evaluate, and compare instructional programs and materials for teaching reading. Successful students are proficient in enabling students to become strategic, fluent, and independent readers using a variety of texts and other materials. They are prepared to involve parents and members of the school and surrounding community to promote reading both inside and outside of school. This course is approved by the Maryland State Department of Education for individuals seeking re-certification and is intended for early childhood, elementary, and special education teachers. Usually offered as needed.

EDUC 206 Literacy in the Content Areas: Part I (3 credits)
This course examines literacy in the present day with an emphasis on the literacy development of adolescent learners. The course content focuses on the interactive nature of the reading process in the content area and examines the use of effective instructional strategies for developing content reading literacy, skills, vocabulary and concepts. Emphasis is placed on the design of instruction that incorporates appropriate methods and materials for developing reading proficiency in the content area with a concentration on meeting the linguistic and cultural characteristics of all students.

EDUC 207 Processes and Acquisition of Reading (3 credits)
This course is designed to assist pre-service and in-service teachers in understanding the reading acquisition process through observation and analysis of reading and written language development, and the study of current issues in reading research. Introduction to language structures including spoken syllables, phonemes, graphemes, and morphemes is included in this course. Participants apply knowledge of the core areas of language to reading acquisition in terms of first and second language acquisition, typical development and exceptionalities. This course is approved by the Maryland State Department of Education for individuals seeking initial certification and re-certification and is intended for early childhood, elementary, and special education teachers. Usually offered in the fall and spring semesters. **CHILD CARE CREDENTIALING INFORMATION: This course includes 12 hours in core of knowledge training including 3 hours in Child Development: Introduction to Observation and Assessment of Children; 3 hours in additional core of knowledge training in Child Development; and 6 hours in additional core of knowledge training in Curriculum.

EDUC 208 Avenues to Children's Literacy (3 credits)
This course is designed to give participants the ability to use criteria consistent with findings of scientific research to select, evaluate, and compare instructional programs and materials (e.g., children's literature) for teaching reading. Successful students will be proficient in enabling students to read a variety of textual materials and will be prepared to involve school and community members in promoting reading. This course is approved by the Maryland State Department of Education for individuals seeking re-certification and is intended for early childhood, elementary, and special education teachers, current daycare workers and future daycare workers only. Three lecture hours per week. Usually offered fall and spring semesters. **CHILD CARE CREDENTIALING INFORMATION: This course includes 12 hours in core of knowledge training including 3 hours in Child Development: Developmentally Appropriate Practice (including children with special needs); 9 hours in additional core of knowledge training in Curriculum; and 3 hours in Community: Family & Community Partnerships.

EDUC 209 Literacy in the Content Areas: Part II (3 credits)
This course examines literacy in the present day with an emphasis on the methods to develop that literacy in adolescent learners. Teacher candidates taking the course will examine, use, and evaluate a wide range of strategies and approaches to literacy instruction. Emphasis is placed on literacy tasks and assessment of those tasks to promote a better understanding of disciplinary content. Teacher candidates will develop professional dispositions for collaboration and leadership in order to work effectively with students, families, schools, and communities of varied linguistic and cultural backgrounds. It is recommended that students have access to a classroom for this course.
EDUC 210 Children with Behavioral Challenges (3 credits)
This course provides a basic overview of the causes and treatments of behavioral difficulties in children and adolescents. Emphasis is placed on interventions that can be implemented by an educator, or daycare provider through high school. Attention is given to creating relationships with families and agencies that support the progress of the child. Usually offered during fall semester. **CHILD CARE CREDENTIALING INFORMATION: This course includes 3 hours in Child Development: Introduction to Observation and Assessment of Children; 6 hours in Child Development: Positive Child Guidance & Discipline Theory; and 6 hours in Special Needs: Supporting Children with Disabilities, Delays, or Special Health Care Needs.

Prerequisite(s): (PSY 202) or (EDUC 103)

EDUC 211 Assessment for Reading Instruction (3 credits)
This course is designed to assist pre-service and in-service teachers in becoming proficient consumers and users of classroom-based assessments and assessment data. Instruction focuses on building knowledge of the purposes of assessment, types of assessment tools, how to administer and use several valid, reliable, well-researched formal and informal assessments of reading and related skills, how to effectively interpret the results of assessments, and how to communicate assessment results in a variety of contexts. This course is approved by the Maryland State Department of Education for individuals seeking recertification and is intended for early childhood, elementary, and special education teachers. Usually offered as needed.

EDUC 212 Effective Teaching Methodology (3 credits)
This course introduces students to a broad spectrum of instructional methodologies for use in today's classrooms and to the frameworks that will guide their instructional decisions. Students learn to design instruction to meet the needs of diverse student populations and to apply instructional techniques to manage and teach these children. Usually offered in summer session.

EDUC 213 Classroom Assessment of Students (3 credits)
This course provides students with knowledge about both formal and informal assessment principles and applications and how these help in making decisions about their teaching and student learning. Participants learn the concepts and applications of various methods of assessment as well as the reasons and cautions that are inherent in the assessments they construct and interpret. Usually offered in summer session.

EDUC 214 Classroom Mentoring (1 credit)
This course is intended for new or provisional teachers in the public school system. Students have an opportunity to discuss lesson plans, student behavior, classroom management, and any other topic of importance during their first year teaching. The instructor is in contact with the students' assigned public school mentors and acts as resource for the students. Usually offered in fall and spring semesters.

EDUC 215 School-Age Child Care (3 credits)
This course presents best practices in the care of children from ages five through twelve. Topics covered include development and learning theories, effective environments, the importance of relationships, curriculum development, selection of age-appropriate materials, forming partnerships with families, and current trends in the field of school-age child care. Considerations when caring for children from diverse backgrounds, including children with disabilities, will be discussed. Prerequisite/Co-requisite: EDUC 103. Additional Information Required by State Regulations Students who complete both EDUC103 and EDUC215 are eligible for the 90-hour School-Age Certificate required by the Maryland State Department of Education, Office of Child Care. **CHILD CARE CREDENTIALING INFORMATION: This course includes 45 hours in core of knowledge training including 3 hours in child Development: Introduction to Observation and Assessment of Children; 3 hours of Curriculum: Resources that Guide Daily Planning; 3 hours in Curriculum: Developmentally Appropriate Practice (including children with special needs); 3 hours in Curriculum: Taking Learning Outside; 15 additional hours in Curriculum; 3 hours in Special Needs: Supporting Children with Disabilities, Delays, or Special Health Care Needs; 3 hours in Professionalism: Environmental Rating Scales; 3 hours in Professionalism: The Child Care Provider as Professional; 3 additional hours in Professionalism; 3 hours in Community: Anti-bias/Cultural Competence; and 3 hours in Community, Family & Community Partnerships.

Prerequisite(s): EDUC 103 and EDUC 104

EDUC 216 Child Health, Safety and Nutrition (3 credits)
This course examines the health, safety, and nutritional needs of children in the child care setting. It provides students with information concerning health and nutrition policies, the creation of safe learning environments, the development of lesson plans, and current issues in health, safety, and nutrition. **CHILD CARE CREDENTIALING INFORMATION: This course includes 36 hours of core of knowledge training including 3 hours in Child Development: Developmentally Appropriate Supervision; 6 hours in curriculum: Taking Learning Outside; 6 hours in Health, Safety & Nutrition: Nutrition & Active Learning; 6 hours in Health, Safety & Nutrition: Playground Safety; and 18 hours in additional core of knowledge training in Health, Safety & Nutrition.

Prerequisite(s): EDUC 103 and EDUC 104

EDUC 217 Introduction to Special Education (3 credits)
This course provides a basic overview and understanding of special education programs and their design. Handicapping conditions and their characteristics are explained and discussed. Participants should anticipate spending a minimum of 30 hours in a special education setting. This course meets the requirements of three credits in special education for Maryland teachers seeking new or continuing certification. **CHILD CARE CREDENTIALING INFORMATION: This course includes 21 hours of core of knowledge training including 6 hours in additional core of knowledge training in Curriculum; 3 hours in Special Needs: Including All Children & the ADA; 3 hours in Special Needs: Supporting Children with Disabilities, Delays, or Special needs; and 9 hours in additional core of knowledge training in Special Needs.

Prerequisite(s): (EDUC 101) or (EDUC 103) or (EDUC 113) or (PSY 207)
EDUC 218 Exploring Teaching as a Next Career (1 credit)
This course is for individuals who have at least a bachelor’s degree and are exploring the profession of teaching as a career choice. Topics presented include introductory information on teaching strategies, assessment, classroom management and school culture. This one-credit course includes five days with a mentor teacher in a classroom. To register for EDUC 218, must have at least a bachelor’s degree or have permission from the dean.

EDUC 219 Everyday Classroom Assessment (3 credits)
This course provides an introduction to the assessment methods most frequently used within the classroom. Students will learn to use a variety of assessment techniques, develop objective scoring tools, analyze assessment data, and suggest next steps based on assessment results. Assessment for the purposes of monitoring development, developing instruction, documenting progress towards IEP objectives, and grading are all covered. Usually offered during the spring semester.

Prerequisite(s): EDUC 103 or (PSY 202) or (PSY 216)

EDUC 220 Teaching Methods for Differentiating Instruction/Elementary (3 credits)
This course provides an introduction to evidence based practices that allow teachers to meet the needs of every student in a diverse classroom. It also introduces students to a broad spectrum of instructional methodologies for use in the early childhood and elementary classroom. Learning styles, differentiated instruction, co-teaching, and use of technology are covered. The skills necessary for supporting students with special learning needs, including those with disabilities and those who are English Language Learners, are emphasized. Usually offered during the fall semester.

Prerequisite(s): (EDUC 101) or (EDUC 104) or (EDUC 113)

EDUC 221 Teaching Methods for Differentiating Instruction/Sec. (3 credits)
This course provides an introduction to evidence based practices that allow teachers to meet the needs of every student in a diverse classroom. It also introduces students to a broad spectrum of instructional methodologies for use in the secondary classroom. Learning styles, tiered instruction, co-teaching, and use of technology are covered. The skills necessary for supporting students with special learning needs, including those with disabilities and those who are English Language Learners, are emphasized. Usually offered during the fall semester.

Prerequisite(s): EDUC 101

EDUC 261 Special Topics: (1 credit)
This course is for individuals who have at least a bachelor’s degree and are exploring the profession of teaching as a career choice. Topics presented include introductory information on teaching strategies, assessment, classroom management and school culture. This one-credit course includes seven and one-half hours of classroom instruction and five full days in a K-12 environment in a private school setting.

EDUC 262 Special Topics (2 credits)
This exploratory course is for individuals who have at least a bachelor’s degree and are interested in acquiring secondary certification to teach in grades 7-12 in a particular discipline. It is a gateway course for the Maryland Approved Alternative Preparation Program with Harford County Public Schools pending MSDE approval. It provides a basic overview of what is needed for certification as well as covers the types of diversity in today’s classroom, including socioeconomic status, English language learners, gifted and talented, and students with disabilities. This course will include eight hours of observation in a public school setting.

EDUC 263 Special Topics: (3 credits)

Electronics (ELEC)

ELEC 105 Introduction to Electronics (4 credits)
This course provides a broad introduction to electronics. It focuses on DC and AC circuit fundamentals, including electrical components, voltage, current, resistance, Ohm’s Law, energy and power, series circuits, parallel circuits, series-parallel circuits, capacitors, inductors, and transformers, RC, RL, RLC circuits and the application of circuit theorems in AC analysis. Course fee.

Prerequisite(s): MATH 026

Engineering (ENGR)

ENGR 101 Engineering Drawing I (2 credits)
The fundamental principles of the graphic language are presented. Students acquire the necessary drafting skills to produce technical drawings. Topics include lettering, geometric construction, sketching, multiview projection, sectional views, auxiliary views, dimensioning and tolerancing. Usually offered in fall semester.

Prerequisite(s): (MATH 026) or (MATH 101) or (MATH 109)

ENGR 103 Introduction to Engineering Design (4 credits)
This course provides an introduction to engineering and an overview and application of the basic tools and techniques of engineering design and graphic communications. The fundamentals of engineering design, engineering drawing, AutoCAD, Excel spreadsheet, an introduction to MATLAB, and ethics in engineering are presented in this course. Students work on a team to use these tools on a design project with related modules in electrical/mechanical/structural topics. This course meets for 30 lecture hours and 60 laboratory hours. Course fee.

Prerequisite(s): (MATH 026) or (MATH 101) or (MATH 103) or (MATH 109) or (MATH 203)

ENGR 104 Statics (3 credits)
Using the vector approach and free body diagrams, this course deals with formulation and application of the laws governing the equilibrium of physical objects under the influence of general forces. The major topics include application of vector diagrams, equilibrium force systems, analysis of frames and trusses, internal forces in beams, friction, centroids, moments of inertia and fluid statics.

Prerequisite(s): ENGR 103 and MATH 203
ENGR 201 Dynamics (3 credits)
Students learn to formulate and apply the laws governing the motion of physical objects under the influence of general forces. Topics are Newton's laws of motion; multidimensional motion of particles and rigid bodies; kinematics and kinetics of particles, energy and momentum methods for particles; and mechanical vibrations.
Prerequisite(s): ENGR 104 and PHYS 203

ENGR 202 Mechanics of Materials (3 credits)
The fundamentals of strength and deformation of various materials are presented in this course. The main topics covered are axial stress and deformation of bars, stresses and generalized Hook's law, torsional stress and deformation in shafts, stress and deformation in beams, compound stresses, pressure vessels, statically indeterminate problems, and columns.
Prerequisite(s): ENGR 104 and MATH 204

ENGR 204 Basic Circuit Analysis (4 credits)
This course is intended for electrical engineering majors. It presents the fundamentals of circuit analysis and introduces the students to basic electronic equipment and measurement techniques, including simulation, construction, and testing of basic analog circuits. Topics include basic circuit elements, such as resistors, capacitors, inductors, sources, transformers, and operational amplifiers; V-I laws for RLC elements; response of RC, LC and RLC circuits; steady state analysis of DC and AC circuits. Students apply Ohm's Law and Kirchoff's Laws, apply analysis techniques including phasor, nodal and mesh analysis and Thevenin and Norton's Theorems, and perform transient analysis for first and second-order circuits. This course includes a design project and presentation. This course meets 45 lecture/discussion hours and 45 laboratory hours. Course fee.
Prerequisite(s): MATH 204, PHYS 204

ENGR 206 Digital Logic Design (4 credits)
This course serves as an introduction to the concepts, principles and design elements governing the behavior of digital circuits. Topics include number systems, Boolean algebra, logic functions and gates, decoders and encoders, Karnaugh map, flip-flops, counters and shift registers, arithmetic and logical operations, binary codes and codes circuits, combinational and sequential logic systems and design, state diagrams, memory architecture, and programmable logic devices. This course includes laboratory projects with design elements. This course meets for 45 lecture/discussion hours and 30 laboratory hours. Co-requisite CSI 131 (or demonstration of programming ability) or equivalent. Course fee.
Prerequisite(s): ENGR 103, CSI 131

ENGR 207 Scientific and Engineering Computation (3 credits)
This course is an introduction to the fundamental methods of numerical analysis. Topics include roots of equations, matrix algebra and systems, interpolation and curve fitting, error analysis, numerical integration, and numerical methods for ordinary differential equations. Use of a Computer Algebra System is integrated throughout the course. This course meets 30 lecture/discussion and 30 laboratory hours. Course fee.
Prerequisite(s): MATH 203, MATH 204

ENGR 210 Signals and Systems (4 credits)
This course presents an overview of signals and systems. Topics include continuous-time signals and linear time-invariant systems; singularity functions, differential equations and continuous convolution; Fourier series and Fourier transforms; Laplace transforms, state variables; frequency analysis. Students will apply the application of theory to problems in electrical engineering. This course meets for 60 lecture/discussion hours.
Prerequisite(s): MATH 208 and ENGR 204 and ENGR 206

ENGR 213 Engineering Design with 3D CAD (3 credits)
This course gives students a fundamental knowledge of computer-aided design (CAD) using solid modeling software in three dimensions. CAD topics include feature-based modeling, engineering drawings, assemblies, simulation and analysis. Students groups will apply engineering mechanics, the engineering design process and solid modeling to complete a design project. An oral presentation and written report will be required. This course meets for 2 lecture hours and 2 laboratory hours. Course fee $40.
Prerequisite(s): ENGR 103 and ENGR 202

ENGR 215 Chemical Engineering Analysis (3 credits)
This course is an introduction to methods of chemical engineering calculations and analysis. Topics include stoichiometric relations; material and energy balances; and the behavior of gases, vapors, liquids and solids. Analytical and computer methods are presented. This course meets 60 lecture/discussion hours.
Prerequisite(s): ENGR 103 and CHEM 112

ENGR 232 Engineering Thermodynamics (3 credits)
This course will introduce students to the interaction between energy in its various forms and the energy transformations that occur in engineering processes and systems. Topics covered include the first and second laws of thermodynamics, properties of pure substances, energy analysis of closed systems, mass and energy analysis of control volumes, entropy, exergy, gas power and refrigeration cycles, gas mixtures and chemical reactions. Conceptual understanding will be integrated with problem-solving. Course includes 45 hours of lecture.
Prerequisite(s): (CHEM 112 and MATH 204 and PHYS 203) or (CHEM 135 and MATH 204 and PHYS 203)

ENGR 273 Cooperative Education III: Engineering (3 credits)

Engineering Technology (ENGT)

ENGT 101 Introduction to Engineering Technology (3 credits)
This course introduces students to the history, responsibilities, and career opportunities within the engineering technology field. Emphasis is placed on critical thinking and problem-solving skills. Students study report writing, calculator usage, data collection and analysis, measurement systems, geometry, right triangle trigonometry, and basic computer skills, including word processing and spreadsheet applications. Also examined are the ethical standards that guide engineering practices. Course fee.
This course may require field trip(s). A reasonable alternative to the required field trip(s) will be available.
Prerequisite(s): (MATH 023 or MATH 024 or (MATH 017 or (MATH 018, CSCI 102)
ENGT 102 Blueprint Reading (1 credit)
This course examines the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Students learn how to interpret different types of blueprints and schematics used in various engineering, technical or industrial environments. Students interpret the different types of standard symbols and abbreviations found on the drawings and schematics, such as electrical or mechanical drawings and wiring diagrams.

ENGT 103 Introduction to 3D Printing (2 credits)
This course is an introduction into the world of 3D printing, including the equipment and software used in this exciting technology. Students will assemble a 3D printer kit, and learn and use various open source software to model and print objects. The class will be offered in a workshop format with hands-on lab based instruction and activities.

ENGT 104 Intermediate 3D Printing (3 credits)
This course expands the application of 3D Printing techniques learned in ENGT 103. Students use calibration files and other techniques for print optimization and finishing. Basic 3D Scanning and enhancement of scanned files are introduced. Open source modeling software and meshing software are explored. Rapid Prototyping and Additive Manufacturing concepts used in the production process are explained. A capstone project is required.

Prerequisite(s): ENGT 103

ENGT 105 Electrical Control Systems (3 credits)
This course covers the basic concepts needed to understand the operation and programming techniques common to most Programmable Logic Controllers (PLC). An overview of Programmable Logic Controllers and the different number systems are covered. Topics include various number systems, programming fundamentals, timers, counters, sensors and their wiring, input/output modules and wiring, arithmetic instructions, and an overview of plant floor communications. Course fee.

Prerequisite(s): ELEC 105

ENGT 106 Introduction to Additive Manufacturing (3 credits)
This course will explore 3D printing and its role in Additive manufacturing, global product development, and innovation. Students will have the opportunity to use 3D printers. Through the use of 3D printers, students will practice the techniques of 3D printing. The objective of this course is for the students to learn the fundamental skills and terminology of 3D printing.

ENGT 107 Principles of Hydraulics and Pneumatics (4 credits)
This course covers the basic concepts needed to understand the operation and design of hydraulic and pneumatic systems. Topics include measurement of pressure flow, measurement systems, pumps, valves, filters, controlling pressure, fluid flow, actuators, seals, reservoirs, hose, pneumatic controllers, and safety protocols. Course fee.

Prerequisite(s): (ENGT 101) or (ENGT 106) or (ENGT 106)

ENGT 108 Introduction to Electronics (4 credits)
This course provides a broad introduction to electronics. It focuses on DC and AC circuit fundamentals, including electrical components, voltage, current, resistance, Ohm’s Law, energy and power, series circuits, parallel circuits, series-parallel circuits, capacitors, inductors, and transformers, RC, RL, RLC circuits and the application of circuit theorems in AC analysis.

Prerequisite(s): MATH 026

ENGT 109 LabVIEW Fundamentals (3 credits)
This course introduces students to the basics of LabVIEW programming language. LabVIEW is an interactive, graphical programming language that enables users to write sophisticated programs and applications required by the engineering technology field. LabVIEW’s graphical programming environment has become an industry standard. Successful completion of this course prepares students for the Certified LabVIEW Associate Developer (CLAD) certification. Course fee.

ENGT 110 3D Printing in Additive Manufacturing (3 credits)
This course expands the application of 3D printing techniques learned in ENGT 106. Different printing processes are explored. Failed prints will be analyzed. Basic 3D scanning and enhancement of scanned files are introduced. Open source modeling software and meshing software are explored. Rapid prototyping and additive manufacturing concepts used in the production process are explained. Simple jig and fixtures are modeled and printed. Problem-based case learning is used to examine prototyping issues.

Prerequisite(s): (ENGT 103) or (ENGT 106)

ENGT 115 Optimizing Print Files (3 credits)
This course will explore various techniques and software applications used to modify or optimize 3D print files. Students will learn fundamental techniques of changing print files using open source software commonly used in 3D printing. Students will examine and modify G-code software for FFF 3D printers. Students will evaluate their modifications by printing the file in 3D.

ENGT 150 Machining I (3 credits)
This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, setup and layout instruments, and common shop practices.

ENGT 152 Machining II (3 credits)
This course builds on Machining I to reinforce and add to important concepts as well as provide additional practical experience with specific machining equipment. Machine work included in this course, not in Machining I, includes using computerized numerical control machines and electric discharge machines.

Prerequisite(s): ENGT 150

ENGT 160 Welding I (3 credits)
This course is an introduction to arc welding machines and accessories, oxyacetylene cutting equipment, and types of uses of electrodes. Students will learn flat, vertical, horizontal and overhead welds, types of joint design, (butt, lap and T-joints), basic welding symbols, and safety practices.

ENGT 162 Welding II (3 credits)
Welding II builds on the skills learned from Welding I by continuing horizontal, vertical, and overhead welding positions and adding electric arc and gas welding. This course will also provide the student with techniques and manipulative skills required for gas metal arc welding (MIG) and gas tungsten arc welding (TIG).

Prerequisite(s): ENGT 160
ENGT 182 Technical Drawing (2 credits)
This course will develop the student’s ability to read, interpret, create sketches, and use technical drawings found in a variety of industries. Topics include line types, orthographic projections, dimensioning methods, notes, and free hand sketching. The student will learn how to visualize objects depicted in technical drawings (multi-views). This course will provide the student the opportunity to apply this knowledge and learn the skills needed to create free hand sketches.

ENGT 193 Independent Study: Reverse Engr (3 credits)
This course will develop the student's ability to create Block Diagrams, Wire Diagrams and Bill of Material project application. Student Learning Objectives Linked to Relevant Academic Outcomes Upon satisfactory completion of this course, the student will be able to: Develop Block Diagrams (Program Goal 3: Demonstrate competency in using technical tools, technology, methods and processes. Create Wire Diagrams (Program Goal 3) Identify Bill of Material (Program Goal 3)

ENGT 201 Materials in Manufacturing (3 credits)
ENGT 201: Materials in Manufacturing (3 credits) This course is an introduction to a broad spectrum of engineering materials used in various industries. Emphasis is on the types, properties, production, and application of the materials. The topics include selection of materials, availability, elastic moduli, yield strength and ductility, hardness, fracture, toughness, fatigue, corrosion, deformation, and a CADD design project to incorporate various engineering materials. Course Fee

ENGT 223 Principles of Mechanics (3 credits)
This course is designed for students in the Engineering Technology Program. The course focuses on establishing a hands-on background in the basic principles of mechanics as applied to an industrial setting. A broad range of tools and techniques are presented which introduce students to industry standard procedures and equipment. Topics include hand tools, fasteners, basic fundamentals of mechanics, lubrication, bearings, seals, gaskets and packing, belt drives, chain drives, gears, couplings, clutches and brakes, and rigging.

Prerequisite(s): ENGT 101 and MATH 103

ENGT 224 Quality Assurance for Technicians (2 credits)
Quality Assurance for Technicians teaches basic quality assurance components as they apply to a manufacturing environment. This course introduces the basic engineering principles and technical skills in support of engineers and other professionals engaged in maintaining consistent manufacturing standards. Students are introduced to quality tools, basic statistics and control charts, blueprint reading, geometric dimensioning and tolerancing, measurements, problem solving, and system auditing. Course Fee.

Prerequisite(s): ENGT 101 and ENGT 223 and MATH 103

ENGT 225 Quality Control & Metrology for Additive Manufacturing (3 credits)
This course is designed to explain the challenges encountered when measuring additive manufactured parts. Methods and technologies for measuring, evaluating and validating additive manufactured parts are explored to convey best measurement practices.

Prerequisite(s): ENGT 115

ENGT 230 Additive Manufacturing Capstone (3 credits)
Using the PBCL (Problem Based Case Learning) framework, students will make a direct connection to a real-world (the case) workplace situation, applying the knowledge, skills, and attitudes acquired throughout the additive manufacturing concentration. Students, under the guidance of industry mentors and HCC faculty, address problems encountered in industry and work to an effective solution throughout the semester. Working within teams and effective communication skill will also be developed. Pre-requisites: ENGT 106, ENGT 110, and ENGT 115, Co-requisite ENGT 225

Prerequisite(s): ENGT 106 and ENGT 110 and ENGT 115, ENGT 225

ENGT 273 Cooperative Education III: Engineering Technology (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

English (ENG)

ENG 001 Introductory Writing (3 credits)
This course is designed to develop sentence writing skills needed as preparation for ENG 012. It concentrates on grammar and mechanics, sentence combining and editing skills. In order to ensure proper placement, students are asked to write a sample paragraph on the first day of class. May not be used to meet graduation requirements.

ENG 002 Reading Power and Comprehension (3 credits)
This course is required of students who score below a determined minimum reading level on the standardized reading placement test. The emphasis is on vocabulary development, word attack skills, literal reading skills and critical reading skills. May not be used to meet graduation requirements.

ENG 003 Reading and Understanding College Textbooks (3 credits)
This course is required of students who score within a determined range on the standardized reading placement test. Students study and apply basic skills needed to read college-level textbooks effectively and efficiently. May not be used to meet graduation requirements.

Prerequisite(s): (ENG 001) or (ENG 001)

ENG 012 Basic Writing (3 credits)
This course is designed to develop the basic writing skills needed as preparation for English 101. English Composition. ENG 012 concentrates on paragraph organization and development with some emphasis on vocabulary and grammar. In order to ensure proper placement, students are asked to write a sample essay the first day of class. May not be used to meet graduation requirements.

Prerequisite(s): (ENG 001) or (ENG 001)
ENG 017  Associated Reading and Writing (4 credits)
This course is required of students who score below a determined minimum reading level on the standardized reading (ACR) and writing (ACE) placement tests. The emphasis is on vocabulary development, word attack skills, literal reading skills, and critical reading skills. This course is also designed to develop sentence writing skills. It concentrates on grammar and mechanics, sentence combining, and editing skills. In order to ensure proper placement, students are asked to write a sample paragraph on the first day of class. This course carries institutional credit only, which means that the credits are not calculated in the number of hours earned toward graduation. However, they do count toward full-time student status and for financial aid requirements. May not be used to meet graduation requirements.

ENG 018  Integrated Reading and Writing (4 credits)
Intended specifically for students who test into both ENG 012 and ENG 003, this course integrates reading, writing, and study skills instruction. Students study and apply basic reading and writing skills to read college-level textbooks effectively and to develop college-level writing skills. May not be used for graduation credit.

Prerequisite(s): (ENG 017) or (ENG 001 and ENG 002) or (ENG 084)

ENG 019  Accelerated Writing (1 credit)
This course is designed to develop the basic writing skills needed for ENG 101: English Composition. ENG 019 concentrates on paragraph organization and development, with some emphasis on vocabulary and grammar. Students will enroll in ENG 101 at the same time as ENG 019. ENG 019 may not be used to meet graduation requirements.

Prerequisite(s): (ENG 001) and (ENG 017)

ENG 059  ESL Introductory Writing (3 credits)
Intended specifically for ESL students, the course is designed to develop sentence-level communication skills needed as preparation for ENG 060 or ENG 012 and concentrates on vocabulary, grammar, and mechanics as well as sentence combining and editing skills. May not be used to meet graduation requirements.

ENG 060  ESL Basic Writing (3 credits)
Intended specifically for ESL students, the course is designed to develop basic writing skills needed as preparation for the college composition course and concentrates on paragraph organization and development with emphasis on vocabulary and grammar. May not be used to meet graduation requirements.

Prerequisite(s): (ENG 001) or (ENG 059)

ENG 081  Bridge Course: ENG 012 to ENG 101 (1 credit)
This course is designed to develop the basic writing skills needed as preparation for English 101: English Composition. This bridge course concentrates on paragraph organization and development with some emphasis on vocabulary and grammar. In order to ensure proper placement, students are asked to write a sample essay the first day of class. May not be used to meet graduation requirements.

ENG 084  Special Topics: Associated Reading and Writing (4 credits)
This course is required of students who score below a determined minimum reading level on the standardized reading (ACR) and writing (ACE) placement tests. The emphasis is on vocabulary development, word attack skills, literal reading skills and critical reading skills. This course is also designed to develop sentence writing skills. It concentrates on grammar and mechanics, sentence combining, and editing skills. In order to ensure proper placement, students are asked to write a sample paragraph on the first day of class. This course carries institutional credit only, which means that the credits are not calculated in the number of hours earned toward graduation. However, they do count toward full-time student status and for financial aid requirements. May not be used to meet graduation requirements.

ENG 101  English Composition (GE) (3 credits)
This course is designed to develop mature writing skills in the essay form, including the documented essay. Through writing a series of essays in a variety of modes, such as argumentative essay, the process analysis, the research paper, and the summary analysis, students achieve proficiency in presenting and supporting their own ideas and incorporating the ideas of others into their essays.

Prerequisite(s): (ENG 012) or (ENG 084) or (ENG 018) or (ENG 060)

ENG 102  English Composition and Literature (3 credits)
This course focuses on the critical analysis of literary genres, emphasizing poetry, short fiction and drama. Students explore literary works from various cultures through discussions and critical writing activities.

Prerequisite(s): ENG 101

ENG 107  Introduction to Creative Writing (3 credits)
This course is an introduction to creative writing beyond the boundaries of standard composition. Students explore narrative and expository techniques, short stories, plays and poetry. Refer to ENG 110, 113, 231, 232, 235, or 236 for courses at a more advanced level in poetry, fiction and creative non-fiction.

Prerequisite(s): ENG 101

ENG 109  English Composition: Research Writing (3 credits)
This course emphasizes the use of exposition and argumentation, along with library research and documentation techniques, in developing clear and effective research reports, term papers, and other analytical writing. This course is recommended for those desiring transfer to a four-year institution or those desiring additional training in writing skills.

Prerequisite(s): ENG 101

ENG 110  Poetry I (3 credits)
This introductory-level, genre-specific course requires students to participate in a series of weekly workshops designed to improve their skills in poetry. Students analyze market trends in poetry publications.

Prerequisite(s): ENG 107

ENG 113  Fiction and Creative Nonfiction I (3 credits)
This introductory-level, genre-specific course requires students to participate in a series of weekly workshops designed to improve their skills in fiction and creative nonfiction. Students analyze market trends in literary publications.

Prerequisite(s): ENG 107
ENG 183 Special Topics: Comics as Literature (3 credits)
This course is an introduction to the comics medium, particularly comic books and digital comics. Students will learn about the history of comics as well as some of the aesthetic features that make them work. Focusing on comics as visual and literary art, students will critically examine the medium and some of its influence on 21st century culture. This course meets for 30 lecture hours.

ENG 193 Independent Study: English (3 credits)

ENG 201 World Literature: 800 B.C. to 1600 A.D. (GH) (D) (3 credits)
This course examines selected major works from the Old Testament and African legends to Cervantes and Shakespeare. It traces the origins and developments of Western concepts and conflicts as revealed in the great literature of the Western world. Usually offered in fall semester.

Prerequisite(s): ENG 101

ENG 202 World Literature: 1600 A.D. to the Present (GH) (D) (3 credits)
This course examines shifts in values and concerns from the end of the Renaissance to the present. Writers who may be studied include Machiavelli, Moliere, Voltaire, Kafka, Chekhov, Tagore, Xun, and Mahfouz. Usually offered in spring semester.

Prerequisite(s): ENG 101

ENG 203 English Literature: Survey of English Literature I (GH) (3 credits)
This course is a chronological and critical study of writers, Anglo-Saxon through Neoclassical, and their personal, literary and cultural importance. Usually offered in spring semester.

Prerequisite(s): ENG 101

ENG 204 English Literature: Survey of English Literature II (GH) (3 credits)
This course is a chronological and critical study of English writers, Romantic to the present, and their personal, literary and cultural importance.

Prerequisite(s): ENG 101

ENG 205 American Literature: Colonial Through the Civil War (GH) (D) (3 credits)
This course examines major American writers, Colonial through the Civil War periods, as well as cultural and philosophic ideas reflected in the literature of the periods. Usually offered in fall semester.

Prerequisite(s): ENG 101

ENG 206 American Literature: Late 19th and 20th Centuries (GH) (D) (3 credits)
This course examines the major American writers of the late 19th and 20th centuries as well as cultural and philosophic ideas reflected in the literature of these periods.

Prerequisite(s): ENG 101

ENG 207 Perspectives in Humanities (GH) (D) (3 credits)
This course is a chronological exploration of dominant styles and ideas in architecture, art, philosophy, music and literature from Western and Non-Western cultures from antiquity to the Renaissance. Emphasis is given to the study of concrete examples and the critical processes used to understand these works and their current relevance. Usually offered in fall semester.

Prerequisite(s): ENG 101

ENG 208 Contemporary Humanities (GH) (D) (3 credits)
This course is a retrospective view of influential architects, artists, composers and writers of the 20th century whose ideas have been recognized and synthesized in the post modern culture. Emphasis is on the creative contributions of the individuals and the analytical processes used to understand these works. Usually offered in spring semester.

Prerequisite(s): ENG 101

ENG 209 Technical Writing (3 credits)
This course emphasizes types of technically oriented, practical report writing skills necessary to develop progress reports, proposals and recommendation reports. Through individual assignments, students learn the techniques of definition, description of a mechanism and a process, clarification, analysis and interpretation.

Prerequisite(s): ENG 101

ENG 210 Literature for Children and Adolescents (GH) (D) (3 credits)
This course is a survey of literature for children in the higher elementary school grades through middle and high school, including classical and contemporary works from a variety of genres.

Prerequisite(s): ENG 101

ENG 214 Great Writers: Lives and Works (GH) (3 credits)
This course provides an opportunity for study in some depth of the work of three major writers and at the same time, through biographical and critical materials, of the lives and periods which shaped their different visions. Consideration is given as well to what makes a writer 'great,' in the sense both of artistic excellence and cultural impact.

Prerequisite(s): ENG 101

ENG 215 Multicultural Literature: The 20th Century (GH) (D) (3 credits)
This course emphasizes the critical study of 20th century literature from around the world, including representative works of Asia, Africa, and Latin America.

Prerequisite(s): ENG 101

ENG 216 Business Communications (3 credits)
Designed for the student who must communicate effectively in a business environment, this course emphasizes the principles common to written and oral communications. Topics include the nature of the communication process; listening, planning and writing; preparing correspondence, agreements and reports; communicating about employment; records of oral communications; and management of written communications.

Prerequisite(s): ENG 101

ENG 219 American Women Writers (GH) (D) (3 credits)
This course is a chronological and critical study of American women writers from the 19th and 20th centuries. The selections reflect the cultural diversity of society and literature in the United States.

Prerequisite(s): ENG 101

ENG 231 Fiction and Creative Nonfiction II (3 credits)
This intermediate-level, genre-specific course requires students to participate in a series of weekly workshops designed to improve their skills in fiction and creative nonfiction. Students analyze market trends in order to send out their own work appropriately.

Prerequisite(s): ENG 113, ENG 107
Environmental Sciences (ENV)

ENV 111 Introduction to Environmental Science (GS) (3 credits)
This course is a basic human ecology course for the general student, presenting the basic principles of ecology as related to use and misuse of the environment. Environmental problems and proposed solutions are studied and discussed.

ENV 112 Environmental Science Laboratory (GL) (1 credit)
This is an introductory laboratory course in environmental science. The course provides hands-on learning using experimentation, field excercises, science technology, and computer activities to demonstrate how humans impact environment. Co-requisite or pre-requisite: ENV 111. This course meets for a total of 30 laboratory hours. Course fee.

ENV 113 Independent Study: Environmental Sciences (3 credits)
This course introduces the student to the fundamental principles of soil science. Topics include soil properties, soil fertility, and environmental concerns of using soils for agricultural production. Emphasis is placed upon the characteristics of Maryland soils which are similar to the soils in the Mid-Atlantic region. The importance of nutrient management and non-point source pollution of the Chesapeake Bay are covered. This course may require field trips. A reasonable alternative option to the required field trip will be available. The course meets for a total of 30 hours of lecture and 30 hours of laboratory per semester. Course fee.

ENV 114 Independent Study: Environ Science (1 credit)
This course is designed to provide the student with an opportunity to gain or enhance ecological systems knowledge and to explore an area of interest related to environmental science research.

ENV 191 Indep Study: Environ Science (1 credit)
This course is a basic human ecology course for the general student, presenting the basic principles of ecology as related to use and misuse of the environment. Environmental problems and proposed solutions are studied and discussed.

ENV 193 Independent Study: Environmental Sciences (3 credits)

ENV 202 Environmental Law (3 credits)
This course explores fundamental legal concepts relevant to environmental issues, including the relationship between statutes, regulations and court decisions. Various forms of enforcement used in environmental rules are discussed, such as command and control, liability and information disclosure. Specific issues include a survey of environmental statutes; regulations and case law; environmental audits and assessments; role of attorneys; unauthorized practice of law; and ethical conflicts between the attorney and the role of the scientist. Usually offered in fall semester.

ENV 210 Introduction to Hazardous Waste/Materials Management (4 credits)
This course provides education and training to prepare the student to work with hazardous materials and hazardous waste, safely and in full compliance with the law. Topics include an overview of the Resource Conservation and Recovery Act, the Superfund Amendment and Reauthorization Act, Occupational Safety and Health Administration regulations, basic chemistry of hazardous materials, hazardous waste management and spill response procedures. Course meets for 45 hours of lecture and 45 hours of laboratory per semester. Usually offered in spring semester. Course fee.

Prerequisite(s): CHEM 111

Environmental Sciences (ENV)

ENG 232 Fiction and Creative Nonfiction III (3 credits)
This advanced-level, genre-specific course requires students to participate in a series of weekly workshops designed to improve their skills in fiction and creative nonfiction. Students analyze market trends in order to send out their own work appropriately. Students are responsible for editing the HCC literary magazine Feather and Talon.

Prerequisite(s): ENG 107 and ENG 113 and ENG 231

ENG 233 African-American Literature (GH) (D) (3 credits)
This course is a survey of African-American literature from the mid-19th century until the present. Selected works include slave narratives, folklore, fiction, poetry and drama. The works are examined in historical context and in their relationship to the political, social and intellectual milieux in which they were produced.

Prerequisite(s): ENG 101

ENG 234 Ethnic American Literature (GH) (D) (3 credits)
This course emphasizes the critical study of literature written by diverse American authors, including works by African-, Asian-, Hispanic-, European-, Native-Americans and emerging ethnic writers.

Prerequisite(s): ENG 101

ENG 235 Poetry II (3 credits)
This intermediate-level, genre-specific course requires students to participate in a series of weekly workshops designed to improve their skills in poetry. Students analyze market trends in order to send out their own work appropriately.

Prerequisite(s): ENG 107 and ENG 110

ENG 236 Poetry III (3 credits)
This advanced-level, genre-specific course requires students to participate in a series of weekly workshops designed to improve their skills in poetry. Students analyze market trends in order to send out their own work appropriately. Students are responsible for editing the HCC literary magazine Feather and Talon.

Prerequisite(s): ENG 107 and ENG 110 and ENG 235

ENG 237 Literature to Film (GH) (3 credits)
This course examines the relationship between literary works and their film adaptations within their historical and cultural contexts. Students critically read literary works, view films based on these literary works, and compare and contrast the elements of each artistic form.

Prerequisite(s): ENG 101

ENG 238 Latin American Literature (D) (3 credits)
This course emphasizes the critical study of English translations of literature written by a variety of Latin American writers, including indigenous, Asian or Afro-Latin voices, from the 19th and 20th centuries. Genres studied include the novel, short story, poetry, testimonial narrative, and historical nonfiction. Readings, films, and discussion provide the cultural and historical context necessary for understanding Latin American literature from Mexico, the Caribbean, Central and South America.

Prerequisite(s): ENG 101

ENG 239 English History and Grammar (3 credits)
This course offers students an overview of the history of modern English and its influences, as well as a thorough review of the major elements of English grammar and mechanics.

Prerequisite(s): ENG 101
ENV 220 Principles of Environmental Analysis I (4 credits)
This course teaches proper environmental sampling techniques, data collection methodology, field instrumentation and laboratory sample testing, quality assurance and documentation. Groundwater, physical, chemical, and biological characterization of aquatic systems, priority pollutant analysis, and treatment technologies for toxic and hazardous wastes are covered. Field experiences are required. Some topics may integrate between this course and ENV 221. Course meets for 30 hours of lecture and 60 hours of laboratory per semester. Usually offered in spring semester. Course fee.

Prerequisite(s): CHEM 111

ENV 221 Principles of Environmental Analysis II (4 credits)
This course is a companion to ENV 220. Environmental sampling techniques, data collection methodologies, field instrumentation, and laboratory sample testing are explored with emphasis on atmospheric, noise and radiological monitoring, soil analysis, biological community structure evaluation, and pollution prevention. Course meets for 30 hours of lecture and 60 hours of laboratory per semester. Usually offered in fall semester. Course fee.

Prerequisite(s): CHEM 111

ENV 225 Environmental Problems - Assessment and Evaluation (4 credits)
This is a capstone course in which students study an environmental problem and design a program which involves monitoring, analysis, instrumentation, data collection and synthesis of information into a report. The students provide oral and written presentations of their methodology, data and conclusions. Usually offered in spring semester. Course fee.

Prerequisite(s): ENV 111 and MATH 216 and ENV 220 and ENV 221

ENV 273 Cooperative Education III: Environmental Science (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

ENV 274 Cooperative Education IV: Environmental Science (4 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

ENV 293 Independent Study: Environmental Sciences (3 credits)

Exercise Science (EXCS)

EXCS 101 Introduction to Exercise Science (3 credits)
Exercise Science is the study of human movement performed to maintain or improve physical fitness. Topics include fundamental concepts, sub-disciplines, careers and professionalism in the field of exercise science.

EXCS 201 Fitness Assessment & Program Design (3 credits)
This course is an introduction to the essential principles and skills of exercise testing and prescription. This course provides the student with the knowledge to properly conduct various aspects of exercise testing such as the assessment of risk stratification, cardiorespiratory endurance, muscular strength and endurance, body composition and flexibility. Students will be expected to participate in these tests as well. The course then instructs the student in how to utilize the data generated from exercise testing to design and implement appropriate exercise programs for healthy and special populations. The material covered in this course is appropriate for individuals desiring work in cardiac rehabilitation, fitness centers, coaching, health care settings, or any other related exercise setting in which exercise is a commonly applied modality.

EXCS 202 Fitness Instruction (3 credits)
This course will instruct students on how to develop, assess, modify, and lead various group-led exercise activities for various populations in multiple settings. Students will demonstrate safety, communication, leadership, and motivation techniques by participating in various group exercise classes.

EXCS 283 Exercise Science Internship (3 credits)
The internship is designed to provide students with experiences typical of those encountered on a job in exercise science field. The internship requires that the student spend 135 hours in an exercise science setting under the supervision of a site manager or a faculty member.

Finance (FIN)

FIN 100 Personal Finance (3 credits)
This course enables students to acquire an introduction to the various concepts associated with personal finance. Students apply financial management concepts in the areas of basic financial planning, creating a budget, preparing personal income tax returns, managing investment options and other liquid accounts, buying a house, the use of credit, purchasing insurance, managing investments, and saving for retirement.

FIN 183 Special Topics: Personal Finance (3 credits)
This Special Topics course was replaced by FIN 100 Personal Finance.

FIN 201 Introduction to Financial Mang (3 credits)
This course provides an understanding of the fundamental concepts underlying the theory of finance. Topics include time value of money, capital budgeting and cash flow, cost of capital, security valuation, dividend policy, and financial planning and forecasting. The emphasis of the course is on problem solving and decision making. Students will develop critical thinking and problem solving skills while gaining exposure to quantitative financial information.

Prerequisite(s): ACCT 101

Forensic Science (FS)

FS 100 Basic Forensic Science (GS) (3 credits)
A survey of the scientific principles employed by the forensic scientist in the evaluation of physical evidence associated with crime. This course is designed as an introduction to the crime laboratory and the techniques utilized by the forensic scientists in such areas as drug identification, forensic serology, hair and fiber identification, gunshot residues and other areas of forensic interest, as well as the principles involved in the collection and preservation of such evidence.
FS 101 Basic Forensic Science Laboratory (GL) (1 credit)
This course is an introductory laboratory course in the fundamentals of forensic science with a focus on a survey of scientific principles utilized in the evaluation of physical evidence associated with crime. Laboratory exercises focus on crime scene processing, evidence collection, photography, fingerprints, toolmarks, questioned documents, controlled dangerous substances (drugs), chain of command, and various types of trace evidence. Course meets for 30 hours per semester.

Prerequisite(s): FS 100

French (FR)

FR 101 Elementary French I (3 credits)
This course develops communicative proficiency in French at the elementary level. Students also gain insights into French-speaking cultures. It is primarily designed for students who have never studied French. No prerequisite. Usually offered in fall semester.

FR 102 Elementary French II (3 credits)
This course continues to develop communicative proficiency in French at the elementary level. Students also explore aspects of the French culture. Usually offered in spring semester.

FR 201 Intermediate French I (3 credits)
This course continues to develop language skills in French at an advanced level. Cultural materials are also integrated into course content and activities. Usually offered in fall semester.

FR 202 Intermediate French II (3 credits)
This course emphasizes the continued refinement and development of language skills in French at an advanced level. Students also discuss cultural materials. Usually offered in spring semester.

General Science (GS)

GS 181 Special Topics: Undergraduate Laboratory Research (1 credit)
This course is an introduction to laboratory research methods for the STEM major. Competency in designing research problems and conducting experimentation is essential in STEM-related advanced studies and careers in research and industry. Students will gain an understanding of the scientific process by defining and researching a scientific problem, developing hypotheses and experimental protocols, analyzing results, and drawing conclusions. Students will present their findings in written and oral presentations. This course is 1 credit. Course fee.

GS 182 Introduction to Research Methods (2 credits)
This course is an introduction to research methods for the STEM major. Students will gain an understanding of the scientific process, learn strategies for finding information from online and library resources, develop the ability to read and critically analyze scientific literature, and write a scientific literature review. Students will also identify a scientific problem and be introduced to the process of developing a scientific research proposal related to this problem. This course is 2 credits. Course fee.

GS 183 Special Topics: Introduction to Research Methods (3 credits)
This course is an introduction to research methods for the STEM major. Competency in designing research problems and conducting experimentation is essential in STEM-related advanced studies and careers in research and industry. Students will gain an understanding of the scientific process and develop scientific information literacy and writing skills. In addition, students will define and research a scientific problem, develop and test hypotheses using experimental protocols, analyze results, and draw conclusions. Students will present their findings in written and oral presentations. This course meets for 30 lecture/discussion hours and 45 laboratory hours per semester. Course fee.

Geography (GEOG)

GEOG 101 Physical Geography (GB) (3 credits)
Course emphasis includes basic physical elements of geography, including map reading and interpretation, as well as climate, landforms, soil and natural resources and their integrated patterns of world distribution.

GEOG 102 Human Geography (GB) (D) (3 credits)
This course features basic cultural elements of geography including population distribution, settlement, land use patterns and their correlation with the physical elements of the world.

GEOG 103 World Regional Geography (GB) (D) (3 credits)
This course is a survey of world geographical regions that examines geographic features and areas, as well as their significance.

GEOG 203 Fundamentals of Geospatial Technology (3 credits)
This course introduces maps as effective tools to record and communicate spatial information. Emphasis is on map scale and measurement, referencing systems, map types, and new geotechniques. Topics include earth geometry, geodetic survey, map projections, location and land partitioning systems, map measurement, symbolization, (3D) terrain representation and contour interpretation, thematic maps, and cartogram maps. Geographic exercises requiring geotechnologies, digital cartography, remote sensing, image interpretation, geographic information, global positioning, and interactive internet mapping are discussed.

Prerequisite(s): GEOG 101 and (MATH 017 or MATH 018 or MATH 023 or MATH 026)

GEOG 204 Introduction to Geographic Information Systems (4 credits)
This course introduces students to selected computer hardware and software for the storage, retrieval, manipulation, analysis, and display of geographic data. Practical applications of geographic information systems (GIS) are emphasized. This course is not intended to provide students with extensive training in particular GIS software. However, laboratory projects involving student use of Windows-based GIS software on desktop computers and Web-based mapping applications are required and will reinforce important concepts. Course fee.

Prerequisite(s): GEOG 101 and GEOG 203
GEOG 210  Remote Sensing & Global Positioning Systems (GPS) (3 credits)
Introduction to the acquisition, interpretation and mapping of aerial and satellite images. Students will also learn to use Global Positioning Systems (GPS) in the field, apply error correction of GPS data, and build Geospatial Information Systems using GIS technology. This course meets for 30 lecture hours and 60 laboratory hours.
Prerequisite(s): GEOG 204

GEOG 220  Advanced Geospatial Information Systems (3 credits)
This course builds upon the concepts introduced in GEOG 204. Students will learn in-depth spatial data handling, modeling, and analysis using ArcGIS software. This course meets for 30 lecture hours and 30 laboratory hours. Course fee.
Prerequisite(s): GEOG 204

GEOG 230  Geospatial Project (4 credits)
This course is a capstone course in which students will gain real world experience in the development, management, and implementation of a geospatial project. The project will be used to resolve geospatial problems in the public and private sectors, and/or in academia. This course meets for 30 lecture hours and 60 laboratory hours.
Prerequisite(s): GEOG 220

German (GER)

GER 101  Elementary German I (3 credits)
This course develops communicative proficiency in German at the elementary level. Students also gain insights into German-speaking cultures. It is primarily designed for students who have never studied German. No prerequisite. Usually offered in fall semester.

GER 102  Elementary German II (3 credits)
This course continues to develop communicative proficiency in German at the elementary level. Students also explore aspects of the German culture. Usually offered in spring semester.
Prerequisite(s): GER 101

GER 201  Intermediate German I (3 credits)
This course continues to develop language skills in German at an advanced level. Cultural materials are also integrated into course content and activities. Usually offered in fall semester.
Prerequisite(s): GER 102

GER 202  Intermediate German II (3 credits)
This course emphasizes the continued refinement and development of language skills in German at an advanced level. Students also discuss cultural materials. Usually offered in spring semester.
Prerequisite(s): GER 201

Health (HLTH)

HLTH 101  Contemporary Health Issues (GI) (3 credits)
This course presents an overview of current health issues and problems facing our society. Topics include emergency care and CPR; prevention, recognition, and treatment of chronic and communicable disease; aging, marriage, and family lifestyles and choices; recognition and treatment of mental disorders; and stress management.

HLTH 102  EMC, First Aid, and Safety (3 credits)
This course prepares students to meet the certification requirements from a nationally recognized organization. Topics include first aid, emergency medical care, Cardiopulmonary resuscitation (CPR), Automated External Defibrillator (AED) training, safety awareness and accident triage. Course fee.

HLTH 103  Wellness Theory and Applications (GI) (3 credits)
This course combines two elements: the theoretical study of wellness and the application of wellness concepts. Topics include cardiovascular health, body composition, physical fitness, weight control, stress management, sexually transmitted diseases, addictive behaviors and chronic diseases. Other topics include teaching perceptual motor skills and fundamental movements. In a laboratory setting, students assess and evaluate their personal wellness state, and practice strategies (including a fitness program) to achieve an optimal level of wellness.

HLTH 104  Environmental Health (GI) (3 credits)
This course examines, from an interdisciplinary and global perspective, the health of the environment and how it affects human health. It addresses such issues as ozone depletion, global warming, human hunger, water pollution and shortages, and other indications of global malaise. Solutions are discussed and evaluated.

HLTH 105  Introduction to Holistic Health (3 credits)
This course explores the expanding field of holistic health therapies that address the interplay of body, mind, and spirit. It reviews modern health threats (stress, obesity, poor nutrition, inactivity, toxins). It examines how complementary and alternative medicine (CAM) contrasts with and supplements traditional Western medicine. A wide range of therapies— including yoga, massage, and acupuncture—is covered, along with lifestyle changes that promote wellness.

HLTH 106  Nutrition for Personal Wellness (GI) (3 credits)
This class introduces students to practical nutrition information. Emphasis on the role of nutrients in health management, weight control, and disease prevention, as well as behavioral influences on eating habits are discussed. Students assess personal nutritional status, develop individual nutrition plans, and learn positive eating behavior modification strategies.

HLTH 107  Stress Management (3 credits)
This course examines different stressors and their impact on one’s health. Mental health, stress related illnesses, and healthy and unhealthy choices are discussed. Stress management techniques are emphasized.

HLTH 108  Introduction to Public Health (3 credits)
Public health is the science of protecting and improving the health of families and communities through promotion of health lifestyles, research for disease and injury prevention and detection and control of infectious diseases. This course presents an introduction to the structure and functions of public health organizations and public health practice. Prerequisite(s): Eligibility for ENG 101 as demonstrated by a qualifying score on writing assessment or completion of ENG 012 or ENG 018 or ENG 060.
Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060)

HLTH 191  IS: Stress Management (1 credit)

HLTH 192  Independent Study: Stress Management (2 credits)
This course examines different stressors and their impact on one’s health. Mental health, stress related illnesses, and healthy and unhealthy choices are discussed. Stress management techniques are emphasized.
HLTH 201 Human Sexuality (D) (3 credits)
This course will examine major aspects of human sexuality from biological, historical, and cultural perspectives. Topics include male anatomy and physiology, female anatomy and physiology, sexual behaviors, contraceptives, health related issues, conception, pregnancy, birth, gender development, and relationship sexuality.

HLTH 202 Health Behavior (3 credits)
The course examines the psychosocial factors that influence health behavior. Theoretical frameworks for behavior modification intervention programs are emphasized. Prerequisites: Eligibility for ENG 101 as demonstrated by a qualifying score on writing assessment or completion of ENG 012 or ENG 018 or ENG 060.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060)
HLTH 203 The U.S. Health Care System (GB) (3 credits)
This course provides an introduction to the organization, delivery, and financing of the United States health care system. Students examine the historical, social, economic, technological, and political forces that have shaped and continue to influence the system. Issues related to cost, quality, and access are analyzed.

HLTH 281 Field Placement in Community Health Promotion (1 credit)
This is a structured career exploration course that includes 3 hours of faculty-led instruction and mentorship and 12 hours of job shadow rotation at community health workplaces, including but not limited to post-secondary education, government, non-profit, and medical/hospital settings. Students evaluate their interest in the field of community health through observation of day-to-day responsibilities associated with the profession, learn more about the skills and qualifications necessary to be successful in the field of community health, and network with professionals. Course fee.

Prerequisite(s): HLTH 108
HLTH 282 Internship in Community Health Promotion (2 credits)
This internship provides an opportunity for students to obtain work experience in a community health promotion setting in coordination with a faculty member. Students apply previous coursework to skill practice in workplace settings that enhance the health of the community. Written goals and objectives, as well as evaluation criteria, are agreed upon and confirmed in writing by the student, site supervisor, and faculty mentor. Students may not use their own job as an intern site. The work experience time commitment is equivalent to 5 hours per week during the 3rd 5-week spring semester. Course fee.

Prerequisite(s): HLTH 281

History (HIST)

HIST 101 History of Western Civilization I (GB) (D) (3 credits)
This course is the first half of the Western Civilization survey, beginning with its foundations in the ancient Middle East, and ending with the emergence of the modern West, ca. 1700. Key topics covered in this course include the spread of Greco-Roman culture, the rise of Christianity, the Middle Ages and Renaissance, and the emergence of 'modernity.' Students will examine what it meant to be 'Western' during the eras in question.

HIST 102 History of Western Civilization II (GB) (D) (3 credits)
This course is the second half of the Western Civilization survey, from ca. 1648 to the twenty-first century. Key topics covered in this course include the Enlightenment and Age of Revolutions, industrialization and modernity, the world wars, and the Cold War. Students will analyze Europe's impact on the rest of the world via colonization and decolonization. Students will also focus on the religious, social, and cultural concerns that have shaped the modern West.

HIST 103 History of the United States I (GB) (3 credits)
This course is a survey of American history from the early British settlements of the 17th century through the Civil War. Key topics include: early British settlements in North America, British North America, American Revolution, the Constitution, the two-party system, War of 1812, market revolution, immigration, Jacksonian democracy, slavery and freedom, social reform, western expansion, North-South sectionalism and the Civil War. Students will also explore the development of the American republic in global context.

Prerequisite(s): ENG 101
HIST 104 History of the United States II (GB) (D) (3 credits)
This course is a survey of United States history from the end of the Civil War (1865) through the beginning of the 21st century. Key topics include Civil War Reconstruction, industrialization, populism, western expansion, immigration, progressivism, imperialism, World War I, the Depression, World War II, civil rights, Cold War, Vietnam era, feminism, digital revolution, terrorism, and the 21st century wars. Students will focus on the United States' international interactions and impacts in a global age.

HIST 109 World History I (GB) (D) (3 credits)
This course has a global perspective, examining many different civilizations, cultures and societies around the world, comparing how they dealt with economic, social, political, technological, environmental and other major challenges, and how they organized their lives and interacted with other peoples from the early beginnings of humankind (ca 200,000 BCE) to the age of exploration (ca 1500 CE). Co-requisite: Eligibility for ENG 101.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060), ENG 101
HIST 110 World History II (GB) (D) (3 credits)
This course has a global perspective, examining many different civilizations, cultures and societies around the world, comparing how they dealt with economic, social, political, technological, environmental and other major challenges, and how they organized their lives and interacted with other peoples from the age of exploration (ca 1500 CE) to the present. Co-requisite: Eligibility for ENG 101.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060), ENG 101
HIST 112 History of Science and Technology (3 credits)
This course is a one-semester survey of the development of science and technology from the civilizations of the ancient Near East through the world of the late twentieth century. Theoretical and practical advances in science and technology are studied in their political, economic, social and intellectual contexts.
HIST 115 Exploring Ancient Civilizations (3 credits)
This course covers the foundations of western civilization from the end of the nomadic Paleolithic era (c. 20,000 BCE) through the rise of civilizations in the Neolithic and Bronze Ages, concluding with the rise and fall of the Roman Empire (476 CE). Students examine the political, social, economic, and technological forces which shaped the development of ancient civilizations, laying the foundation for the creation of the modern western world. Traveling in Greece and Italy provides students firsthand experience with the architecture, culture, physical remnants, and historical legacies of these civilizations. Course fee.

HIST 201 Maryland State and Local History (3 credits)
This course provides an overview of Maryland and Harford County history in the broader context of American history. Students will explore Maryland’s emergence as a colony and progression through the revolutionary era, early Republic, Civil War, industrialization, military and government expansion, prosperity and depression to the beginning of the 21st century. Class activities will draw upon the rich historical resources and people of Harford County, central Maryland and the upper Chesapeake region.

HIST 202 The Twentieth Century World (GB) (D) (3 credits)
This course covers world history since 1900. Topics include the World Wars; the rise of Communism, Fascism and religious fundamentalism; the Cold War; emergence of Third World nations; the United Nations, and other international agencies seeking protection of the disadvantaged. The environment, the women’s movement, the scientific and technical revolution, and the search for peace are also studied.

HIST 203 American Military History (3 credits)
This course will engage students in the study of key aspects of American military history from the American Revolution through the wars of the 21st century, including the War of 1812, Mexican War, Civil War, World War I, World War II, Korean War, Vietnam War, Iraq and Afghanistan wars. Students will investigate military strategies, leadership, personal military experiences, key battles, wartime dissent, politics, civil policy, wartime controversies, domestic and economic impacts of military events.

HIST 204 History of Modern Russia (3 credits)
This course will cover Russian history from the rise of Imperial Russia in the late 17th century through the modern Russia of the 21st century. Key topics will include: Russia’s ascendency as an imperial power, 19th century Russian literature, serf emancipation, the Russian Revolution, Stalinist Soviet Union, Great Patriotic War (World War II), Soviet Union and the Cold War, the collapse of the Soviet Union and 21st century Russia, and cultural diversity in modern Russia.

HIST 207 African-American History (GB) (D) (3 credits)
This course will provide an opportunity for students to assess and appreciate the African-American experience from Colonial times to the present. Key topics include: the Middle Passage, the Revolutionary experience, the establishment of free African-American communities, slavery and abolitionism, the Civil War, Jim Crow and segregation, the Great Migration, wartime experiences, Harlem Renaissance, jazz and blues, civil rights, black nationalism, modern culture, rock-and-roll, hip hop culture, and the rise of a professional African-American culture.

HIST 208 American Ethnic History (D) (3 credits)
All Americans are ‘ethnic’ and have some racial, religious, national or cultural roots in at least one other culture. This course examines the American ethnic experience from Colonial times to the present. Students study how various racial and ethnic groups have influenced American social, economic and political development. Students have an opportunity to trace their own family and ethnic heritage.

HIST 210 Central American and Caribbean History (3 credits)
This course provides an overview of the history of Central America and the Caribbean islands. Students will investigate indigenous civilizations and analyze the impact of western imperialism on regions. Specific topics include: indigenous peoples, the age of European exploration, the Atlantic world, slave trade, colonial competition, independence, imperial subjugation, 20th century political tumult, Cold War, modern nationalism, recent economic and policial progress and problems.

HIST 211 History of Africa (D) (3 credits)
This course is a one-semester introductory survey of the history of Africa from ancient to modern times. It surveys the medieval kingdoms, empires, states, and its peoples and diverse cultures. Pre-Colonial and post-Colonial systems are examined.

HIST 214 History of the Middle East (D) (3 credits)
This course is the story of the development of the predominantly Muslim Middle East (as well as North Africa), beginning in the seventh century and ending in the recent past. The role of Islam, and the relationship between Muslim and non-Muslim peoples in shaping religious, political and economic developments in this region are stressed.

Prerequisite(s): (ENG 101 and HIST 101) or (ENG 101 and HIST 102) or (ENG 101 and HIST 109) or (ENG 101 and HIST 110)

HIST 216 Introduction to Public History (3 credits)
This course introduces the student to the world of Public History. Public History is a specialty within the historical field, where professional historians interpret and present history to broad public audiences. The course will include activities on: the definition of Public History, physical exhibits, digital history, oral history, job opportunities, archival management, resource acquisition, project assessment and presentation of controversial topics. It will include intellectual and practical experiences for students interested in Public History careers.

Prerequisite(s): (HIST 101) or (HIST 102) or (HIST 103) or (HIST 104) or (HIST 109) or (HIST 110)

HIST 218 History of the British Isles (3 credits)
This course explores the history of the ‘four nations’ of the British Isles- England, Ireland, Scotland, and Wales-over the last six centuries, from the 15th century to the recent past. Students will focus on political, cultural, social, and economic developments, and assess how interactions amongst the ‘four nations’ have shaped the history of the British Isles. Attempts to forge a broader ‘British’ cultural and social identity (or to resist this process, and preserve one’s original identity) will also be stressed.

Prerequisite(s): ENG 101 and (HIST 102 or HIST 110)

HIST 220 History of American Women (D) (3 credits)
This course uses multicultural perspectives to examine the politics, works, family, creativity and sexuality of American women’s lives from the colonial period to the present. Co-requisite: eligibility for ENG 101.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060) or (ENG 101)
HIST 263 Special Topics (3 credits)
Students will seek answers to timeless questions by exploring classic examples of espionage through the different periods of human history. Beginning with some classic, ancient examples, and working through the Renaissance, students will note the advances to the profession during the Elizabethan period and consider how those forms of intelligence operations have influenced the course of history. From an American perspective, students will explore the intelligence activities during the Revolutionary War, the Civil War and World Wars I and II, ending during the Cold War. From a foreign perspective, students will cultivate an understanding of different nations’ espionage services and the roles they have played in foreign affairs throughout the same time period.
Prerequisite(s): HIST 101 or (HIST 102) or (HIST 109) or (HIST 110)

HIST 263A Special Topics: America in the Stormy Sixties (1950-1975) (3 credits)
America in the Stormy Sixties (1950-1975) The 1960s was the United States’ most dynamic and disruptive decade from the 1950s to the end of the 20th Century. This course deals with a series of dramatic events and changes, e.g. the missile crisis, assassination of JFK, the civil rights movement, the Great Society, the women’s movement, the sexual revolution, Vietnam war and peace protests, environmental movement, the computer revolution, the drug scene, Rock ‘n’ Roll, Watergate - that almost brought about a national breakdown.

HIST 283 Internship in Public History (3 credits)
This course provides an opportunity for hands-on engagement in History. The course creates opportunities for students to work directly with regional Public History professionals to develop exhibits and otherwise earn credit for projects in Public History. Students will be able to apply their historical knowledge and skills to activities and project development. Permission of the instructor is required.

Human Development (HD)

HD 015 Personal & Academic Development (3 credits)
This course is designed to help students identify and develop their career/life and academic goals. Students will clarify their interests and skills while developing effective academic and personal goal-setting techniques. This course also focuses on setting and achieving short-term academic goals, preparing for success in college through effective study skill techniques, and learning to accept responsibility for one’s behavior. May not be used to meet graduation requirements.

HD 103 Career and Life Planning (3 credits)
This course is designed to assist each student to become more aware of the processes of career and life planning and their relationship to interests, values, abilities and goals. It prepares the student to establish, change or confirm career goals through investigation and integration of the theory of the developmental process of career decision-making, self-analysis and a survey of career information. Course fee.

HD 110 Success in College and Beyond (1 credit)
This course is designed to help students develop and refine skills necessary for success in college and in life. While encouraging students to take responsibility for their behavior, it provides practice in a variety of strategies that can lead students to greater academic, professional, and personal success. Students examine study skill strategies, creative and critical thinking, and personal self-management. In addition, students are encouraged to explore and change self-defeating behaviors which may diminish their ability to succeed. Permission of instructor required. Course fee.

HD 111 Personalized Career Exploration (1 credit)
This course provides individualized assistance to students in developing skills, competencies, and knowledge essential to career exploration and decision making. Students fulfill a learning contract based on needs for self-assessment and occupational research. Minimum of five hours with instructor and twenty hours of lab and research assignments. Permission of instructor required. Course fee.

HD 112 Job Search Techniques (1 credit)
This course provides assistance to students in developing skills, competencies and knowledge essential in securing employment. Students learn the use of technology in job searching, the writing of effective resumes and cover letters and necessary interviewing skills. Permission of instructor required.

Information Systems Security (ISS)

ISS 105 Intro to Cybersecurity (GI) (3 credits)
This course introduces students to the evolving field of cybersecurity. Students learn about cyber-attacks and techniques for identifying, detecting, and defending against common cybersecurity threats. Students learn about software and hardware, network, Internet, and wireless security as well as a foundation for a more advanced study of cybersecurity.

ISS 111 Cisco 1 (4 credits)
This course is the first of four courses leading to the Cisco Certified Network Associate (CCNA) designation and provides an introduction to computer networking. The course presents information on network terminology, fundamentals, media, cabling, Ethernet fundamentals, Transmission Control Protocol/Internet Protocol (TCP/IP), and routing fundamentals. Course includes 45 lecture hours and 30 lab hours per semester. Course fee.
Prerequisite(s): CIS 102

ISS 112 Cisco 2 (4 credits)
This course is the second of four courses leading to the Cisco Certified Network Associate (CCNA) designation and provides an introduction to routers and routing basics. The course presents information on initial router configuration, Cisco Input/Output System (IOS) software management, router protocol configuration, Transmission Control Protocol/Internet Protocol (TCP/IP), and access control lists (ACLs). Course includes 45 lecture hours and 30 lab hours per semester. Course fee.
Prerequisite(s): ISS 111

ISS 210 Ethical Hacking & Systm Defens (3 credits)
This course introduces the fundamentals of protecting information technology resources against network hacking. Students learn the tools and penetration testing methodologies used by ethical hackers, as well as the methods and tools to protect against attacks. Students identify potential network and system vulnerabilities. Computer crime-related laws and regulations are studied. This course provides additional preparation for the EC Council Certified Ethical Hacker exam.
Prerequisite(s): (CIS 210) and (ISS 105)
IDS 213 Cisco 3 (4 credits)
This course is the third of four courses leading to Cisco Certified Network Associate (CCNA) designation and provides information on switching basics and intermediate routing. The course focuses on Internet Protocol (IP) addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, and Virtual Local Area Network (VLAN) Trunking Protocol (VTP). Course includes 45 lecture hours and 30 lab hours per semester. Course fee.
Prerequisite(s): ISS 112

IDS 214 Cisco 4 (4 credits)
This course is the fourth of four courses leading to the Cisco Certified Network Associate (CCNA) designation. The course focuses on advanced Internet Protocol (IP) addressing techniques, such as, Network Address Translation (NAT), Port Address Translation (PAT), and Dynamic Host Configuration Protocol (DHCP), Wide Area Network (WAN) technology and terminology, Point-to-Point Protocol (PPP), Integrated Services Digital Network (ISDN), Dial-on-Demand routing (DDR), Frame Relay network management, and introduction to optical networking. Course includes 45 lecture hours and 30 lab hours per semester. Course fee.
Prerequisite(s): ISS 213

ISS 220 Strategic Infrastructure Security (3 credits)
This course focuses on security-related issues and the essential skills needed to implement security in a network in an enterprise environment, such as risk analysis, security policies, penetration testing techniques, Transfer Control Protocol (TCP), packet analysis, cryptography, operating system (OS) hardening, virus protection, and disaster recovery. Course fee.
Prerequisite(s): CIS 210

ISS 221 Network Defense & Countermeasures (3 credits)
This course focuses on the architecture for network defense including network attacks and defenses, firewall systems design and configuration, virtual private network (VPN) configuration, designing and configuring intrusion detection systems, intrusion signature, and network security policies and configurations. Course fee.
Prerequisite(s): ISS 220

ISS 222 Computer Forensics (3 credits)
This course introduces students to computer forensics, the emerging role of the computer forensics examiner, forensic evidence preservation, and legal and ethical foundations. This course provides a comparative study of information technology, evidence analysis, chain of custody, and data retrieval from computer hardware and software applications. Students have hands-on experiences using various computer forensic methods, evidence preservation techniques and documentation. Course fee.
Prerequisite(s): CIS 210 and ISS 111 and ISS 112

Interdisciplinary Studies (IDS)

IDS 181 Special Topics: Compass Seminar - First Year Experience (1 credit)
This seminar will be composed of 7 modules, each addressing a success skill that freshmen need to do well in their first year of college. The seminar will help students adapt to college level expectations, and a college level workload by focusing on time management, study skills, and campus connections. The seminar will run in two formats: as a stand-alone seminar and as a seminar that is linked to several classes that are enrolled heavily by freshmen.
Prerequisite(s): ENG 101

Mass Communications (MC)

MC 101 Introduction to Electronic Media (3 credits)
This course is an introduction to the physical, financial, social and governmental controls of radio, television, cable and satellite. Students study the history of radio and television, basic radio and television technology, programming, and the business side of the industries, including sales practices, ratings, personnel and careers in the electronic media and related fields. Classroom learning consists of lecture, discussion, listening and viewing assignments, game shows and occasional guests. Students may elect to work in some capacity on WHFC, the College's radio station, or Harford Cable Network, the Harford County public access cable TV station, or to write a term paper.

MC 102 Audio Production (3 credits)
This course introduces students to basic techniques of recording, editing, and mixing audio. Instruction covers fundamentals of microphone usage, mixing console operation, and digital recording and editing. Lectures and labs focus on topics such as acoustics, audio in media, equipment demonstrations, and recording techniques. Students work individually and in groups on a range of audio assignments including the production of an audio portfolio. Course includes 30 hours of lecture and 30 hours of lab per semester. This course may require field trips. Course fee.

MC 103 Television Studio Production (3 credits)
This is an introductory course in the fundamentals of television studio production and the operation of television equipment commonly found in a studio setting. Students explore fundamental usage of studios and equipment, and will operate cameras, TV audio, video controls systems, TV lighting and basic set design. Students participate individually and in groups in productions such as news and commercials, as well as interviews, some of which may air on the local cable system. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.
MC 104 Electronic Media Performance (3 credits)
This hands-on course introduces students to the preparation and execution of media performance skills. Students learn how to improve their vocal and visual presentation, record performances typical of the industry, and critique classroom and professional performances. Newscasts, commercials and interviews are typical projects with the possibility of airing on FM radio or cable television. Course includes 30 hours of lecture and 30 hours of lab per semester. Usually offered in spring semester. Course fee.
Prerequisite(s): MC 102

MC 105 Introduction to Journalism (GH) (3 credits)
Students study the roles, responsibilities, and effects of print and broadcast journalism from a broad historical and critical perspective. Related topics include the Internet, advertising, and public relations. Ethical standards, business constraints, and current trends in journalism are also considered. Students may shadow a professional journalist and write for the college newspaper.

MC 191 Independent Study: Mass Comm (1 credit)
MC 192 Independent Study: Mass Comm (2 credits)
MC 193 Independent Study: Mass Communications (3 credits)

MC 201 Writing for the Electronic Media (3 credits)
This capstone course focuses on short-form writing for the electronic media and the Internet, including television and radio commercials, web pages, press releases, outdoor advertising, and brochures for a local, non-profit agency. Students learn through assignments, lectures, quizzes, guest lectures, and a final multimedia campaign for a real client. Course includes 30 hours of lecture and 30 hours of lab per semester. Usually offered in fall semester.
Prerequisite(s): MC 102 and MC 103

MC 203 Advanced Audio Production (3 credits)
Advanced Audio Production is an in-depth study of audio/sound/hearing and the application of audio principles to various media. Other topics include digital editing, mixing and multi-tracking; studios and acoustics; equipment needs such as consoles, microphones, speakers and recorders; the processing of signals; and on-location recording. Students learn through lecture/discussion and through hands-on usage of advanced equipment. Student projects may be prepared for WHFC programming. Course includes 30 hours of lecture and 30 hours of lab per semester. Usually offered in spring semester. Course fee.
Prerequisite(s): MC 102

MC 204 Video Production and Editing (3 credits)
This course is an advanced study and practicum in video production. Students are involved in pre-production, production and post-production, including an introduction to digital editing. Lecture/discussion ranges widely from the practical study of equipment usage to broader concepts such as video language and its application to modern video production. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.
Prerequisite(s): MC 103

MC 206 History of Film (GH) (3 credits)
This course is a chronological survey of film from the technological development stage, through the silent era, to the studio dominated years, to the present day. Emphasis is placed on the appreciation of today’s films through the viewing of films important to the development of film expression. Course includes 30 hours of lecture and 30 hours of lab per semester. This course may require field trips.

MC 207 Digital Video I (3 credits)
This course concentrates on principles, production, and editing of digital video. Students are involved in all aspects of digital production including shooting, digitizing and editing video on a digital nonlinear system. Student projects progress from simple to complex. Course includes 30 hours of lecture and 30 hours of lab per semester. This course may require field trips.
Prerequisite(s): (MC 204) or (ART 108 and ART 207)

MC 208 Multimedia Journalism I (GH) (3 credits)
This course is designed to train prospective student journalists in the organization, design and production of a college magazine. Students learn how to write in standard journalistic style, become familiar with ethical and legal standards in the publication of a college magazine, and exhibit expertise in the areas of magazine design, business management, advertising, photography, editing, and copyreading. All students work toward the production of the campus magazine, The Harford Owl.
Prerequisite(s): ENG 101

MC 209 Multimedia Journalism II (3 credits)
This course is designed to refine the journalistic skills of prospective student journalists in the organization, design and production of a college magazine. Students review how to write in accepted journalistic style, continue to apply ethical and legal standards in the publication of a college magazine, and exhibit expertise in the areas of magazine design, business management, advertising, photography, editing, and copyreading. All students help supervise the production of the campus magazine, The Harford Owl.
Prerequisite(s): MC 208

MC 210 Introduction to Social Media (GI) (3 credits)
This course introduces students to a variety of social media platforms. Students will learn the professional and personal applications of social media, as well as their limitations. Related topics include the role of social media in advertising and public relations. Students may produce digital content for the college magazine’s Facebook page and/or participate in other hands-on assignments. This course may require field trip(s).
Prerequisite(s): MC 208

MC 271 Cooperative Education I: Mass Communications (1 credit)
MC 272 Cooperative Education II: Mass Communications (2 credits)
MC 273 Cooperative Education III: Mass Communications (3 credits)
MC 283 Field Project: Announcing/Production in Electronic Media (3 credits)
Students receive individual assignments at a selected job site in the area of electronic media desired by the student. Intended as a capstone course for the Associate degree and Certificate programs, this course offers the student an opportunity to actually work in a professional environment prior to graduation. Minimum of nine hours per week or a total of 135 hours per semester of independent work and conference.
MC 284 Field Project: Journalism/New Media and Advertising (3 credits)
Students receive individual assignments at a selected job site in the area of advertising or sales promotion desired by the student. Intended as a capstone course for the Associate degree and Certificate programs, this course offers the student the opportunity to actually work in a professional environment prior to graduation. Minimum of nine hours per week or a total of 135 hours per semester of independent work and conference.

MC 291 Independent Media Project (1 credit)
This course is an advanced practicum in media production. In consultation with the instructor, students select a complex media assignment to complete within the semester. Execution of the project is the student throughout. Minimum of six hours per week or a total of 90 hours per semester of independent work and conference. Course fee.

Prerequisite(s): MC 203 and MC 204

MC 292 Independent Media Project (2 credits)
This course is an advanced practicum in media production. In consultation with the instructor, students select a complex media assignment to complete within the semester. Execution of the project is on an independent study basis with the instructor guiding and instructing the student throughout. Minimum of six hours per week or a total of 90 hours per semester of independent work and conference. Course fee.

Prerequisite(s): MC 203 and MC 204

MC 293 Independent Media Project (3 credits)
This course is an advanced practicum in media production. In consultation with the instructor, students select a complex media assignment to complete within the semester. Execution of the project is on an independent study basis with the instructor guiding and instructing the student throughout. Minimum of six hours per week or a total of 90 hours per semester of independent work and conference. Course fee.

Prerequisite(s): MC 203 and MC 204

Mathematics (MATH)

MATH 001 Fundamentals of Mathematics (3 credits)
This course provides the student with the foundation in arithmetic that is necessary for a study of MATH 002. It includes whole number concepts, fractions, decimals, percents, ratios and proportions and signed numbers. May not be used to meet graduation requirements.

MATH 002 Introductory Algebra (3 credits)
This course provides the student with the foundation in elementary algebra that is necessary for MATH 017 and CHEM 010. It includes a study of real rational numbers, equations, polynomials, factoring, algebraic fractions and graphing. May not be used to meet graduation requirements.

Prerequisite(s): (MATH 001) or (MATH 001)

MATH 003 Integrated Review for Contemporary Mathematics (1 credit)
MATH 003: Integrated Review for Contemporary Mathematics * 1 *credit
This course is designed to reinforce algebraic and problem-solving skills and concepts necessary for success in Math 102 – Contemporary Math. Topics include deductive/inductive reasoning; the methods of quantitative reasoning - problem solving by Polya's method with analytic, numeric, and graphical methods, logic, algebraic and exponential models, probability and normal distribution, and selected topics from statistics. Not intended for students who have a grade of C or better in Math 023 Algebra Track II. Co-requisite: Math 102.

MATH 010 Pre-Algebra (4 credits)
This course provides students with a combined foundation in fundamentals of mathematics and basic algebraic expressions and equations that are necessary skills for the study of Math 018. Topics include integers and their applications in fractions, decimals, percents, graphing, basic algebraic expressions and equations. May not be used to meet graduation requirements.

Prerequisite(s): MATH 001

MATH 014 Intens Rev of Intermed Algebra (1 credit)

MATH 016 Topics in Introduction to Statistics (1 credit)
MATH 016: Topics in Introduction to Statistics (1 credit) will give students the mathematical foundation necessary for study of college level Introduction to Statistics. Topics include linear equations and inequalities, polynomials, exponents, radicals, the Cartesian plane, data collection methods and descriptive statistics, and introductory probability concepts. Technology such as Excel and a graphing calculator will be utilized throughout the course. Co-requisite with MATH 216.

MATH 017 Intermediate Algebra (3 credits)
This course provides students with the foundation in intermediate algebra that is necessary for the study of a college-level mathematics course. It includes a study of equations and inequalities, exponents and polynomials, rational expressions, roots and radicals, and systems. Graphing calculators are recommended for use in the course. May not be used to meet graduation requirements.

Prerequisite(s): (MATH 002) or (MATH 002)

MATH 018 Combined Algebra (4 credits)
This course provides students with a combined foundation in introductory and intermediate algebra topics that are necessary skills for the study of a college-level mathematics course. Topics include real numbers, equations and inequalities, coordinate grid topics, exponents and polynomials, factoring, rational expressions, roots and radicals, systems of equations and quadratic equations. May not be used for graduation credit.

Prerequisite(s): (MATH 002) or (MATH 010)

MATH 019 Intensive Review of Intermediate Algebra (1 credit)
This course provides an intensive review of intermediate algebraic topics and will provide students with the foundation necessary for success in college-level mathematics. It includes a study of equations and inequalities, exponents and polynomials, rational expressions, roots and radicals, and systems. TI83 graphing calculators are recommended for use in this course. May not be used to meet graduation requirements. Course cannot be repeated.

Prerequisite(s): MATH 017
MATH 020 Pre-Algebra I (2 credits)
This course provides students with a foundation necessary for study in MATH 021: Pre-Algebra II. It includes whole number concepts, fractions, decimals, percents, ratios and proportions. Basic algebraic skills are coupled with arithmetic skills throughout the course. May not be used for graduation credit. Course includes four lecture hours per week. This course requires outside class time for testing in the Test and Assessment Center.

MATH 021 Pre-Algebra II (2 credits)
This course provides students with a foundation necessary for study in MATH 022: Liberal Arts Track I and MATH 024: Stem Business Track I. It includes the study of signed numbers, sets and properties of numbers, algebraic expressions, linear equations and inequalities in one variable, and linear equations in two variables. May not be used for graduation credit. Course includes four lecture hours per week. This course requires outside class time for testing in the Test and Assessment Center.

MATH 022 Liberal Arts Track I (2 credits)
This course provides students with a foundation necessary for study in MATH 023: Liberal Arts Track II. It includes the study and application of exponents and exponential expressions, polynomials and polynomial expressions, functions, graphs, inverses, logarithms, and systems of equations and applications. The use of technology is integrated throughout the course. May not be used for graduation credit. Course includes 28 lecture hours. This course requires outside class time for testing in the Test and Assessment Center.

Prerequisite(s): MATH 021

MATH 023 Liberal Arts Track II (2 credits)
This course provides students with a foundation necessary for study in a college level math course. It includes the study of polynomial factoring, quadratic equations, rational expressions, rational equations and applications, radical expressions, radical equations and applications. The use of technology is integrated throughout the course. May not be used for graduation credit. Course includes 28 lecture hours. This course requires outside class time for testing in the Test and Assessment Center.

Prerequisite(s): MATH 022

MATH 024 STEM Track I (2 credits)
This course provides students with a foundation necessary for study in MATH 025: Stem Track II. It includes the study of systems of equations, exponents and scientific notation, polynomials, and basic function content. May not be used for graduation credit. Course includes 28 lecture hours. This course requires outside class time for testing in the Test and Assessment Center.

Prerequisite(s): MATH 021

MATH 025 STEM Track II (2 credits)
This course provides students with a foundation necessary for study in MATH 026: STEM Track III. It includes the study of polynomial factoring, quadratic equations and applications, operations on rational expressions, solving rational equations and applications of rational equations. May not be used for graduation credit. Course includes 28 lecture hours. This course requires outside class time for testing in the Test and Assessment Center.

Prerequisite(s): MATH 024

MATH 026 STEM Track III (2 credits)
This course provides students with a foundation necessary for study in a college level math course. It includes the study of radical expressions, radical equations and applications of radical equations, complex numbers and complex solutions to quadratic equations, and the study of functions, their graphs, and properties of functions. An overview of inverse, exponential, and logarithmic functions is studied as well. May not be used for graduation credit. Course includes four lecture hours per week. This course requires outside class time for testing in the Test and Assessment Center.

Prerequisite(s): MATH 025

MATH 027 STAT Track Mathematics (3 credits)
This course will give students the mathematical foundation necessary for study of college level Introduction to Statistics. Topics include linear equations and inequalities, polynomials, exponents, radicals, the Cartesian plane, data collection methods and descriptive statistics, and introductory probability concepts. Technology such as Excel and a graphing calculator will be utilized throughout the course.

Prerequisite(s): MATH 021

MATH 101 College Algebra (GM) (3 credits)
This course presents linear, quadratic, logarithmic, polynomial and inverse functions. Additional topics include linear systems and inequalities, complex numbers, and piecewise-defined functions. Emphasis is placed on solving application problems related to business and social sciences.

Prerequisite(s): (MATH 026) or (MATH 025)

MATH 102 Contemporary Mathematics (GM) (3 credits)
This survey course of contemporary mathematics and applications is intended for non-math, non-science majors. Topics include logic, introductory probability and statistics, financial management, and mathematical modeling.

Prerequisite(s): (MATH 026) or (MATH 023)

MATH 103 Trigonometry (GM) (3 credits)
This course provides a foundation for analytic geometry and calculus. Topics include functions, graphs, trigonometric functions of angles and real numbers, degree and radian measure, right triangle applications, identities, inverse functions, analytical trigonometry and trigonometric equations.

Prerequisite(s): (MATH 026) or (MATH 101)

MATH 109 Precalculus Mathematics (GM) (4 credits)
This course will provide students with concepts and skills necessary for the study of calculus. It includes a study of algebraic and transcendental functions including their properties, inverses, graphs, equations, and applications. Additionally, the study of angles and triangles, trigonometric functions, and analytic trigonometry with applications is included.

Prerequisite(s): MATH 103

MATH 111 Introduction to Finite Mathematics (GM) (3 credits)
This course is designed for students in Business Administration, Computer Information Systems and other appropriate transfer programs. Topics include graphing linear functions, systems of linear equations, linear programming, matrices and Markov chains, game theory, counting techniques, probability, logic and logic circuits.

Prerequisite(s): MATH 026
MATH 131 Concepts in Mathematics I (4 credits)
This course is designed to meet the needs of prospective elementary school teachers. It reflects the philosophy of the NCTM Standards of School Mathematics. Topics include sets, functions, equations, logic, numeration systems, number theory, fundamental operations with whole numbers, integers, fractions and decimals, estimations and mental computation. Problem solving strategies are incorporated throughout the course.
Prerequisite(s): MATH 026

MATH 203 Calculus I (GM) (4 credits)
This course is an introduction to calculus with analytic geometry. It includes a study of functions, limits, differentiation, integration, and applications of differentiation and integration.
Prerequisite(s): MATH 109 or (MATH 101 and MATH 103)

MATH 204 Calculus II (GM) (4 credits)
This course continues the study of calculus with analytic geometry. It includes logarithmic, exponential, inverse, and hyperbolic functions, techniques of integration, improper integrals, infinite series and conic sections.
Prerequisite(s): MATH 203

MATH 206 Calculus III (4 credits)
This course provides students with the basic concepts of the calculus of vector functions. Topical categories include partial derivatives and multiple integrals with applications, line and surface integrals, and Green's Theorem.
Prerequisite(s): MATH 204

MATH 208 Elementary Differential Equations (3 credits)
This course provides the student with the fundamentals of ordinary differential equations. Topical categories include first order differential equations, high order linear differential equations with constant coefficients and applications, the Laplace Transform, the Taylor Series and numerical methods.
Prerequisite(s): MATH 204

MATH 210 Discrete Structures (3 credits)
This course develops the basic mathematical background and maturity for use in later Computer Science courses. Topics include proof by induction, axiomatic definition, sets, graphs, programs and recursion.
Prerequisite(s): MATH 203

MATH 211 Elements of Geometry (GM) (4 credits)
This course explores geometric concepts inductively and deductively. Topics include two- and three-dimensional geometry using techniques of synthetic, coordinate and transformational geometries, measurement and the use of technology to explore geometric concepts.
Prerequisite(s): MATH 026

MATH 212 Calculus with Applications (GM) (3 credits)
This course is designed for students in the social and management sciences. Differential and integral calculus with emphasis on differentiation techniques and the use of calculus in the above fields form an important part of the course. Exponential and logarithmic functions, partial derivatives are included. Technology will be utilized to enhance understanding of the concepts and their applications related to their future career. This course is not open to math, chemistry, engineering, or physics majors.
Prerequisite(s): (MATH 101) or (MATH 111) or (MATH 103) or (MATH 109)

MATH 216 Introduction to Statistics (GM) (4 credits)
This course provides the student with the fundamental concepts and methods of statistical analysis. Course topics: measures of central tendency and variation, graphical representation of data, least squares regression, correlation, probability distributions, sampling techniques, parameter estimation, and hypothesis testing. Technology and statistical literacy will be integrated throughout the course.
Prerequisite(s): (MATH 026) or (MATH 027) or (MATH 023) or (MATH 101) or (MATH 017) or (MATH 018)

MATH 217 Linear Algebra (4 credits)
This course presents basic concepts of linear algebra. Included are systems of linear equations, vector space, matrices, determinants, linear transformations, eigenvalues, and eigenvectors. Usually offered in spring semester.
Prerequisite(s): MATH 203

MATH 225 Numerical Methods (3 credits)
This course is an introduction to numerical methods and accompanying programming techniques. Topics include computer arithmetic, error analysis, iterative processes, numerical differentiation, numerical integration, Gaussian elimination, approximation of functions, interpolation, curve-fitting, and numerical solution of ordinary differential equations. The syntax and data structures of programming software such as MATLAB and Mathematics are also integrated throughout this course. Co-requisite: Math 204
Prerequisite(s): MATH 203 and CSI 131, MATH 204

Medical Assisting (MAS)

MAS 120 Medical Assisting Fundamentals (3 credits)
This course introduces the student to medical assisting. Topics include choosing a career as a medical assistant; working in today's healthcare environment; understanding legal and ethical issues; communicating with clients, physicians and staff; emerging trends in medicine; and control and measurement of blood pressure. Emphasis throughout this course is placed on the professional standards of conduct essential to a career in medical assisting. Course includes 45 hours of lecture per semester.
MAS 122 Clinical Medical Assistant I (3 credits)
This course introduces the student to basic clinical skills performed by the medical assistant. Topics covered include the medical assistant’s role in medical records and documentation, obtaining and documenting medical history, vital signs and anthropometric measurements, assisting with general exams, client teaching, medical asepsis and infection control, medical office emergencies, and life-span concepts. Emphasis throughout this course is placed on the essential clinical skills for a successful career in medical assisting. Course includes 30 hours of lecture and 30 hours of laboratory per semester. Course fee.
Prerequisite(s): (BIO 108 and BIO 116) or (BIO 103 and BIO 104) or (BIO 203 and BIO 204) and (MAS 120) and (AHS 101)

MAS 124 Clinical Medical Assistant II (4 credits)
This course focuses on advanced clinical skills for the medical assistant. Topics include principles and practices of surgical asepsis, minor surgical assisting, instrument identification and function, electrocardiography techniques, common medical specialty disorders, and medical assisting skills employed in the medical specialties. Emphasis is placed on clinical competence required for employment in medical specialty practice. Course includes 45 hours of lecture and 30 hours of laboratory per semester. Course fee.
Prerequisite(s): MAS 122

MAS 126 Administrative Medical Assisting I (3 credits)
This course introduces students to the administrative role of the medical assistant in the ambulatory care setting. Topics include professional communication skills, medical office equipment, legal and ethical considerations in the use of information technology, and the electronic health records. Course Fee.
Prerequisite(s): AHS 101

MAS 127 Administrative Medical Assisting II (3 credits)
This course provides students with a basic knowledge of the descriptive terms and identifying codes for valid reporting of medical services and procedures performed by physicians. The coding and classification of diseases, symptoms, operations and procedures are presented. Skills in analyzing medical records to identify data elements to be coded are developed. Legal and ethical considerations are discussed. Career opportunities and certifications in coding are presented. Course includes 45 hours of lecture per semester.
Prerequisite(s): AHS 101

MAS 200 Laboratory Procedures for Medical Assistant (3 credits)
This course introduces students to the role of the medical assistant in the laboratory. Topics include an overview of the clinical laboratory, laboratory standards and regulations, laboratory safety, and the collection, processing, and diagnostic procedures associated with clinical chemistry, urinalysis, hematology, serology, immunohematology, and microbiology. Course includes 30 hours of lecture and 30 hours of laboratory per semester. Course fee.
Prerequisite(s): MAS 124

MAS 202 Pharmacology for the Medical Assistant (3 credits)
This course integrates the principles and concepts of common pharmacologic interventions related to the practice of the Medical Assistant. Topics of study include dosage calculation, medication orders and errors, drug sources, schedules and dosages, medication preparation and administration. Emphasis is based on understanding of drug classification, drug action, reasons for administration, therapeutic effects, side effects, and client teaching for common medications. Course includes 30 hours of lecture and 30 hours of laboratory per semester. Course fee.
Prerequisite(s): MAS 120

MAS 210 Medical Assisting Practicum (4 credits)
This course provides students with 160 hours of required administrative and client care experience in a medical office and fifteen additional instructional hours focused on employment and certification preparation. The student integrates and applies knowledge and skills from prerequisite coursework in an actual health care delivery setting. Administrative, clinical and laboratory skills are performed under the supervision of trained mentors to transition the student into the role of professional medical assistant. Course includes 15 hours of instruction and 160 hours of practicum per semester. Offered fall, spring and summer sessions.
Prerequisite(s): MAS 124 and MAS 126 and MAS 127 and MAS 200 and MAS 202 and OS 135

Music (MUS)

MUS 101 Music Fundamentals (3 credits)
Music Fundamentals includes the study of basic elements of music theory, rhythmic and pitch notation, major and minor scale intervals, basic chord structures, melodic and rhythmic dictation, as well as an introduction to the keyboard and singing.
Prerequisite(s): MUS 103

MUS 103 Music Theory I (4 credits)
Music Theory I is the study of the basic principles of chordal structure and progression including four-part writing of diatonic harmony; sight-singing, dictation, and keyboard exercises; rhythmic drills with basic conducting patterns; and a study of elementary music forms. Course includes 45 hours of lecture and 30 hours of lab per semester. Usually offered in fall semester.

MUS 104 Music Theory II (4 credits)
Music Theory II is a study of the advanced principles of elementary chordal structure and progression including four-part writing of diatonic chords in root position and inversion. This course provides exercises in sight-singing and dictation, rhythmic drills, and the study of musical form. Course includes 45 hours of lecture and 30 hours of lab per semester. Usually offered in spring semester.
Prerequisite(s): MUS 103

MUS 105 Chorus I (1 credit)
The chorus performs both sacred and secular works from the 16th century to the present. Vocal problems are given attention. Members are expected to participate in concerts, Broadway-type productions, television appearances, etc., as scheduled by the director. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.
MUS 106 Chorus II (1 credit)
The chorus performs both sacred and secular works from the 16th
to the present. Vocal problems are given attention. Members
are expected to participate in concerts, Broadway-type productions,
television appearances, etc., as scheduled by the director. Course
includes 15 hours of lecture and 30 hours of rehearsal per semester.
Course fee.

MUS 107 A Cappella Singers I (1 credit)
The A Cappella Singers perform unaccompanied vocal music from
the Renaissance to the present. Students develop vocal techniques.
Participation in concerts, community events, and other appearances, as
scheduled, is required. Course includes 15 hours of lecture and 30 hours
of rehearsal per semester. Course fee.

MUS 108 A Cappella Singers II (1 credit)
The A Cappella Singers perform unaccompanied vocal music from
the Renaissance to the present. Students develop vocal techniques.
Participation in concerts, community events, and other appearances, as
scheduled, is required. Course includes 15 hours of lecture and 30 hours
of rehearsal per semester. Course fee.

MUS 109 Band I (1 credit)
The band provides practice in basic musicianship, intonation and
tone color. It is a study of various types and styles of music written
or arranged for band. Students are prepared for public performances.
Course includes 15 hours of lecture and 30 hours of rehearsal per
semester. Course fee.

MUS 110 Band II (1 credit)
The band provides practice in basic musicianship, intonation and
tone color. It is a study of various types and styles of music written
or arranged for band. Students are prepared for public performances.
Course includes 15 hours of lecture and 30 hours of rehearsal per
semester. Course fee.

MUS 111 Jazz Ensemble I (1 credit)
The HCC Jazz Ensemble performs instrumental jazz from the earliest
to contemporary forms. Students develop instrumental techniques and
participate in concerts, theater productions and other appearances, as
scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal
per semester. Course fee.

MUS 112 Jazz Ensemble II (1 credit)
The HCC Jazz Ensemble performs instrumental jazz from the earliest
to contemporary forms. Students develop instrumental techniques and
participate in concerts, theater productions and other appearances, as
scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal
per semester. Course fee.

MUS 113 Percussion Ensemble I (1 credit)
This course consists of the performance of percussion repertoire and
the development of techniques on various percussion instruments.
Participation in concerts, theater productions and other appearances, as
scheduled, is required. Course includes 15 hours of lecture and 30 hours
of rehearsal per semester. Course fee.

MUS 114 Percussion Ensemble II (1 credit)
This course consists of the performance of percussion repertoire and
the development of techniques on various percussion instruments.
Participation in concerts, theater productions and other appearances, as
scheduled, is required. Course includes 15 hours of lecture and 30 hours
of rehearsal per semester. Course fee.

MUS 115 Class Piano I (1 credit)
This course is an introduction to basic theory and its application to the
keyboard including notation, scales, chords and elementary piano skills.
Grade one level piano pieces are used. Course includes 15 hours of
lecture and 15 hours of lab per semester. Course fee.

MUS 118 Vocal Jazz Ensemble I (1 credit)
'second Shift' performs vocal jazz from the earliest to contemporary
forms. Students develop vocal jazz techniques. Participation is required
in concerts, theater productions and other appearances, as scheduled.
Course includes 15 hours of lecture and 30 hours of rehearsal per
semester. Course fee.

MUS 119 Vocal Jazz Ensemble II (1 credit)
'second Shift' performs vocal jazz from the earliest to contemporary
forms. Students develop vocal jazz techniques. Participation is required
in concerts, theater productions and other appearances, as scheduled.
Course includes 15 hours of lecture and 30 hours of rehearsal per
semester. Course fee.

MUS 120 Orchestra I (1 credit)
The orchestra performs the great orchestral masterpieces as well as
new orchestral literature. Students gain practice in basic musicianship,
tonation, tone, color and sensitivity. Students are prepared for public
performance. Course includes 15 hours of lecture and 30 hours of
rehearsal per semester. Course fee.

MUS 121 Orchestra II (1 credit)
The orchestra performs the great orchestral masterpieces as well as
new orchestral literature. Students gain practice in basic musicianship,
tonation, tone, color and sensitivity. Students are prepared for public
performance. Course includes 15 hours of lecture and 30 hours of
rehearsal per semester. Course fee.

MUS 124 Vocal Performance Workshop I (1 credit)
This course provides performance opportunities for students who
wish to pursue a music program intended for performance, or other
students with musical interest. Students collaboratively learn musical
scenes and become comfortable with a professional rehearsal process,
culminating in a public performance. The instructor provides feedback
to aid students' development of complete dramatic material. Assigned
scenes include selections from the classical, operatic, or musical theater
repertoire. Course includes 15 hours of lecture and 30 hours of rehearsal
per semester. Course fee.

MUS 125 Vocal Performance Workshop II (1 credit)
This course provides performance opportunities for students who
wish to pursue a music program intended for performance, or other
students with musical interest. Students collaboratively learn musical
scenes and become comfortable with a professional rehearsal process,
culminating in a public performance. The instructor provides feedback
to aid students' development of complete dramatic material. Assigned
scenes include selections from the classical, operatic, or musical theater
repertoire. Course includes 15 hours of lecture and 30 hours of rehearsal
per semester. Course fee.
MUS 127 Applied Music: Commercial Voice I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 128 Applied Music: Commercial Voice II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 129 Applied Music: Commercial Voice III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 130 Applied Music: Commercial Voice IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 131 Applied Music: Woodwinds I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 132 Applied Music: Woodwinds II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 133 Applied Music: Woodwinds III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 134 Applied Music: Woodwinds IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 135 Applied Music: Brass I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 136 Applied Music: Brass II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 137 Applied Music: Brass III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 138 Applied Music: Brass IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 139 Applied Music: Drum Set/Percussion I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 140 Applied Music: Drum Set/Percussion II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.
MUS 141 Applied Music: Keyboard I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 142 Applied Music: Keyboard II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 143 Applied Music: Keyboard III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 144 Applied Music: Keyboard IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 145 Applied Music: Strings I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 146 Applied Music: Strings II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 147 Applied Music: Strings III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 148 Applied Music: Strings IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 149 Applied Music: Voice I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 150 Applied Music: Voice II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 151 Applied Music: Voice III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 152 Applied Music: Voice IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.
MUS 155 Applied Music: Guitar I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 157 Applied Music: Guitar III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 158 Applied Music: Guitar IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 155 Applied Music: Electric Bass I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 156 Applied Music: Guitar II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 159 Applied Music: Electric Bass II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 160 Applied Music: Electric Bass III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 161 Applied Music: Electric Bass IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 156 Applied Music: Electric Guitar I (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 157 Applied Music: Electric Guitar II (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 158 Applied Music: Electric Guitar III (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.

MUS 159 Applied Music: Electric Guitar IV (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One-half hour lesson and seven hours of practice per week. Course fee.
MUS 170 Applied Music: Composition IV (1 credit)
This course provides individualized instruction in vocal/instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 171 Applied Music: Improvisation I (1 credit)
This course provides individualized instruction in vocal/instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 172 Applied Music: Improvisation II (1 credit)
This course provides individualized instruction in vocal/instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 173 Applied Music: Improvisation III (1 credit)
This course provides individualized instruction in vocal/instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 174 Applied Music: Improvisation IV (1 credit)
This course provides individualized instruction in vocal/instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 185 Classical Guitar Ensemble I (1 credit)
This course provides an ensemble experience by giving the guitar student an opportunity to perform in a group environment along with guitarists. Students are exposed to a variety of classical music literature, as well as styles and techniques associated with classical music, with an emphasis on guitar. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 186 Classical Guitar Ensemble II (1 credit)
This course provides an ensemble experience by giving the guitar student an opportunity to perform in a group environment along with guitarists. Students are exposed to a variety of classical music literature, as well as styles and techniques associated with classical music, with an emphasis on guitar. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 187 Chamber Music Ensemble I (1 credit)
Students participating in this course have the opportunity to play a wide variety of classical music styles in a chamber setting, allowing for a high level of musical interaction within the ensemble. Students gain practice in basic musicianship, intonation, tone, color and sensitivity. Students develop instrumental techniques and participate in concerts, theater productions and other appearances as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 188 Chamber Music Ensemble II (1 credit)
Students participating in this course have the opportunity to play a wide variety of classical music styles in a chamber setting, allowing for a high level of musical interaction within the ensemble. Students gain practice in basic musicianship, intonation, tone, color and sensitivity. Students develop instrumental techniques and participate in concerts, theater productions and other appearances as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 201 The Art of Listening I (H) (D) (3 credits)
Art of Listening I is an introductory study of music styles, media and forms as they exist in our culture from ancient times to the early 19th century through a survey of standard concert repertory and its historical development. Special emphasis is placed on aural identification. This course may require field trips.

MUS 202 The Art of Listening II (GH) (D) (3 credits)
Art of Listening II is an introductory study of music styles, media and forms as they exist in our culture from the early 19th century to the present through a survey of standard concert repertory and its historical development. Special emphasis is placed on aural identification. This course may require field trips.

MUS 203 Music Theory III (4 credits)
Music Theory III is a study of chromatic harmony highlighting stylistic differences between 18th and 19th century practices. Original composition is encouraged. The course includes sight-singing, dictation, rhythmic drills, and the study of musical forms. Course includes 45 hours of lecture and 30 hours of lab per semester. Usually offered in fall semester.

Prerequisite(s): MUS 104

MUS 204 Music Theory IV (4 credits)
Music Theory IV is a study of advanced chromatic harmony and 20th century compositional techniques. Original compositions are required. Includes sight-singing, dictation and keyboard exercises; rhythmic drills; and study of music forms. Course includes 45 hours of lecture and 30 hours of lab per semester. Usually offered in spring semester.

Prerequisite(s): MUS 203

MUS 205 Chorus III (1 credit)
The chorus performs both sacred and secular works from the 16th century to the present. Vocal problems are given attention. Members are expected to participate in concerts, Broadway-type productions, television appearances, etc., as scheduled by the director. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 206 Chorus IV (1 credit)
The chorus performs both sacred and secular works from the 16th century to the present. Vocal problems are given attention. Members are expected to participate in concerts, Broadway-type productions, television appearances, etc., as scheduled by the director. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.
MUS 207 A Cappella Singers III (1 credit)
The A Cappella Singers perform unaccompanied vocal music from the Renaissance to the present. Students develop vocal techniques. Participation in concerts, community events, and other appearances, as scheduled, is required. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 208 A Cappella Singers IV (1 credit)
The A Cappella Singers perform unaccompanied vocal music from the Renaissance to the present. Students develop vocal techniques. Participation in concerts, community events, and other appearances, as scheduled, is required. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 209 Band III (1 credit)
The band provides practice in basic musicianship, intonation and tone color. It is a study of various types and styles of music written or arranged for band. Students are prepared for public performances. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 210 Band IV (1 credit)
The band provides practice in basic musicianship, intonation and tone color. It is a study of various types and styles of music written or arranged for band. Students are prepared for public performances. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 211 Jazz Ensemble III (1 credit)
The HCC Jazz Ensemble performs instrumental jazz from the earliest to contemporary forms. Students develop instrumental techniques and participate in concerts, theater productions and other appearances, as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 212 Jazz Ensemble IV (1 credit)
The HCC Jazz Ensemble performs instrumental jazz from the earliest to contemporary forms. Students develop instrumental techniques and participate in concerts, theater productions and other appearances, as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 213 Percussion Ensemble III (1 credit)
This course consists of the performance of percussion repertoire and the development of techniques on various percussion instruments. Participation in concerts, theater productions and other appearances, as scheduled, is required. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 214 Percussion Ensemble IV (1 credit)
This course consists of the performance of percussion repertoire and the development of techniques on various percussion instruments. Participation in concerts, theater productions and other appearances, as scheduled, is required. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 215 Introduction to Electronic Music (3 credits)
Students are able to create interesting electronic musical compositions through introductory studies of notation and sequencing software programs. Projects include computer-generated scores and compositions generated with MIDI, digital audio and digital synthesis. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

MUS 216 World Music (GH) (D) (3 credits)
World Music has a broad scope within the realm of the music from other cultures, with the emphasis on music from cultures other than Western European. Students consider a variety of works from a variety of cultures across the globe by representative performers and composers. This course may require field trips.

MUS 218 Vocal Jazz Ensemble III (1 credit)
'Second Shift' performs vocal jazz from the earliest to contemporary forms. Students develop vocal jazz techniques. Participation is required in concerts, theater productions and other appearances, as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 219 Vocal Jazz Ensemble IV (1 credit)
'Second Shift' performs vocal jazz from the earliest to contemporary forms. Students develop vocal jazz techniques. Participation is required in concerts, theater productions and other appearances, as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 220 Orchestra III (1 credit)
The orchestra performs the great orchestral masterpieces as well as new orchestral literature. Students gain practice in basic musicianship, intonation, tone, color and sensitivity. Students are prepared for public performance. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 221 Orchestra IV (1 credit)
The orchestra performs the great orchestral masterpieces as well as new orchestral literature. Students gain practice in basic musicianship, intonation, tone, color and sensitivity. Students are prepared for public performance. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 222 Popular Music of the United States (GH) (D) (3 credits)
The history of popular music in the United States is studied from the standpoint of cultural impact. This course includes the study of the origins of a 'popular' audience, through the late 19th century; the development of Jazz, Ragtime, Blues, Tin-Pan-Alley, show music, Swing, motion picture music, Country, protest music, Rock and Roll, Folk and Rock. Students are required to participate in listening assignments representative of the various stages of the development of popular music. This course may require field trips.

MUS 223 Listening to Jazz (GH) (D) (3 credits)
Listening to Jazz is a general introductory course exploring the history and development of jazz music in the United States over its century-long history and from its African and American precursors to its present-day practice throughout the world. The basic structural elements of music are introduced to provide a foundation for critical listening and discussion. This course may require field trips.

MUS 224 Vocal Performance Workshop III (1 credit)
This course provides performance opportunities for students who wish to pursue a music program intended for performance, or other students with musical interest. Students collaboratively learn musical scenes and become comfortable with a professional rehearsal process, culminating in a public performance. The instructor provides feedback to aid students' development of complete dramatic material. Assigned scenes include selections from the classical, operatic, or musical theater repertoire. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.
MUS 225 Vocal Performance Workshop IV (1 credit)
This course provides performance opportunities for students who wish to pursue a music program intended for performance, or other students with musical interest. Students collaboratively learn musical scenes and become comfortable with a professional rehearsal process, culminating in a public performance. The instructor provides feedback to aid students’ development of complete dramatic material. Assigned scenes include selections from the classical, operatic, or musical theater repertoire. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 227 Applied Music: Commercial Voice V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 228 Applied Music: Commercial Voice VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 229 Applied Music: Commercial Voice VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 230 Applied Music: Commercial Voice VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 231 Applied Music: Woodwinds V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 232 Applied Music: Woodwinds VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 233 Applied Music: Woodwinds VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 234 Applied Music: Woodwinds VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 235 Applied Music: Brass V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 236 Applied Music: Brass VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 237 Applied Music: Brass VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 238 Applied Music: Brass VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.
MUS 239 Applied Music: Drum Set/Percussion V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 240 Applied Music: Drum Set/Percussion VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 241 Applied Music: Drum Set/Percussion VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 242 Applied Music: Drum Set/Percussion VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 243 Applied Music: Strings V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 244 Applied Music: Strings VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 245 Applied Music: Strings VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 246 Applied Music: Strings VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 247 Applied Music: Keyboard V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 248 Applied Music: Keyboard VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 249 Applied Music: Keyboard VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 250 Applied Music: Keyboard VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 251 Applied Music: Voice V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 252 Applied Music: Voice VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.
MUS 253 Applied Music: Voice VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 254 Applied Music: Voice VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 255 Applied Music: Guitar V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 256 Applied Music: Guitar VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 257 Applied Music: Guitar VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 258 Applied Music: Guitar VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 259 Applied Music: Electric Bass V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 260 Applied Music: Electric Bass VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 261 Applied Music: Electric Bass VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 262 Applied Music: Electric Bass VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 263 Applied Music: Electric Guitar V (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 264 Applied Music: Electric Guitar VI (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 265 Applied Music: Electric Guitar VII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.

MUS 266 Applied Music: Electric Guitar VIII (1 credit)
These courses provide instruction in voice or instrument for students who wish to pursue a music program on an individualized basis intended for solo performance, or for students who wish to transfer to a program leading to a degree in music, or for other students with musical background and interest. Students may choose either from the traditional repertoire or from a jazz/rock/show repertoire. One half-hour lesson and seven hours of practice per week. Course fee.
MUS 267  Applied Music: Composition V (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 268  Applied Music: Composition VI (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 269  Applied Music: Composition VII (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 270  Applied Music: Composition VIII (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 271  Applied Music: Improvisation V (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 272  Applied Music: Improvisation VI (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 273  Applied Music: Improvisation VII (1 credit)
This course provides individualized instruction in vocal/ instrumental composition and arranging for students who wish to pursue a music degree, or for those with musical background and interest. One-half hour lesson and seven hours of work/practice per week. Course fee.

MUS 274  Applied Music: Improvisation VIII (1 credit)
This course provides individualized instruction in Jazz Theory and Vocal/ Instrumental improvisation for students who wish to pursue a music degree, or for other students with musical background and interests. One-half hour lesson and seven hours of work per week. Course fee.

MUS 275  Applied Music Keyboard Theory (1 credit)
This course is designed to develop specific theoretical skills to be realized on the keyboard. Subjects include all varieties of chords, figured bass realization, transposition, and scales. Total contact hours per week: 30 minutes individual lesson is scheduled weekly with the instructor per regular semester. An additional 3 1/2 hours of practice per week is expected. Course fee.

MUS 279  Applied Music: Keyboard Theory II (1 credit)
This course is a continuation of MUS 179 and is designed to develop specific theoretical skills to be realized on the keyboard. Subjects include all varieties of chords, figured bass realization, transposition, choral score reading and scales. Total contact hours per week: 30 minutes individual lesson is scheduled biweekly with the instructor per regular semester. An additional 3 1/2 hours of practice per week is expected. Course fee.

Prerequisite(s): MUS 179

MUS 285  Classical Guitar Ensemble III (1 credit)
This course provides an ensemble experience by giving the guitar student an opportunity to perform in a group environment along with guitarists. Students are exposed to a variety of classical music literature, as well as styles and techniques associated with classical music, with an emphasis on guitar. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 286  Classical Guitar Ensemble IV (1 credit)
This course provides an ensemble experience by giving the guitar student an opportunity to perform in a group environment along with guitarists. Students are exposed to a variety of classical music literature, as well as styles and techniques associated with classical music, with an emphasis on guitar. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 287  Chamber Music Ensemble III (1 credit)
Students participating in this course have the opportunity to play a wide variety of classical music styles in a chamber setting, allowing for a high level of musical interaction within the ensemble. Students gain practice in basic musicianship, intonation, tone, color and sensitivity. Students develop instrumental techniques and participate in concerts, theater productions and other appearances as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

MUS 288  Chamber Music Ensemble IV (1 credit)
Students participating in this course have the opportunity to play a wide variety of classical music styles in a chamber setting, allowing for a high level of musical interaction within the ensemble. Students gain practice in basic musicianship, intonation, tone, color and sensitivity. Students develop instrumental techniques and participate in concerts, theater productions and other appearances as scheduled. Course includes 15 hours of lecture and 30 hours of rehearsal per semester. Course fee.

Nursing (NURS)

NURS 101  Fundamentals of Nursing (7 credits)
In this course, students utilize the nursing process to contribute to a plan of care to meet the assessed basic health and wellness needs of clients. Course includes 60 hours of lecture, 30 hours of laboratory, and 90 hours in a clinical setting per semester. Course fee.

Prerequisite(s): BIO 104, PSY 102, BIO 204, PSY 214

NURS 105  Medical-Surgical Nursing 1 (4.5 credits)
In this course, students utilize the nursing process to develop a plan of care to meet the assessed health and wellness needs of clients with commonly occurring health issues. Course includes 30 hours of lecture and 105 hours in a clinical setting. BIO 205 is a prerequisite for NURS 210, NURS 220, and NURS 230. Course fee.

Prerequisite(s): NURS 101 and (BIO 104 or BIO 204) and (PSY 102 or PSY 214)
NURS 112 Prerequisite(s): NURS 101 and BIO 204 and PSY 214

This course introduces students to the fast-paced world of end-user communication technology and telecommunications. Students acquire knowledge of the fundamentals of electronic mail, voice processing, teleconferencing, wireless communication, and related technologies. The course includes student use of speech recognition software. Course fee.

Prerequisite(s): OS 100

OS 116 Communication Technologies (4 credits)
This course introduces students to the fast-paced world of end-user communication technology and telecommunications. Students acquire knowledge of the fundamentals of electronic mail, voice processing, teleconferencing, wireless communication, and related technologies. The course includes student use of speech recognition software. Course fee.

Prerequisite(s): OS 100

OS 129 Introduction to Office Procedures and Management (4 credits)
This course provides students with opportunities to explore various office careers for development of short- and long-term career goals. Key topics include: written and oral business communication skills; international etiquette; records/financial management/office design, space and workplace safety; minute-taking; and an introduction to supervision. Hands-on practice in the use of various filing systems, event planning/travel arrangements as well as case studies and role-playing will provide students with experience in real-world business practices. Course fee.

Prerequisite(s): OS 100
OS 135 Medical Office Systems (3 credits)
Office administration in a medical setting requires human relations skills, confidentiality and computer software proficiency. The role and responsibilities of the medical office assistant are explored through simulations and application of office systems theory. Topics include the ethical and legal responsibilities of handling patient records, preparation of medical records, billing and insurance forms, professional reports, scheduling and communications. Course fee.

OS 136 Introduction to Bookkeeping: Quickbooks (3 credits)
This course introduces basic bookkeeping concepts and procedures vital to developing and controlling business activities through the use of accounting software. Accounting for payables and receivables, preparing payroll activities and producing financial statements will be major topics of the course. Students will gain proficiency in developing sample databases designed to simulate real-world bookkeeping functions. Course fee.

Prerequisite(s): MATH 021

OS 140 Fundamentals of Healthcare (3 credits)
This course focuses on the knowledge and skills common to all healthcare occupations. This course will explore content which includes healthcare delivery systems, communication skills, legal and ethical responsibilities, wellness and disease concepts, infection control, CPR, introductory first aid and safety, employability, computer skills, and professionalism common to health care occupations. Course fee.

Prerequisite(s): OS 113

OS 214 Advanced Keyboarding & Document Processing (3 credits)
This course emphasizes the continued development of speed and accuracy with keyboarding exercises. Assignments are customized to the individual student’s skill level. Students use word processing software as a tool to prepare various business documents. Decision-making skills are used to select document formats. Course projects emphasize advanced word processing skills such as advanced tables, merged documents, tracking changes and macros. Course fee.

Prerequisite(s): OS 113

OS 235 Medical Transcription (3 credits)
Students master transcription techniques and apply medical terminology and English language usage to prepare medical documents. Documents illustrate appropriate medical report forms, use of reference materials and computer software. Knowledge of software productivity techniques is essential for successful transcription. Course fee.

Prerequisite(s): (AHS 101 and ENG 012 and OS 113) or (AHS 101 and ENG 018 and OS 113) or (ENG 101 and AHS 101 and OS 113)

OS 245 End User Technology Solutions (3 credits)
This course provides a comprehensive overview of technology solutions for the organizational end user environment. Emphasis is on the development of business applications using several software packages, including desktop publishing and project management. Course fee.

Prerequisite(s): OS 116

OS 272 Cooperative Education II: Office Systems (2 credits)

OS 273 Cooperative Education III: Office Systems (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Paralegal (PL)

PL 101 Introduction to Law (Same course as PS 106) (GB) (3 credits)
This course introduces students to basic legal concepts, principles, and procedures. It is designed to provide the student with an understanding of the structure of the U.S. legal system including the role of the judicial, legislative, and executive branches; the history of law in the United States; the role of attorneys, law enforcement and other legal professionals; ethical and professional issues facing legal professionals; basic categories of law; litigation principles; and alternative dispute resolutions.

PL 104 Procedural Law and Evidence (3 credits)
The constitutional aspects of arrest, search and seizure are considered, together with interrogation and confession, self-incrimination and right to counsel. Students learn rules of evidence as they apply to law enforcement officers in the performance of their investigatory duties and their testimony in court.

PL 105 Legal Research (3 credits)
This course focuses on the theories, procedures, and resources used for solving legal problems through research. The student becomes familiar with the various legal publications found in a typical law library and learns to use those resources to develop and execute a plan for the solution of legal problems. Students explore electronic research programs. It is recommended that PL 101 be taken prior to or concurrently with Legal Research.

PL 106 Legal Writing (3 credits)
This course builds on the knowledge students have acquired in Legal Research. The skills developed in that course are applied to the tasks of case analysis and legal writing. Students are exposed to the methods of analyzing and briefing cases and statutes. The principles of technical legal writing are taught and applied in legal correspondence, instruments, office memoranda, pleadings, court memoranda, and appellate briefs.

Prerequisite(s): PL 105 and PL 110 and ENG 101

PL 110 Technology in the Legal Profession (3 credits)
This course provides an overview of the application of technology in the legal setting. Students learn the basics of computer hardware and software as well as purchase considerations. A major emphasis is placed on legal word processing and its applications in pleadings and correspondence. Telecommunications, computer assisted legal research, Internet, and other technology utilized in the law office are explored. Credit for prior learning is available. Students are required to take this course prior to PL 106.
PL 111 Principles of Criminal Law (3 credits)
The substantive law is discussed: how and why laws are created with emphasis on specific offenses against persons and property. Also covered: what constitutes a violation of the law and how police must satisfy the legal requirements imposed by the elements of the statutes so that the state may successfully prosecute a criminal case. Landmark U.S. Supreme Court and selected state court cases are studied.

PL 122 Torts and Insurance (3 credits)
This course covers the areas of unintentional and intentional torts, and torts based on strict liability. Topics include damages, defenses, and the application of insurance law. Emphasis is placed on the academic as well as the practical aspects of a tort practice.

Prerequisite(s): PL 101

PL 124 Civil Litigation and Procedure (3 credits)
This course focuses on both the procedural and substantive aspects of civil litigation. The student becomes familiar with Maryland and federal court procedure, structure, personnel, pleadings, discovery, and other topics. In addition, students study the issues of jurisdiction and evidence. Emphasis is placed on the typical litigation tasks that paralegals are assigned including drafting pleadings, investigation, preparing witnesses, and reviewing records.

Prerequisite(s): PL 101

PL 201 Conflict Analysis and Resolution (3 credits)
This course focuses on the study of conflict in both interpersonal and professional contexts. Students examine the sources, symptoms, dynamics, and ramifications of conflict. In addition, the current methods of resolving conflict and disputes are closely examined. Students are given the opportunity to employ specific conflict resolution techniques that can be applied in legal, business, multicultural, and personal settings. Emphasis is placed on examining negotiation, mediation, and arbitration. It is recommended that PL 101 be taken prior to or concurrently with Conflict Analysis and Resolution.

PL 202 Bankruptcy and Collections Law (3 credits)
This course focuses on the paralegal's duties in the area of bankruptcy and collection law. Students become familiar with procedural as well as substantive bankruptcy law. In addition, students learn about the law of debtor/creditor relations, collection of judgments, secured transactions, and electronic filing.

PL 203 Contract Law (3 credits)
This course covers basic issues of the common law of contracts and the Uniform Commercial Code. Subjects covered include conditions precedent and subsequent, statute of frauds, offer, acceptance, consideration, breach, and remedies. The differences in these areas of law between the Uniform Commercial Code and the common law will be highlighted. Basic contract drafting will be learned and practiced. It is recommended that PL 101 be taken prior to or concurrently with this course.

PL 204 Constitutional Law (3 credits)
This course covers the basic concepts of American government and civil rights and liberties as seen from the application of the Constitution of the United States. Landmark decisions regarding judicial review, separation of powers, and the freedoms guaranteed and protected by the Bill of Rights are discussed. Questions of balance of constitutional rights to privacy and national security are covered.

Prerequisite(s): (PL 101) or (PS 106) or (PS 101) or (HIST 103)

PL 205 Business Law (3 credits)
This course focuses on a study of the Uniform Commercial Code as it applies to negotiable instruments and secured transactions. This course emphasizes agency, business organizations, and employment law. It examines creditors' rights, bankruptcy, property law (real and personal), and estates.

PL 233 Probate Practice and Procedure (2 credits)
This course covers the areas of estate planning and probate procedure. The student becomes familiar with the ways an estate can be planned through the use of wills, trusts, and powers of attorney. Medical decisions are discussed through the use of the living will and medical power of attorney. Probate procedure is covered with an emphasis on Maryland procedure. Tax considerations of both estate planning and probate are considered.

Prerequisite(s): PL 101

PL 238 Law Practice and Professional Conduct (3 credits)
This course covers the fundamentals of law office management and professional conduct. Subjects include basic principles and structure of management, employment opportunities for paralegals, timekeeping and accounting systems, marketing issues, administrative and substantive systems in the law office and law library, employee and client relations, law practice technology, and paralegal and attorney ethics.

PL 242 Real Estate Transactions (3 credits)
This course covers issues related to the ownership of real property, real estate finance, and the landlord/tenant relationship. Emphasis is on the practical aspects of real estate and landlord/tenant practice, including settlement, title search, recordation, zoning, lease drafting, and lease enforcement.

Prerequisite(s): PL 101

PL 244 Family Law and Litigation (2 credits)
This course covers the rights and responsibilities of parents, children, and spouses in the context of the family. Topics include the traditional areas of divorce, custody, support, and adoption. Newer areas such as pre-nuptial agreements, surrogacy, the legal rights of women, and divorce mediation are also considered. Litigation issues related to all topics will be addressed.

Prerequisite(s): PL 101 and PL 124

PL 245 Legal Environment of Business (3 credits)
The student is introduced to the legal environment in which businesses operate. The course covers sources of law and the application of law to business. Areas examined include business crimes, contracts (under common law and the Uniform Commercial Code), sales torts (including product liability), administrative, antitrust, environmental, and consumer protection laws.

PL 246 Administrative Law and Procedure (3 credits)
This course provides an overview of the functions and procedures of federal and state administrative law. Special focus is placed on using the Internet and legal research in various state and federal agencies. Topics include the Administrative Procedure Act, rulemaking, hearing procedure, state and federal applications, privacy issues, and the Freedom of Information Act.

Prerequisite(s): PL 124
PL 248 Internship in Paralegal Studies (3 credits)
The internship is designed to provide students with experiences typical of those encountered by paralegals in the work setting. Students work 135 hours as interns in law offices, governmental agencies, or the court system and spend 5 hours in the classroom. Permission of the coordinator is required.
Prerequisite(s): PL 101

PL 273 Cooperative Education III: Paralegal (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled. Permission of the program coordinator is required.

Philosophy (PHIL)

PHIL 101 Introduction to Philosophy (GH) (3 credits)
This course is a study of some of the major questions and issues arising in philosophy. Course content includes selected philosophers' views on the nature of knowledge, the existence of God, ethical values and the role of the State.

PHIL 193 Independent Study/Philosophy (3 credits)

PHIL 200 Principles of Logic (GH) (3 credits)
Students examine selected principles of formal and informal logic with the purpose of developing the ability to think critically, reason clearly and use language precisely. The course provides students with theoretical and practical reasoning skills needed to construct sound arguments and evaluate the arguments of others.

PHIL 205 Ethics (GH) (3 credits)
This introductory course in philosophical ethics encompasses the prominent ethical theories of Western philosophy and considers the application of ethics to modern cases and current situations. This course acquaints students with the major philosophical ethical thinkers in Western philosophy and their ethical theories. It gives students the philosophical perspectives and skills needed to recognize, understand, and apply these theories to contemporary issues in an intelligent and effective way by applying the theories to ethical cases.

PHIL 220 Bioethics (GH) (3 credits)
The course covers pertinent ethical theories and applies them to cases drawn from several health care fields. Students gain philosophical understanding and ethical techniques necessary to identify and deal with such issues in theory and practice.

PHIL 221 Business Ethics (GH) (3 credits)
This course serves as an introduction to the philosophical study of ethics and the applied sub discipline of business ethics by covering pertinent ethical theories and applies them to cases drawn from the several business ethics fields. Students will gain philosophical understanding and ethical techniques necessary to identify and deal with such issues in theory and practice.

PHIL 222 Environmental Ethics (3 credits)
This course examines both the theory and practice of the relationship of humans to the non-human world. In addition, students explore environmental thinking with an historical context. Among issues discussed are population and consumption, food ethics, animal rights, and climate control.

PHIL 250 Philosophy of Religion (GH) (3 credits)
This course addresses prominent questions generated by a philosophical study of religions. As such, the method is rational evaluation and fair-minded scrutiny of the issues. Issues include: the existence and nature of god, the afterlife, the soul, and pluralism. The course also examines insights and understandings proposed by some of the greatest thinkers in the discipline. The course is an objective academic study and is not faith-based.

Photography (PHOT)

PHOT 101 Black & White Photography I (3 credits)
Black and White Photography I is an introductory course in traditional film-based photography, teaching 35mm camera operation and wet darkroom techniques. Course includes 30 hours of lecture and 30 hours of lab per semester. No previous photography experience is required. A 35mm film camera capable of manual exposure operation is required. Course fee.

PHOT 102 Black & White Photography II (3 credits)
Black and White Photography II is an advanced course in photographic techniques, styles and aesthetics. The refinement of camera exposure techniques, negative quality and print quality is emphasized. Course includes 30 hours of lecture and 30 hours of lab per semester. A 35mm film camera capable of manual exposure operation is required. Course fee.

PHOT 103 Darkroom Workshop (3 credits)
The Darkroom Workshop is an individualized course in darkroom techniques. Students may experiment with a variety of films, papers and processes. The course concentrates on refining the photographic process with individualized supervision in the darkroom. Course fee. Usually offered in summer session.

PHOT 105 Photojournalism (3 credits)
Photojournalism is an introduction to the uses of photography as a journalistic tool. A portfolio based on a semester-long project is required. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

PHOT 131 Digital Photography I (3 credits)
Digital Photography I introduces students to the tools and processes of digital photography within a framework that emphasizes creative practice. Students learn fundamental skills necessary in the creation of digital photographic art, effective workflow management, and approaches to scanning and printing. Coursework includes lecture, studio work, and critique. This course is taught in the Mac lab studio using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

PHOT 191 Independent Study/Photography (1 credit)
PHOT 192 Independent Study: Photography (2 credits)
PHOT 193  Independent Study: Photography (3 credits)

PHOT 202  Alternative Photographic Processes (3 credits)
This course concentrates on the use of alternative processes, analogue and digital, in the creation of photographic images. Emphasis is on the development of a personal, self-expressive style through the use of traditional and non-traditional materials, media, equipment, and presentation strategies. Students taking PHOT 202 cannot receive credit for this course and PHOT 201. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

Prerequisite(s): PHOT 101 and PHOT 102

PHOT 206  Studio Lighting (3 credits)
This advanced course concentrates on the use of studio lighting procedures and equipment in the creation of portraiture and still life images in the studio and on location. Students taking PHOT 206 cannot receive credit for this course and PHOT 205 and/or PHOT 207. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

Prerequisite(s): PHOT 101 or PHOT 131

PHOT 209  The History of Photography (GH) (3 credits)
The History of Photography is a survey of the development of photography from its prehistory through today. The course includes the study of the interrelationships between photography and the other visual arts, the effects of changing technologies on the photographic image, and the contributions of major photographers and art movements, as well as historical perspectives. This course may require field trips.

PHOT 231  Digital Photography II (3 credits)
Digital Photography II continues the development introduced in Digital Photography I. Students learn in-depth processes of image manipulation to create complex photographic imagery culminating in the production of a portfolio. Course work includes lecture, studio work and critique. This course is taught in the Mac lab studio using current software. Course includes 30 hours of lecture and 30 hours of lab per semester. Course fee.

Prerequisite(s): PHOT 131

Physical Education (PE)

PE 101  Beginning Tennis (1 credit)
This course involves instruction of the fundamental skills of tennis. Students are required to physically practice basic tennis skills and drills. Rules of play, game scoring, and the health benefits of tennis are presented. No previous tennis experience is required.

PE 102  Intermediate Tennis (1 credit)
This course involves instruction in intermediate skills of tennis. Students are required to physically practice these skills. Advanced game strategies, drills for improvement, individual analysis and technique correction are presented. Basic tennis skill proficiency is strongly advised.

PE 104  Beginning Bowling (1 credit)
This course involves instruction of beginner bowling skills. Students are required to physically practice fundamental bowling skills. The selection and care of bowling equipment, game scoring, and bowling etiquette are presented. No previous bowling experience is required. Course fee.

PE 130  Hiking (1 credit)
This course is an introduction to hiking techniques. Students are required to physically complete hikes at trail locations in Harford, Baltimore, and Cecil Counties. Map-reading skills, hike preparation considerations and the physical benefits of hiking are presented. Students must provide their own transportation to trail locations. While no previous hiking experience is required, the physical ability to complete moderately difficult terrains is strongly advised.

PE 131  Beginning Badminton (1 credit)
This course involves instruction of beginner badminton skills. Students are required to physically practice fundamental skills of badminton, including basic stroke orientation, strategy, rules, and scoring. No previous badminton experience is required.

PE 133  Aqua Yoga (1 credit)
Aqua yoga combines the benefits of traditional yoga and continuous water exercise. This course requires students to physically participate in pool exercise designed to improve muscular endurance and flexibility. Swimming skills are not required. Course fee.

PE 134  Cross Training for Fitness (1 credit)
Cross Training exercise employs two or more training methods in one workout session to develop cardiorespiratory and muscular endurance. This course requires students to physically participate in a group exercise program that uses a variety of equipment, including barbells, steps, rowers, jump ropes, and resistance bands. Course fee.

PE 135  Indoor Cycling (1 credit)
Indoor cycling is performed on specialized stationary bikes that simulate an outdoor riding experience. Students are required to physically participate in an indoor group cycling program that includes off-bike muscular endurance and flexibility exercises to enhance cycling performance. Course fee.

PE 136  Cardiovascular Fitness (1 credit)
This course presents principles of cardiorespiratory endurance. Students are required to physically participate in a cardiorespiratory endurance program using stationary equipment, such as treadmills, cross trainers, and bikes. Course Fee.

PE 137  Circuit Training (1 credit)
Circuit training is a method of total body conditioning that involves movement from one exercise to another, using different pieces of equipment. Students are required to physically participate in a circuit training program designed to improve muscular endurance and cardiorespiratory endurance. Course fee.

PE 138  Jogging (1 credit)
This course presents principles and techniques of jogging. Students are required to physically participate in a jogging program. While no previous jogging experience is required, the physical ability to sustain high-impact cardiorespiratory exercise is strongly advised.

PE 147  Mountain Biking (1 credit)
This course presents principles and techniques of mountain bike riding. Students are required to physically complete bike rides at trail locations in Harford, Baltimore, and Cecil Counties. The mechanical, physical, and safety aspects of trail riding are presented. Students must provide their own transportation to trail locations, a mountain bike and a helmet. An understanding of basic mountain biking skills is strongly advised. Students should be physically able to bike moderately difficult terrain. Course fee.
PE 150 Aikido I (1 credit)
Aikido is a form of self-defense that uses the principles of nonresistance in order to debilitate the strength of the opponent. Students are required to participate in paired partner practice to learn movements that respond to a given attack with a specific defense. No previous Aikido experience is required.

PE 153 Karate (1 credit)
Karate is a form of self-defense that uses the hands and feet to deliver and block blows. Students are required to physically practice basic self-defense skills, flexibility exercises, and mental focus techniques. No previous Karate experience is required.

PE 154 Hatha Yoga (1 credit)
Yoga promotes spiritual health and physical fitness. This course requires physical participation in a yoga exercise program designed to improve muscular endurance and flexibility, breath control, and mental concentration. No previous yoga experience is required.

PE 155 Matwork Pilates (1 credit)
Pilates involves a series of controlled movements designed to improve core muscle stability and strength. This course requires physical participation in a Pilates mat exercise program. No previous Pilates experience is required.

PE 169 Aqua Fitness (1 credit)
This course presents principles and techniques of Aqua exercise designed to improve physical fitness. Students are required to physically participate in group water exercise that uses a variety of resources, including kickboards and swim bars. Swimming skills are not required. Course fee.

PE 171 Aqua Run I (1 credit)
Aqua run is an exercise program that includes continuous deep water movement to develop cardiorespiratory and muscular endurance. Students are required to physically participate in water exercise. While swimming skills are not required, students should feel comfortable exercising in deep water. Flotation devices that assist deep water running are provided. Course fee.

PE 178 Dance Movement (1 credit)
This course presents creative dance techniques, improvisation, and choreography. Students are required to physically practice dance movement skills, including jazz, ballet, and modern dance. No previous dance training is required.

PE 191 Independent Study: Physical Education (1 credit)
This course provides an overview of the concepts of wellness and physical fitness. Topics include fitness, nutrition, stress management, holistic health, and chronic health issues.

PE 228 Weight Training (1 credit)
This course presents principles of weight training, with an emphasis on proper form and technique. Students are required to physically participate in a weight training program designed to increase muscular strength or muscular endurance. No previous weight lifting experience is required. Course fee.

PE 229 Advanced Weight Training (1 credit)
This course presents principles of advanced weight training, with an emphasis on proper form and technique. Students are required to physically participate in a weight training program designed to increase muscular strength or muscular endurance. Previous weight lifting experience is strongly advised. Course Fee.

PE 230 Fitness Walking (1 credit)
This course presents principles and techniques of a walking program. Students are required to physically participate in a walking program designed to improve cardiorespiratory endurance.

PE 273 Cooperative Education III: Physical Education (3 credits)

Physical Science (SCI)

SCI 105 Physical Science I (GS) (3 credits)
Physical Science I is a development of physical science for nonscience majors. Insight into the methods of scientific investigation is stressed. Topics include motion and force, energy and energy transfer, properties of matter, heat, electricity, magnetism, and light. Emphasis is on building process skills and content understanding using a ‘hands on’ inquiry based teaching methodology. Insight into the structure, the beauty and the power of the physical sciences is stressed throughout the course. Course meets AAT (Associate of Arts in Teaching) degree requirements.

SCI 106 Physical Science Course Observations and Investigations: Matter (GL) (1 credit)
An introductory laboratory course in the basic techniques of measurements and analysis of the motion of bodies, heat properties of bodies and the characteristics of waves. Usually offered in fall semester. SCI 105 may also be taken concurrently. The course meets for a total of 30 laboratory hours per semester. Course fee.

SCI 107 Physical Science II (3 credits)
Physical Science II is a development of physical science for nonscience majors. Insight into the methods of scientific investigation is stressed with emphasis on the electromagnetic spectrum, nuclear phenomena, the nature of solid matter, and the impact of science, computer and technology on twenty-first century humans. Forces in matter, moving charges, atomic models, crystal structure, chemical reactions and environmental consequences are studied. Usually offered in spring semester.

SCI 108 Physical Science Course Observations and Investigations: Energy (1 credit)
This is an introductory laboratory course in the basic techniques of measurements and analysis of the electrical properties of bodies and the properties of atoms. Usually offered in spring semester. The course meets for a total of 30 laboratory hours per semester. Course fee.
SCI 109 Introduction to Energy & Sustainability (GS) (3 credits)
This course introduces students to the essential principles and fundamental concepts of energy necessary to build an energy literate society. Topics include the history of energy use, energy science and mechanics, electricity, sources of energy and use of energy, energy conservation and efficiency, environmental impacts, health effects, economics, policy, and future technology. Field experiences may be required; a reasonable alternative to the field trips will be available. Pre-requisite: Test into college level reading or successfully complete ENG 003; MATH 023 or MATH 024. This course meets for a total of 45 lecture hours. Course fee.
Prerequisite(s): MATH 002 or MATH 010 or MATH 023 or MATH 024 or (ENG 003 and MATH 002 or MATH 010 or MATH 023 or MATH 024)

Physics (PHYS)

PHYS 101 Introductory Physics I (GL) (4 credits)
This course is for students requiring noncalculus based physics. It is a presentation of the fundamentals of physics emphasizing mechanics, heat and wave motion. Physics is treated as a living, expanding adventure that can turn you on to a more perceptive view of physical reality. Insight into the structure, the beauty and the importance of physics is achieved by study and discussion of the central ideas and principles of physics and their relation to the everyday environment. Course meets for 45 hours of lecture and 30 hours of laboratory and 15 hours of discussion per semester. Usually offered in fall semester.
Prerequisite(s): MATH 109

PHYS 102 Introductory Physics II (GL) (4 credits)
This course is for students requiring noncalculus based physics, presenting fundamentals of physics including electromagnetism, relativity, structure of matter, atomic and nuclear physics. Course meets for 45 hours of lecture, 30 hours of laboratory and 15 hours of discussion per semester. Usually offered in spring semester.
Prerequisite(s): PHYS 101

PHYS 200 General Physics I Lab (GL) (1 credit)
This is an introductory laboratory course designed to accompany General Physics I (PHYS 203) that explores basic physical concepts in vectors, laws of motion, force and energy; and principles of mechanics, collisions, linear and angular momentum, rotation and gravitation. Course meets for 45 hours per semester. Pre or co-requisite: PHYS 203
Prerequisite(s): MATH 203, PHYS 203

PHYS 203 General Physics: Mechanics and Particle Dynamics (GS) (3 credits)
This course is the first semester of a calculus-based general physics course sequence. Laws of motion, force and energy; and principles of mechanics, collisions, linear momentum, rotation and gravitation are studied and used for problem solving. Course meets for 45 hours of lecture and 15 hours of discussion/problem solving per semester. Usually offered in spring semester.
Prerequisite(s): MATH 203

PHYS 204 General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL) (4 credits)
This second semester of a calculus-based general physics course sequence covers vibrations, waves and fluids; heat, kinetic theory and thermodynamics; electrostatics, circuits and magnetism. Course meets for 45 hours of lecture, 45 hours of laboratory, and 15 hours of discussion/problem solving per semester. Usually offered in fall semester.
Prerequisite(s): PHYS 203 and MATH 204

PHYS 205 General Physics: Electrodynamics, Light Relativity and Modern Physics (4 credits)
This third semester of a calculus-based general physics sequence covers electrodynamics, Maxwell’s equations, electromagnetic waves, geometrical optics, interference and diffraction, special theory of relativity, and modern physics. Course meets for 45 hours of lecture, 45 hours of laboratory, and 15 hours of discussion/problem solving per semester. Usually offered in spring semester.
Prerequisite(s): PHYS 204

Political Science (PS)

PS 101 American National Government (GB) (3 credits)
Students participate in an analysis of American national politics. Topics include the Constitution, political parties, interest groups, Congress, the Presidency, the Judiciary and recent public policies. Special consideration is given to the individual’s relationship with the national government and to the factors influencing decision-making in the national government.

PS 102 State and Local Government (GB) (3 credits)
Students participate in analysis of state and local government, politics and policies. Topics include theory, intergovernmental regulations, state constitutions, political parties, interest groups, legislatures, executives, courts, subdivision governments, metropolitan politics and current issues. An effort is made to understand variables and pressures involved in state and local governmental decision-making, especially in Maryland and Harford County. Usually offered in the evening.

PS 106 Introduction to Law (Same course as PL 101) (GB) (3 credits)
This course introduces students to basic legal concepts, principles, and procedures. It is designed to provide the student with an understanding of the structure of the U.S. legal system including the role of the judicial, legislative, and executive branches; the history of law in the United States; the role of attorneys, law enforcement and other legal professionals; ethical and professional issues facing legal professionals; basic categories of law; litigation principles; and alternative dispute resolutions.

PS 201 Introduction to International Relations (GB) (3 credits)
This course has two major goals. One goal is to survey contemporary international issues so that students have a comprehensive understanding of issues in the Middle East, China, Russia, Africa and other areas of current interest. A second goal is to introduce students to the methods and objectives of foreign policy-making, the theory of the balance of power, the principles of international law and organization, and the development of regional integration such as in Europe. 3 credits.
Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060), ENG 101
**PS 203 Comparative Politics and Governments (3 credits)**
This course introduces students to the comparative study of politics and governments. Following an overview of political systems, the instructor selects representative countries from both the developed and developing worlds and highlights issues including political culture, participation, government structures, and public policies in each. Using case studies, students engage in comparative political analysis of both historical processes and current issues facing countries domestically and internationally. 3 credits.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060), ENG 101

**PS 204 Urban Government and Politics (GB) (D) (3 credits)**
Students participate in analyses of urban government and politics. The course examines the evolution of urban/metropolitan development, theory, and structure in the United States; identifies the key actors and addresses their roles both within the city and as liaisons with local, state and federal governments; and addresses the most pressing issues currently facing these jurisdictions, including: economic development, suburbanization, city infrastructure and finance, race relations and immigration, poverty, housing, law enforcement, and education.

Prerequisite(s): ENG 012 or ENG 101 or ENG 018

**PS 263 Special Topics: (3 credits)**
This course will enable students to increase their understanding of contemporary issues in international relations in a global context. It places emphasis on gaining critical perspectives on contemporary theory and practice—the goal is to develop the student’s ability to evaluate and explain contemporary issues from historical and theoretical perspectives in the disciplines of international relations. After a review of how nation-states interact in the international arena, we will travel to Europe and focus primarily on the two types of non-state actors (intergovernmental and nongovernmental) and the roles they play. We will visit and be briefed by representatives at the United Nations in New York, the European Union headquarters in Brussels, the International Court of Justice in The Hague and the Bretton Woods Project in London. This course is designed to address issues such as regionalization, globalization, international conflict, the future of democracy and others in an interdisciplinary way and provide a solid grounding in research methods in the social sciences. Students will gain a deep understanding of how international organizations affect the practice of world politics because they will experience it for themselves. A course fee of approximately $2500 covers all travel expenses. Pre-requisite: Instructor permission.

**PS 281 Political Science Internship (1 credit)**
Students work as interns in governmental agencies, in elected officials’ offices or on political campaigns. The purpose of the internship includes providing students with practical experiences in politics and government, and giving to students the opportunity to determine if they desire a career in government. A wide variety of field placements exists.

**PS 282 Political Science Internship (2 credits)**
Students work as interns in governmental agencies, in elected officials’ offices or on political campaigns. The purpose of the internship includes providing students with practical experiences in politics and government, and giving to students the opportunity to determine if they desire a career in government. A wide variety of field placements exists.

**PS 283 Political Science Internship (3 credits)**
Students work as interns in governmental agencies, in elected officials’ offices or on political campaigns. The purpose of the internship includes providing students with practical experiences in politics and government, and giving to students the opportunity to determine if they desire a career in government. A wide variety of field placements exists.

**PS 284 Political Science Internship (4 credits)**
Students work as interns in governmental agencies, in elected officials’ offices or on political campaigns. The purpose of the internship includes providing students with practical experiences in politics and government, and giving to students the opportunity to determine if they desire a career in government. A wide variety of field placements exists.

**PS 285 Political Science Internship (5 credits)**
Students work as interns in governmental agencies, in elected officials’ offices or on political campaigns. The purpose of the internship includes providing students with practical experiences in politics and government, and giving to students the opportunity to determine if they desire a career in government. A wide variety of field placements exists.

**PS 286 Political Science Internship (6 credits)**
Students work as interns in governmental agencies, in elected officials’ offices or on political campaigns. The purpose of the internship includes providing students with practical experiences in politics and government, and giving to students the opportunity to determine if they desire a career in government. A wide variety of field placements exists.

**Practical Nursing (PN)**

**PN 118 Maternal-Child Health for Practical Nursing (4 credits)**
Students use the nursing process, within the scope of practical nursing, to identify physiological and psychological stresses interfering with the well-being of the childbearing woman, the newborn infant, and children. The emphasis of this course is on providing basic nursing care to assist the client to adapt to or eliminate stresses which interfere with maternal and child health. Five weeks; summer term only. Course includes 30 hours of lecture and 70 hours in a clinical setting per 5-week summer term. Current CPR Certification for Healthcare Providers. Course fee.

Prerequisite(s): NURS 105 and NURS 107 and NURS 112, PN 121

**PN 121 Medical-Surgical Nursing for Practical Nursing (5 credits)**
Within the scope of practical nursing, students use the nursing process in a structured setting to provide nursing care for clients who are experiencing acute or chronic physiological stressors throughout the life span and help promote physiological and psychological well-being. Ten weeks; summer term only. Course includes 50 hours of lecture and 70 hours in a clinical setting per 10-week summer term. Course fee.

Prerequisite(s): NURS 105 and NURS 107 and NURS 112, PN 122

**PN 122 Practical Nursing Issues (0.5 credits)**
This course provides students with information about issues and trends that influence their careers in practical nursing. Content includes the development of nursing, legal and ethical issues affecting nursing, and career opportunities and challenges. Five weeks; summer term only. Course includes 5 hours of lecture per 5-week summer term.

Prerequisite(s): NURS 105 and NURS 107 and NURS 112, PN 118, PN 121
Psychology (PSY)

PSY 101 General Psychology (GB) (3 credits)
A broad spectrum of research and theoretical concepts are presented to provide a balanced understanding of human behavior. Topics include the biological basis of behavior, human development, personality, health and wellness, learning and memory, social diversity, abnormal behavior and therapy.

Prerequisite(s): (ENG 012) or (ENG 101) or (ENG 018)

PSY 202 Child Psychology (3 credits)
This course studies the developing person from conception through late childhood. Current research and applications are used to explain biosocial, psychosocial and cognitive development. The importance of specific environmental contexts in development is emphasized. Topics include bonding and attachment, language development, abuse and neglect, parenting, gender role development, mental retardation and giftedness, peer relationships, and moral development.

Prerequisite(s): PSY 101

PSY 204 Abnormal Psychology (3 credits)
This course presents the study of abnormal behavior including anxiety, mood disorders, schizophrenia, substance abuse disorder, and other DSM categories. Topics include diagnosis, classification, causes, prevention and treatment modalities with emphasis on eclectic, biological, and cognitive models, as well as cultural influences, community needs and resources.

Prerequisite(s): PSY 101

PSY 205 Psychology of Women (D) (3 credits)
This course is a survey of the socialization, gender role development, mental health, special concerns and life span changes of women. The relationship of psychology to the position and roles of women is also examined from a cross-cultural perspective. Usually offered in spring semester.

PSY 207 Educational Psychology (3 credits)
Educational Psychology focuses on the learning process and related ideas such as development, individual differences, cognition, effective learning environments, motivation and exceptionalities. Emphasis is placed on studying the development of effective teaching-learning relationships in the American school environment. Connections among a variety of disciplines are stressed, as well as links to the real world beyond the classroom.

Prerequisite(s): PSY 101

PSY 208 Alcohol/Drugs: Impact on Behavior (3 credits)
This course studies the physiological and psychological effects of alcohol and depressants, psychoactive drugs, stimulants and hallucinogens on the user and abuser. Topics include the effects of drugs taken in combination, drug classification, absorption, distribution, metabolism, half-life, tolerance, cross-tolerance and elimination. Usually offered in spring semester.

Prerequisite(s): PSY 101

PSY 209 Social Psychology (D) (3 credits)
This course incorporates psychological and sociological theory and research as applied to contemporary group situations. A wide range of issues concerning human experience in group settings is explored, including interpersonal attraction, gender roles and sexism, cross-cultural and within cultural differences, attitude formation based on group membership, prejudice, conflict, power and aggression between groups, pro-social behavior and group conformity.

Prerequisite(s): PSY 101

PSY 212 The Helping Relationship (3 credits)
This is an introductory counseling skills course that emphasizes developing skills and techniques to facilitate the helping process, through an understanding of helping theory and the dynamics of the helping relationship. Helper self development will be achieved via in-class exercises and the use of a pseudo-client. Usually offered in fall semester.

Prerequisite(s): PSY 101

PSY 213 Human Relations (B) (3 credits)
This course is a learning experience designed to provide students with skills necessary to develop sensitivity to others, to become more effective listeners, and to convey awareness, understanding and patience. Students will learn strategies to become more effective in interacting with diverse people as individuals, in groups, organizations, and in the community.

PSY 214 Human Development Across the Life Span (3 credits)
This course studies the developing person across the life span from conception to death. Numerous theoretical perspectives are applied to studying biological, cognitive, psychosocial change. Emphasis is given to the role of genetic influences as well as the specific environmental contexts in which development occurs.

Prerequisite(s): PSY 101

PSY 216 Adolescent Psychology (3 credits)
This course presents the period of adolescence as a distinct stage in the lifespan, with its own unique biological, psychosocial, and cognitive issues. Current theoretical perspectives and research findings are used to explain and explore such topics as the challenges of puberty, identity development, risk taking behavior, intimate relationships, and the impact of cultural variables on adolescent development. Usually offered in the Spring semester.

Prerequisite(s): PSY 101

PSY 263 Special Topics: (3 credits)
Special Topics: Survey of Biopsychology Biopsychology is a rapidly growing branch of psychology that studies the relationship between the structure and functioning of the nervous system and behavior. This course will introduce students to the biological bases of behavior by exploring research findings of biopsychologists in explaining such behaviors as wakefulness and sleep, learning and memory, emotions and stress, psychological disorders such as schizophrenia and depression, and reproductive functioning. New information in this field is rapidly increasing; as students examine the current level of knowledge in this field and develop a framework of biopsychological principles, they will become prepared to incorporate the future knowledge that is sure to follow.

Prerequisite(s): PSY 101
PSY 273  Cooperative Education III: Psychology (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

PSY 274  Coop Educ IV Psychology (4 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experiences may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Religion (RELG)

RELG 207  Literature and Religious Thought of the Old Testament (GH) (3 credits)
This course is a survey and analysis of the literature and religion of the Old Testament within the context of the ancient Near East. The course is an objective academic study and is not faith-based.

RELG 208  Literature and Religious Thought of the New Testament (GH) (3 credits)
This course is a survey and academic analysis of The New Testament, related early Christian literature, and the historical, archaeological, and cultural contexts that influenced these documents. The course is an objective academic study and is not faith-based.

RELG 210  Comparative Religion (GH) (D) (3 credits)
This course is a comparative overview of the most prominent living religions. Each religion is approached from the view of the religion's history, culture, beliefs, rituals, and theologies.

Sociology (SOC)

SOC 101  Introduction to Sociology (GB) (D) (3 credits)
This course is the scientific study of society. Detailed consideration is given to culture, social control and deviation, social groups, social instruction, social stratification, ethnic minorities, demography, the community, social change and collective behavior.

SOC 102  Social Problems (GB) (D) (3 credits)
This course places major emphasis on a variety of contemporary American and world social and cultural issues – ranging from social justice issues and diversity (gender, race, and social class) to criminal justice issues and violence to global concerns such as the ecological system, war, and terrorism. Analysis of multiple causation and past historical origins are connected to contemporary problems.

SOC 200  Introduction to Social Work (3 credits)
The study of social work as a professional endeavor is the focus of this class. Students explore the scope of social welfare in connection with social change, social control and the relationship between services and clients. This course is of value to sociology and psychology majors who intend to work as mental health aids or in other allied areas.

SOC 201  Marriage and the Family (GB) (D) (3 credits)
This course provides analysis of the social institution of the family through theory and research in the field. Emphasis is placed on the social organization of the family in its structure and its function, including detailed consideration of historical cultural factors, social class elements, premarital matters, marriage adjustment and the family life cycle.

SOC 212  Race, Class & Gender in the United States (3 credits)
This course examines the social construction, historical context and intersection of social class, race, ethnicity, gender, sex, sexual orientation, and gender identity, primarily in American society. In this course, students will also explore how these identities affect them in their daily lives, and how they can better understand people of their own or different backgrounds.

Prerequisite(s): (ENG 012) or (ENG 018) or (ENG 060) or (ENG 101) and (SOC 101)

SOC 213  Criminology (same course as CJ 213) (3 credits)
This course provides a sociological study of the causes of crime and the relationships between criminal behavior and various social factors such as age, sex, race, religion, socioeconomic status, etc. Included also are studies of crime rates, white-collar crime and victimless crimes.

Prerequisite(s): SOC 101

SOC 214  Juvenile Delinquency (3 credits)
The student is introduced to the nature and extent of juvenile delinquency. Emphasis is placed on the causative factors involved and methods of control and prevention. Special attention is given to the relationship between delinquency and the social structure.

SOC 263  Special Topics: Food, Culture, and Society (3 credits)
This course is a holistic examination of the production, consumption, and symbolic meaning of food throughout time and across the globe. Specially, this course examines food and its relationship to society's social structures and gender, cultural identity, religion, politics, economics, and social movements. The course includes food demonstrations, guest lecturers, films, and a field trip. This course is cross listed as an anthropology and sociology course, but credit can only be obtained for one, not both designations.

SOC 273  Coop Educ III Sociology (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

Spanish (SPAN)

SPAN 101  Elementary Spanish I (3 credits)
This course develops communicative proficiency in Spanish at the elementary level. Students also gain insights into Spanish-speaking cultures. It is primarily designed for students who have never studied Spanish. No prerequisite. Usually offered in fall semester.

SPAN 102  Elementary Spanish II (3 credits)
This course continues to develop communicative proficiency in Spanish at the elementary level. Students also explore aspects of the Spanish culture. Usually offered in spring semester.

Prerequisite(s): SPAN 101
SPAN 201  Intermediate Spanish I (3 credits)
This course continues to develop language skills in Spanish at an advanced level. Cultural materials are also integrated into course content and activities. Usually offered in fall semester.
Prerequisite(s): SPAN 102
SPAN 202  Intermediate Spanish II (3 credits)
This course emphasizes the continued refinement and development of language skills in Spanish at an advanced level. Students also discuss cultural materials. Usually offered in spring semester.
Prerequisite(s): SPAN 201
SPAN 203  Survey of Spanish Literature I (GH) (3 credits)
This course is a study of Spanish culture, civilization and literature from the Middle Ages to the 1800s. All work is in Spanish. Usually offered in fall semester.
Prerequisite(s): SPAN 202
SPAN 204  Survey of Spanish Literature II (3 credits)
This course is a study of Spanish culture, civilization and literature from 1800 to the present. All work is in Spanish. Usually offered in spring semester.
Prerequisite(s): SPAN 202
SPAN 205  Advanced Conversation (D) (3 credits)
This course develops oral proficiency of students who are in need of applying their grammatical knowledge to real life situation discourse. Grammatical concepts from elementary and intermediate classes are practiced and expanded for more extensive dialogue. Subject matter stems from themes relative to language, cultural, global, and political issues. Students apply their speaking skills by engaging in conversations, panel discussions, short presentations, interviews, and group work. Usually offered in fall semester.
Prerequisite(s): SPAN 202

Student Development (SDEV)

SDEV 015  Personal & Academic Dev (3 credits)
This course is designed to help students identify and develop their career/life and academic goals. Students will clarify their interests and skills while developing effective academic and personal goal-setting techniques. This course also focuses on setting and achieving short-term academic goals, preparing for success in college through effective study skill techniques, and learning to accept responsibility for one’s behavior. May not be used to meet graduation requirements.

SDEV 103  Career and Life Planning (3 credits)
This course is designed to assist each student to become more aware of the processes of career and life planning and their relationship to interests, values, abilities and goals. It prepares the student to establish, change or confirm career goals through investigation and integration of the theory of the developmental process of career decision-making, self-analysis and a survey of career information. Course fee.

SDEV 100  Success in College and Beyond (1 credit)
This course is designed to help students develop and refine skills necessary for success in college and in life. While encouraging students to take responsibility for their behavior, it provides practice in a variety of strategies that can lead students to greater academic, professional, and personal success. Students examine study skill strategies, creative and critical thinking, and personal self-management. In addition, students are encouraged to explore and change self-defeating behaviors which may diminish their ability to succeed. Permission of instructor required. Course fee.

SDEV 111  Personalized Career Exploration (1 credit)
This course provides individualized assistance to students in developing skills, competencies, and knowledge essential to career exploration and decision making. Students fulfill a learning contract based on needs for self-assessment and occupational research. Minimum of five hours with instructor and twenty hours of lab and research assignments. Permission of instructor required. Course fee.

SDEV 112  Job Search Techniques (1 credit)
This course provides assistance to students in developing skills, competencies and knowledge essential in securing employment. Students learn the use of technology in job searching, the writing of effective resumes and cover letters and necessary interviewing skills. Permission of instructor required.

SDEV 271  Cooperative Education I (1 credit)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

SDEV 272  Cooperative Education II (2 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

SDEV 273  Cooperative Education III (3 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.

SDEV 274  Cooperative Education IV (4 credits)
Cooperative Education experiences are work-based learning experiences with an employer for a specific period of time. The experience may be paid and must be related to the career and specific curriculum in which the student is enrolled. It is an opportunity for the student to supplement/integrate classroom learning with learning from a related work setting. A student registers for one to four credits of Cooperative Education in the curriculum in which he/she is enrolled.
Theatre (THEA)

THEA 101 Introduction to Theatre (GH) (3 credits)
This course introduces students to the basic elements of theatrical performance and the components that make up theatre production, including understanding the roles of the actor, director, playwright, and designer. Students explore the varied methods of presentation, concepts, vocabulary, and the range of techniques and experiences involved in a production. Attendance at and critical evaluation of theatrical performances and participation on a performance crew may be required.

THEA 102 Acting I (3 credits)
This course introduces students to basic acting skills, including exercises in characterization, relaxation and concentration, verbal and nonverbal communication, and expression. Students are required to attend or participate in productions. Course includes 30 hours of lecture and 30 hours of studio per semester. This course may require field trips.

Prerequisite(s): THEA 101

THEA 103 Acting II (3 credits)
This course includes the study of textural analysis, scene study, and the process of developing characterization in different historical styles of performance. Students are required to attend or participate in productions. Course includes 30 hours of lecture and 30 hours of studio per semester. This course may require field trips.

Prerequisite(s): THEA 102

THEA 104 Stagecraft I (3 credits)
This course is a practical study of basic technical production with emphasis in scenic construction and lighting techniques. Topics include scenic design, construction, rigging, painting, and the handling of lighting instruments. This course consists of lecture as well as shop hours. Students are required to participate as technical crew in departmental productions. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

THEA 105 Stagecraft II (3 credits)
This course continues the study of technical production needs of any theatrical production with an evaluation of the theatre production and an emphasis on the supervision of running crews for preparation and performance. This course consists of lecture as well as shop hours. Students are required to participate as technical crew in departmental productions. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

Prerequisite(s): THEA 104

THEA 106 Script Analysis: From Page to Stage (GH) (3 credits)
This course focuses on the analysis of dramatic texts as plans for public performance. Students practice reading, researching, and planning productions based on a variety of important international plays. Attendance at and critical evaluations of performances and participation in performance projects are required. Course fee.

Prerequisite(s): THEA 102

THEA 191 Independent Study: Theatre (1 credit)

THEA 192 Independent Study: Theatre (2 credits)
This course allows the student to explore special topics in theatre.

THEA 193 Independent Study: Theatre (3 credits)

THEA 201 Fundamentals of Play Directing (3 credits)
This course introduces students to the basic techniques, principles, and genres of directing a theatrical production. Topics include the director’s role, composition, script analysis, movement and rhythm, production preparation, and procedures. At the conclusion of the course, the student prepares a production for performance. Additional time outside of class for rehearsals is required.

Prerequisite(s): THEA 101 and THEA 104

THEA 202 Scene Design (3 credits)
This course introduces theater forms and spaces through the various design elements and locales of a scenic environment. Students study the principles and techniques of scenic design as it pertains predominately to the stage, as well as television and film. Course includes 30 hours of lecture and 30 hours of studio per semester. This course may require field trips. Course fee.

Prerequisite(s): THEA 104

THEA 204 Costuming (3 credits)
This course introduces the basic principles of costume design and construction. Students explore costume patterning, construction methods, draping, sewing technique, equipment usage, and skills necessary to the entire costuming process. Students are expected to serve on a costume crew for one production during the semester. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

Prerequisite(s): THEA 101 and THEA 279

THEA 205 Stagecraft II (3 credits)
This course continues the study of technical production needs of any theatrical production with an evaluation of the theatre production and an emphasis on the supervision of running crews for preparation and performance. This course consists of lecture as well as shop hours. Students are required to participate as technical crew in departmental productions. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

Prerequisite(s): THEA 104

THEA 221 Vocal Performance for the Stage (3 credits)
This course includes the study of voice production with extensive exercises in developing a wide range of controls in pitch, volume, diction, and quality to meet the standards of acting and media. Through a highly technical phonetic approach, students learn how to reduce their own and produce other American speech regionalisms and cultural accents. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

Prerequisite(s): THEA 102

THEA 222 Movement for the Actor (3 credits)
This course introduces physical techniques that help develop a movement vocabulary for the actor. Starting with an examination of the body, the student applies the basic movement vocabulary and terminology of ballet, modern and jazz styles, mime, neutral mask, physical comedy (falls, lifts, timing, partnering), and scripted scenes with a strong physical component. This course may require field trips. Course includes 30 hours of lecture and 30 hours of studio per semester.

Prerequisite(s): THEA 101 and THEA 102
THEA 223 Makeup for the Performer (3 credits)
This course is a studio course in which students develop an understanding of the art of traditional makeup application predominately for the stage as well as for television and film. Through the use of cosmetics and prosthetics, students learn to execute corrective, character, and age makeup. Students are expected to serve on a makeup crew for one production during the semester. Course includes 30 hours of lecture and 30 hours of studio per semester. Course fee.

Prerequisite(s): THEA 101 and THEA 279

THEA 273 Cooperative Education III Theatre (3 credits)
The Cooperative Education Program provides students with a planned and supervised learning environment allowing them to apply classroom learning to the world of work. The program enables students to become better acquainted with both theory and practice in their chosen career field. 37.5 hours per credit (112 hours per 3 credit course).

THEA 279 Theatre Workshop I (1 credit)
This course is a practical application of classroom theory and technique demonstrated through crew and/or cast participation in a specific theatrical production to be presented on campus. Students elect or are assigned a task and work as a crew or cast member. Acting and/or dancing in a production is by audition only. Credit is awarded upon satisfactory completion of the task or role. Students are required to participate in productions.

Prerequisite(s): THEA 104

THEA 280 Theatre Workshop II (1 credit)
This course is a practical application of classroom theory and technique demonstrated through crew and/or cast participation in a specific theatrical production to be presented on campus. Students elect or are assigned a task and work as a crew or cast member. Acting and/or dancing in a production is by audition only. Credit is awarded upon satisfactory completion of the task or role. Students are required to participate in productions.

Prerequisite(s): THEA 104

THEA 281 Theatre Workshop III (1 credit)
This course is a practical application of classroom theory and technique demonstrated through crew and/or cast participation in a specific theatrical production to be presented on campus. Students elect or are assigned a task and work as a crew or cast member. Acting and/or dancing in a production is by audition only. Credit is awarded upon satisfactory completion of the task or role. Students are required to participate in productions.

Prerequisite(s): THEA 104

Visual and Performing Arts (VPA)

VPA 201 Visual and Performing Arts Survey (GH) (D) (3 credits)
This course introduces students to the areas of visual arts, dance, music and theater through an exploration of representative works. This experience enhances self-expression and provides a better understanding of the human experience. This course may require field trips.
CREDIT BY EXAMINATION

1. All Division Exams require faculty appointment; see the HCC Test Center for details.

2. Academic advising is strongly suggested for students who intend to transfer.

3. Some exams require additional papers, essays, or lab experience. Please contact the Test Center for details.

4. HCC is an Open Center for CLEP (https://clep.collegeboard.org/?excmpid=VT-00005/) and DSST (https://www.getcollegecredit.com/) exams. If you are having credit applied elsewhere, you may still test at HCC. The list below is not a comprehensive listing of all available CLEP (https://clep.collegeboard.org/?excmpid=VT-00005/) and DSST (https://www.getcollegecredit.com/) exams; see Test Center staff for details or visit the CLEP (https://clep.collegeboard.org/?excmpid=VT-00005/) or DSST (https://www.getcollegecredit.com/) websites.

5. AP and IB exams are given in conjunction with coursework taught in high school. AP credit is awarded only for AP exams; IBO credit is awarded after review of official IB transcript.

* Some DSST exams revised and rescaled on a 200-800 scale in 2008. New American Council on Education (ACE)-recommended credit-granting score for revised exams is 400. HCC abides by the ACE recommendations for CLEP and DSST exams.
EMPLOYEE DIRECTORY

For a current online directory visit our online employee directory.

Jacqueline Jackson
Interim President
Vice President for Student Affairs and Institutional Effectiveness
P HD, Old Dominion University
BS, Western Illinois University
MS, Western Illinois University

College Administration

A

Todd Abramovitz
Dean of Arts and Humanities
BA, Towson University
MA, Towson University

Thomas Alcide
Chief Information Officer
MS, Towson University
BS, Towson University

C

Sandra Clifford
Director for Procurement
JD, Touro College
BA, State University of New York - Geneseo

D

Denise Dregier
Director for College and Alumni Development
AA, Community College Baltimore County

Nancy Dysard
Director for Communications
AA, Harford Community College
BS, Towson University

E

Patrick Elliott
Associate Vice President for Enrollment Management
EDD, Frostburg State University
MIM, University of Maryland College Park
BA, American University

H

Richard Hartwell
Associate Vice President for Analytics & Planning
MS, University of Pennsylvania
BS, University of Michigan Ann Arbor

Nicole Hoke-Wilson
Director for Disability and Student Intervention Services
BA, University of Delaware
MA, Towson University

J

Jacqueline Jackson
Interim College President
MS, Western Illinois University
BS, Western Illinois University
PHD, Old Dominion University

Trevor Jackson
Vice President for Finance & Administration
MBA, Kutztown University of Pennsylvania
BS, Kutztown University of Pennsylvania

K

Kelly Koermer
Dean of Community Education, Business & Applied Technology
JD, University of Baltimore
BS, Stevenson University
AA, Stevenson University

M

Sherry Massoni
Assistant Dean of Continuing Education and Training
BS, Towson University
MA, Notre Dame of Maryland University

Courtney Mitchell
Registrar
BS, Salisbury University
MBA, Wilmington University

Elizabeth Mosser
Associate Dean of Academic Operations
MA, Ohio State University
BA, West Chester University

O

Kelly Otis
Director for Admissions
MED, West Chester University
BS, Temple University

P

Pamela Pape-Lindstrom
Dean of Science, Technology, Engineering, and Mathematics
BS, University of Miami
PHD, University South Carolina-Columbia

Laura Preston
Dean of Nursing & Allied Health
BSN, University of Maryland Global Campus
MS, University of Maryland Global Campus

R

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MA, Loyola University Maryland  
BA, Hampton University

The directory information in the 2020-2021 Academic Catalog is current as of May 1, 2020. For a current online directory visit our [online employee directory](http://example.com).
ENROLLMENT INFORMATION AND POLICIES

Apply to the College

Harford Community College practices an open door policy of enrollment. Students are enrolled at the College without regard to race, color, religion, sex, sexual orientation, national origin, age, disability or any other characteristic protected by law. Some restrictions exist for applicants who are currently enrolled in high school, are under 16 years of age, are not U.S. citizens or are deemed incapable of exhibiting and practicing professional student behavior. The College prohibits the enrollment of individuals listed on the National or Maryland Department of Public Safety and Correctional Services Sex Offender Registry or with the Harford County Child Advocacy Unit.

As a requirement for student receiving federal financial aid, Harford Community College must check the validity of a high school degree (34 C.F.R. 668.16). If Harford Community College or the Department of Education has reason to believe that the high school diploma is not valid or was obtained from an entity that does not provides secondary education, the college must review further. Acceptable documentation for checking the validity of a student’s high school completion may include the diploma itself or a final transcript that shows all the courses the student took. In addition, HCC may contact the state department of education, if that department has jurisdiction over the high school, in the state which the student earned the high school diploma. HCC may also consult with other colleges regarding the validity of high school diplomas.

If you are under 16 years of age you must contact the Assistant Director for Admissions at 443-412-2311. If you are currently enrolled in high school you should contact Admissions at 443-412-2109 or by e-mail at admissions@harford.edu (%20admissions@harford.edu).

Application Procedure

All students applying to the College should submit an application and transcripts, if required, to:

Admissions
Harford Community College
401 Thomas Run Road
Bel Air, Maryland 21015-1698

The Application for Admission is available online and in print at www.harford.edu/apply.

Non U.S. citizens, except for F-1, J-1, or B visa students, may apply online. Valid photo identification verifying current immigration status (permanent resident card or applicable visa) must be presented in person to the Admissions Office in order to be accepted. Students without valid immigration status will be charged out-of-state tuition rates unless eligible for the MD Dream Act (SB 537).

Transcript Requirements

1. Send official high school or GED transcripts to the Admissions Office if:
   • Applying for financial aid.
   • Still enrolled in high school or have graduated within the last three years and the academic goal is an Associate degree or Certificate.

2. Send official college transcripts to the Admissions Office if:
   • Applying for veterans’ benefits, in which case Veteran’s Administration regulations require that student is an Associate degree or Certificate candidate.
   • Desire to have previous college credits evaluated for transfer to Harford Community College. Transcripts will only be evaluated if the student has declared a program of study. Secure transmission of official transcripts may be sent to transcripts@harford.edu.
   • Did not graduate and want to determine if exempt from the College’s mathematics and English assessment requirement.

3. If the student is enrolled at another college or university and is taking Harford Community College courses to transfer back to that institution, transcripts are not required. Proof of current enrollment at the home institution is required at the time of application (valid college ID, copy of grades or letter from school official).

Personal Injury

At enrollment, students agree to assume the risks and liabilities entailed in any course requirement. The student releases and holds harmless Harford Community College, its trustees, faculties, and administration from any injury sustained through his/her actions or the actions of other students enrolled in the course.

Vaccinations

The College does not require proof of immunizations for admissions. However, students who are admitted into the nursing or allied health programs may be required to provide documentation of a recent physical examination and proof of current immunizations.

Enrollment Status

Students are enrolled in the College based on their academic goal:

1. taking courses
2. degree seeking
3. certificate seeking

In order to be eligible for financial aid consideration, students must declare that they are seeking a degree or certificate and must hold a high school diploma or GED.

Full-time Students

Any student enrolled in twelve or more credit hours per semester is considered a full-time student. Full-time students are urged to limit employment to fifteen to twenty hours per week.

Part-time Students

Any student enrolled in fewer than twelve credit hours per semester is considered a part-time student. Students employed full-time are urged to enroll in no more than six credit hours per semester.

Registration and Class Schedule

Registration refers to the process of enrolling in courses. Students who are not currently registered may register up to the start time of any course. All persons attending a course must be registered for that course. The registration procedures vary, depending upon whether a student is a new or continuing student with a goal of degree/certificate completion or a goal of taking courses. More specific information about registration is published in the Schedule of Classes, available as follows:

To request a change in residency, students must submit a Change in Residency Form along with appropriate documentation to the Registration and Records Office. Forms are available in the Registration and Records Office. A request for a change in residency must be received prior to the start of the semester/term. Otherwise, any approved change in residency will apply to the next semester.

The College shall consider the following factors for substantiation of residency:

1. Ownership or rental of local quarters
2. Substantially uninterrupted physical presence, including the months when the student is not in attendance at the College
3. Maintenance in Maryland and in Harford County of all, or substantially all, of the student’s possessions
4. Payment of Maryland state and local piggy-back income taxes on all income earned, including income earned out of state
5. Registration to vote in Maryland and Harford County
6. Registration of a motor vehicle in Maryland, with a local address specified, if the student owns or uses such a vehicle
7. Possession of a valid Maryland driver’s license with a local address specified, if the student is licensed anywhere to drive a motor vehicle

Questions regarding residency and tuition rates should be referred to the Registration and Records Office.

Concerning Behavior Reports

As members of the campus community, students have a shared ethical responsibility to report concerning behaviors they experience or observe. Concerning behaviors include emotional distress, unusual behavior, abuse of alcohol or illicit drugs, thoughts of suicide or homicide, disturbing written material, and other troubling behaviors. If you experience or you know or observe someone who exhibits any of these behaviors, it is your duty to report them using the Report Form for Concerning Behavior on OwlNet. You may also report the situation to the Associate Vice President for Student Development or designee, Student Center, Room 254. Thank you for doing your part to help someone in need!

While HCC does not have a counseling center, the College does have a Student Intervention and Prevention Team (SIP). Members of the SIP team will review the report and provide assistance to the student as necessary. The SIP team may meet with the student in question, assess the situation, provide resources, and/or mandate an assessment. The College retains the authority to impose an interim suspension, if such action is necessary to:

1. preserve the safety of persons or property and/or
2. if the student poses an ongoing threat of disruption of, or interference with, the normal operations of the College.

Communication and Emergency Notification

Email Accounts (OwlMail)

The College uses on-campus student email accounts, known as OwlMail, through OwlNet to officially communicate with students. As a result, students are responsible for accessing this email account on a regular basis.
**OwlNet Account**

All students receive an OwlNet account. This web portal allows students to access their College email account; receive College announcements and news; and conduct College business, such as registering for classes, requesting transcripts, and making payments. As a result, students are responsible for accessing this account on a regular basis and protecting the confidentiality of their access code.

**Current Mailing Address**

Students are responsible for maintaining a current mailing address with the College. All address changes should be reported in the College’s online system OwlNet or to the Registration and Records Office. If a student owes a debt to the College and does not maintain a current mailing address, that debt may be sent to a collection agency without further notice to the student. In this event, the student will owe an additional collection fee.

**Texting Policy**

By signing the Admissions application, students allow Harford Community College to reach out to them via call or text to any number listed on the application with College-related information. Students may ‘opt-out’ of the texting program by replying ‘Stop’ to any text they receive.

Prospective students (those who have not applied) may be contacted by text or phone call if information is provided on an inquiry card or other College form.

**Emergency Notification**

Students are requested to provide two types of emergency notification contacts:

1. an emergency contact person and phone number in case the student has a personal emergency, and
2. telephone and/or email contact information which will only be used in the event of a non-scheduled campus closing, or if there is a serious situation on campus.

Students will be requested once a semester to provide or update this information.

**Academic Skills Assessment**

**Requirements for Assessment**

**DEGREE AND CERTIFICATE SEEKING STUDENTS**

Recent high school graduates will be required to complete a New Student Advising session. For more information, visit Getting Started at the Admissions website or contact the Admissions Office at 443-412-2109.

Students entering HCC with a high school GPA of 3.0 or higher can register for college-level English and mathematics courses. Applicants will be required to submit official high school transcripts. The 3.0 GPA should be: unweighted, on a 4.0 scale, and within the preceding 5 years; junior high school GPA is acceptable.

Students with qualifying scores in SAT, ACT, PARCC, Accuplacer, AP or IB tests give students a College and Career Readiness designation. Official copy of qualifying scores in all tests should be sent to Admissions for review and consideration.

Students who have not completed College Level English or Math, do not have a high school GPA of 3.0, nor earned qualifying SAT or ACT scores, may be referred to the Test Center to complete the Academic Skills Assessment. Exemptions for taking the Academic Skills Assessment are listed below.

**English**

- SAT Evidence-Based Reading and Writing score of 480 or higher
- ACT English and Reading score of 21 or higher
- PARCC English 10 OR 11 score of 4 or higher (750 or higher scaled score)
- GED Reasoning through Language Arts score of 165 or higher
- AP English Language & Composition OR English Literature & Composition score of 3 or higher
- IB Lang. A: Literature SL or HL OR Lang. A: Language & Literature SL or HL score of 4 or higher
- Next-Generation Accuplacer Writing and Reading score of 263 or higher

**Math**

- SAT Math Score of 530 or higher (570 will place students in Math 109)
- ACT Math Score of 21 or higher
- PARCC Algebra II score of 4 or higher (750 or higher scaled score)
- GED Math scores of 165 or higher are eligible for Math 216 or Math 102. Students needing college algebra or pre-calculus or above for program of study must take the Accuplacer test or a calculus readiness test.
- AP Calculus AB/BC OR Statistics OR Computer Science score of 3 or higher
- IB Math Studies or Math SL/HL OR Further Math score of 4 or higher
- Next-Generation ACCUPLACER Math (Quantitative Reasoning, Algebra and Statistics) is 263 or higher

Assessment scores, SAT scores and ACT scores are valid for a period of two years. Students who do not begin the appropriate course sequence within the two-year time period must repeat the assessment. Assessment results may restrict students from registering for college-level classes.

**Retests**

Students may retest 24 hours after the initial test. After two attempts within a two year period a $25 proctoring fee will be assigned for all subsequent attempts. For more information visit the Test Center website or contact the Test Center at 443-412-2352.

**Community Education Certificate-Seeking Students**

All Community Education Certificate-Seeking students planning to register for English and/or a math course must have the related skill assessment. Contact the Community Education, Business and Applied Technology division to find out the required assessments needed to register for classes.

**High School Students**

High school juniors and seniors have three options by which they may attend Harford Community College while still attending high school. Before selecting any of these options, students should consult with their parent(s)/guardian(s) and their high school counseling office. Students will be enrolled at Harford Community College as undeclared students who are only taking courses and not in a degree seeking program.
Students Enrolled in Private School or are Home Schooled

1. College and High School Credit – College and High School Credit provides credit for both high school graduation as well as college credit. When the course is required for high school graduation, the student will not be eligible for high school graduation until the required credit is earned. The grade will be reflected on the high school and permanent college transcript.

2. College Only Credit – Students choose to enroll in college courses for college credit only and these courses and grades become part of the student’s permanent college transcript.

Students Enrolled in Harford County Public Schools (HCPS)

1. Waiver of Senior Year – Students may waive all of their senior year and still graduate with their high school class. Students must contact their high school counseling office to complete the HCPS application.

2. Dual Transfer of Credit – Students may enroll in college credit courses and use these courses for high school graduation credit as well as college credit. Students must contact their high school counseling office to complete the HCPS application and receive enrollment guidelines.

3. College Credit Only – Students may enroll in college courses that meet beyond the regular school day but choose not to use these courses for high school transfer credit. Some restrictions exist for students under the age of 16. Those under 16 years of age should contact the Assistant Director of Admissions at 443-412-2311 for further detailed information regarding enrollment.

Students enrolled in Harford County Public Schools can find more information at www.hcps.org/students/enrollmentoptions.

Assessment for Prior Learning (Non-Traditional Credit)

Students at Harford Community College (HCC) may earn academic credit toward graduation through a variety of non-traditional learning means, as well as through the traditional classroom learning experience. The assessment of prior learning refers to awarding credit based on demonstrated learning that has been gained outside a traditional academic environment, such as through working, participating in employer training programs, serving in the military or engaging in other experiential activities, or studying related subjects independently. When competencies and knowledge learned through these experiences can be documented and assessed as equivalent to that required in college courses, college credit can be awarded and recorded on a student’s transcript.

The College reserves the right to determine the kind and amount of credit granted through non-traditional learning programs, based on scores, percentile or evaluation established by the faculty.

No more than 45 credits may be used toward completing an associate degree through assessment for prior learning, including but not limited to:

- military training, education, and coursework
- Advanced Placement (AP) exams
- College Level Examination Program (CLEP) exams
- International Baccalaureate (IB) exams
- articulated credit
- DANTES Subject Standardized Tests (DSST)
- professional training evaluated by the American Council on Education (ACE)
- examinations developed by the institution
- portfolio assessments

Students must have a declared program of study and successfully complete any three credit course at HCC before credit can be posted to the HCC transcript. Non-traditional credit does not affect the student’s grade point average (GPA).

Non-traditional credits earned on the HCC transcript may not necessarily be accepted for transfer to another college or institution. Students planning to transfer should check the requirements of the receiving institution for policies regarding the acceptability of credits earned by non-traditional means.

Credit for Military Training

In accordance with §15-113 of the Education Article of the Annotated Code of Maryland and in support of the Veteran Full Employment Act (VFEA), HCC awards credit for a variety of formal military training, education, and coursework. Evaluations will be completed for students who submit official military transcripts through the Joint Transcript Services (JST) for Army, Navy, Marines, and Coast Guard, or the Community College of the Air Force. In awarding credit the College follows the recommendations of the American Council on Education’s (ACE) Guide to the Evaluation of Education Experiences in the Armed Services. For more information contact the Registration and Records Office. All Military, Reserve, and Veteran students are also eligible to pursue the other Credit for Competency-Based Learning options that follow. Call 443-412-2100 for more information.

Advanced Placement (AP)

Advanced Placement, a College Board program available annually to high school students, allows students to demonstrate college-level achievement. Students should submit AP results to the Registration and Records Office to receive credit for qualifying AP scores. Credit is posted to the student’s transcript upon successful completion of any three-credit course taken in attendance at HCC. Because qualifying scores vary at institutions, students planning to transfer should check with the transfer institution to determine score requirements. Please see the Credit by Examination (p. 83) table for a list of AP exams and respective scores for which HCC will award credit.

International Baccalaureate Organization (IB)

International Baccalaureate Organization courses may be awarded credit for courses at HCC. The minimum grade of granting credit is 4 for higher level IBO courses and 5 for standard level IBO courses. Students should submit official IBO transcripts to the Registration and Records Office for the transcript to be evaluated. Credit is posted to the student’s transcript upon successful completion of any three-credit course taken in attendance at HCC. Please see the Credit by Examination (p. 83) table for a list of IB exams and respective scores for which HCC will award credit.

Credit by Harford Division Exam

Current HCC students may earn credit for the satisfactory completion of tests developed by HCC faculty members for select courses. To receive division exam credit at HCC, a student must complete the Application for Credit by Division Exam form, pay the current test fee, score a 70% or
above on the exam, and successfully complete any three-credit course in attendance at HCC. Division exam credit does not affect the student’s grade point average (GPA). Please see the Credit by Examination table (p. 83) for a list of current division exams. Contact the Test Center at 443-412-2352 for testing information.

Credit by Examination (Other)
Credit may be earned by examination through nationally normed testing programs including CLEP and DSST for courses offered at HCC. Credit by examination testing is open to all current and former HCC students, as well as students at other colleges that accept this type of credit. Contact the Test Center at 443-412-2352 for testing information. To receive credit at HCC, a student must successfully complete any three-credit course in attendance at HCC before credit will be recorded on the student’s academic record. Please see the Credit by Examination table for a list of current CLEP and DSST exams and respective scores for which HCC will award credit.

Harford County Training Program
Academic credit towards specific degrees may be awarded for the completion of training programs recognized through an articulation agreement between the College and training institution. Programs in which the College has agreements are: Aberdeen Proving Ground Child and Youth Services, the Harford County Sheriff’s Office Training Academy, Harford County Electrical Contractors Association and others. Awarded as articulated credit, credit can only be used towards meeting the degree requirements of the approved program of study listed in the agreement. Credit is posted to the student’s transcript upon successful completion of any three-credit course taken in attendance at HCC. For more information, contact the Registration and Records Office at 443-412-2222.

Industry Recognized Credentials (IRC)
HCC accepts industry recognized credentials (IRC) for academic credit. Eligible IRCs include industry, trade and professional certifications or qualifications that are earned by individuals to perform a task or job. IRCs are considered an option under Prior Learning Assessment (PLA) for individuals seeking to apply their experience toward an academic degree. In order for students to use credentials for credit, the credential must be an approved IRC and students must be able to provide original documentation of the credential with which they are seeking credit. A current list of approved IRCs and the courses eligible for credit can be found on the Credit for Prior Learning Application for Industry Recognized Credentials. (http://ww2.harford.edu/Catalog/PDF/Application_PriorLearning_IRC-2017.pdf)

There is no fee for seeking PLA credit through IRCs. If you will be applying for credit with an IRC, please print, read and complete the Credit for Prior Learning Application for Industry Recognized Credentials (https://ww2.harford.edu/Catalog/PDF/Application_PriorLearning_IRC-2017.pdf). Credentials not included on the list may be eligible for credit following a division assessment of the credential.

Note: Prior Learning Assessment (PLA) credit is awarded based on HCC policy. There is no guarantee PLA credit will transfer to a four year institution. If you plan to transfer, it is recommended that you check with your intended institution for information on the PLA credit and/or non-traditional credit transfer policy.

Credit for Business/Industry Training
Academic credit may be awarded for the completion of training programs which have been evaluated by the American Council on Education (ACE). Credit is posted to the student’s transcript upon successful completion of any three-credit course taken in attendance at HCC.

High School Courses
Students may earn up to twelve credits for high school experiences through an articulated agreement between HCC and Harford County Public Schools. Articulated high school credit is posted to the student’s transcript upon successfully meeting all agreement requirements including completion of any three-credit course taken in attendance at HCC with a minimum grade of ‘C’.

College Credit for Prior Learning through Portfolio Development and Assessment
Students at HCC who have significant college-level learning acquired through employment, hobbies, volunteer work, or independent (non-credit) study may develop a portfolio of learning and have that portfolio evaluated for credit by expert faculty evaluators. Students interested in submitting a portfolio must have permission from the Division Dean and must enroll in and successfully complete APL 101 Portfolio Development and APL 102 Portfolio Development Seminar. Credit attempted must satisfy the learning objectives of courses described in this catalog.

Special Admission Procedures for International Students & Undocumented Individuals

Visa Types and Tuition Rates
International students with other types of visas may also be eligible to attend the College. In addition to the standard application materials, students must present proof of immigration status and type. Tuition rates for international students are based on visa type and not on local residency. Permanent residents, resident aliens, officially recognized refugees and asylees and those in possession of A, J, L, or H visa types are charged in-county fees if residing in Harford County. Students with all other visa types, including F-1, are charged out-of-state fees.

Note: The College follows the same guidelines for determining tuition rates for international students enrolling in noncredit courses as in credit courses.

Non-Immigrant (F-1) Student and Other Visas
The College is authorized under federal law to consider applications for enrollment of non-immigrant alien students in the F-1 visa status. Prospective students must satisfy academic, College admission requirements as well as requirements for the certificate of eligibility (Form I-20) prior to applying for the F-1 Student Visa. The College reserves the right to determine the requirements for enrollment. Application deadlines are as follows:

New (visa) credit students:
Fall admission - June 1
Spring admission - November 1

Transfer (visa) credit students:
Fall admission - August 10
Spring admission - December 15

Documentation required prior to admission and registration includes the following:
Prospective F-1 visa applicants should contact the Admissions Office prior to applying to the College.

Special Admission Procedures for Undocumented Individuals

Students who are undocumented - individuals who do not have valid documentation of their immigration status - will be accepted and charged the out-of-state tuition rate. Maryland Senate Bill 537 (also known as the MD DREAM Act) provides the opportunity for some undocumented non-U.S. citizens who attended high school in Maryland to receive in-state tuition (in-county or out-of-county tuition rates as specified below). In order to qualify for this exemption from the out-of-state rate, students must meet the following requirements and submit all relevant documents:

1. Attended a public or nonpublic high school in Maryland (official high school transcript required);
2. Graduated from a public or nonpublic high school in Maryland or received the equivalent of a Maryland high school diploma;
3.Registers at a public institution of higher education in the state no later than 6 years after graduating from a public or nonpublic secondary school in the state or receiving the equivalent of a high school diploma in the state (official college transcript required);
4. Provides documentation that the student, or the student's parent or legal guardian has filed a Maryland income tax return: a. Annually for the 3 year period before the academic year in which the tuition rate exemption would apply;
5. Provides an affidavit stating that the student will file an application to become a permanent resident within 30 days of being eligible to do so;
6. Provides proof that the student has registered with the selective service system.

Once it is determined that a student is eligible for in-state (in-county or out-of-county) rates, the student will continue to receive it as long as they fulfill the eligibility requirements or until the College no longer offers this exemption. Applying for the exemption does not alter the student's responsibility to pay by Harford Community College's deadline any nonresident tuition and associated fees that may be due before eligibility is determined.

In the event that Harford Community College discovers that false or misleading information has been provided, the student may be billed by the College retroactively to recover the difference between in-county or out-of-county and out-of-state tuition for the current and subsequent terms. Student may also be subject to the Student Code of Conduct for providing false information to the College.

Please note: The tuition rate is determined by location of school and not the current place of residency. Therefore, only those students who graduated from a Harford County public or nonpublic high school or received the equivalent of a high school diploma and the most recently attended high school was in Harford County, will receive the in-county tuition rate.

Information for Veterans and Military Personnel

Priority Registration for Student Veterans

Harford Community College offers priority registration to all veteran/military students who served/currently serving in any branch of the Armed Forces of the United States, including the National Guard and the Military Reserves and received an Honorable or A Certificate of Satisfactory Completion of Military Service.

To be eligible for priority registration, students must indicate their veteran status on the Harford Community College Application form and will be eligible to register with students in the 30 credit group.

Priority registration does not waive any course or program requirements, such as prerequisites and program restrictions. All student Registration Holds must be resolved before students can take advantage of Priority registration. Students can check their OwlNet account under My Academic Life, then Degree Works to determine whether or not there is a Registration Hold on their account. Academic Courses are available on a first-come, first-served basis.

Military Personnel, Veterans, and their Dependents

Military personnel and their dependents stationed at a military installation in Harford County are considered Harford County residents.

1. HCC paper Application for Admission and the paper International Student Application
2. Demonstration of valid passport, I-94 admission number, Form I-20, if appropriate, and all other pertinent identification and documentation.
3. Verification of English language proficiency. In most cases, students are required to take the Test of English as a Foreign Language (TOEFL) and achieve a minimum score of 500 (standard test) or 173 (Internet-based test), or 61 (Internet-based test). All international students who are admitted to HCC will be required to take the College's Academic Skills Assessment.
4. Proof of graduation from high school or secondary school such as a transcript and/or diploma. If applicable, an official translation to English may be required.
5. Declaration of financial resources to demonstrate ability to fund education, health insurance and living expenses. Students should not expect to find part-time employment on campus, as such jobs are scarce. International students must be enrolled full-time, taking a minimum of 12 credits both fall and spring semesters.
6. As there are no residence halls or dormitories on campus, each prospective international student must demonstrate the availability of residence with local family or friends. Such local sponsorship ensures assistance with housing, meals, transportation, social and religious practices, public services, medical care, shopping and adjustment to cultural change. Students without local addresses will not be considered for admission.
7. Official college transcripts if transferring from another U.S. higher education institution, or official evaluation of a transcript from a college or university outside of the United States. A foreign transcript must be evaluated by a member of the National Association of Credential Evaluation Services (www.naces.org (http://www.naces.org)). Please allow adequate time for requesting, translating, and evaluating of academic credentials from a college or university outside the United States. Transfer of credits will be considered on the basis of applicable to the student's chosen program of study at Harford Community College
Military personnel and their dependents stationed at a military installation elsewhere in Maryland are considered residents of Maryland. Students must submit a copy of their orders to the Military and Veteran Services Office.

**Veterans Choice Act Waiver**

The following individuals shall be charged the in-state rate, or otherwise considered a resident, for tuition purposes:

A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill®-Active Duty Program) or chapter 33 (Post-9/11 G.I. Bill®), of title 38, United States Code, who lives in the state of Maryland while attending Harford Community College (regardless of his/her formal state of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.

- Anyone using transferred Post-9/11 G.I. Bill® benefits (38 U.S.C. § 3319) who lives in the state of Maryland while attending Harford Community College (regardless of his/her formal state of residence) and enrolls in the school within three years of the transferor’s discharge from a period of active duty services of 90 days or more.

- A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Maryland while attending Harford Community College (regardless of his/her formal state of residence) and enrolls in the school within three years of the Service member’s death in the line of duty following a period of active duty service of 90 days or more.

- An individual using educational assistance under chapter 31, Vocational Rehabilitation and Employment (VR&E) who lives in the State of Maryland while attending Harford Community College (regardless of his/her formal State of residency) effective for courses, semesters, or terms beginning after March 1, 2019.

- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at Harford Community College. The person so described must have enrolled at Harford prior to the expiration of the three year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.

**Chapter 31 Facility Compliance Policy**

Individuals who are covered under Chapter 31 – Veterans Vocational Rehabilitation, are permitted to attend educational courses beginning on the date designated on their VAF-28-1905 and ending on the earlier of one of the following dates:

- The date on which tuition/fees (T&F) payment from the VA is made to the facility.
- 90 days after the date the facility submits a valid T&F invoice to the VA following receipt of the VA authorization.

Individuals who are using Chapter 31 benefits must submit the following to the School Certifying Official:

- A valid VA authorization, VAF 28-1905 form for VR&E beneficiaries, no later than the first day of classes if possible. If this is not possible, the student must make arrangements with the School Certifying Official for a date that the form will be submitted.

Harford Community College will not impose a penalty on the individual, that includes: late fees, denial of access to classes, libraries or other institutional facilities; or require the Chapter 31 individual to borrow additional funds, due to a delay of Tuition and Fee payments from the VA under Chapter 31 VR&E.

*Effective 06/2019*
FINANCIAL AID

The Financial Aid Office
The Financial Aid Office provides assistance and counseling to students seeking financial aid. Assistance is available through grants, scholarships, loans and student employment. All students must apply each year for financial aid. Inquiries may be addressed to:

Financial Aid Office
Harford Community College
401 Thomas Run Road
Bel Air, MD 21015-1698
443-412-2257
finaid@harford.edu

Financial aid information may also be obtained through Harford Community College website (http://www.harford.edu/).

Financial Aid Information
Applying for Financial Aid
1. All students should apply for federal and state financial aid. Applications are electronic and students (and parents if the student is a dependent) should first apply for the FSA ID at https://fsaid.ed.gov/nps/index.htm (https://fsaid.ed.gov/nps/). To complete the FAFSA, students should access www.studentaid.gov (https://studentaid.gov/).
2. For the 2020-2021 academic year, students will use income information from 2018. The federal Student Aid Report (SAR) will be emailed to the student within one week of application. Students and parents must sign the FAFSA using the FSA ID.
3. Students should complete the FAFSA before March 1, so that they can be considered for Maryland State financial aid from the Maryland Office of Student Financial Assistance.
4. Once the Financial Aid Office at Harford Community College receives the student’s FAFSA information electronically, correspondence will be mailed requesting additional information, if needed. Students must promptly provide all additional documentation, such as tax transcripts, if requested. Students and parents are urged to use the IRS Data Retrieval Tool when completing the FAFSA to speed processing time.
5. Students applying for HCC scholarships must complete an application on-line through their OwlNet account. Complete information about HCC scholarships is found in the Scholarship Brochure or at the Financial Aid website (http://www.harford.edu/student-services/financial-aid.aspx).
6. Students applying for a Federal Direct Loan must complete a separate application obtained at the Financial Aid Office or downloaded from the College website and meet with the Financial Aid Loan Counselor.

Student Responsibilities
• Priority consideration for Federal Work Study and certain other federal programs is given to students who meet the deadlines of May 15 for the fall semester and December 22nd for the spring semester.
• Students must have their financial aid process finalized with the Financial Aid Office no later than their last day of enrollment of the semester or term.
• Students may be eligible to receive grants, loans and/or student employment, but will receive such aid ONLY if funds are available and Satisfactory Academic Progress (completion rate of at least 67% and GPA 2.0) is maintained. Students should refer to the section Satisfactory Academic Progress for Students Receiving Financial Aid (p. 104).
• Once students have registered for classes and have been awarded financial aid, their aid will be credited to their accounts.
• Students must officially withdraw from class(es) at the Records & Registration Office if they are no longer attending.
• Students receiving federal financial aid are expected to attend and complete their classes. Students who receive aid for classes which they never attend will have the aid voided. Students who withdrawal or stop attending all classes may owe a refund to the U.S. Department of Education.

Selection of Students to Receive Assistance
Scholarship applications for awards funded through the College, the HCC Foundation and some private donors are reviewed by the Academic Honors and Scholarship Committee or by the scholarship donor. Decisions are based on the criteria established by the donor. The selection of students for federal grants and Federal Work Study is based on the criteria established by the program and the funds available to award.

Financial need is determined by the cost of attendance in relation to the amount reasonably expected to be contributed by parents, spouse and/or student. This contribution is determined by an analysis of the Free Application for Federal Student Aid (FAFSA). The estimated budget for a full-time in-county dependent student living at home with parents for the 2020-2021 academic year:

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$2,800</td>
</tr>
<tr>
<td>Books and Supplies</td>
<td>$1,300</td>
</tr>
<tr>
<td>Transportation</td>
<td>$1,328</td>
</tr>
<tr>
<td>Room and Board</td>
<td>$3,000</td>
</tr>
<tr>
<td>Personal Expenses</td>
<td>$3,000</td>
</tr>
<tr>
<td>Total</td>
<td>$11,436</td>
</tr>
</tbody>
</table>

1 Estimated budgets for students not living at home with parents and independent students are available in the Financial Aid Office. Student budgets are adjusted annually. Out-of-county and out-of-state budgets are also available.

Tuition Refund Policy, Return of Unearned Title IV Aid and Student Responsibilities
Information regarding the HCC Tuition & Refund Policy can be found at http://www.harford.edu/student-services/paying-for-college/tuition-and-fees.aspx

The Office of Financial Aid is required by federal statute to recalculate federal financial aid eligibility for students who withdraw (officially or unofficially), drop out, are dismissed or take a leave of absence prior to completing the 60% point of each semester. Withdrawing from all of your classes (i.e. stop attending your classes) before the 60% point of each semester will impact your financial assistance. Students who withdraw from a class or classes are advised to contact the Financial Aid Office prior to withdrawal to determine the impact that a total withdrawal will have on their financial aid. Federal law may require that you pay...
back all or a portion of your federal financial aid that was not earned for withdrawing.

A schedule is used to determine the percentage of the semester the student attended based on the withdrawal date/last date of attendance as determined by the instructor. The percentage of the semester the student attended is calculated as follows:

<table>
<thead>
<tr>
<th>Number of days in attendance</th>
<th>Number of days in semester</th>
</tr>
</thead>
</table>

Students awarded Title IV financial aid are entitled to the funds if they attend classes. If a student completely withdraws from all classes or stops attending all classes during an enrollment period, Harford Community College must calculate the portion of federal aid that the student earned according to the federal guidelines. If the student is enrolled and attending classes past the 60% date of the semester or term, the student is entitled to all aid and does not have to repay any portion of the aid.

If the student withdraws past the official add-drop (refund) period but before the 60% point of the enrollment period, a prorated schedule is used to determine the amount of Title IV funds the student has earned at the time of withdrawal. The amount of Title IV grant or loan assistance earned by the student must be calculated based on the number of days that the student was enrolled. This is determined by the last day of attendance as determined by the instructor.

If the amount disbursed to the student is greater than the amount the student earned, unearned funds must be returned to the Department of Education and a debt to the College and possibly to the Department of Education will be incurred.

The institution must return the amount of Title IV funds for which it is responsible no later than 45 days after the date of the determination of the date of the student’s withdrawal.

Order in which federal funds must be returned:

1. Unsubsidized Direct Loan
2. Subsidized Direct Loan
3. Direct Plus Loan
4. Pell Grant
5. Federal Supplemental Opportunity Grant (FSEOG)

If a student earned more than was disbursed to him or her, the institution would owe the student a post-withdrawal disbursement which must be paid within 120 days of the student’s withdrawal.

Examples of Return of Funds are available at the Financial Aid Office.

Students who never attend any classes during the payment period are not eligible for any funds and must repay all Title IV funds received.

Student Responsibilities

- A student who is withdrawing from one or all classes must complete the appropriate withdrawal process at the Registration and Records Office (http://www.harford.edu/student-services/registration-and-records.aspx) or online via their OwlNet account during the official withdraw period.
- A student who withdraws from all classes or stops attending all classes is responsible for the repayment of all Unearned Title IV aid, as calculated by the Financial Aid office using the formula mandated by the U.S. Department of Education.

Students must repay the Unearned Title IV aid to the College and will not be permitted to register for additional classes until the debt is resolved.

- Students who owe funds to the U.S. Department of Education are not eligible for additional federal aid of any type until the funds are repaid.
- If the Financial Aid office learns, at any time, that a student never attended a class, the Financial Aid office is required to cancel financial aid for that class. The student will be obligated to re-pay any balance due to the college as a result of the cancellation of this aid.

Satisfactory Academic Progress (SAP)

Federal regulations require that HCC track the academic progress of students from the first date of enrollment at HCC (including while dually enrolled in High School), whether or not financial aid was received. Student’s progress must be measured both quantitatively and qualitatively. That is, in addition to a minimum grade point average requirement, a student must complete a minimum percentage of course work and must complete the degree or certificate requirements within a maximum time frame.

Minimum Grade Point Average: Students must maintain a cumulative grade point average of 2.0 (or minimum GPA for major). Transitional studies course grades are calculated into the GPA for SAP purposes. See additional information about Incomplete (I) grades in Incomplete Grades (p. 104) section below.

Minimum Completion/Pace Rate: Students must successfully complete at least 67% of cumulative attempted credits at HCC. Transitional studies courses (zero level), repeated courses, transfer credits and withdrawals are included in this calculation. A successful completion is defined as the grade of A, B, C or D, TR (transfer), ML (military) and AP (Advanced Placement). The grades of F, W, N, I, K, etc. are not considered as successful completion of the attempted credits. See additional information about Incomplete (I) grades in Incomplete Grades (p. 104) section below.

Maximum Timeframe: A student pursuing an Associate degree (approximately 60-70 credits) may attempt or transfer in up to 90 - 105 attempted credits (150% of degree requirement). A student who habitually does not complete attempted credits may exceed the maximum timeframe for completion before he or she has earned a degree and will be terminated from receiving any financial aid at HCC. If a student changes majors while at HCC, credits taken in all majors while at HCC will be included in the maximum timeframe calculation.

Incomplete grades: If a student receives an I (Incomplete) grade for a course and later successfully completes the course it is the student’s responsibility to notify the Financial Aid Office and request a review of their SAP status. SAP is not automatically recalculated after I grade is resolved. I grades are not included in the GPA calculation, but are included as attempted but not completed credits in Completion/Rate calculation.

If the I grade is resolved in the middle of a semester that the student is currently receiving aid and it causes the student to be terminated the student will not lose financial aid eligibility for that current semester.

If the I grade is resolved in the middle of a semester that the student is enrolled but is not currently receiving aid because they are
terminated and it causes the student to be in good SAP status aid will be awarded retroactively to the beginning of the current semester.

HCC measures the progress of each student after each semester or payment period. Failure to meet SAP GPA and Completion/Pace requirements will result in student being placed on Warning. At HCC, students get one semester of warning. If student has not improved GPA and/or Completion/Pace rate by end of the warning semester, student is terminated from financial aid until student is meeting SAP requirements. Students who exceed the Maximum Time Frame (90-105 credits) are not placed on warning; they are terminated from financial aid at the end of the semester when they cannot complete their program within 150% of its length.

1. Transitional Studies Courses: Courses below 100 level. They are noted with an * next to grade on student transcript.
2. Completed Credits: Any class on student transcript with grade of A, B, C or D, including transitional studies courses, repeated courses, transfer (TR) credits, AP credits, and military (ML) credits.
3. Attempted Credits: All courses on student transcript, including transitional studies courses, transfer credits, military, and AP. If a student repeats a course previously taken, both the original and the repeated course are counted as attempted credits.

Calculating Financial Aid GPA and Completion

GPA: Financial Aid recipients could have two GPAs at HCC. One is the official, academic GPA that includes courses that are considered college level, credit courses completed at HCC. This is the GPA on transcript. The other GPA is a Financial Aid GPA. This includes ALL classes taken at HCC including courses below 100 level also known as transitional studies or remedial courses. The Financial Aid GPA is calculated by the Financial Aid department at the end of every semester. You may contact Financial Aid to determine your Financial Aid GPA.

Completion/Pace: To calculate completion/pace you need to add up all of your completed credits and divide by number of all your attempted credits. For example, you completed or transferred in 36 credits and you have attempted 54 credits your completion/pace rate is 67% (36/54=67%) and you are considered in good standing for completion/pace.

Financial Aid SAP Appeal Process

Students whose Financial Aid has been terminated for failure to meet the required standards of Satisfactory Academic Progress have the right to appeal such termination. The conditions under which an appeal may be sought are:

- Death in immediate family
- Serious illness/accident/medical condition
- Other documented extenuating circumstances

All appeals must be FULLY documented. No appeal will be considered without appropriate documentation. Appeal deadline is two weeks before the beginning of the semester.

Steps to Appeal GPA or Completion/Pace

1. Initiate the appeal with the Financial Aid Office by submitting the Application for Appeal of Financial Aid Termination. Students will be able to download the appeal form from their OwlNet Account. Deadline to submit appeal is two weeks before the beginning of the semester. The student must include all supporting documentation along with the appeal.

2. The Financial Aid Office Appeals Committee will review the appeal and notify the student, via the student’s HCC email address, if he or she has been tentatively approved. If the appeal is not approved, the student will receive an email from the Financial Aid Office.

GPA Appeals

If tentatively approved, the student must make an appointment with a designated academic advisor. If the advisor determines that student can reach SAP standards in one semester they will complete a SAP worksheet that shows the student what is necessary to meet SAP standards and Financial Aid will place the student on probation for one semester. If advisor determines it will take more than one semester to meet SAP standards the advisor will develop an individualized plan called the GPA Academic Plan for SAP Improvement (GAPSI), which will outline what courses and grades are needed to meet SAP standards. An appointment is required by calling (443) 412-2301. Both the student and the advisor must sign the GAPSI and the student must follow all aspects of the plan to avoid becoming ineligible for future aid. Plans will not exceed 4 semesters. Students must take blank GAPSI to the appointment with the advisor. The SAP worksheet and GAPSI will be available in OwlNet, ‘All About Me’ tab. Once the SAP worksheet or GAPSI is received by the Financial Aid Office, the Financial Aid Appeals Committee will finalize the approval, place the student on probation and notify the student by email if approved.

Completion/Pace Appeals

An appointment with an academic advisor is not required for COMPLETION only appeals. If appeal is approved and student only needs one semester to meet SAP standards they will be placed on probation and receive an email stating appeal is approved. If student needs more than one semester to meet standards they will be sent an email outlining the requirements of their plan (Completion Academic Plan for SAP Improvement/CAPSI).

All decisions made by the Appeals Committee are final. The Financial Aid Office will be monitoring adherence to the Academic Plans at the end of every semester.

Steps to Appeal Maximum Time Frame

1. The student will make an appointment with a designated academic advisor to determine what classes are needed for the student to graduate.
   a. If the student can graduate in one semester the advisor will complete a worksheet showing the student what classes are needed. The student will be placed on probation for one semester. Student must answer the two questions on the form (reason for the appeal and what changes will be made to improve success in college) before meeting with their advisor. The form should be taken to appointment with advisor. An appointment is required by calling (443) 412- 2301.
   b. If the student needs more than one semester but maximum of four semesters the advisor will develop an individualized plan called the Maximum Time Frame Academic Plan for SAP Improvement (MAPSI). Student must answer the two questions on the form (reason for the appeal and what changes will be made to improve success in college) before meeting with their advisor. The form should be taken to appointment with advisor. An appointment is required by calling (443) 412- 2301.

2. Blank forms will be available on the student’s OwlNet account.
3. When the Maxtime Worksheet or MAPSI is complete the student must submit to Financial Aid office at least two weeks before the beginning of the semester.

4. The Financial Aid Appeals Committee will review the Appeal Worksheet or MAPSI and send approval email to student and place the student on probation.

**Maximum Time Frame Appeal Guidelines**

- Only courses needed to complete the degree(s) are eligible for aid.
- Only courses student is receiving aid for can count toward the 6 credit (half-time) requirement for loan eligibility, and credit requirements for other aid.
- If student has already taken all classes required for graduation in any major, the appeal will not be approved. Student should apply for graduation. HCC will not approve an appeal to complete courses needed for transfer that are not a requirement of the HCC degree.
- Students at Maximum Time Frame attempting to get into nursing program must be accepted by nursing program before the Maximum Time Frame appeal is approved.
- Students must be meeting 67% cumulative completion rate or be able to achieve 67% by end of one semester probation or multi-semester plan.
- Student can not repeat already completed classes for a better grade.

**Students will be eligible for only one appeal.** The Financial Aid Office will be monitoring all students at the end of every semester. Students on one semester probation will be terminated again if they are not meeting SAP standards. Students on probation with plans will be reviewed to determine the student’s adherence to the Academic Plans at the end of every semester. If student does not follow the requirements in their specific Academic Plan (APSI), student will be terminated again and they cannot appeal again. All decisions made by the Appeals Committee are final.

**Reinstatement of Aid:** A student may be reinstated for receipt of financial aid through the appeal process or by paying for classes on their own until they are meeting minimum SAP standards.

**Federal Financial Aid Programs (Title IV Aid)**

Eligibility Criteria: To receive any federal aid, the student must be a U.S. citizen or eligible non-citizen, be accepted for enrollment at HCC, maintain satisfactory academic progress, have a high school diploma or GED, have a valid Social Security number, register with the Selective Service if required, and sign a statement of educational purpose.

Students who have been convicted for possessing or selling illegal drugs may not be eligible for Title IV aid. Students who have questions regarding their eligibility should call 1-800-4FEDAIL.

Repeat Coursework Federal regulations prevent the Financial Aid Office from paying for a course that has been passed and repeated more than one time. In order for a repeated course to be counted towards your enrollment status for financial aid purposes, you may only repeat a previously passed course once (a total of two attempts). If you enroll in a previously repeated course and passed the course a third time, this course will not count towards your enrollment for financial aid purposes.

**Federal Pell Grant Program**

A Federal Pell Grant is a need-based grant awarded to undergraduate students who demonstrate a financial need. The amount of the grant depends on the Expected Family Contribution (EFC) and the number of credits for which the student enrolls. Students must complete the FAFSA to apply for this grant. All students are urged to apply. The maximum Federal Pell Grant amount for 2020-2021 is $6,345.

Lifetime Eligibility Used (LEU) The amount of Federal Pell Grant funds you may receive over your lifetime is limited to the equivalent of six years of Pell Grant funding. Since the maximum amount of Pell Grant funding you can receive each year is equal to 100-150%, the six-year equivalent is 600%. Students are urged to plan carefully when enrolling and should not enroll in courses not required in their Program of Study.

**Federal Supplemental Opportunity Grant Program**

The Federal Supplemental Educational Opportunity Grant (FSEOG) is awarded to students who demonstrate exceptional financial need and who receive Federal Pell Grants. Awards are based on fund availability. The minimum FSEOG is $200 per academic year; the annual maximum is $4,000.

**Federal Stafford Loan Program (Direct Loans)**

Federal Stafford Direct Loans are low-interest loans made to students attending college at least half-time (6 credits). These loans are made by the U. S. Department of Education. Subsidized Stafford Loans are made to students who demonstrate financial need. Interest does not accrue on these loans while the student is in school. Unsubsidized Stafford Loans are made to students who do not have financial need. Interest accrues on these loans from the date the loan is fully disbursed. First-time borrowers taking out federal Direct subsidized loans on or after July 2013 are subject to the 150% Direct Subsidized Loan Limit, which limits the amount of time a student is eligible to borrow subsidized loans to 150% of their published program length.

Current interest rates can be obtained at studentaid.gov. Students must be making Satisfactory Academic Progress (SAP) to receive a loan. To apply for a Direct Loan, a student must complete the FAFSA and a HCC First-Time or Repeat Borrower Packet. First time borrowers at HCC must complete an in-person Entrance Counseling session. During the session your rights and responsibilities as a borrower will be reviewed as well as the disbursement process and Satisfactory Academic Progress (SAP) requirements.

The College can refuse to certify a loan or can certify a loan for a reduced amount. Students are provided with a written explanation if this occurs.

**Federal Direct PLUS Loan for Parents**

The Parent Loan for Undergraduate Students (PLUS) is a non-need based educational loan for parents of dependent undergraduate students.

Loans are made through the Federal Direct PLUS loan program. Parents may borrow up to the student’s yearly cost of attendance minus all other aid the student has received. PLUS loan interest rates can be obtained at studentaid.gov. The borrower has the option of beginning repayment on the PLUS loan either 60 days after the loan is fully disbursed or waiting until six months after the dependent student on whose behalf the parent borrowed ceases to be enrolled on at least a half-time basis. Parents who wish to apply for a PLUS loan must complete the FAFSA and then apply for PLUS loan online at studentaid.gov. During the application process the parent will complete a Master Promissory Note (MPN). When approved the student and parent are required to complete the HCC PLUS
Scholarships and Grants

HCC Foundation, Inc. & College-Sponsored Scholarships and Grants

Scholarships and grants are funded by Harford Community College and the Harford Community College Foundation, Inc. to help HCC students attain their educational goals. The Harford Community College Foundation, Inc. partners with individuals, local businesses, corporations, and other foundations to secure scholarship and grant funds to meet the rising costs of education for HCC students. Recipients are selected by the College’s Academic Honors and Scholarship Committee unless otherwise noted. Financial need and academic potential/merit are among the criteria for these scholarships and grants. Most awards are based on a full academic year (fall and spring semesters).

Generally, the application deadline for fall semester awards is May 15; the deadline for spring semester awards is December 22nd. Some awards may have a different deadline, as indicated in the current Harford Community College and Harford Community College Foundation, Inc. Scholarship and Grant Program brochure. Visit the Financial Aid Office for a copy of the brochure and for scholarship and grant applications. All scholarship information can be viewed online on the Financial Aid Page of the Harford Community College website (www.harford.edu (http://www.harford.edu)). The scholarship application process is on-line through the All About Me tab on the student’s OwlNet page.

Most scholarships and grants are awarded to students who demonstrate a financial need, which is determined by the Federal government. All students applying for need-based awards must complete the FAFSA and have a valid Student Aid Report (SAR) on file in the Financial Aid Office by the deadline date in order to be considered for the scholarship or grant.

Community Scholarships

In addition to the scholarships listed in the Scholarship Brochure, direct awards to HCC students are available from local organizations. Please refer to the External Scholarship Resources (https://www.harford.edu/student-services/financial-aid/types-of-aid-available/external-scholarship-sources.aspx) link on the Types of Aid Available (https://www.harford.edu/student-services/financial-aid/types-of-aid-available.aspx) page of the HCC website. For outside organizations not listed on our website, students will need to contact organization directly for application procedures.

Students receiving grants or scholarships from outside organizations should contact the Financial Aid Office to have awards applied to the student’s account.

Maryland State Scholarship Program

A variety of state scholarships are available to Maryland residents attending college in the state of Maryland. The FAFSA (Free Application for Federal Student Aid) is used to apply for most Maryland State Scholarships and must be completed by March 1st to be considered for state awards. Application information may be obtained from the Office of Financial Aid, the State Scholarship Administration, 410-767-3300, or at http://mhec.maryland.gov (https://mhec.maryland.gov/preparing/Pages/FinancialAid/descriptions.aspx). The most commonly received Maryland State Scholarships follow.

The most commonly received Maryland State Scholarships follow.

Rawlings Educational Assistance Grant

To be eligible for the Rawlings Educational Assistance Grant, students must have financial need as determined by student’s current FAFSA, be enrolled as a full-time student (12 or more credits) in a degree-seeking program in a Maryland post-secondary institution, be eligible for in-state tuition and a resident of Maryland. (If student is a dependent student parent must also resident of Maryland. To apply, the student must complete the FAFSA by March 1st. This grant is renewable provided the student completes FAFSA by March 1st.

Rawlings Guaranteed Access Grant

This grant is for low-income high school graduates who have completed a college prep or individuals who have completed a General Educational Development Diploma (GED) and under the age of 26 when receiving initial award. Eligible students must have a minimum high school GPA of 2.5 or completed a minimum of 165 or above per module on the diploma (GED) examination. Students must demonstrate need as determined by current FAFSA and certain income requirements.

Students must submit the FAFSA by March 1st and a separate Rawlings Guaranteed Access Grant application by April 1st. To receive this grant, students must be enrolled full time (12 or more credits) in a degree seeking program, be eligible for in-state tuition and a resident of Maryland (If a dependent student, parent must also be a resident of Maryland.) This grant is renewable each year provided the student completes FAFSA by March 1st.

Senior Scholarship

Each Maryland State Senator selects recipients for Senatorial Scholarships. Eligible students must demonstrate financial need by submitting the FAFSA by March 1 and plan to attend a Maryland college. Some exceptions are made if the student is enrolling in a major that is not available in Maryland. Enrollment requirements are determined by each Senator but requires a minimum of half-time enrollment or 6 credits. These awards are renewable for up to four years. To determine your state senator use mdelect.net (https://maryland.maps.arcgis.com/apps/webappviewer/index.html?id=177afa87a67746a4ac5496b2d0897fb7/) and type in your address. Contact your Senator in January.

Delegate Scholarship

Each Maryland State Delegate awards Delegate Scholarships based on criteria determined by the Delegate. Application information can be obtained from the Delegate for the student’s district. Enrollment requirements are determined by each Delegate but requires a minimum of half-time enrollment or 6 credits. To determine your delegate use mdelect.net (https://maryland.maps.arcgis.com/apps/webappviewer/index.html?id=177afa87a67746a4ac5496b2d0897fb7/) and type in...
your address. Contact our Delegate in January. This scholarship is not renewable and must be requested each year.

### Workforce Shortage Student Assistance Grants

This program is a combination of several state programs related to critical shortages in the workforce. Eligible majors and employment fields will be determined annually. Both merit and need-based criteria are used in selecting recipients. Students are urged to complete the FAFSA by March 1.

### Maryland Part-Time Grant

These state funded grants are awarded by HCC to students who demonstrate financial need, are enrolled half-time (3-11 credits) in a degree-seeking program and are eligible for in-state tuition and a resident of Maryland (if student is a dependent student, parent must also be a resident of Maryland). The Maryland State Part-Time Grant is awarded based on the availability of funds.

### Health Manpower Shortage Program Tuition Reduction for Out-of-State Nursing Students

Under this program, out-of-state Nursing students enter into a legally binding agreement with the State of Maryland under which the student promises to fulfill certain obligations in return for a reduction in tuition costs. Contact the Maryland Higher Education Commission (http://mhec.maryland.gov/preparing/Pages/FinancialAid/ProgramDescriptions/prog_nonresnurs.aspx) for complete information about this program.

### Maryland Community College Promise Scholarship

The Promise Scholarship is a need-based financial aid program for eligible middle income families, funded by the State of Maryland. The scholarship pays tuition for eligible students to enroll full time at their local community college. The FAFSA deadline for this scholarship is March 1st. Contact the Maryland Higher Education Commission (https://mhec.state.md.us/Pages/Community-College-Promise-Scholarship.aspx) for complete information about the eligibility requirements for this program.

### Veterans' Services

Harford Community College is approved by the Department of Veterans Affairs and the U.S. Military to process educational benefit claims for Military and Veteran students, as well as their qualifying dependents. For more information on how to request these benefits, students should review the information located on HCC's Support for Military & Veterans web page (http://www.harford.edu/student-services/support-for-military-and-veterans.aspx). Information and forms required to process educational claims at HCC can be found on this web page. Students receiving VA educational benefits are responsible for the payment of all tuition, fees and textbooks according to the College billing dates and/or VA regulations. VA students are required to adhere to the VA standards of academic progress in order to remain eligible for educational benefits. Questions regarding the processing of educational benefits should be directed to the Coordinator for Military and Veterans Services. Students should consult the VA website (www.gibill.va.gov) for specific information about VA educational benefits. The office is located in Building 4305, Room 207, Susquehanna Avenue, APG. This office is staffed 5 days per week, but the Coordinator for Military and Veterans Services has office hours on Tuesdays in the Financial Aid Office in the Student Center on campus.
GENERAL EDUCATION

General Education

The mission of Harford Community College's General Education program is to foster the students' development of the core competencies, attitudes, and values necessary to pursue lifelong learning. This foundation is integrated into all the degree programs and academic support areas at HCC. Upon completion of the General Education core requirements, students will possess the skills to acquire and apply knowledge across broad areas of study. In addition, they will be able to demonstrate the skills basic to acquiring knowledge in the behavioral/social sciences, English composition, arts/humanities, mathematics, biological/physical sciences, and interdisciplinary and emerging issues.

Upon completion of the general education core requirements, students will be able to:

1. Read with comprehension and communicate analytically, critically and/or creatively in speech and writing.
2. Apply technology across a variety of disciplines.
3. Interpret data, gathered in a variety of methods, by applying the scientific method to organize and express observations and results clearly and concisely.
4. Apply reasoning, creativity, estimation, and/or computational skills to solve complex problems.
5. Define information needs, access information efficiently and effectively, evaluate information critically and use information ethically.
6. Establish goals, develop objectives and implement plans independently.
7. Analyze ethical issues, relevant principles, and arguments in order to make informed, well-reasoned judgments.
8. Apply knowledge and skills necessary to be informed global citizens in a diverse and changing intercultural world.

General Education Transcript Notations

Courses meeting Harford Community College General Education requirements are automatically noted on the HCC student transcript. The notation, ‘General Education Program Met’ is automatically placed on associate degree graduates’ transcripts. Students who have completed the General Education program requirements but have not graduated can request this notation be placed on their transcript by completing a General Education Program Completion Form in the Registration and Records (http://www.harford.edu/student-services/registration-and-records.aspx) Office.

General Education Requirements

General Education Requirements Completed at Other Institutions

The College recognizes General Education discipline requirements completed at other institutions as equivalent to comparable General Education discipline requirements at Harford Community College. Courses that fulfill English, arts/humanities, mathematics, science (including laboratory science), behavioral and social science, and interdisciplinary and emerging issues core requirements at the sending institution may be used to satisfy General Education requirements at Harford Community College, the receiving institution, so that there is no loss of credit in transfer.

In this catalog, see the Maryland Higher Education Commission Student Transfer Policies for the procedure to complete general education requirements at other institutions after enrolling at Harford Community College.

General Education Course Codes

The following codes are used to identify courses that satisfy the General Education Degree Requirements:

- GB - Behavioral/Social Science
- GE - English Composition
- GH - Arts/Humanities
- GI - Interdisciplinary and Emerging Issues
- GL - Biological/Physical Laboratory Science
- GM - Mathematics
- GS - Biological/Physical Science

Only courses identified by the General Education course codes will satisfy the General Education requirements. See the General Education Approved Course List for designated general education courses at Harford Community College.

General Education AA, AS, and AAT Degree Requirements

All students must meet specific General Education requirements within their Associate degree programs. To be eligible for the Associate of Arts (AA) degree, the Associate of Science (AS) degree, or the Associate of Arts in Teaching (AAT) degree, students must complete a minimum of 60 credits of college-level work. Of the 60 credits, 28-36 credits must fulfill the College’s General Education core requirements. The approved General Education courses appear on the following pages. The distribution of the 28-36 General Education credits must meet the following specifications and may be further prescribed within particular degree programs:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH</td>
<td>Arts/Humanities</td>
<td>6</td>
</tr>
<tr>
<td>GB</td>
<td>Behavioral/Social Science</td>
<td>6</td>
</tr>
<tr>
<td>GL &amp; GS</td>
<td>Biological/Physical Laboratory Science</td>
<td>7-8</td>
</tr>
<tr>
<td>GE</td>
<td>English Composition</td>
<td>3</td>
</tr>
<tr>
<td>GM</td>
<td>Mathematics</td>
<td>3-4</td>
</tr>
</tbody>
</table>

General Education Electives
Students may choose, according to the requirements specified by their particular program of study, any course(s) from GB, GH, GI, GM or GS on the approved General Education course list to meet this requirement. A maximum of 8 credits from GI Interdisciplinary and Emerging Issues may be used to fulfill General Education Elective credit.

### General Education AAS Degree Requirements

To be eligible for the Associate of Applied Sciences (AAS) degree, students must complete a minimum of 60 credits of college-level work. Of the 60 credits, a minimum of 18 credits must fulfill the College’s General Education core requirements. The approved General Education courses appear on the following pages of this catalog. The distribution of the 18+ General Education core credits must include at least one course from each of the following categories: GB, GE, GH, GL, and GM. The remainder of the required General Education core credits may be selected from any of the approved General Education courses, except where specified by the student’s particular program requirements.

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<thead>
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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GH</td>
<td>Arts/Humanities</td>
<td>3</td>
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<td></td>
<td>Students must complete one 3-credit course according to the specific requirements of their program of study.</td>
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<tr>
<td>GB</td>
<td>Behavioral/Social Science</td>
<td>3</td>
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<tr>
<td></td>
<td>Students must complete 3 credits according to the specific requirements of their program of study.</td>
<td></td>
</tr>
<tr>
<td>GL</td>
<td>Biological/Physical Laboratory Science</td>
<td>4</td>
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<tr>
<td></td>
<td>Students must complete one 4-credit course according to the specific requirements of their program of study.</td>
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<tr>
<td>GE</td>
<td>English Composition</td>
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<tr>
<td></td>
<td>This requirement must be completed by all students within the first 24 credit hours of study.</td>
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<tr>
<td>GM</td>
<td>Mathematics</td>
<td>3-4</td>
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<td></td>
<td>Students must complete one 3-4 credit course according to the specific requirements of their program of study.</td>
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</table>

**General Education Electives**

Students may choose, according to the requirements specified by their particular program of study, any courses from GB, GH, GI, GM, or GS on the approved General Education course list to meet this requirement. A maximum of 8 credits from GI Interdisciplinary and Emerging Issues may be used to fulfill General Education Elective credit.

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>ART 203</td>
<td>Art and Architecture in the United States (GH)</td>
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<td>ART 239</td>
<td>Asian Art and Culture (GH)</td>
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<td>ART 240</td>
<td>Modern Art and Culture (GH)</td>
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<tr>
<td>CMST 210</td>
<td>Group Communication and Leadership (GH)</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 203</td>
<td>Survey of World Drama (GH) (D)</td>
<td>3</td>
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<tr>
<td>DRAM 204</td>
<td>Survey of Modern Drama (GH) (D)</td>
<td>3</td>
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<tr>
<td>ENG 201</td>
<td>World Literature: 800 B.C. to 1600 A.D. (GH) (D)</td>
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<tr>
<td>ENG 202</td>
<td>World Literature: 1600 A.D. to the Present (GH) (D)</td>
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<tr>
<td>ENG 203</td>
<td>English Literature: Survey of English Literature I (GH)</td>
<td>3</td>
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<tr>
<td>ENG 204</td>
<td>English Literature: Survey of English Literature II (GH)</td>
<td>3</td>
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<tr>
<td>ENG 205</td>
<td>American Literature: Colonial Through the Civil War (D)</td>
<td>3</td>
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<td>ENG 206</td>
<td>American Literature: Late 19th and 20th Centuries (GH) (D)</td>
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<td>ENG 207</td>
<td>Perspectives in Humanities (GH) (D)</td>
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<td>ENG 208</td>
<td>Contemporary Humanities (GH) (D)</td>
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<td>ENG 210</td>
<td>Literature for Children and Adolescents (GH) (D)</td>
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<tr>
<td>ENG 214</td>
<td>Great Writers: Lives and Works (GH)</td>
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<tr>
<td>ENG 215</td>
<td>Multicultural Literature: The 20th Century (GH) (D)</td>
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<tr>
<td>ENG 219</td>
<td>American Women Writers (GH) (D)</td>
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<tr>
<td>ENG 233</td>
<td>African-American Literature (GH) (D)</td>
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<td>ENG 234</td>
<td>Ethnic American Literature (GH) (D)</td>
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<tr>
<td>ENG 237</td>
<td>Literature to Film (GH)</td>
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<tr>
<td>HUM 101</td>
<td>Introduction to Digital Humanities (H)</td>
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<tr>
<td>MC 105</td>
<td>Introduction to Journalism (GH)</td>
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<tr>
<td>MC 206</td>
<td>History of Film (GH)</td>
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<td>MC 208</td>
<td>Multimedia Journalism I (GH)</td>
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<tr>
<td>MUS 201</td>
<td>The Art of Listening I (H) (D)</td>
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<tr>
<td>MUS 202</td>
<td>The Art of Listening II (GH) (D)</td>
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<tr>
<td>MUS 216</td>
<td>World Music (GH) (D)</td>
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<td>MUS 222</td>
<td>Popular Music of the United States (GH) (D)</td>
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<td>MUS 223</td>
<td>Listening to Jazz (GH) (D)</td>
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<tr>
<td>PHIL 101</td>
<td>Introduction to Philosophy (GH)</td>
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<tr>
<td>PHIL 200</td>
<td>Principles of Logic (GH)</td>
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<tr>
<td>PHIL 205</td>
<td>Ethics (GH)</td>
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<tr>
<td>PHIL 220</td>
<td>Bioethics (GH)</td>
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<tr>
<td>PHIL 221</td>
<td>Business Ethics (GH)</td>
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<tr>
<td>PHIL 250</td>
<td>Philosophy of Religion (GH)</td>
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<td>PHOT 209</td>
<td>The History of Photography (GH)</td>
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<tr>
<td>RELG 207</td>
<td>Literature and Religious Thought of the Old Testament (GH)</td>
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<td>RELG 208</td>
<td>Literature and Religious Thought of the New Testament (GH)</td>
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<td>RELG 210</td>
<td>Comparative Religion (GH) (D)</td>
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<td>SPAN 203</td>
<td>Survey of Spanish Literature I (GH)</td>
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<tr>
<td>THEA 101</td>
<td>Introduction to Theatre (GH)</td>
<td>3</td>
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<tr>
<td>THEA 106</td>
<td>Script Analysis: From Page to Stage (GH)</td>
<td>3</td>
</tr>
<tr>
<td>VPA 201</td>
<td>Visual and Performing Arts Survey (GH) (D)</td>
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</table>

### Arts/Humanities Electives (GH)

Note: For AA, AS, and AAT degrees students must choose two courses.

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<tr>
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<tr>
<td>ART 121</td>
<td>Introduction to Drawing-Non-Majors (GH)</td>
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<td>ART 122</td>
<td>Color, Art, Science &amp; Culture (GH)</td>
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<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
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<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
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**Behavioral/Social Science Electives (GB)**

Note: For AA, AS, and AAT degrees students must choose two courses.

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<td>Visual and Performing Arts Survey (GH) (D)</td>
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<tr>
<td>ANTH 101</td>
<td>Introduction to Physical Anthropology and Archaeology (GB) (D)</td>
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<td>ANTH 102</td>
<td>Introduction to Cultural Anthropology (GB) (D)</td>
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<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
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<tr>
<td>ECON 102</td>
<td>Microeconomics (GB)</td>
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<tr>
<td>GEOG 101</td>
<td>Physical Geography (GB)</td>
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<tr>
<td>GEOG 102</td>
<td>Human Geography (GB)</td>
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<tr>
<td>GEOG 103</td>
<td>World Regional Geography (GB) (D)</td>
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<td>HIST 101</td>
<td>History of Western Civilization I (GB) (D)</td>
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<td>HIST 102</td>
<td>History of Western Civilization II (GB) (D)</td>
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<td>HIST 103</td>
<td>History of the United States I (GB) (D)</td>
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<td>HIST 104</td>
<td>History of the United States II (GB) (D)</td>
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<tr>
<td>HIST 109</td>
<td>World History I (GB)</td>
<td>3</td>
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<tr>
<td>HIST 110</td>
<td>World History II (GB)</td>
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<tr>
<td>HIST 202</td>
<td>The Twentieth Century World (GB) (D)</td>
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<td>HIST 207</td>
<td>African-American History (GB) (D)</td>
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<td>HLTH 203</td>
<td>The U.S. Health Care System (GB)</td>
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<tr>
<td>PL 101</td>
<td>Introduction to Law (Same course as PS 106) (GB)</td>
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<tr>
<td>PS 101</td>
<td>American National Government (GB)</td>
<td>3</td>
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<tr>
<td>PS 102</td>
<td>State and Local Government (GB)</td>
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<td>PS 106</td>
<td>Introduction to Law (Same course as PL 101) (GB)</td>
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<td>PS 201</td>
<td>Introduction to International Relations (GB)</td>
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<tr>
<td>PS 204</td>
<td>Urban Government and Politics (GB) (D)</td>
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<td>PSY 101</td>
<td>General Psychology (GB)</td>
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<td>PSY 213</td>
<td>Human Relations (B)</td>
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<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
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<td>SOC 102</td>
<td>Social Problems (GB)</td>
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<td>SOC 201</td>
<td>Marriage and the Family (GB) (D)</td>
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<td>SOC 212</td>
<td>Race, Class &amp; Gender in the United States</td>
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### Biological/Physical Laboratory Science Electives (GL)

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<tbody>
<tr>
<td>ASTR 152</td>
<td>Sky and Telescope Laboratory (GL)</td>
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<tr>
<td>BIO 100</td>
<td>Fundamentals of Biology (GL)</td>
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<td>BIO 110</td>
<td>Introduction to Plant Sciences (GL)</td>
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<td>BIO 116</td>
<td>Human Body in Health and Disease Laboratory (GL)</td>
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<td>BIO 119</td>
<td>Biology for Health Professionals (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
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<tr>
<td>BIO 121</td>
<td>General Biology II (GL)</td>
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<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL)</td>
<td>4</td>
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<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL)</td>
<td>4</td>
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<tr>
<td>BIO 205</td>
<td>Microbiology (GL)</td>
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<tr>
<td>CHEM 100</td>
<td>Chemistry for Changing Times (GL)</td>
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<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
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<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
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<td>CHEM 114</td>
<td>General Chemistry II B (GL)</td>
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<tr>
<td>ENV 112</td>
<td>Environmental Science Laboratory (GL)</td>
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<td>Earth Science Laboratory (GL)</td>
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<td>ES 108</td>
<td>General Meteorology (GL)</td>
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<td>FS 101</td>
<td>Basic Forensic Science Laboratory (GL)</td>
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<tr>
<td>PHYS 101</td>
<td>Introductory Physics I (GL)</td>
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<tr>
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<td>PHYS 200</td>
<td>General Physics I Lab (GL)</td>
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<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
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<td>SCI 106</td>
<td>Physical Science Course Observations and Investigations: Matter (GL)</td>
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### English Electives (GE)

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### Interdisciplinary and Emerging Issues Electives (GI)

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<td>Digital Media Culture (GI)</td>
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<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
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<tr>
<td>BA 140</td>
<td>Introduction to Leadership (GI)</td>
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<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
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<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
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<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
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<td>HLTH 101</td>
<td>Contemporary Health Issues (GI)</td>
<td>3</td>
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<tr>
<td>HLTH 103</td>
<td>Wellness Theory and Applications (GI)</td>
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<td>HLTH 104</td>
<td>Environmental Health (GI)</td>
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<td>HLTH 106</td>
<td>Nutrition for Personal Wellness (GI)</td>
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<td>ISS 105</td>
<td>Intro to Cybersecurity (GI)</td>
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<td>MC 210</td>
<td>Introduction to Social Media (GI)</td>
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### Mathematics Electives (GM)

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<td>MATH 101</td>
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<td>MATH 102</td>
<td>Contemporary Mathematics (GM)</td>
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<td>MATH 103</td>
<td>Trigonometry (GM)</td>
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<td>MATH 109</td>
<td>Precalculus Mathematics (GM)</td>
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<td>Introduction to Finite Mathematics (GM)</td>
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<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
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<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
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<tr>
<td>MATH 211</td>
<td>Elements of Geometry (GM)</td>
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<td>MATH 212</td>
<td>Calculus with Applications (GM)</td>
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<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
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### Biological/Physical Science Elective (GS)

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<tr>
<td>ASTR 151</td>
<td>Introduction to Astronomy (GS)</td>
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<tr>
<td>BIO 108</td>
<td>Human Body in Health and Disease (GS)</td>
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<td>BIO 109</td>
<td>Human Genetics (GS)</td>
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<td>BIO 210</td>
<td>Nutrition (GS)</td>
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<td>ENV 111</td>
<td>Introduction to Environmental Science (GS)</td>
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<td>ES 105</td>
<td>Earth Science (GS)</td>
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<td>FS 100</td>
<td>Basic Forensic Science (GS)</td>
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<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
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<td>SCI 105</td>
<td>Physical Science I (GS)</td>
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<tr>
<td>SCI 109</td>
<td>Introduction to Energy &amp; Sustainability (GS)</td>
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</tbody>
</table>
For information on Non-General Education Course Options and Requirements, please see listings on the Academic Policies and Information page of the catalog.
INSTITUTIONAL PROFILE AND BOARD POLICIES

Institutional Profile

About

Harford Community College was founded in 1957 as a public community college and occupies 350 acres on Thomas Run Road, three miles east of Bel Air, Maryland. As a comprehensive community college, Harford Community College addresses the diverse educational needs of Harford County. An open admissions institution that views learning as a lifelong activity, the College provides high quality transfer and career programs, developmental education courses, and community education programs to challenge and support students regardless of age, color, disability, national origin, race, religion, sex, or sexual orientation.

Address, Telephone and Web Information:

Harford Community College
401 Thomas Run Road
Bel Air, Maryland 21015-1698

443-412-2000
Maryland Relay Services, 711
www.harford.edu (http://www.harford.edu)

Questions, suggestions, or comments regarding the Harford Community College credit catalog should be addressed to catalog@harford.edu.

The Harford Community College Mission, Vision, Values and Strategies for 2020-2025

Our Mission


Our Vision

Strive for:

Satisfaction: Demonstrate excellence in all we do as measured by those we serve.
Completion: Do what it takes for students to achieve their goals.
Success: Prepare all constituents to make a positive impact and inspire change in the world.

Our Values

1. Agency
   • We trust the capacity of individuals to act both independently and collaboratively in carrying out their job responsibilities and to make informed decisions based on diverse perspectives and data.
   • We are courageous in our decision-making.
   • We are accountable for the decisions we make and appreciate that self-reflection is a learning opportunity.

2. Equity and Inclusion
   • Our shared purpose unites us, and our diversity strengthens our actions.
   • We intentionally engage many voices and seek to understand existing inequities before taking action.
   • We bring open minds and appreciation of backgrounds, expertise, talents, and experiences to every conversation.

3. Communication and Collaboration
   • Honesty, integrity, and clarity are the foundation of our communications.
   • We practice civil discourse: we listen more, talk less, and say what we mean.
   • We work toward common understanding.
   • We lead by example, appreciating that our actions are more powerful than our words.
   • We work in and across teams to accomplish our shared goal of student success.

4. Respect
   • We act in the best interest of our students.
   • We consider the perspectives, feelings, wishes, rights, and traditions of others.
   • We are kind and courteous in our interactions and engage in courageous conversations for the betterment of our students, our College, and ourselves.
   • Our expertise and contributions are valued and as such we are happy and productive.

5. Innovation
   • We encourage creative thinking and taking chances in the pursuit of excellence.
   • We let our curiosity propel us toward new, smarter ways of working and serving our students.
   • Our agility enables us to be responsive to each other, our students, and the competitive environment.

Our Strategies

1. Establish relevant, flexible options for learning that respond to community needs for growth and prosperity.
2. Create an engaging and inclusive learning experience so ALL students can achieve their goals.
3. Foster a participative culture that encourages success by hiring, developing, and retaining diverse employees that share the College’s values.
4. Develop ways to fund educational opportunities to ensure student success.
5. Prepare students to distinguish themselves as compassionate contributors and leaders in the global community.
6. Build, strengthen, and sustain partnerships that drive intellectual, social, and economic development and vitality.

Please visit the College’s website for information on Harford Community College’s Strategic Plan (http://www.harford.edu/about/leadership/board-of-trustees/strategic-plan.aspx).

Accreditations

Harford Community College is accredited by the Middle States Association Commission on Higher Education (https://www.msche.org/) (3624 Market Street, Philadelphia, PA 19104). The Histotechnology Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (http://www.naaccsl.org/). The Paralegal Studies Program is approved by the American Bar Association (http://www.americanbar.org/aba.html). The Medical Assisting Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs (http://www.caahep.org/) upon the recommendation of Medical Assisting Education Review Board (MAERB) (http://www.maerb.org/). The Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (https://www.caahep.org/) upon recommendation of the Committee.
on Accreditation of Educational Programs for the Emergency Medical Services Professions, (CoA EMSP). The Associate of Sciences Degree Nursing program is approved by the Maryland Board of Nursing and accredited by:

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road, Suite 850
Atlanta, GA 30326
404-975-5000
www.acenursing.org (http://www.acenursing.org)

The College holds memberships in numerous national, regional, state and local professional associations.

**Campus Climate**

The College is committed to a work and learning environment that is respectful, courteous and free of discrimination and unlawful harassment. Equal employment and advancement opportunities at the College are based on merit qualifications and abilities. The College is committed to maintaining an environment in which the free exchange of ideas is encouraged, equal opportunity to speak is protected, academic freedom is ensured, and the individual is accorded respect. While the College is committed to upholding each individual's freedom of speech, it is also committed to protecting the individual from speech which causes harm to any member of the College community and which has no value as an expression of ideas.

To ensure a work and study place free of discrimination and harassment, periodic workshops and meetings are scheduled with employees and students. These gatherings provide opportunities to engage in study sessions and collegial dialogue regarding human relations, public laws, Board policy and College procedure, and to address concerns appropriate to the campus environment. Additionally, students are expected to be familiar with the College's Code for Student Rights, Responsibilities and Conduct that is available online.

**Cultural Pluralism**

Harford Community College expects to sustain an atmosphere of cultural pluralism where individuals and groups can maintain a sense of cultural identity while supporting a strong, integrated campus community. The College considers multiculturalism as a process rather than an event. The campus community accepts, appreciates and actively unifies diversity into the cultural quilt that makes up world society.

**Freedom of Expression and Inquiry**

The College bears responsibility for creating, nurturing, and maintaining an environment conducive to the free exchange of ideas. The College will strive to foster an environment for critical dialogue in which varying intellectual and cultural perspectives can interact while maintaining an open relationship to the different cultural, intellectual, and religious values characteristic of our pluralistic society. The College also has a duty to assure that free exchange of ideas and acts of free expression do not violate the rights of others or impinge upon the responsibility of the College to provide an environment conducive to effective teaching and learning. The way in which a college deals with controversy in art, theater, speech, and/or with exhibits, presentations, lectures and/or performances reveals the relative status of the fine and performing arts, the sciences, humanities and related fields of academic inquiry within the college, and the attitude of the neighboring community toward the role of the college as a forum for public discourse (Lyons, 1991). Therefore, when appropriate and necessary, HCC will provide a forum for public dialogue when controversy erupts over an exhibition, performance or presentation of material intrinsic to higher education learning.

The public should be encouraged to think of the College as a laboratory in which varying intellectual and cultural perspectives can interact. The College will strive to foster an environment for critical dialogue concerning the above while maintaining an open relationship to the different cultural, intellectual, and religious values characteristic of our pluralistic society. When learning is permitted to function in this way, it can best serve the mission of the College and the community at large (Lyons, 1991); further, campus leaders can best protect the freedom of expression for all constituencies by siding with none.

If an exhibition (or other activity) becomes the focus of public controversy, the most appropriate response an academic institution can take is not to censor or attach disclaimers, but to confer with involved parties to seek a resolution, and when appropriate, provide a forum for public dialogue about the exhibition/activity. When the argument is asserted regarding public funding for artistic or related presentations and performances, it does not diminish (and indeed may heighten) the responsibility of the college community to ensure academic freedom and of the public to respect the integrity of academic institutions (Fanton, 1990).

**Board of Trustees**

Harford Community College's governing board is comprised of nine trustees who are appointed by the Governor for a term of five years; members may serve up to two consecutive five-year terms. Six members represent the Councilmanic Districts and three are appointed from the county at large.

The Board’s primary function is to provide general oversight and establish policies that govern the College to ensure the institution fulfills its mission as outlined in State law.

**Board Members**

Members of the Board include:

- **Cordell E. Hunter, Sr., Chair**
  At-Large Representative
- **Laura L. Henninger, Esq., CPA, Vice Chair**
  At-Large Representative
- **Judith A. Holloway, OD, MS**
  Councilmanic District E Representative
- **Steve D. Linkous**
  Councilmanic District D Representative
- **James W. McCauley, PhD**
  Councilmanic District F Representative
- **Christopher Payne**
  Councilmanic District A Representative
- **Richard P. Streett, III, DVM**
  At-Large Representative
- **Brian Walker**
  Councilmanic District C Representative
Board Meetings

The Board of Trustees of Harford Community College meets on the second Tuesday of each month (except July) at 6 p.m. in the James F. LaCalle Conference Room (Edgewood Hall Room 132) on Harford’s campus at 401 Thomas Run Road, Bel Air, Maryland. Any change in the meeting date, time, or venue is announced in advance of the regularly scheduled meeting. Please visit the College website (http://www.harford.edu/about/leadership/board-of-trustees.aspx) for the meeting schedule.

Board of Trustees Bylaws provide that individuals or groups wishing to present any matter of concern pertaining to the College at a Board meeting are to submit written request to the president of the College at least ten (10) working days prior to the regularly scheduled public meeting. Upon recommendation by the president and approval of the Board chair, the matter may be included on the agenda for the meeting.

In addition, a public comment period is offered at each public Board meeting. Anyone wishing to speak at this time must complete a request form before the meeting begins (forms are available immediately prior to the meeting). Guidelines adopted by the Board for public comment specify a 3-minute limit for each citizen or group. Topics for discussion must relate to college concerns. Comments which involve personal attacks, employment or employee-related matters, real estate acquisitions, or which contain unprofessional or inappropriate language or content are not allowed. For more information on the Board of Trustees’ public comment guidelines, contact the Director for Communications at 443.412.2408.

Email may be directed to the Board at trustees@harford.edu.

For more information, visit the Board of Trustees (http://www.harford.edu/about/leadership/board-of-trustees.aspx) webpage.

Collegial Governance

The purpose of the Collegial Governance system at Harford Community College is to provide structures and processes that allow employees and students who will be affected by decisions to have input into those decisions. Though any issue of concern to a constituency group may be discussed, some issues will be appropriate for formal consideration and recommendation through Collegial Governance and some will not be appropriate for such consideration. For many issues, the role and involvement of Collegial Governance may not be clear. In such instances, the first task of Collegial Governance will be to clarify the scope of involvement and the limits and parameters of that involvement.

Overview

Constituency Councils: There will be four constituency councils representing staff, faculty, administrators, and students. Collegial Governance at Harford Community College will operate primarily through these councils. The councils will serve as the voices for employees and students to the Executive Leadership Team for input on issues and decisions that will affect them.

Coordinating Group: A Coordinating Group comprised of the chairs and vice chairs of the four constituency councils will define parameters when an issue or decision will affect more than one constituency. The Coordinating Group will be responsible for communication among constituency councils and to all employees on issues considered through the governance process.

Institutional Assessment

Harford Community College continually strives to engage in a measurable, sustained process that evaluates effectiveness of our campus to include teaching and learning, student success, and administrative services. Departments and units develop specific definitions of effectiveness such as key indicators using internal and external benchmarking. Such initiatives are reported and shared with the campus community. The institution’s planning processes, resources, and structures are continuously assessed and improved, ensuring effectiveness of its programs and services and allowing the College to respond effectively to opportunities and challenges. The College employs a variety of strategies to measure, assess, and improve the utilization of institutional resources required to support the institution’s mission and goals. As a component of its institutional assessment efforts, Harford Community College is committed to excellent educational experiences and high-quality programs for its students.

Student Learning Assessment

Harford Community College is committed to excellent educational experiences and high-quality programs for its students. In order to ensure that students are gaining the skills, knowledge and abilities needed to be successful, the College routinely engages in evaluation and assessment of course-level, program-level, and institution-level learning outcomes. Students may be asked to directly participate in assessment activities such as focus groups, surveys, questionnaires, and interviews. In addition, student coursework, including but not limited to, exams, papers, written assignments, and presentations, may be retained for the purpose of assessment and improvement.

Community Connections

Towson University, Northeastern Maryland (TUNE)

The Towson University (https://www.towson.edu/) and Harford Community College partnership provides seamless transfer for students who wish to pursue an associate degree at Harford and a bachelor’s degree at Towson. This location makes Towson’s programs easy to access and provides regional opportunities for study and workforce development. County residents can enjoy the short commute and ample parking.

See the Towson University, Northeastern Maryland (https://www.harford.edu/admissions/hcc-towson-partnership.aspx) webpage for more information on programs, transfer agreements, and admissions.

Harford Community College at APG (Aberdeen Proving Ground)

The Harford Community College office at Aberdeen Proving Ground is a full-service satellite center. Students can complete the enrollment steps from start to finish and obtain information about a variety of credit and noncredit programs and courses. A variety of credit courses are also offered on Post. Although the office serves mainly a military and civilian government employee population, staff at APG are happy to assist any student.

Visit the HCC at APG (https://www.harford.edu/student-services/support-for-military-and-veterans/apg-access-pass.aspx) webpage for more information.

W.A.G.E. Connection

In partnership with the Harford County Department of Social Services (HCDSS), Harford Community College manages the facilities and provides
job readiness training and clerical support at the W.A.G.E. Connection, a one-stop employment center located in Aberdeen, MD.

Call (410) 297-9243 for more information on W.A.G.E. Connection.

**Harford County Public Schools**

HCC works in partnership with Harford County Public Schools (HCPS) to encourage high school students to enroll in college classes early. Taking college classes while in high school enables students to receive a quality education and reduce the amount of time it takes to earn a college degree. Students have the opportunity to simultaneously earn high school credit and/or up to 30 college credits through articulated course selections.

Visit the HCPS College Resources for Parents webpage (https://www.hcps.org/parents/Default.aspx) for more information and resources (see section for Academics). Information on how to get started and can be found on the HCC website (http://www.harford.edu/).

**Institution Teaching Locations**

**Main Location:**

Harford Community College
401 Thomas Run Road
Bel Air, MD 21015

**Branch Locations:**

Aberdeen Senior High School
251 Paradise Road
Aberdeen, MD 21001

Bel Air High School
100 Heighe Street
Bel Air, MD 21014

C. Milton Wright High School
1301 N Fountain Green Rd
Bel Air, MD 21015

Edgewood High School
2415 Willoughby Beach Rd
Edgewood, MD 21040

Edgewood Library
629 Edgewood Road
Edgewood, MD 21040

Fallston High School
2301 Carrs Mill Road
Fallston, MD 21047

Forest Hill Lanes
1 Maurice Drive
Forest Hill, MD 21050

Harford Technical High School
200 Thomas Run Road
Bel Air, MD 21015

Havre de Grace High School
700 Congress Ave
Havre de Grace, MD 21078

Janet Barr Soldier Support Center
4305 Susquehanna Avenue
Aberdeen Proving Ground, MD 21005

Joppatowne High School
555 Jopp Farm Road

Joppatowne, MD 21085
North Harford High School
211 Pylesville Road
Pylesville, MD 21132

Patterson Mill High School
85 Patterson Mill Road
Bel Air, MD 21014-21015

**Educational Programs and Services**

To meet the diverse needs of our students and community, Harford Community College offers a variety of educational programs leading to degree and certificate completion, as well as career training, workforce development, personal enrichment, and student support services:

- HCC students can choose from more than 80 unique programs of study (p. 125) (majors) leading to the completion of an academic degree (p. 127) (A.A., A.S., A.A.S., and A.A.T.) or certificate (p. 205).

- The general education program (p. 109) provides students with the writing, speaking, reading, thinking and computing skills and knowledge to function as educated citizens in a complex world.

- College and university transfer programs (also called articulation agreements) provide students who complete a degree seamless transfer to a four-year college. Transfer programs align courses in specific disciplines and general education to the first two years at a four-year college. Visit the College Articulation and Transfer Information (http://www.harford.edu/student-services/academic-advising/college-articulation-and-transfer-information.aspx) webpage for more information on transfer options.

- Career education programs prepare students for immediate employment or career mobility in a variety of fields and allow students some opportunities to continue studies at four-year institutions.

- Community education (http://www.harford.edu/academic-resources.aspx)/workforce training/community education provides noncredit courses and activities, which allow individuals to upgrade their abilities, prepare for state licensure, retrain for new occupations, enrich cultural backgrounds and develop specialized interests. The department also provides contract training for government, business and industry.

- The Transitional Studies program helps students to overcome identified weaknesses in basic skills, which provide a necessary foundation for success in college.

- Global Education and Engagement (http://harford.edu/academic-resources/global-education-and-engagement.aspx) prepares students and the community to actively participate in and help shape the future of the interconnected global society by offering travel and study abroad credit, noncredit, and service-learning opportunities; campus and community events; and student clubs.

- The HCC Honors Program (http://harford.edu/academic-resources/honors.aspx) promotes a learning experience enriched with great depth, analysis, and synthesis for eligible students. See the Honors Programs & Societies (http://harford.edu/academic-resources/honors.aspx) webpage for more information on the program and admission criteria.

- Student development services (http://www.harford.edu/student-services.aspx) include a variety of resources and services to support and enhance the college experience including academic advising, academic skills assessment, financial aid, career development, mentoring, individual and group learning assistance, disability
services, service-learning, student activities, recreation, intercollegiate athletics, university transfer, and job search services.

- Curriculum Advisory Committees (p. 8) are utilized to assist in the growth of academic programs, as well as the development of new programs.

**Board Policies**

The selected Board Policies below have been included because the content of each policy is applicable to both students and employees of the College. These policies do not represent all Board Policies found in the Board Manual. College employees should see the Board Manual on OwlNet for more information.

**Access/Trespass Policy**

It is the policy of Harford Community College, in accordance with the Education Article of the Maryland Code, Section 26-102, that the president or her/his written designee may deny access to the buildings or grounds of the college to any person who: (a) is not a bona fide currently registered student or is not a current employee at the college and/or who does not have lawful business to pursue at the college, or (b) is suspended or expelled, or (c) acts in a disruptive manner.

**Alcohol Policy and Smoke and Tobacco-Free Campus Policy**

It is the policy of Harford Community College that the College is committed to providing a safe and healthy workplace. While the College generally prohibits employees from consuming alcoholic beverages in the course of business, responsible consumption of alcoholic beverages may be permitted at receptions and other occasions generally associated with cultural events and corporate sponsorships. Further, use, possession or consumption of alcoholic beverages is prohibited at student events on or off campus that are organized or sponsored by College personnel or its agents.

It is the policy of Harford Community College that the College is a smoke- and tobacco-free environment. The use of any type of tobacco product, smoking device or equipment, or any item that simulates smoking such as vaping, is prohibited in all buildings and areas of the campus and off-campus sites supervised by the College.

**Drug Abuse Prevention and Drug-Free Workplace Policy**

It is the policy of Harford Community College to be drug-free in order to ensure a safe, healthy and productive work and learning environment. This policy applies to all employees, applicants for employment, students and others under the control of or contracted by the College.

**Heroin and Opioid Addiction and Prevention Policy**

It is the policy of Harford Community College to be drug free in order to ensure a healthy and safe learning environment. The College is committed to promoting personal wellness and responsibility and recognizes that drug addiction is an illness.

This policy requires all incoming full-time students to participate in an in-person or electronic heroin and opioid addiction and awareness training. Harford Community College will provide all incoming part-time students with resources that alert and educate the students regarding heroin and opioid addiction and prevention.

To further its ongoing efforts to protect the health and safety of its students, Harford Community College will maintain a supply of overdose reversing medication to be used in an emergency situation. Special Police Officers of Harford Community College will be trained: to properly recognize the symptoms of an opioid overdose; in procedures for administering overdose reversing medications; and in the proper follow-up emergency procedures related to an opioid overdose.

**Accompanying College Procedure**

The College complies with all guidelines and procedures established by Harford County and the State of Maryland Health Departments with regard to public health issues affecting the College community. The College offers tobacco, drug and alcohol awareness programming at various times at no cost to students. Visit the Student Activities webpage or contact (443) 412-2140 for more information. Employees seeking tobacco cessation assistance can access free Quit Tobacco Programs through the Harford County Health Department or contact (410) 612-1781.

**Nondiscrimination Statement and Equal Employment Opportunity Policy**

Harford Community College is committed to nondiscrimination and equal opportunity. This commitment is based not only upon the legal requirements of federal, state, and local law, but also upon the College’s firm conviction that the principles of non-discrimination and equal opportunity, as well as courteous and respectful behavior, are imperative to the success of all.

It has been, and will continue to be, the policy of Harford Community College that all students, employees, applicants, and other persons dealing with the College will do so in an atmosphere that is free from discrimination on the basis of race, color, religion, sex, national origin, age, status as an individual with a disability, veteran, sexual orientation, gender identity or expression, marital status, genetic information or any other status protected by law. This policy includes, but is not limited to, decisions about recruitment, hiring, training, promotion, compensation, benefits, transfers, social or recreational programs, academic opportunities and enrollment.

As part of its commitment to equal employment opportunity, the College prohibits harassment of any kind. The College will not tolerate harassment by anyone - supervisors, other employees, students, contractors, or other persons under control of the College.

While every student, employee and visitor retains the right to file an external complaint when he or she believes unfair practices have occurred, Harford Community College provides an internal procedure for addressing such grievances.

Students who have been subjected to discriminatory actions as part of the educational process may discuss it with (1) the appropriate faculty division dean; (2) the Vice President for Student Affairs and Institutional Effectiveness at 443-412-2233, or (3) the Chief Human Resources Officers (CHRO) at 443-412-2103.

**Accompanying College Procedure**

While every student, employee and visitor retains the right to file an external complaint when he or she believes unfair practices have occurred, Harford Community College provides an internal procedure for addressing such grievances.

Students who have been subjected to discriminatory actions as part of the educational process may discuss it with (1) the appropriate faculty division dean; (2) the Vice President for Student Affairs and Institutional Effectiveness at 443-412-2233, or (3) the Chief Human Resources Officers (CHRO) at 443-412-2103.
Pets on Campus
It is the policy of Harford Community College to prohibit all pets from all campus buildings, offices, laboratories and athletic fields with the exception of service animals, animals used as bona-fide instructional aids or animals used for contracted entertainment purposes. Dogs that are properly controlled (leashed) and licensed will be permitted in open campus areas. Owners will be responsible for all pet clean-up.

Sexual Harassment and Misconduct Policy
Harford Community College does not tolerate sexual misconduct by anyone—supervisors, other employees, students, contractors, or any person over whom the College has control. Sexual misconduct includes, but is not limited to, sexual assault, sexual exploitation, intimate partner violence or abuse, and sexual harassment of any person, including employees and students. Sexual harassment includes unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature that becomes a term of employment or condition for an advantage, or which has the purpose or effect of creating a hostile or intimidating atmosphere. Harford Community College has developed a comprehensive Sexual Harassment and Misconduct Procedure statement with guidance about the handling of these matters. Any person who feels or believes that they have been subjected to any such behavior is urged to consult that procedure. A violation of this policy will be handled as provided in the comprehensive Sexual Harassment and Misconduct Procedure, with employees subject to disciplinary action up to, and including, termination.

Accompanying College Procedure
Students who believe they have been subjected to sexual harassment or misconduct may discuss the matter with either HCC's Title IX Coordinator or one of the designated Title IX Deputy Coordinators:

Title IX Coordinator
Ms. Jennie Towner
Interim Vice President for Student Affairs and Institutional Effectiveness
Title IX Coordinator
Harford Community College
Library, Executive Suite
401 Thomas Run Road
Bel Air, MD 21015
443-412-2142 or jtowner@harford.edu

Title IX Deputy Coordinator
Ms. Elizabeth Mosser
Associate Dean for Academic Operations
Title IX Deputy Coordinator
Harford Community College
Library, Executive Suite
401 Thomas Run Road
Bel Air, MD 21015
443-412-2319 or emosser@harford.edu

For more information, please see the College website's section on Sexual Misconduct (http://www.harford.edu/about/sexual-misconduct.aspx).

Tobacco Policy
Harford Community College is a smoke and tobacco free campus. The use of any type of tobacco product (i.e. chew, cigarettes, and smokeless, vapor or electronic cigarettes) is prohibited in all areas of the campus, including parking lots and personal vehicles. A $75 fine may be imposed for non-compliance. This policy was approved by Harford Community College's Board of Trustees on April 10, 2007.

Violence Policy and Campus Weapons Policy
It is the policy of Harford Community College that any and all forms of violence, threatening behavior, and/or verbal/non-verbal harassment that involve or affect Harford Community College or which occur on the college campus (or its satellites, off-site facilities or in any off-campus location that could be considered an extension of the college) are prohibited. This includes threatening behavior, violent actions, and harassment by/against or between/among students, employees, supervisors, and visitors.

It is the policy of Harford Community College that persons who enter any college property are prohibited from carrying a handgun, firearm, or prohibited weapon as defined and enumerated in the Maryland Criminal Law Article §4-101 of any kind onto the college property. Only authorized HCC employees and law enforcement officers authorized to carry weapons are exempt from this prohibition.

This policy applies to all college employees and students, visitors, contractors, guests, and vendors on college property regardless of whether or not they are licensed to carry a concealed weapon.

All college employees and students are also prohibited from carrying weapons while in the course and scope of performing their job or representing the college whether they are on college property at the time or not and whether they are licensed to carry a weapon or not. Employees may not carry a weapon while performing any task on behalf of the college; the only exceptions to this policy will be persons with written permission by the college administration to carry a weapon while performing specific tasks on the college's behalf. This policy also prohibits weapons at any college-sponsored function except by persons affiliated with law enforcement agencies as stated in this policy.
Successful and harmonious articulation depends upon:

- Firm agreement that the needs of the student should be a primary concern in developing articulation procedures, while maintaining the integrity of educational programs;
- Establishment of clear and equitable policies to assure optimum accessibility for transfer students with minimal loss of credits and minimal duplication of course content;
- Mechanisms for evaluation and resolving difficulties students may encounter in moving from one school to another;
- Free and continuous communications among institutions;
- Mutual respect for institutions and their missions;
- Adaptability, within a context of understanding that changes affect not only the institution making changes but also the students and institutions impacted by the changes;
- Free exchange of data among institutions;
- Timely exchange of information relative to students’ progress.

The intended principal benefactor is the student, whose uninterrupted progress toward a degree - based on successful academic performance - is best served by the open exchange of current information about programs, and is best protected by a clear transfer policy pertaining to the public segments of higher education in Maryland. The State’s interests are similarly served through such a policy, which results in the optimal use of its higher education resources by reducing the costly duplication that results in the needless waste of the valuable time and effort of Maryland students, faculty, and administration.

In more specific ways this document’s purpose is to:

- Define broad areas of agreement among the public two-year and four-year institutions of higher education pertaining to facilitating the transfer of students within these segments;
- Provide a mechanism for continuous evaluation of programs, policies, procedures, and relationships affecting transfer of students;
- Provide such revisions as are needed to promote the academic success and general well-being of the transfer student;
- Provide a system of appeals beginning on the campus level to resolve difficulties that students experience in transfer.

While policies and procedures can be established which facilitate the transfer of students, it is the responsibility of the student, as the principal in the process, to know and follow the procedures defined.

**Title 13B Maryland Higher Education Commission**

**Subtitle 06 General Education and Transfer**

*Chapter 01 Public Institutions of Higher Education Authority: Education Article, Section 11-201 to 11-206, Annotated Code of Maryland*

**.01 Scope and Applicability.**
This chapter applies only to public institutions of higher education. Return to Top Go Top

**.02 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. 'A.A.T. degree' means the Associate of Arts in Teaching degree.
4. 'A.F.A. degree' means the Associate of Fine Arts degree.
5. '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.
6. 'A.S. degree' means the Associate of Sciences degree.
7. 'A.S.E. degree' means the Associate of Science in Engineering degree.
8. 'Associate's degree includes an:
   a. A.A. degree;
   b. A.S. degree;
   c. A.A.S. degree;
   d. A.A.T. degree;
   e. A.F.A. degree; and
   f. A.S.E. degree.
9. '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.
10. 'Cumulative grade point average' means the average of grades received for completed coursework at all institutions attended.
11. 'English composition courses' means courses that provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.
12. 'General education' means the foundation of the higher education curriculum providing a coherent intellectual experience for all students.
13. '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 life-long learning; and
   c. Foster the development of educated members of the community and the world.
14. 'Humanities' means courses that examine the values and cultural heritage that establish the framework for inquiry into the meaning of life.
15. 'Mathematics' means courses that provide students with numerical, analytical, statistical, and problem-solving skills.
16. '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.
17. '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 institution, 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.
18. 'Receiving institution' means the institution of higher education at which a transfer student currently desires to enroll.
19. '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 half of the baccalaureate degree.
20. 'Reverse transfer' means a process whereby credits that a student earns at any public senior higher education institution in the State toward a bachelor's degree are transferable to any community college in the State for credit toward an associate's degree.
21. 'Sending institution' means the institution of higher education of most recent previous enrollment by a transfer student at which transferable academic credit was earned.
22. 'Social and behavioral sciences' means courses that are concerned with the examination of society and the relationships among individuals within a society.
23. '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 applicable for credit at the institution the student is entering.

.02-1 Admission of Transfer Students to Public Institutions.

A. Admission to Institutions.
   1. Subject to §B of this regulation, a student attending a public institution who has completed an associate's degree or who has completed 60 or more semester hours of credit, may not be denied direct transfer to another public institution if the student attained a cumulative grade point average of at least 2.0 on a 4.0 scale or its equivalent at the sending institution, except as provided in §A(4) of this regulation.
   2. Subject to §B of this regulation, a student attending a public institution who has not completed an associate's degree or who has completed fewer than 60 semester hours of credit, is eligible to transfer to a public institution regardless of the number of credit hours earned if the student:
      a. Satisfied the admission criteria of the receiving public institution as a high school senior; and
      b. Attained at least a cumulative grade point average of 2.0 on a 4.0 scale or its equivalent at the sending institution.
   3. Subject to §B of this regulation, a student attending a public institution who did not satisfy the admission criteria of a receiving public institution as a high school senior, but who has earned sufficient credits at a public institution to be classified by the receiving public institution as a sophomore, shall meet the stated admission criteria developed and published by the receiving public institution for transfer.
   4. If the number of students seeking admission exceeds the number that can be accommodated at a receiving public institution, admission decisions shall be:
      a. Based on criteria developed and published by the receiving public institution on the institution's website; and
      b. Made to provide fair and equal treatment for native and transfer students.

B. Admission to Programs.
   1. A receiving public institution may require additional program admission requirements to some programs if the standards and criteria for admission to the program:
      a. Are developed and published by the receiving public institution; and
b. Maintain fair and equal treatment for native and transfer students.

2. Courses taken at a public institution as part of a recommended transfer program leading toward a baccalaureate degree shall be applicable to related programs at a receiving public institution granting the baccalaureate degree.

C. Receiving Institution Program Responsibility.
1. The faculty of a receiving public institution is responsible for development and determination of the program requirements in major fields of study for a baccalaureate degree, including courses in the major field of study taken in the lower division.
2. A receiving public institution may set program requirements in major fields of study which simultaneously fulfill general education requirements.
3. A receiving public institution, in developing lower division coursework, shall exchange information with other public institutions to facilitate the transfer of credits into its programs.
4. A receiving public institution shall ensure that any changes to program standards and criteria for admission and the transfer of credits maintain the fair and equal treatment of native and transfer students, and are communicated in a timely manner.

.03 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, and incorporate the general education knowledge and skills required by the Middle States Commission on Higher Education Standards for Accreditation. No later than August 1, 2017, 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 28 and not more than 36 semester hours, and each baccalaureate degree program to include not less than 38 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. Two courses in arts and humanities;
2. Two courses in social and behavioral sciences;
3. Two science courses, at least one of which shall be a laboratory course;
4. One course in mathematics, having performance expectations demonstrating a level of mathematical maturity beyond the Maryland College and Career Ready Standards in Mathematics (including problem-solving skills, and mathematical concepts and techniques that can be applied in the student's program of study); and
5. One course in English composition, completed with a grade of C- or better.

D. Institution-Specific Requirements.
1. In addition to the five required areas in §A of this regulation, a public institution may include up to 8 semester hours in coursework outside the five areas. These courses may be integrated into other general education courses or may be presented as separate courses. Examples include, but are not limited to, Health, Diversity, and Computer Literacy.
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 18 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 humanities area if literature is included as part of the content of the course.
I. 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. 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.
M. 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.

.04 Transfer of Education Program Credit.
A. Transfer of Credit 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.
1. Except as provided in §B(5) of this regulation, at least 60 credits but not more than 70 credits of general education, elective, and
major courses that a student earns at any community college in the State toward an associate's of art or an associate's of science degree shall be transferable to any public senior higher education institution in the State for credit toward a bachelor's degree.

2. To be transferable, a credit shall have been earned in accordance with the student's degree plan.

3. Courses taken at a public institution as part of a recommended transfer program leading toward a baccalaureate degree shall be applicable to related programs at the receiving public institution granting the degree if successfully completed in accordance with the receiving institution's policies governing native students in the same program.

4. Students earning an A.A.S. or A.F.A. degree shall have their credits evaluated in a manner that maximizes the transfer of articulated and elective credit.

5. A community college and a public senior higher education institution may provide in an articulation agreement for the transfer of credits in addition to credits transferred under §B(1) of this regulation.

C. Nontraditional Credit.

1. The assignment of credit for AP, CLEP, or other nationally recognized standardized examination scores presented by transfer students is 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 according to the same standards that apply to native students at the receiving institution:
   a. Technical courses from career programs;
   b. Course credit awarded through articulation agreements with other segments or agencies, which should be developed in collaboration with all public institutions, including course credit awarded by articulation with Maryland public secondary schools;
   c. Credit awarded for clinical practice or cooperative education experiences;
   d. Credit awarded for life and work experiences; and
   e. Credit awarded for training, coursework, or education through the military.

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 basis for the awarding of the credit. The basis for the awarding of the credit shall be annotated on the student's transcript.

5. The receiving institution shall provide a program articulation agreement with COMAR 13B.02.02. and shall be evaluated by the receiving institution on a course-by-course basis 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.

D. Program Articulation.

1. Recommended transfer programs shall be developed through collaboration 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 for seamless transfer. These programs constitute freshman/sophomore level course work to be taken at the community college in fulfillment of the receiving institution'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.

E. Reverse Transfer of Credit

1. Subject to §E(2) of this regulation, a community college shall accept reverse transfer any credits that an individual earned at a public senior institution up to 45 credits. Credits in excess of 45 credits may be accepted in accordance with the community college's policy.

2. To be eligible for the transfer of credit under §E(1) of this regulation, a student shall have completed at least 15 credits at the community college to which the credits are transferred.

3. Community colleges and public senior institutions shall develop a process to identify students eligible for reverse transfer at no cost to the student.

F. Transfer of General Education Credit

1. 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.

2. 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.

3. 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.

4. A Maryland community college shall accept 28-36 credits of general education as specified in Regulation .03(C) of this chapter as completion of the general education requirements at the community college, without further review or the need for a course-by-course match.

5. 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.

6. 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 10-18 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.

7. Each public 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.

8. Associate's Degrees.
a. While there may be variance in the numbers of hours of general education required for associate'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.

b. A student possessing an associate's degree 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 credits.

9. Student Responsibilities. A student is held:
   a. Accountable for the loss of credits that:
      1. Result from changes in the student’s selection of the major program of study;
      2. Were earned for remedial course work; or
      3. Exceed the total course credits accepted in transfer as allowed by this chapter; and
   b. Responsible for meeting all requirements of the academic program of the receiving institution.

.05 Academic Success and General Well-Being of Transfer Students.
A. Sending Institutions.
   1. Community colleges shall encourage their students to complete the associate degree in a recommended transfer program that 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 and programs to 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.
   1. 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 or transcripts of a degree-seeking transfer student as expeditiously as possible, and notify the student of the results within 20 working days of the receipt of all official transcripts. The receiving institution shall inform a student of the courses that are acceptable for transfer credit and the courses that are applicable to the student’s intended program of study.
   4. A transfer student shall be provided the same opportunity as a native student to pursue the program and degree requirements that were in effect at the time that the student enrolled at the sending institution provided they have been continuously enrolled and otherwise meet the same requirements of the native student.

.06 Programmatic Currency.
A. Maryland public institutions shall collaborate to develop and provide to students current and accurate information on transferable programs and courses.
B. Upon approval of new baccalaureate programs, recommended transfer programs shall be developed with each community college.
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.

.07 Transfer Mediation Committee.
A. Sending and receiving institutions that disagree on the transferability of general education courses as defined by this chapter shall submit their disagreements to the Secretary, who shall appoint a Transfer Mediation Committee to adjudicate the disagreement. Members appointed to the Transfer Mediation Committee shall be representative of the public 4-year colleges and universities and the community colleges.
B. The Transfer Mediation Committee shall address general education issues at the course or curricular level, not individual student cases. 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.

.08 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 written 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.

.09 Periodic Review.
1. Report by Receiving Institution.
   1. A receiving institution shall report annually the progress of students who transfer from 2-year and 4-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.

2. 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.

3. 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.
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- History, Area of Concentration in Arts and Sciences (AA) (p. 168)
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- Business Administration Lower-Level Certificate (p. 209)
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- CPA Exam Qualification Lower-Level Certificate (p. 210)
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Associate of Arts (A.A.)
The Associate of Arts degree recognizes a curricular focus on the liberal
arts (humanities, social sciences and similar subjects) and fine arts. The
Associate of Arts degree not only transfers to appropriate baccalaureate
programs, but also provides for career exploration and skills upgrading.

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• Arts Management (AA) (p. 135)
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• Social Work, Area of Concentration in Arts & Sciences (AA) (p. 198)
• Sociology, Area of Concentration in Arts & Sciences (AA) (p. 199)
• Teacher Education (AA) (p. 200)
• Theatre: Performance (AA) (p. 204)

Associate of Fine Arts (A.F.A.)
The Associate of Fine Arts degree recognizes a curricular focus on the
fine arts (studio, graphic, digital, photographic and similar arts subjects).
The Associate of Fine Arts degree not only transfers to appropriate baccalaureate
programs, but also provides for career exploration and skills upgrading.

• Digital Arts, Area of Concentration in Art + Design (AFA) (p. 149)
• Fine Art, Area of Concentration in Art + Design (AFA) (p. 162)
• Graphic Design, Area of Concentration in Art + Design (AFA) (p. 167)
• Photography, Area of Concentration in Art + Design (AFA) (p. 185)

Associate of Sciences (A.S.)
The Associate of Sciences degree recognizes a curricular focus on
science, mathematics, engineering and technology. The Associate of
Sciences degree not only transfers to appropriate baccalaureate
programs, but also provides for career exploration and skills upgrading.

• Accounting (AS) (p. 128)
• Agribusiness, Area of Concentration in Business Management (AAS)
(p. 132)
• Agricultural Studies (AAS) (p. 133)
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Sciences (AS) (p. 138)
• Chemistry, Non-Calculus Based Physics, Area of Concentration in Arts &
Sciences (AS) (p. 139)
• Computer Science (AS) (p. 144)
• Engineering (AS) (p. 153)
• Environmental Science, Area of Concentration in Arts & Sciences (AS)
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• Information Systems Management, Area of Concentration in Business
Management (AAS) (p. 171)
• Marketing, Area of Concentration in Business Management (AAS)
(p. 174)
• Mathematics, Area of Concentration in Arts & Sciences (AS)
(p. 175)
• Nursing (AS) (p. 178)
• Physics, Area of Concentration in Arts & Sciences (AS) (p. 186)

Associate of Applied Sciences (A.A.S.)
The Associate of Applied Sciences degree recognizes a curricular focus in
a specific occupational area. The Associate of Applied Sciences degree
is intended primarily for immediate employment or career mobility; it also provides some opportunities for transfer to baccalaureate programs.

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- Administrative Professions, Area of Concentration in Business Management (AAS) (p. 131)
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**Associate of Arts in Teaching (A.A.T.)**

The Associate of Arts in Teaching degree recognizes a curricular focus in teacher education which meets the lower-level degree academic content, outcomes, and requirements for teacher education similar to the first two years of a baccalaureate program in teacher education. This degree requires a passing score on Praxis Core and a cumulative grade point average of 2.75 on a 4.0 scale and will transfer in total without further review by Maryland public and independent 4-year institutions.

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- Secondary Education - English (AAT) (p. 193)
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- Additive Manufacturing Technician Certificate (p. 206)
- Administrative Professions, Business Management Certificate (p. 207)
- Agribusiness, Business Management Certificate (p. 207)
- Biotechnology Certificate (p. 208)
- Business Administration Lower-Level Certificate (p. 209)
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- Medical Assisting Certificate (p. 217)
- Medical Office Assistant Certificate (p. 218)
- Paralegal Studies Certificate (p. 219)
- Photography Certificate (p. 220)
- Production and Announcing in the Electronic Media, Mass Communications Certificate (p. 220)
- Professional Education Courses for Maryland Certification (p. 221)
- Programming, Computer Information Systems Certificate (p. 221)
- Software, Computer Information Systems Certificate (p. 222)
- Unix, Computer Information Systems Certificate (p. 223)
- New Link (https://catalog.harford.edulabel::/programs-study-majors/certificates/0/)

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- Accounting (AS) (p. 128)
- Accounting (AS) (p. 128)
- Additive Manufacturing, Area of Concentration in Engineering Technology (AAS) (p. 130)
- Administrative Professions, Area of Concentration in Business Management (AAS) (p. 131)
- Agribusiness, Area of Concentration in Business Management (AAS) (p. 132)
- Agricultural Studies (AAS) (p. 133)
- Anthropology/Sociology, Area of Concentration in Arts & Sciences (AA) (p. 134)
- Arts Management (AA) (p. 135)
- Biology, Area of Concentration in Arts & Sciences (AS) (p. 136)
- Business Administration (AS) (p. 137)
- Chemistry, Calculus Based Physics, Area of Concentration in Arts & Sciences (AS) (p. 138)
- Chemistry, Non-Calculus Based Physics, Area of Concentration in Arts & Sciences (AS) (p. 139)
- Communication Studies (AA) (p. 140)
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- Computer Aided Design and Drafting (CADD) (AAS) (p. 142)
- Computer Information Systems (AAS) (p. 143)
- Computer Science (AS) (p. 144)
Accounting (AS)

Award: Associate of Science
No. of credits required: 60

For more information: Contact James Baker, 443-412-2374, j baker@harford.edu; Cynthia Lewis, 443-412-2058, c lewis@harford.edu; or Admissions, 443-412-2109.

Program Description
This program is designed for students who wish to transfer to earn a baccalaureate degree in accounting. Students who plan to transfer should consult an advisor for assistance in selecting courses appropriate for the transfer institution and program.

Program Goals
Upon completion of the Associate of Science in Accounting program, students will be able to:

1. Use the language of business
2. Demonstrate effective and professional communication skills.
3. Analyze ethical and social responsibilities in business decision making.
4. Examine accounting as an information processing system.
5. Demonstrate problem solving skills in business decision making.
6. Transfer successfully to a four-year institution.

Transfer Information
Transfer students should note that many business schools have selective admissions requirements. Cumulative grade point average and completion of specific course requirements are used as criteria for acceptance. Students should contact academic advising or accounting faculty for further information.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 210 or CIS 102</td>
<td>Business Computer Applications (GI) or Introduction to Information Sciences (GI)</td>
<td>3</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<td>Select from:</td>
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</tr>
<tr>
<td>MATH 111</td>
<td>Introduction to Finite Mathematics (GM)</td>
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<tr>
<td>MATH 212</td>
<td>Calculus with Applications (GM)</td>
<td></td>
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<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<tr>
<td></td>
<td>General Elective</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<td></td>
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<tr>
<td>ACCT 102</td>
<td>Accounting Principles II</td>
<td>3</td>
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<tr>
<td>BA 205 or BA 246</td>
<td>Business Law (GI) or Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102 or ENG 216</td>
<td>English Composition and Literature (GE) or Business Communications</td>
<td>3</td>
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<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
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<tr>
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<td>Credits</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
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<tr>
<td>ECON 102</td>
<td>Microeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 213</td>
<td>Intermediate Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
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<td>4</td>
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<td>Credits</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>ACCT 206 or ACCT 208</td>
<td>Cost Accounting or Managerial Accounting</td>
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<td>General Elective</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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</tr>
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<td></td>
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<td>13</td>
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<tr>
<td></td>
<td>Total Credits</td>
<td>60</td>
</tr>
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</table>

1 Students who plan to continue studies at a four-year institution should select the appropriate course depending upon the four-year institution's particular requirements.

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

**Accounting (AAS)**

**Award:** Associate of Applied Sciences Degree
**No. of credits required:** 60
**For more information:** Contact James Baker, 443-412-2374, jbbaker@harford.edu; Cynthia Lewis, 443-412-2058, clewis@harford.edu; or Admissions, 443-412-2109.

**Program Description**

Designed to prepare students to perform accounting activities for corporations, governmental agencies, nonprofit organizations or individuals, this program allows the student to focus on specific areas of interest in the accounting profession. Upon successful completion of the program, students will have a strong background in accounting principles and applications, as well as a strong general education experience.

**Program Goals**

Students who successfully complete the Accounting Program will:

1. Apply basic financial, managerial, cost and tax accounting principles.
2. Develop and employ problem-solving skills related to accounting issues.
3. Examine accounting as an information processing system.
4. Analyze and discuss transactions and related financial statements.
5. Recognize ethical accounting behavior.

**Transfer Information**

Accounting students who plan to transfer to a four-year institution should pursue the Associate degree in Business Administration. One opportunity for students interested in a Bachelor's degree in accounting is the dual admissions program with University of Maryland University College. Interested students should consult an academic or program advisor and the transfer guide for the institution to which they plan to transfer.

**Employment Information**

Accounting personnel compile and analyze business records and prepare financial reports such as income statements, balance sheets, cost studies and tax reports. The major fields of accounting practice are government, industry and public accounting.

According to the Occupational Outlook Handbook, employment of accountants is expected to grow 10%, adding over 140,000 new positions by 2026. Most jobs require at least a Bachelor’s degree in accounting or a related field, and competition will be keen for the most prestigious jobs. Most employers prefer applicants who are familiar with computers and their applications in accounting. For beginning accounting and auditing positions in the Federal Government, four years of college are required (including 24 semester hours in accounting) or an equivalent combination of education and experience.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:
Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
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<td>BA 101</td>
<td>Introduction to Business (GI)</td>
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<td>ECON 102</td>
<td>Microeconomics (GB)</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<tr>
<td>MATH 109 or MATH 216</td>
<td>Precalculus Mathematics (GM) or Introduction to Statistics (GM)</td>
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Second Semester

<table>
<thead>
<tr>
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<tr>
<td>ACCT 102</td>
<td>Accounting Principles II</td>
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<td>ACCT 108</td>
<td>Computerized Accounting</td>
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<td>Select one of the following:</td>
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<td>BA 210</td>
<td>Business Computer Applications</td>
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<td>CIS 145</td>
<td>Introduction to Microsoft Excel</td>
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<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
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<td>Select one of the following:</td>
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<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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Physical Education Elective 1

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Third Semester

<table>
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<td>ACCT 206 or ACCT 208</td>
<td>Cost Accounting or Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 211</td>
<td>Intermediate Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BA 246 or BA 205</td>
<td>Legal Environment of Business or Business Law</td>
<td>3</td>
</tr>
<tr>
<td>Accounting Electives (p. 130)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GL) (p. 111)</td>
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<table>
<thead>
<tr>
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Fourth Semester

<table>
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<td>Intermediate Accounting II</td>
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<td>Accounting Electives (p. 130)</td>
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<td>6</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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Physical Education Elective 1

<table>
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| Total Credits | 60 |

Accounting Electives

Choose nine credits of electives

<table>
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<tr>
<th>Code</th>
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<th>Credits</th>
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<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
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</tr>
<tr>
<td>ACCT 105</td>
<td>Financial Statement Interpretation and Analysis</td>
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</tr>
<tr>
<td>ACCT 107</td>
<td>Spreadsheet Applications For Accounting</td>
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</tr>
<tr>
<td>ACCT 203</td>
<td>Tax Accounting I</td>
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</tr>
<tr>
<td>ACCT 204</td>
<td>Tax Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 205</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 206</td>
<td>Cost Accounting</td>
<td>3</td>
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<td>ACCT 208</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ENG 216</td>
<td>Business Communications</td>
<td>3</td>
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</tbody>
</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Additive Manufacturing, Area of Concentration in Engineering Technology (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact David Antol, Coordinator for Applied Technology at 443-412-2472, dan@harford.edu; or Admissions, 443-412-2109.

Program Description

This program prepares students for employment in advanced manufacturing, including additive manufacturing (3D printing), and a variety of other industries that use technicians or technology specialists to support engineering staff. A strong emphasis is placed on applications, problem solving, critical thinking, and communication skills. Upon graduation, students will be able to use these skills to organize, and carry out engineering technology projects. Graduates of this program will demonstrate knowledge of CAD, electronics, hydraulics, pneumatics, blueprint reading, and mechanics. Engineering and science courses are important parts of this program.

Program Goals

Upon successful completion of this program of study students will be able to:

1. Apply appropriate communications skills to work independently and collaboratively within an organization to promote the goals and objectives of the work unit.
2. Recognize how to facilitate successful completion of technical projects.

1 MATH 101 College Algebra (GM) and MATH 103 Trigonometry (GM) may be substituted for MATH 109 Precalculus Mathematics (GM).
2 Students who plan to continue studies at a four-year institution should select the appropriate course depending upon the four-year institution’s particular requirements.
3. Demonstrate competency in using technical tools, technology, methods, and processes.
4. Recognize professional and ethical behavior.
5. Apply problem solving skills to technical problems.

Employment Information
Data illustrates a significant demand for well-educated and highly-skilled additive manufacturing workers in Harford County and in the State of Maryland. In 2015 Maryland's 3,680 manufacturing businesses generated $20.2 billion in gross state product and employed more than 109,000 persons. The state supports numerous 21st century manufacturing industries including defense electronics, aeronautics, systems engineering, medical diagnostics, specialty chemicals, software and aircraft engines. Sixty percent of these manufacturers are advanced, producing a profound multiplier effect on Maryland's economy. High-technology manufacturers in Maryland generate almost two additional jobs for each new manufacturing job created.

Course Title Credits

First Semester
CADD 101 Introduction to CADD 3
CIS 102 Introduction to Information Sciences (GI) 3
CMST 105 Interpersonal Communication (GI) (D) 3
ENGT 106 Introduction to Additive Manufacturing 3
CIS 115 Fundamentals of Programming 3
Credits 15

Second Semester
ENGT 110 3D Printing in Additive Manufacturing 3
ENGT 108 Introduction to Electronics 4
ENGR 203 3
ENG 101 English Composition (GE) 3
MATH 103 Trigonometry (GM) 3
Credits 16

Third Semester
ENGT 115 Optimizing Print Files 3
ENGT 223 Principles of Mechanics 3
ENGT 105 Electrical Control Systems 3
Biological/Physical Lab Science Elective (GL) (p. 111) 4
PHIL Elective (GH) 3
Credits 16

Fourth Semester
ENG 209 Technical Writing 3
ENGT 225 Quality Control & Metrology for Additive Manufacturing 3
Physical Education Elective 1
Behavioral/Social Science Elective (GB) (p. 110) 3
ENGT 230 Additive Manufacturing Capstone 3
Credits 13

Total Credits 60

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Administrative Professions, Area of Concentration in Business Management (AAS)
Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Admissions, 443-412-2109.

Program Description
The Business Management program is designed to enable students to obtain knowledge, skills, and competencies in the challenging business fields of Marketing Management, Entrepreneurship, Human Resources Management, Administrative Professions, and Agribusiness.

Students have the option to complete certificates in each of these business management career fields initially. Upon successful completion of the certificate, students are able to incorporate the 24 credit hours earned into an Associate of Applied Science degree in Business Management to satisfy their individual career goals.

Program Goals
Upon successful completion of this program of study students will be able to:
1. Use the language of business and demonstrate effective and professional communication skills.
2. Analyze ethical and social responsibilities in business decision making.
3. Examine different types of business systems, organizations, management practices and theories related to the global economy.
4. Demonstrate problem-solving skills in business decision making.
5. Use information technology applications to develop business solutions.
6. Demonstrate acquired proficiencies in a business or organizational setting.

Employment Information
The Business Management Administrative Professions program prepares students for a business career by providing comprehensive skills for today's rapidly changing business environment. Employment projections provided by the U.S. Department of Labor and regional workforce development data indicate that opportunities in administrative support professions will continue to increase.

According to the Occupational Outlook Handbook, employment of administrative professionals is expected to decline 5% through 2026, although there are still projected to be nearly 4,000,000 jobs in this field.
### Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>OS 100</td>
<td>Keyboarding Basics</td>
<td>1</td>
</tr>
<tr>
<td>OS 113</td>
<td>Intermediate Keyboarding and Document Processing</td>
<td>3</td>
</tr>
<tr>
<td>OS 214</td>
<td>Advanced Keyboarding &amp; Document Processing</td>
<td>3</td>
</tr>
<tr>
<td>OS 129</td>
<td>Introduction to Office Procedures and Management</td>
<td>4</td>
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<tr>
<td>OS 136</td>
<td>Introduction to Bookkeeping: Quickbooks</td>
<td>3</td>
</tr>
<tr>
<td>OS 116</td>
<td>Communication Technologies</td>
<td>4</td>
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<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>OS 245</td>
<td>End User Technology Solutions</td>
<td>3</td>
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<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
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<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
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<tr>
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<td>ENG 216</td>
<td>Business Communications</td>
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<td>PHIL 221</td>
<td>Business Ethics (GH)</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
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<td>Mathematics Elective (GM) (p. 110)</td>
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<td>Physical Education Elective</td>
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<tr>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>60</td>
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</tr>
</tbody>
</table>

1. Upon successful completion of these 24 credit hours, the student will be able to obtain a Business Management Administrative Professions Certificate.

### General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

### Agribusiness, Area of Concentration in Business Management (AAS)

**Award:** Associate of Applied Sciences Degree  
**No. of credits required:** 60

For more information: Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu; or Admissions, 443-412-2109.

### Program Description

The Business Management program is designed to enable students to obtain knowledge, skills, and competencies in the challenging business fields of Marketing Management, Entrepreneurship, Human Resources Management, Administrative Professions, and Agribusiness.

Students have the option to complete certificates in each of these business management career fields initially. Upon successful completion of the certificate concentrations, students are able to incorporate the 24 credit hours earned into an Associate of Applied Science degree in Business Management to satisfy their individual career goals.

### Program Goals

Upon successful completion of this program of study students will be able to:

1. Use the language of business and demonstrate effective and professional communication skills.
2. Analyze ethical and social responsibilities in business decision making.
3. Examine different types of business systems, organizations, management practices and theories related to the global economy.
4. Demonstrate problem-solving skills in business decision making.
5. Use information technology applications to develop business solutions.
6. Demonstrate acquired proficiencies in a business or organizational setting.

### Employment Information

The Business Management Agribusiness program prepares students for a business career by providing comprehensive business skills and knowledge as it relates to the agribusiness industry. Agricultural business managers are employed by companies that manufacture and market animal and plant products. Employment opportunities in this field are expected to grow at an average rate over the next decade according to the U.S. Department of Labor. Employment positions include sales representatives, farm managers, food production managers and food retailers. In addition, the Harford County Division of Agriculture has launched and sustained a ‘buy local’ advertising campaign to stimulate consumer demand for locally grown fruits, vegetables and grains. Stimulation of consumer demand may result in job creation in agribusiness in Harford County.

### Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
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</tr>
<tr>
<td>BA 110</td>
<td>Introduction to Entrepreneurship (GI)</td>
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</tr>
<tr>
<td>BA 145</td>
<td>Farm and Agribusiness Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 209</td>
<td>Agricultural Marketing (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 246</td>
<td>Legal Environment of Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 242</td>
<td>Introduction to International Business (GI)</td>
<td>3</td>
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<tr>
<td>BA 210</td>
<td>Business Computer Applications (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>OS 129</td>
<td>Introduction to Office Procedures and Management</td>
<td>4</td>
</tr>
<tr>
<td>OS 136</td>
<td>Introduction to Bookkeeping: Quickbooks</td>
<td>3</td>
</tr>
<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 216</td>
<td>Business Communications</td>
<td>3</td>
</tr>
</tbody>
</table>
Skills can be applied to careers in feed or seed sales and service, productive, profitable businesses. Effective management and business solutions to the challenge of protecting natural resources while managing and across the nation. This technology can be used to ignite creative Advances in technology continue to change agriculture in Maryland below.

In order to graduate with this degree, a student must have an approved written learning plan including concentration area on file in the Advising, Career, and Transfer Services Office. The plan must be developed in collaboration with a Faculty Advisor or an Academic Division Dean and include courses from the Technical/Professional core courses listed below.

**Agricultural Studies (AAS)**

**Award:** Associate of Applied Sciences Degree - Technical/Professional Studies

**No. of credits required:** 60

For more information: Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mhuddleston@harford.edu; Admissions, 443-412-2109.


**Program Description**

Harford Community College cooperates with the Institute of Applied Agriculture (IAA), University of Maryland, College Park, to offer this program. HCC offers general education courses to prepare students for transfer to the Institute of Applied Agriculture. The Institute of Applied Agriculture offers the subject-specific courses required for this program. HCC awards the Associate of Applied Sciences degree in Technical/Professional Studies upon successful completion of the program.

In order to graduate with this degree, a student must have an approved written learning plan including concentration area on file in the Advising, Career, and Transfer Services Office. The plan must be developed in collaboration with a Faculty Advisor or an Academic Division Dean and include courses from the Technical/Professional core courses listed below.

**Agricultural Business Management/ Business Administration**

Advances in technology continue to change agriculture in Maryland and across the nation. This technology can be used to ignite creative solutions to the challenge of protecting natural resources while managing productive, profitable businesses. Effective management and business skills can be applied to careers in feed or seed sales and service, nutrient management consulting, and crop and livestock production. The business skills emphasized in this program are an important part of success in any career area. Coupled with courses in agricultural mechanics and crop and animal science, students gain skills that are important for managing an effective agricultural enterprise. Internship experiences provide work with industry professionals and interaction with others in agriculture.

**Golf Course Management/Business Administration**

Golf course superintendents/managers combine business and communication skills with science. They are part scientist, part executive, part environmentalist, and part golfer. Their expertise provides an outstanding playing surface for professional and recreational golfers. This expertise includes Turfgrass science, pest control strategies, computer driven irrigation systems, and state-of-the-art maintenance equipment. There are over 17,000 golf courses in the U.S. and over 200 in Maryland that require educated and experienced superintendents and managers. This program prepares students to enter this exciting career.

**Landscape Management/Business Administration**

This program provides training in basic botany; landscape construction and maintenance; plant, weed, and insect identification; business and personnel management; computer applications and more. Students use the latest technology and software to plan, research, and complete projects. Internships at landscape companies offer hands-on experience and the opportunity to make industry contacts. Landscape companies do over $217.5 million in business in Maryland annually and jobs are plentiful.

**Turfgrass Management/Business Administration**

Turfgrass management requires science and business skills to satisfy the public’s demand for green lawns and playable and safe athletic fields. A combination of education and experience opens numerous doors in the area of Turfgrass management from professional ball fields to lawn care businesses. The program includes in-depth study of turfgrasses, soils, fertilizers and pesticides. Internships offer hands-on experience and the opportunity to make industry contacts. The Turfgrass industry is a growth industry, which generates $30 billion annually in the U.S. In Maryland, the Turfgrass industry contributes $1 billion to the State’s economy.

**Diversity Requirement**

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>General Education Elective (p. 109)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Mathematics Elective (GM) (p. 111) 3
Technical/Professional Electives 17
Technical/Professional Core Courses 20
Physical Education Elective 1

Total Credits 60

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:
Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Anthropology/Sociology, Area of Concentration in Arts & Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor Sharon Stowers, 443-412-2059; sstowers@harford.edu; or Admissions, 443-412-2109.

Program Description
The Sociology program prepares students for a wide variety of careers in government, business, and non-profit organizations, such as research and demography, clinical and counseling services, applied anthropology, and human services. Students can choose from three concentrations that have been developed to facilitate transfer to baccalaureate programs in sociology, social work, or anthropology/sociology.

Program Goals
Upon completion of the sociology program, students will be able to:
1. Apply basic concepts and theories of the discipline to various social structures.
2. Compose research papers employing appropriate information literacy skills and using standard writing formats such as APA.
3. Identify patterns of human behavior and apply appropriate human constructs through their participation in an experiential learning activity.
4. Perform successfully in a baccalaureate program.
5. Apply anthropological theories and terminology to discuss the process of human biological and cultural evolution.
6. Use an anthropological perspective to critically evaluate academic and popular writings on cultural diversity and globalization.

Transfer Information
Students have options for transfer to many institutions, both in Maryland and across the United States.

Employment Information
According to the Bureau of Labor Statistics, positions are expected to grow nationally. Employment for anthropologists, especially, is expected to increase faster than average (21%) from 2010-2020.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>SOC 101 Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 English Composition (GE)</td>
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<tr>
<td>PSY 101 General Psychology (GB)</td>
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</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>SOC 102 Social Problems (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 109 English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 101 Introduction to Physical Anthropology and Archaeology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
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<tr>
<td><strong>Credits</strong></td>
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</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
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<tr>
<td>SOC 201 Marriage and the Family (GB) (D)</td>
<td>3</td>
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<tr>
<td>CMST 101 Speech Fundamentals (GI)</td>
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<tr>
<td>ANTH 102 Introduction to Cultural Anthropology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
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<tr>
<td>Physical Education Elective</td>
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</tr>
<tr>
<td><strong>Credits</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Anthropology/Sociology Track Electives (p. 135)</td>
<td>6</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td>History Elective (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>60</td>
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</tbody>
</table>

1. BIO 100 Fundamentals of Biology (GL) or BIO 120 General Biology I (GL) is recommended.
2. MATH 216 Introduction to Statistics (GM) is recommended if transfer is planned.
3. A four credit course in mathematics (GM) may be substituted.
4. Electives should be chosen according to personal and career interests or to the requirements of the institution to which transfer is planned. It is suggested students take 3-9 credits of foreign language.
5. History elective should be chosen to satisfy the requirements of the institution to which transfer is planned.
6. A four credit Biological/Physical Science Lab (GL) course may be substituted.
Anthropology/Sociology Track Electives

Select two of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 211</td>
<td>The Archaeology of Maryland</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Physical Geography (GB)</td>
<td>3</td>
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</tbody>
</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (CE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Arts Management (AA)

Award: Associate of Arts

No. of credits required: 60

For more information: Contact Ben Fisler, 443-412-2644, bfisler@harford.edu; or Advising, Career and Transfer Services, 443-412-2301.

Program Description

Harford Community College’s Associate of Arts in Arts Management provides a liberal education in the arts and in business management, preparing students for transfer to a four-year institution and/or for careers in management of various arts industries. Students may choose concentrations in art and design, mass communications, music, or theatre.

Program Goals

Upon completion of the Arts Management AA degree program, students will be able to:

1. Develop collaborative relationships with artists, business, patrons, and the general public.
2. Identify the role of a specific form of art within public and private industry.
3. Support artists as entertainers and cultural agents, and advocate for the place of the arts in the community.
4. Demonstrate organizational theory, management techniques, and operating systems for visual and performing arts entities.

Employment Information

Statistics from the United States Department of Labor suggest that the demand for arts management professionals is strong, based on the growth of a wide body of related fields. A variety of professional positions are available to those prepared for arts management including: artistic director, education coordinator, development/grants specialist, facilities manager, and curator. The job placement rate for arts management majors has been historically high, with many programs claiming 90-100% employment for new graduates.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
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</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (CE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>ARTM 101</td>
<td>Arts Management Seminar I</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
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<tr>
<td>Arts Concentration (p. 135)</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
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Second Semester

<table>
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<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
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<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
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<tr>
<td>Arts Concentration (p. 135)</td>
<td>6</td>
<td></td>
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<td></td>
<td>Credits</td>
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Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BA 109</td>
<td>Principles of Management</td>
<td>3</td>
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<tr>
<td>VPA 201</td>
<td>Visual and Performing Arts Survey (GH) (D)</td>
<td>3</td>
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<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts Concentration (p. 135)</td>
<td>6</td>
<td></td>
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<tr>
<td></td>
<td>Credits</td>
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Fourth Semester

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BA 203</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>ARTM 201</td>
<td>Arts Management Seminar II</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<td></td>
</tr>
<tr>
<td>Arts Concentration (p. 135)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
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Concentration Requirements

(Select one concentration, 21 credits)

Art and Design

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<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
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<tr>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
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<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
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</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART 108</td>
<td>Digital Media Culture (GI)</td>
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</tr>
<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td></td>
</tr>
<tr>
<td>ART 239</td>
<td>Asian Art and Culture (GH)</td>
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<tr>
<td>ART 240</td>
<td>Modern Art and Culture (GH)</td>
<td></td>
</tr>
<tr>
<td>PHOT 209</td>
<td>The History of Photography (GH)</td>
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</table>

Total Credits: 21
**Mass Communications/Journalism**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MC 101</td>
<td>Introduction to Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>MC 102</td>
<td>Audio Production</td>
<td>3</td>
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<tr>
<td>MC 103</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 104</td>
<td>Electronic Media Performance</td>
<td>3</td>
</tr>
<tr>
<td>MC 206</td>
<td>History of Film (GH)</td>
<td>3</td>
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<tr>
<td>BA 104</td>
<td>Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>ART 108</td>
<td>Digital Media Culture (GI)</td>
<td>3</td>
</tr>
<tr>
<td>or MC 210</td>
<td>Introduction to Social Media (GI)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits:** 21

**Biology, Area of Concentration in Arts & Sciences (AS)**

**Musical/Physical Science (GS)**

**Biology, Area of Concentration in Arts & Sciences (AS)**

**Award:** Associate of Sciences Degree  
**No. of credits required:** 60  
**For more information:** Contact Professor Tami Imbierowicz, 443-412-2122, timbierowicz@harford.edu or Associate Professor Jaclyn Madden, 443-412-2046, jmadden@harford.edu (August 15 – June 15); and stem@harford.edu or Admissions, 443-412-2019, admissions@harford.edu (year-round).

**Program Description**

This program offers biology students courses in natural and physical sciences in preparation for a wide array of career opportunities. Biological scientists study the origin, development, characteristics, and life processes of plant, microbial, and animal life and their relationships to the environment. They may conduct basic research aimed at increasing our knowledge of living organisms or applied research in medical and industrial settings. A major in the biological sciences is recommended for students interested in pursuing further study in biology, biotechnology and related fields, botany, zoology, microbiology, forestry, molecular and cellular biology, genetics, marine biology, high school biology teaching, and more. This program provides an excellent foundation for studies in pre-professional fields such as pre-medicine, pre-dentistry, pre-pharmacy, physical therapy, occupational therapy, and pre-veterinary sciences.

**Program Goals**

Upon completion of the Associate of Sciences Degree, Area of Concentration in Arts and Sciences, Biology, the student will be able to:

1. Explain and apply the fundamental principles of biology.
2. Perform laboratory experiments and projects (collect, report and analyze data) by applying theoretical concepts and the scientific method.
3. Demonstrate safe laboratory skills.
4. Recognize and discuss the ethical issues in the discipline.
5. Locate, identify, evaluate and use scientific information effectively.
6. Apply computational skills in reasoning, estimation, problem-solving, and analysis.
7. Use appropriate grammatical forms in both oral and written formats to effectively communicate ideas and concepts.

**Transfer Information**

Students planning to transfer to a four-year college or university should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. It may be that a curriculum in General Studies should be followed.

**Employment Information**

This program provides the first two years of a Bachelor’s degree in biology. Employment for those with a Bachelor’s or Master’s degree in biology is expected to continue to increase due to the increased opportunities in biotechnology research and development and molecular biology research and use in medicine. In addition, more biological
scientists will be needed to conduct the ever expanding research related to health and environmental issues.

**Diversity Requirement**

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
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</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>BIO 121</td>
<td>General Biology II (GL)</td>
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</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
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<td>MATH 109</td>
<td>Precalculus Mathematics (GM)</td>
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<td>or MATH 203</td>
<td>Calculus I (GM)</td>
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<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>CHEM 207</td>
<td>Organic Chemistry</td>
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<tr>
<td>Program Elective (p. 137)</td>
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<tr>
<td>PHYS 101</td>
<td>Introductory Physics I (GL)</td>
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<tr>
<td>BIO 208</td>
<td>Genetics</td>
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<td><strong>Credits</strong></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>CHEM 208</td>
<td>Organic Chemistry II</td>
<td>4</td>
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<tr>
<td>PHYS 102</td>
<td>Introductory Physics II (GL)</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

1 Students may elect to take PHYS 200 General Physics I Lab (GL), PHYS 203 General Physics: Mechanics and Particle Dynamics (GS), and PHYS 204 General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL) in place of PHYS 101 Introductory Physics I (GL) or PHYS 102 Introductory Physics II (GL) to meet transfer needs. If the student takes PHYS 204 General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL), Calculus II (MATH 204 Calculus II (GM)) must be taken as a program elective. It is recommended that students take PHYS 200 General Physics I Lab (GL) concurrent with PHYS 203 General Physics: Mechanics and Particle Dynamics (GS).

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Business Administration (AS)**

**Award:** Associate of Sciences Degree  
**No. of credits required:** 60  
**For more information:** Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu (%20mwiglesworth@harford.edu); Assistant Professor Maurice Brown, 443-412-2466, mabrown@harford.edu; or Admissions, 443-412-2109.

**Program Description**

This program is designed for students who wish to transfer to earn a baccalaureate degree in some area of business. Students who plan to transfer should consult an advisor for assistance in selecting courses appropriate for the transfer institution and program. The courses in this curriculum prepare students for later specialization in finance, human resource management, management, private and public accounting, marketing, merchandising and advertising. Cooperative Education is available to students in this program as an additional means of receiving extended learning experiences related to Business Administration.

**Program Goals**

Upon successful completion of this program of study students will be able to:

1. Use the language of business and demonstrate effective and professional communication skills.
2. Analyze ethical and social responsibilities in business decision making.
3. Examine different types of business systems, organizations, management practices and theories related to the global economy.
4. Demonstrate problem-solving skills in business decision making.
5. Use information technology applications to develop business solutions.
6. Transfer successfully to a four-year institution.

**Transfer Information**
Transfer students should note that many business schools have selective admissions requirements. Cumulative grade point average and completion of specific course requirements are used as criteria for acceptance. Students should contact academic advising or business administration faculty for further information.

**Diversity Requirement**
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 210 or CIS 102</td>
<td>Business Computer Applications or Introduction to Information Sciences (GI)</td>
<td>3</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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<td>Select one of the following:</td>
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<tr>
<td>MATH 111</td>
<td>Introduction to Finite Mathematics (GM)</td>
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<tr>
<td>MATH 212</td>
<td>Calculus with Applications (GM)</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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**Second Semester**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ACCT 102</td>
<td>Accounting Principles II</td>
<td>3</td>
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<tr>
<td>BA 205 or BA 246</td>
<td>Business Law or Legal Environment of Business</td>
<td>3</td>
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<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
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<tr>
<td>ENG 102</td>
<td>English Composition and Literature</td>
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<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
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<tr>
<td>ENG 216</td>
<td>Business Communications</td>
<td></td>
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<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
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<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
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<tr>
<td>CMST 106</td>
<td>Business &amp; Professional Speech</td>
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<tr>
<td>ECON 102</td>
<td>Microeconomics (GB)</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td>3</td>
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<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
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</table>

**Business Administration Elective**

**Fourth Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td></td>
<td>3</td>
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<tr>
<td>Physical Education Elective</td>
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<td>1</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

| Courses/electives should be chosen according to the institution to which transfer is planned. Additional Humanities or Social Science electives may be needed at some transfer institutions. |

**General Education Degree Requirements**
Note: The following codes identify courses which satisfy the General Education Degree Requirements:
- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Chemistry, Calculus Based Physics, Area of Concentration in Arts & Sciences (AS)**

**Award:** Associate of Sciences Degree

**No. of credits required:** 60

**For more information:** Contact Assistant Professor Steven Iwanowski, 443-412-2250, siwanows@harford.edu (August 15th - June 15th); or Admissions, 443-412-2109; or stem@harford.edu.

**Program Description**
The chemistry program is designed to prepare students for transfer to a Bachelor’s degree program in general chemistry, forensic chemistry, medicinal chemistry, environmental science/chemistry, and more. Chemists investigate the composition, structure and properties of substances and the transformations they undergo, through basic, as well as applied, research toward the development of new products and methods of producing new materials. They also work in biotechnology, drug development, forensic science, and other areas where a strong foundation in chemistry is essential.

**Program Goals**
Upon successful completion of the Associate of Sciences Degree, Option in Arts and Sciences, Chemistry, the student will be able to:

1. Explain and apply the fundamental principles of chemistry.
2. Perform laboratory experiments and projects (collect, report and analyze data) by applying theoretical concepts and the scientific method.
3. Demonstrate safe laboratory skills.
4. Recognize and discuss the ethical issues in the discipline.
5. Locate, identify, evaluate and use scientific information effectively.
6. Apply computational skills in reasoning, estimation, problem-solving, and analysis.
7. Use appropriate grammatical forms in both oral and written formats to effectively communicate ideas and concepts.

Transfer Information
Options for transfer into four-year programs include medicinal chemistry/pre-pharmacy, general chemistry, forensic chemistry, and more. Students planning to transfer to a four-year college or university should check the requirements of that institution. If they differ significantly from those listed, students should consult with an advisor for academic guidance; it may be that a General Studies curriculum should be followed.

Employment Information
A Bachelor’s degree in chemistry or a related discipline usually is the minimum educational requirement for entry-level chemist jobs. Job growth for chemists will be concentrated in pharmaceutical and medicine manufacturing companies and in professional, scientific, and technical services firms.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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</tr>
<tr>
<td>Total Credits</td>
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<td>14</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td>3</td>
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<td>Program Elective (p. 139)</td>
<td>4</td>
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</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
<td>4</td>
</tr>
<tr>
<td>Program Electives (p. 139)</td>
<td>6</td>
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</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td>Total Credits</td>
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<tr>
<td>Fourth Semester</td>
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<td>CHEM 208</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>Program Elective (p. 139)</td>
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Program Electives

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 208</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CSI 131</td>
<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSI 132</td>
<td>Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>MATH 206</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 208</td>
<td>Elementary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 200</td>
<td>General Physics I Lab (GL)</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 205</td>
<td>General Physics: Electrodynamics, Light Relativity and Modern Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

Arts/Humanities Elective (GH) (p. 110) 3
Behavioral/Social Science Elective (GB) (p. 110) 3
Physical Education Elective 1

Total Credits 60

1 Students are recommended to take PHYS 200 General Physics I Lab (GL) concurrent with PHYS 203 General Physics: Mechanics and Particle Dynamics (GS)

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Chemistry, Non-Calculus Based Physics, Area of Concentration in Arts & Sciences (AS)
Award: Associate of Sciences Degree
No. of credits required: 60
For more information: Contact Assistant Professor Steven Iwanowski, 443-412-2250, siwanows@harford.edu (August 15th - June15th); or Admissions, 443-412-2109; or stem@harford.edu.

Program Description
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drug development, forensic science, and other areas where a strong foundation in chemistry is essential.

**Program Goals**

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2. Perform laboratory experiments and projects (collect, report and analyze data) by applying theoretical concepts and the scientific method.
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4. Recognize and discuss the ethical issues in the discipline.
5. Locate, identify, evaluate and use scientific information effectively.
6. Apply computational skills in reasoning, estimation, problem-solving, and analysis.
7. Use appropriate grammatical forms in both oral and written formats to effectively communicate ideas and concepts.

**Transfer Information**

Options for transfer into four-year programs include medicinal chemistry/pre-pharmacy, general chemistry, forensic chemistry, and more. Students planning to transfer to a four-year college or university should check the requirements of that institution. If they differ significantly from those listed, students should consult with an advisor for academic guidance; it may be that a General Studies curriculum should be followed.

**Employment Information**

A Bachelor’s degree in chemistry or a related discipline usually is the minimum educational requirement for entry-level chemist jobs. Job growth for chemists will be concentrated in pharmaceutical and medicine manufacturing companies and in professional, scientific, and technical services firms.

**Diversity Requirement**

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 109</td>
<td>Precalculus Mathematics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<tr>
<td>Physical Education Elective</td>
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<td>Program Elective (p. 140)</td>
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<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
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<tr>
<td><strong>Credits</strong></td>
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<td>Program Elective (p. 140)</td>
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</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 204 or MATH 216</td>
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<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>Introductory Physics I (GL)</td>
<td>4</td>
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<tr>
<td><strong>Credits</strong></td>
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<td>16</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>CHEM 208</td>
<td>Organic Chemistry II</td>
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<tr>
<td>PHYS 102</td>
<td>Introductory Physics II (GL)</td>
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<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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**Program Electives**

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<thead>
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<th>Code</th>
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<tbody>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
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<tr>
<td>MATH 206</td>
<td>Calculus III</td>
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<td>MATH 208</td>
<td>Elementary Differential Equations</td>
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<td>ENG 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>CSI 131</td>
<td>Computer Science I</td>
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<tr>
<td>CSI 132</td>
<td>Computer Science II</td>
<td>4</td>
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<td>BIO 208</td>
<td>Genetics</td>
<td>4</td>
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<tr>
<td>General Elective</td>
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<td>1-4</td>
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</tbody>
</table>

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Communication Studies (AA)**

Award: Associate of Arts Degree
No. of credits required: 60

For more information: Contact Assistant Professor Ben Byrne, 443-412-2453, bebyrne@harford.edu; or Admissions, 443-412-2109.

**Program Description**

Students of this program will develop an understanding of core communication concepts and apply them in a wide variety of many different careers, relationships, and settings. Because skilled communicators are highly desired by business and industry, students may go on to hold a variety of positions in a wide range of fields and/or to a four year Communication Studies Degree Program.
Students will have knowledge of foundational theories of communication; prevailing communication research paradigms; roles and functions of communication in interpersonal, group, and public contexts; and the impact and ethics of communication in a diverse and global society. Students will also have the ability to think critically; conduct and evaluate communication research; communicate effectively in interpersonal, group, and public contexts; create and deliver effective and ethical messages via oral, print, and electronic modes.

**Program Goals**

Upon completion of the Communication Studies AA Degree Program, students will be able to:

1. Demonstrate the ability to communicate ethically and effectively with others in a variety of oral and written contexts and situations.
2. Demonstrate the application of communication theories in various life situations.
3. Monitor, analyze, and adjust personal communication behavior.
4. Demonstrate intercultural sensitivity.

**Transfer Information**

Students should be aware that each transfer institution has unique curricular requirements. Certain transfer institutions, for example, may require foreign languages. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses. Students earning this degree are able to transfer all credits to Towson University and earn their B.A. of communication at Towson University Northeast.

**Employment Information**

Effective and appropriate communication is required for success in any career path. Strong and effective skills (formal and informal) are required in writing, verbal, and group communication. In October 2013 the National Association of Colleges and Employers reported that, "When it comes to the importance of candidate skills and qualities, employers are looking for team players who can solve problems, organize their work, and communicate effectively.”

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
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<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 216</td>
<td>Business Communications</td>
<td>3</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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<td></td>
</tr>
<tr>
<td>General Elective</td>
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<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
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<td>1</td>
</tr>
<tr>
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<td><strong>Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Third Semester</td>
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<td></td>
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<tr>
<td>CMST 200</td>
<td>Communication Theory</td>
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</tr>
<tr>
<td>PHIL 205</td>
<td>Ethics (GH)</td>
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</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 230</td>
<td>Nonverbal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMST 210</td>
<td>Group Communication and Leadership (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
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<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Community Health Promotion (AA)**

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Deborah Dorsey, 443-412-2064, ddorsey@harford.edu; or Advising, Career and Transfer Services, 443-412-2301.

**Program Description**

Community Health promotes, protects, and preserves the health of those in the community. Experiential learning is gained through active engagement with the local community to address health-related needs and concerns. A multi-disciplinary curriculum provides a foundation for diverse careers in health promotion, disease prevention, and health education. This program creates a transfer pathway to a baccalaureate degree in community health.

**Program Goals**

Upon completion of the Community Health Promotion program the student will:

1. Relate connections between social, economic, behavioral, and physiological factors to health promotion and disease prevention.
2. Identify basic processes, approaches, and interventions that address the major health-related needs and concerns of communities.
3. Use technology to collect and interpret health data, develop health promotion objectives, and deliver health-specific communication.
4. Demonstrate practical experiences in community health settings.
Transfer Information
Students should be aware that each transfer institution has unique curricular requirements. Academic advisement of elective course selection is strongly recommended.

Employment Information
According to the U.S. Bureau of Labor Statistics, employment of health educators and community health workers is projected to grow 16 percent from 2016 to 2026, much faster than the average for all occupations. Growth will be driven by efforts to improve health outcomes and to reduce healthcare costs by teaching people about healthy habits and behaviors and utilization of available health care services.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 101</td>
<td>Contemporary Health Issues (GI)</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 108</td>
<td>Introduction to Public Health</td>
<td>3</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 203</td>
<td>The U.S. Health Care System (GB)</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 281</td>
<td>Field Placement in Community Health Promotion</td>
<td>1</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 107</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 201</td>
<td>Human Sexuality (D)</td>
<td>3</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
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</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 102</td>
<td>EMC, First Aid, and Safety</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 202</td>
<td>Health Behavior</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 282</td>
<td>Internship in Community Health Promotion</td>
<td>2</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Computer Aided Design and Drafting (CADD) (AAS)

**Award:** Associate of Applied Sciences Degree  
No. of credits required: 60  
For more information: Contact Steve Johnson, 443-412-2641, sjohnson@harford.edu; or Admissions, 443-412-2109.

Program Description
This program provides students with a sound knowledge of Computer Aided Design and Drafting (CADD) through familiarization with the computer, peripheral devices and specialized software. The program prepares students to function as skilled CADD professionals who assist engineers and architects in all design and drawing preparation phases.

Program Goals
Upon successful completion of the CADD program students will be able to:

1. Create and revise CADD drawings.
2. Choose appropriate tools and techniques to produce effective and well organized CADD drawings.
3. Use industry terminology and standards.
4. Identify opportunities to improve productivity and accuracy and construct appropriate solutions.

Employment Information
CADD has generally replaced conventional drafting practices, with the number of CADD positions steadily increasing. Employment opportunities will continue to grow. Designers, architects, drafters, engineering technicians, and engineers will be required to operate CADD systems effectively and proficiently in order to be functional in their respective or prospective positions.

According to the 2016-2017 Occupational Outlook Handbook, employment is expected to be approximately 200,000 by 2024.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Computer Information Systems (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu, or Admissions, 443-412-2109.

Program Description
Computer Information Systems (CIS) is the study of the use of computers in business applications. The CIS curriculum presents computer literacy, program design, programming languages and electives in software, network and Internet applications. CIS students may pursue careers as computer programmers, computer simulation/gaming engineers, software specialists, computer user support specialists, network and Internet specialists.

Program Goals
Computer Information Systems is a career-oriented program focusing on the use of computers in business. Students who successfully complete the Computer Information Systems degree will:

1. Analyze the use of commercial software applications, hardware, networks, programming, and other technologies in information systems at a level of competence appropriate to joining the workforce.
2. Use, maintain and modify existing information systems.
3. Design and implement new information systems.
4. Demonstrate the skills to work in a business environment including working in teams, project management, and professional and effective communication with a wider audience.

Transfer Information
The CIS program may transfer to four-year colleges, although it is designed to prepare students for entry-level jobs in the computer field. One option for students interested in a Bachelor's degree is HCC’s articulation agreement with Towson University. Interested students should contact academic advising or CIS faculty.

Employment Information
The Occupational Outlook Handbook from the U.S. Department of Labor forecasts that careers in the computer industry are expected to increase by 12%, adding over 44,200 positions by 2026. The report indicates continuing growth of the computer industry.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that

CADD Electives
Choose four courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 131</td>
<td>Revit 1</td>
<td>3</td>
</tr>
<tr>
<td>CADD 222</td>
<td>Geometric Dimensioning and Tolerancing</td>
<td>3</td>
</tr>
<tr>
<td>CADD 250</td>
<td>Solid Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CADD 260</td>
<td>AutoLISP for AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>CADD 265</td>
<td>Solidworks</td>
<td>3</td>
</tr>
<tr>
<td>CADD 273</td>
<td>Cooperative Education III: Computer Aided Design and Drafting 1</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Students should contact Advising, Career and Transfer services for permission to register for Cooperative Education courses, 443-412-2301.
students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 104</td>
<td>Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<tr>
<td>CIS 111</td>
<td>Programming I: C/C++</td>
<td></td>
</tr>
<tr>
<td>CIS 119</td>
<td>Programming I: Java</td>
<td></td>
</tr>
<tr>
<td>CSI 131</td>
<td>Computer Science I</td>
<td></td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<td>17</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 135</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<tr>
<td>CIS 221</td>
<td>C++ Programming Language</td>
<td></td>
</tr>
<tr>
<td>CIS 214</td>
<td>Programming II: Java</td>
<td></td>
</tr>
<tr>
<td>CSI 132</td>
<td>Computer Science II</td>
<td></td>
</tr>
<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>CSI/CIS/ISS Elective</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CSI/CIS/ISS Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>CIS 203</td>
<td>Computer Systems and Procedures</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>CIS 273</td>
<td>Cooperative Education: Computer Information Systems</td>
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</tr>
<tr>
<td>CSI/CIS/ISS Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CSI/CIS/ISS Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1. Students should consult with program advisors for appropriate mathematics course selection.
2. Any CIS/CSI/ISS course(s) may be taken to satisfy CIS/CSI/ISS electives.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Computer Science (AS)**

**Award:** Associate of Sciences Degree

**No. of credits required:** 60

For more information: Contact Assistant Professor Jerome Brown, 443-412-2125, jebrown@harford.edu; or Admissions, 443-412-2109.

**Program Description**

Computer Science is the study of the design, theory and programming of the computer system. The Computer Science program gives students an understanding of the problem-solving techniques used to program the computer as well as an understanding of the principles that govern the conceptual organization of the computer system and its processes. The program emphasizes the mathematical and scientific components of programming.

**Program Goals**

Students who successfully complete the Computer Science Program will:

1. Develop skills and expand their knowledge in computer science through research and self-directed study and communicate their knowledge in speaking and writing.
2. Apply the defining processes of computer science - theory, abstraction, and design - to solve a wide variety of problems.
3. Solve cross discipline problems through the integration of mathematics, traditional sciences and computer science principles.
4. Analyze and evaluate traditional algorithms used for data reorganization and manipulation.
5. Possess the necessary skills for transfer to an accredited four year institution.

**Transfer Information**

This program provides the first two years of a bachelor's degree in Computer Science.

**Employment Information**

According to the 2016-2017 Occupational Outlook Handbook, computer systems analysts often study computer science or computer information systems. Overall, employment in the Information Technology (IT) field is projected to increase 21% by 2024. Job prospects should be best for those with a bachelor's degree and relevant experience. Demand for computer software engineers will increase as computer networking continues to grow. For example, expanding Internet technologies have spurred demand for computer software engineers who can develop Internet, intranet, and World Wide Web applications. Likewise, electronic data-processing systems in business, telecommunications, healthcare, government, and other settings continue to become more sophisticated...
and complex. Implementing, safeguarding, and updating computer systems and resolving problems will fuel the demand for growing numbers of systems software engineers.

In addition, information security concerns have given rise to new software needs. Concerns over cyber security should result in the continued investment in software that protects computer networks and electronic infrastructure. The expansion of this technology over the next 10 years will lead to an increased need for software engineers to design and develop secure applications and systems, and to integrate them into older systems.

**Diversity Requirement**

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSI 131</td>
<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSI 201</td>
<td>Assembly Programming Language</td>
<td>4</td>
</tr>
<tr>
<td>CIS 221</td>
<td>C++ Programming Language</td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSI 132</td>
<td>Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>CSI 214</td>
<td>Programming II: Java</td>
<td>4</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

Electives should be chosen based upon the requirements of the institution to which transfer is planned.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Criminal Justice, Area of Concentration in Arts & Sciences (AA)**

**Area of Concentration in Arts & Science**

**Award:** Associate of Arts Degree

**No. of credits required:** 60

**For more information:** Contact Assistant Professor Derrick Jones, 443-412-2315, dejones@harford.edu; or Admissions, 443-412-2109.

**Program Description**

The A.A. degree option in Criminal Justice is designed to prepare students for transfer to baccalaureate programs with majors in Criminal Justice. This option provides students an overview of various aspects of the Criminal Justice major and prepares students to complete the last two years at a four-year institution.

**Program Goals**

Upon completion of the A.A. degree criminal justice program, students will be able to:

1. Demonstrate knowledge of the Criminal Justice discipline, including knowledge of police, courts and corrections, and theories of crime and justice.
2. Differentiate between the various components of the criminal justice system, the purposes and objectives of these components, and their roles in the community.
3. Explain individuals’ motivation to commit crime in terms of various criminological theories.
4. Apply the rules of criminal law and criminal procedure to make appropriate decisions identifying criminal offenses, and arresting, searching, interrogating and identifying criminal suspects.

**Transfer Information**

Several Maryland colleges and universities offer majors in criminal justice. Graduates of this program may apply for transfer into many colleges or universities in Maryland or to public and private colleges nationwide.

**Employment Information**

Students interested in criminal justice are employable in many areas of law enforcement. Some frequently chosen occupations are local, state and federal law enforcement officers, probation officers and correctional officers.
treatment specialists, customs and immigration inspectors, fish and game wardens, park rangers, and correctional officers.

The growth rates for criminal justice careers vary depending upon the specific career chosen. The job growth rate for police officers is expected to increase 7% for 2010-2020. For probation officers and correctional treatment specialists the growth rate is expected to be 18% for 2010-2020. For correctional officers for 2010-2020, the job growth rate is expected to be 5%. Projections are from the U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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</tr>
<tr>
<td>CJ 101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
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<td>CJ 104</td>
<td>Procedural Law and Evidence</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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<tr>
<td>PS 101 or PS 102</td>
<td>American National Government (GB) or State and Local Government (GB)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
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</tr>
<tr>
<td>CJ 103</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJ 111</td>
<td>Principles of Criminal Law</td>
<td>3</td>
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<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
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<td>General Psychology (GB)</td>
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<td>Physical Education Elective</td>
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<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>CMST 101 or CMST 105</td>
<td>Speech Fundamentals (Gi) or Interpersonal Communication (Gi) (D)</td>
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<td>PHIL 205</td>
<td>Ethics (GH)</td>
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<td><strong>Fourth Semester</strong></td>
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<tr>
<td>BA 210 or CIS 102</td>
<td>Business Computer Applications or Introduction to Information Sciences (Gi)</td>
<td>3</td>
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<tr>
<td>CJ 213</td>
<td>Criminology (same course as SOC 213)</td>
<td>3</td>
</tr>
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<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td><strong>Credits</strong></td>
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<td>15</td>
</tr>
</tbody>
</table>

1 CJ 104 Procedural Law and Evidence is usually offered only in Fall semester. CJ 111 Principles of Criminal Law is usually offered only in Spring semester.

2 A four credit course in mathematics may be substituted.

3 A four credit course in Biologic/Physical Science Lab course may be substituted.

4 General electives should be chosen based upon the requirements of the institution to which transfer is planned.

Additional Information

Students interested in forensic science as a major should reference the chemistry program in this catalog.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Criminal Justice, Area of Concentration in Legal Studies (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Assistant Professor Derrick Jones, 443-412-2315, dejones@harford.edu; or Admissions, 443-412-2109.

Program Description

The Criminal Justice track of the Legal Studies program prepares students for employment in a variety of criminal justice professions. Students interested in the Criminal Justice track will acquire knowledge enabling them to assess the criminal justice system and learn the occupational features of police work. This track is also designed for practicing professionals who desire to advance their education.

Program Goals

Upon completion of the A.A.S. degree criminal justice program, students will be able to:

1. Demonstrate knowledge of the Criminal Justice discipline, including knowledge of police, courts and corrections, and theories of crime and justice.
2. Differentiate between the various components of the criminal justice system, the purposes and objectives of these components, and their roles in the community.
3. Explain individuals' motivation to commit crime in terms of various criminological theories.
4. Apply the rules of criminal law and criminal procedure to make appropriate decisions identifying criminal offenses, and arresting, searching, interrogating and identifying criminal suspects.

Transfer Information

Students interested in transfer to baccalaureate programs with majors in criminal justice should pursue the A.A. degree option in Criminal Justice.
Employment Information

Students interested in criminal justice are employable in many areas of law enforcement. Some frequently chosen occupations are local, state and federal law enforcement officers, probation and parole officers, customs and immigration inspectors, fish and game wardens, park rangers, and correctional officers.

The growth rates for criminal justice careers vary depending upon the specific career chosen. The job growth rate for police officers is expected to increase 7% for 2010-2020. For probation officers and correctional treatment specialists the growth rate is expected to be 18% for 2010-2020. For correctional officers for 2010-2020, the job growth rate is expected to be 5%. Projections are from the U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook.

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<td>English Composition (GE)</td>
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<td>PS 101</td>
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<td>General Psychology (GB)</td>
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<td>General Elective</td>
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<tr>
<td>Physical Education Elective</td>
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<td>CJ 109</td>
<td>Police Organization and Administration</td>
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<td>CJ 111</td>
<td>Principles of Criminal Law</td>
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<td>CMST 101</td>
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<td>Credits</td>
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<td>Third Semester</td>
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<tr>
<td>CJ 104</td>
<td>Procedural Law and Evidence</td>
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<td>CJ 201</td>
<td>Police-Community Relations</td>
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<td>BA 210</td>
<td>Business Computer Applications</td>
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<td>CJ 213</td>
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1 CJ 111 Principles of Criminal Law is usually offered only in Spring semester.
2 A four credit course in mathematics (GM) may be substituted.

Program Electives

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CJ 103</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJ 112</td>
<td>Introduction to Crime Scene Technology</td>
<td>3</td>
</tr>
<tr>
<td>CJ 216</td>
<td>Terrorism</td>
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<td>CJ 283</td>
<td>Field Practicum in Criminal Justice</td>
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<td>FS 100</td>
<td>Basic Forensic Science (GS)</td>
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<td>CJ 214</td>
<td>Police Problems and Practices</td>
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<tr>
<td>CJ 207</td>
<td>Criminal Investigation</td>
<td>3</td>
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</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Digital Arts, Area of Concentration in Art + Design (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Associate Professor Kenneth Jones, 443-412-2326, kjones@harford.edu; Admissions, 443-412-2109.

Program Description

The Art + Design program offers students an Associate of Arts degree and preparation to transfer to a B.A. or B.F.A. Art + Design program. This program challenges students with an intensive, hands-on, studio-based curriculum that emphasizes art making skills and critical thinking. Classes are taught by professional, exhibiting artists who have expertise in their disciplines. This program also provides the community with the opportunity to study for personal enrichment.

The Digital Arts concentration focuses on the creation of artwork using digital and interactive media. Students investigate a broad range of disciplines including video, web, sound, animation, 3-D modeling, motion graphics and digital photography within the context of the fine arts. This interdisciplinary approach exposes students to evolving technologies and practices of using the computer as a rich and unique resource for image making, print and web design, time-based art, and portfolio production. Graduates are prepared for further study in film and animation, the gaming industry, commercial art and photography, motion graphics, new media, and interdisciplinary arts.

Students planning to transfer to a private art college, or who need more intensive development of their portfolios for transfer to any institution, should enroll in the Associate of Fine Arts (A.F.A.) degree. The Associate of Arts (A.A.) degree is well-suited for those transferring to a state institution. Please consult with an advisor.
Program Goals

Upon completion of the Associate of Arts in Art + Design degree students will be able to:

1. Create works with proper use of design elements.
2. Create works with demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development.
6. Successfully transfer to a four-year institution.

Transfer Information

HCC graduates successfully transfer to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Many art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students in portfolio preparation.

Employment Information

Nationally, 673,656 businesses are involved in the creation or distribution of the arts, and they employ 3.48 million people. This represents 4.01 percent of all U.S. businesses and 2.04 percent of all U.S. employees—demonstrating statistically that the arts are a formidable business presence and broadly distributed across our communities. Arts businesses and the creative people they employ stimulate innovation, strengthen America’s competitiveness in the global marketplace, and play an important role in building and sustaining economic vibrancy.

Art + Design graduates are offered educational opportunities and critical thinking skills that give them the flexibility to use their visual training in many related fields. Opportunities for employment may also be found in architecture, arts administration, art criticism, industrial design, theater set design, film and video production, game design, emerging markets in technology, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

Field Trip Statement

Courses in this discipline may require field trip(s).

Degree Requirements

Recommended Course Sequence

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<thead>
<tr>
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<th>Title</th>
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<tbody>
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<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
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<tr>
<td>ART 111</td>
<td>Studio Drawing I: Observation</td>
<td>3</td>
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<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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Second Semester

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<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
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<tr>
<td>ART 160</td>
<td>Time-Based Media</td>
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<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
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<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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Third Semester

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<td>ART 108</td>
<td>Digital Media Culture (GI)</td>
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<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
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<td>ART 208</td>
<td>Digital Foundations II</td>
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<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
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Fourth Semester

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<td>ART 233</td>
<td>Portfolio Workshop</td>
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<td>Advanced Digital Studio Course (p. 148)</td>
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</table>

1 If a four-credit course in mathematics (GM) is substituted, the one-credit General Elective in the fourth semester is not necessary.

Additional Information

Students who wish to pursue further study in art may, with instructor permission, enroll in Independent Study.

Advanced Digital Studio Course

Check catalog for prerequisites.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 213</td>
<td>Studio Drawing II: Contemporary Practice</td>
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<tr>
<td>ART 229</td>
<td>Design for the Web</td>
<td>3</td>
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<tr>
<td>ART 230</td>
<td>2-D Computer Animation</td>
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<td>ART 231</td>
<td>3-D Modeling and Animation</td>
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<td>PHOT 231</td>
<td>Digital Photography II</td>
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</tbody>
</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)
Digital Arts, Area of Concentration in Art + Design (AFA)

Award: Associate of Fine Arts Degree
No. of credits required: 60
For more information: Contact Associate Professor. Kenneth Jones, 443-412-2326, kjones@harford.edu; or Advising, Career and Transfer services 443-412-2301.

Program Description

The Art + Design program offers students an Associate of Fine Arts (A.F.A) degree and preparation to transfer to some B.F.A. Art + Design programs. The A.F.A degree is a pre-professional degree. In comparison with an A.A. in Art + Design, there is a higher concentration of studio classes and fewer general education courses. Students wishing to pursue a Bachelor of Fine Arts (B.F.A.) at a private art college, or who need more intensive development of their portfolios for transfer to any institution, should choose this degree. Students planning to transfer to a state institution may want to consider enrolling in the Associate of Arts (A.A.) Art + Design degree. Please consult with an advisor. The B.F.A. is the best choice for students who plan on pursuing their M.F.A.

The Digital Arts concentration focuses on the creation of artwork using digital and interactive media. Students investigate a broad range of disciplines including video, web, sound, animation, 3-D modeling, motion graphics and digital photography within the context of the fine arts. This interdisciplinary approach exposes students to evolving technologies and practices of using the computer as a rich and unique resource for image making, print and web design, time-based art, and portfolio production. Graduates are prepared for further study in film and animation, the gaming industry, commercial art and photography, motion graphics, new media, and interdisciplinary arts.

Program Goals

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1. Create works with proper use of design elements.
2. Create works with demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development and increasing sophistication.
6. Successfully transfer to a four-year BFA Program.

Transfer Information

HCC graduates have successfully transferred to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Some art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students in portfolio preparation.

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Field Trip Statement

Courses in this discipline may require field trip(s).

Additional Information

Students who wish to pursue further study in art may, with instructor permission, enroll in Independent Study.

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<td>Digital Photography I</td>
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<tr>
<td>ART 230</td>
<td>2-D Computer Animation</td>
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<td>ART or PHOT Elective</td>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 231</td>
<td>3-D Modeling and Animation</td>
<td>3</td>
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<tr>
<td>ART 233</td>
<td>Portfolio Workshop</td>
<td>3</td>
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<tr>
<td>ART 208</td>
<td>Digital Foundations II</td>
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<td></td>
<td>Credits</td>
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<th>Credits</th>
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<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
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<tr>
<td>ART 229</td>
<td>Design for the Web</td>
<td>3</td>
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</tbody>
</table>
Early Childhood Education (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Kimberly Bell, 443-412-2648, kbell@harford.edu; or Admissions, 443-412-2109.

Program Description

This program prepares students for employment in the child care industry in a management/leadership position. Students will have the opportunity to specialize in teaching or in site management of a child care center. There are two required field placement experiences (135 hours each) in teaching in a child care program/school and site management of a child care center.

Students with significant work or volunteer experience in the field may be eligible to earn up to 12 credits by taking challenge exams and up to 12 credits through a portfolio assessment process (including up to 6 credits through independent studies). Students interested in pursuing credit for life experience should contact Kimberly Bell.

Program Goals

Upon completion of the Early Childhood AAS Degree Program, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Design and implement developmentally appropriate curriculum and instruction for a variety of students.
3. Identify developmental stages, influences on growth and development, and theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Perform management tasks necessary to direct a child care center.
6. Summarize past and present practices pertaining to the care and education of young children.
7. Support children in learning appropriate behavior.

Employment Information

The intent of the AAS degree in Early Childhood Education is to prepare people for employment in the child care industry, potentially in a management/leadership position. According to the Department of Human Resources, expansion of the child care industry in Harford County is anticipated in both the non-profit and for-profit sectors.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
</tr>
<tr>
<td>EDUC 103 The Young Child 1</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 104 Materials and Curriculum in Early Childhood 1</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101 General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
</tr>
<tr>
<td>CMST 101 or CMST 105 Speech Fundamentals (GI) or Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 108 Classroom Management: Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>MATH 102 or MATH 101 Contemporary Mathematics (GM) or College Algebra (GM)</td>
<td>3</td>
</tr>
<tr>
<td>Career-Based Elective (p. 151)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
</tr>
<tr>
<td>EDUC 110 or EDUC 215 Infant and Toddler Curriculum or School-Age Child Care</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 200 Introduction to Child Care Administration</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 201 Field Placement I</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 216 Child Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 217 Introduction to Special Education 2</td>
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<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td>Total Credits</td>
<td>16</td>
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<tr>
<td>Fourth Semester</td>
<td></td>
</tr>
<tr>
<td>EDUC 202 Field Placement II</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 208 Avenues to Children’s Literacy</td>
<td>3</td>
</tr>
<tr>
<td>VPA 201 Visual and Performing Arts Survey (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective (p. 109)</td>
<td>3</td>
</tr>
</tbody>
</table>
Program Description

This A.A.T. degree program prepares students to transfer into a four-year college or university early childhood program to pursue certification in early childhood education (grades pre-K through 3) or early childhood special education to pursue certification in early childhood special education (birth through grade 3). High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE to earn the degree. Students may meet the testing requirement by submitting individual scores at or above the current state qualifying score on Praxis CORE: Reading, Writing, and Mathematics or a composite score that is above the current state qualifying score on Praxis CORE, SAT, GRE, or ACT. A composite score is the combined total of state qualifying scores on the three Praxis CORE assessments or a current qualifying score on the SAT, GRE, or ACT.

Program Goals

Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information

This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply to and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Employment Information

According to the United States Department of Labor, Bureau of Labor Statistics, nearly two million kindergarten and elementary public school teachers will be needed by 2018. Some school systems (Harford County included) require this degree in order to teach preschool, kindergarten, and/or first grade. In addition, all local school systems are required to provide full-day kindergarten to all students and offer pre-kindergarten to economically-disadvantaged four-year-old children; this will result in additional teaching positions.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 103</td>
<td>The Young Child</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 113</td>
<td>Introduction to Early Childhood Education</td>
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</table>

Career-Based Electives

Choose two courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDUC 110</td>
<td>Infant and Toddler Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 113</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 207</td>
<td>Processes and Acquisition of Reading</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 210</td>
<td>Children with Behavioral Challenges</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 219</td>
<td>Everyday Classroom Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 220</td>
<td>Teaching Methods for Differentiating Instruction/Elementary</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 215</td>
<td>School-Age Child Care</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 201</td>
<td>Marriage and the Family (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 191</td>
<td>Independent Study: Education</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 192</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 193</td>
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<tr>
<td>EDUC 194</td>
<td></td>
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</tr>
</tbody>
</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Early Childhood Education / Early Childhood Special Education (AAT)

Award: Associate of Arts in Teaching Degree
No. of credits required: 61
For more information: Contact Kimberly Bell, 443-412-2648; kbell@harford.edu; or Admissions, 443-412-2109.
EN 101  English Composition (GE)  3
MATH 131  Concepts in Mathematics I  4
PSY 101  General Psychology (GB)  3

Credits  16

Second Semester
BIO 100  Fundamentals of Biology (GL)  4
EDUC 104  Materials and Curriculum in Early Childhood  3
GEOG 103  World Regional Geography (GB) (D)  3
MATH 211  Elements of Geometry (GM)  4
Literature Elective (GH) (p. 152)  3

Credits  17

Third Semester
EDUC 217  Introduction to Special Education  3
HIST 104  History of the United States II (GB) (D)  3
MATH 216  Introduction to Statistics (GM)  4
SCI 105  Physical Science I (GS)  3
SCI 106  Physical Science Course Observations and Investigations: Matter (GL)  1

Credits  14

Fourth Semester
EDUC 207  Processes and Acquisition of Reading  3
ES 107  Earth and Space Science  4
SOC 101  Introduction to Sociology (GB) (D)  3
VPA 201  Visual and Performing Arts Survey (GH) (D)  3
Physical Education Elective  1

Credits  14

Total Credits  61

1  Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 113 Introduction to Early Childhood Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students entering a school setting.

2  The EDUC 217 Introduction to Special Education course required by Harford Community College is a necessary requirement of the College's AAT degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

Literature Elective
Select one of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 201</td>
<td>World Literature: 800 B.C. to 1600 A.D. (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 202</td>
<td>World Literature: 1600 A.D. to the Present (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203</td>
<td>English Literature: Survey of English Literature I (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 204</td>
<td>English Literature: Survey of English Literature II (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205</td>
<td>American Literature: Colonial Through the Civil War (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 206</td>
<td>American Literature: Late 19th and 20th Centuries (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 210</td>
<td>Literature for Children and Adolescents (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 214</td>
<td>Great Writers: Lives and Works (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 215</td>
<td>Multicultural Literature: The 20th Century (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 219</td>
<td>American Women Writers (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 233</td>
<td>African-American Literature (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 234</td>
<td>Ethnic American Literature (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 237</td>
<td>Literature to Film (GH)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Elementary Education / Elementary Special Education (AAT)

Award: Associate of Arts in Teaching Degree
No. of credits required: 61
For more information: Contact Associate Professor Laura Hutton at 443-412-2093, lhutton@harford.edu; or Admissions, 443-412-2109.

Program Description
This A.A.T. degree program prepares students for transfer into a four-year college or university elementary education program to pursue certification in elementary education (grades 1-6) or elementary special education program to pursue certification in elementary special education (grades 1-8). High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE to earn the degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from the Test and Assessment Center or the academic division. Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.

Program Goals
Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information
The program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Employment Information
According to the United States Department of Labor, Bureau of Labor Statistics, nearly 1.6 million elementary and middle school public teachers will be needed by 2018.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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<tr>
<td>EDUC 101</td>
<td>Introduction to Education ¹</td>
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<td>ENG 101</td>
<td>English Composition (GE)</td>
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<tr>
<td>MATH 131</td>
<td>Concepts in Mathematics I</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>SCI 105</td>
<td>Physical Science I (GS)</td>
<td>3</td>
</tr>
<tr>
<td>SCI 106</td>
<td>Physical Science Course Observations and Investigations: Matter (GL)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 100</td>
<td>Fundamentals of Biology (GL)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 104</td>
<td>History of the United States II (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 211</td>
<td>Elements of Geometry (GM)</td>
<td>4</td>
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<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Elective (GH) (p. 153)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EDUC 217</td>
<td>Introduction to Special Education ¹, ²</td>
<td>3</td>
</tr>
<tr>
<td>ES 107</td>
<td>Earth and Space Science</td>
<td>4</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<tr>
<td>EDUC 207</td>
<td>Processes and Acquisition of Reading</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 103</td>
<td>Wellness Theory and Applications (GI)</td>
<td>3</td>
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<tr>
<td>PSY 202</td>
<td>Child Psychology</td>
<td>3</td>
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<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>VPA 201</td>
<td>Visual and Performing Arts Survey (GH) (D)</td>
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<td></td>
<td><strong>Credits</strong></td>
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<tr>
<td></td>
<td><strong>Total Credits</strong></td>
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</tbody>
</table>

¹ Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students entering a school setting.

² The EDUC 217 Introduction to Special Education course required by Harford Community College is a necessary requirement of the College’s AAT degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

Literature Elective
Select one of the following courses:

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<td>Literature to Film (GH)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Engineering (AS)
Award: Associate of Sciences Degree
No. of credits required: 63-65
For more information: Contact Assistant Professor Lisa Ovelman, 443-412-2227, lovelman@harford.edu; or Admissions, 443-412-2109; or stem@harford.edu
Program Description

This curriculum is designed to meet the needs of students who plan to transfer to a college or university that grants a baccalaureate degree in engineering.

Engineers apply the principles of science and mathematics to develop economical solutions to technical problems. Their work is the link between social needs and commercial applications. In addition to design and development, many engineers work in testing, production, or maintenance.

Program Goals

Upon successful completion of the Associate of Sciences, Engineering, degree, the student will be able to:

1. Explain and apply the foundational engineering concepts.
2. Perform laboratory experiments and projects (collect, report and analyze data) by applying theoretical concepts and the scientific method.
3. Demonstrate safe laboratory skills.
4. Recognize and discuss the ethical issues in the discipline.
5. Locate, identify, evaluate and use scientific information effectively.
6. Apply computational skills in reasoning, estimation, problem-solving, and analysis.
7. Use appropriate grammatical forms in both oral and written formats to effectively communicate ideas and concepts.
8. Master the engineering design process by completing a design project and report through teamwork.

Transfer Information

Graduates of this program have transferred to such schools as the University of Maryland, the University of Delaware and The Johns Hopkins University.

Employment Information

This program provides the first two years of a bachelor's degree in engineering. Students should determine, as early as possible, the institution and area of engineering in which they expect to complete the remainder of their work, in order to help meet the specific requirements of that institution for their engineering field. Overall job opportunities in engineering are expected to be favorable over the next decade. Starting salaries are significantly higher than those of college graduates in other fields. Engineers are usually specialized and engage in a variety of activities. Engineering specialties include aeronautical, chemical, civil, mechanical, electrical, biomedical, computer hardware, environmental, industrial and more.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 135</td>
<td>Chemistry for Engineers ¹</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 111</td>
<td>or General Chemistry I (GL)</td>
<td></td>
</tr>
<tr>
<td>ENGR 103</td>
<td>Introduction to Engineering Design</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>15</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td>3</td>
</tr>
<tr>
<td>Track Elective</td>
<td>(p. 154)</td>
<td>4</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>17</td>
</tr>
<tr>
<td>Third Semester</td>
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</tr>
<tr>
<td>MATH 208</td>
<td>Elementary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
<td>4</td>
</tr>
<tr>
<td>Track Elective</td>
<td>(p. 154)</td>
<td>4</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>17</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 206</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>Track Electives</td>
<td>(p. 154)</td>
<td>9-11</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>14-16</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>63-65</td>
</tr>
</tbody>
</table>

¹ Choose CHEM 135 Chemistry for Engineers only if the transfer institution has an equivalent course and does not require 8 credits of chemistry. If not, choose CHEM 111 General Chemistry I (GL) and then CHEM 112 General Chemistry II A (GL) as a track elective.
² Students must complete a total of 17-19 track electives to satisfy requirements of the A.S. in Engineering.
³ Choose PHYS 200 General Physics I Lab (GL) as a track elective if the transfer institution requires a lab course to accompany PHYS 203 General Physics: Mechanics and Particle Dynamics (GS).

Track Electives

Choose 17 to 19 credits¹:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 208</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CSI 131</td>
<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSI 132</td>
<td>Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 104</td>
<td>Statics</td>
<td>3</td>
</tr>
</tbody>
</table>
ENGR 201  Dynamics  3
ENGR 202  Mechanics of Materials  3
ENGR 204  Basic Circuit Analysis  4
ENGR 206  Digital Logic Design  4
ENGR 210  Signals and Systems  4
ENGR 213  Engineering Design with 3D CAD  3
ENGR 215  Chemical Engineering Analysis  3
ENGR 232  Engineering Thermodynamics  3
MATH 210  Discrete Structures  3
MATH 217  Linear Algebra  4
MATH 225  Numerical Methods  3
PHYS 200  General Physics I Lab (GL)  1
PHYS 205  General Physics: Electrodynamics, Light Relativity and Modern Physics  4

1 Track electives are chosen based on the transfer institution and the engineering discipline. Not all electives are offered every semester. Most track electives have prerequisite courses; see the Academic Catalog for course descriptions. The student is encouraged to consult the transfer institution and HCC Advisors to select the track electives.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Engineering Technology (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact David Antol, Coordinator for Applied Technology at 443-412-2472, dantol@harford.edu; or Admissions, 443-412-2109.

Program Description

This program prepares students for employment in a variety of industries that use technicians or technology specialists to support engineering staff. A strong emphasis is placed on applications, problem solving, critical thinking, and communication skills. Upon graduation, students will be able to use these skills to organize, and carry out engineering technology projects. Graduates of this program will demonstrate knowledge of CADD, electronics, hydraulics, pneumatics, blueprint reading, and mechanics. Engineering and science courses are important parts of this program.

Program Goals

Upon successful completion of this program of study students will be able to:

1. Apply appropriate communications skills to work independently and collaboratively within an organization to promote the goals and objectives of the work unit.
2. Recognize how to facilitate successful completion of technical projects.
3. Demonstrate competency in using technical tools, technology, methods, and processes.
4. Recognize professional and ethical behavior.
5. Apply problem solving skills to technical problems.

Employment Information

Governments, businesses, organizations, and private contractors connected to engineering research and technology fields recognize an ongoing need for skilled/trained engineering technicians and technologists. The U.S. Department of Labor reports that opportunities for engineering technicians will be best for individuals with an associate degree or extensive job training in engineering technology. According to the Occupational Outlook Handbook, 2016-2017 Edition, overall employment of engineering technicians and technologists is expected to be 136,000 by 2024. A wide variety of job opportunities exist in manufacturing, electronics, production and processing, operations, and research and development.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 101</td>
<td>Introduction to Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 102</td>
<td>Blueprint Reading</td>
<td>1</td>
</tr>
<tr>
<td>MATH 103</td>
<td>Trigonometry (GM)</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Engineering Drawing I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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</tr>
<tr>
<td>ENGTUESDAY, 15TH108/ELEC 105</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ENGT 109</td>
<td>LabVIEW Fundamentals</td>
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<tr>
<td>Career Elective 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGT 223</td>
<td>Principles of Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
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<tr>
<td>BA 273</td>
<td>Cooperative Education III: Business</td>
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<tr>
<td>Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td></td>
</tr>
<tr>
<td>Career Elective 1</td>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>16</strong></td>
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<tr>
<td>Third Semester</td>
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<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGT 105</td>
<td>Electrical Control Systems</td>
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</tr>
<tr>
<td>Career Elective 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGR 203</td>
<td>Quality Assurance for Technicians</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 224</td>
<td>Quality Assurance for Technicians</td>
<td>2</td>
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</tbody>
</table>
### General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

### English, Area of Concentration in Arts & Sciences (AA)

**Award:** Associate of Arts Degree  
**No. of credits required:** 60  
**For more information:** Contact Rose Sieracki, 443-412-2136, rsieracki@harford.edu or Admissions, 443-412-2109.

### Program Description

This curriculum is designed for students in the arts and sciences who plan to transfer to a baccalaureate degree institution for their upper division major. The core courses provide a foundation in academic writing and literary studies.

### Program Goals

Upon completion of the English program, students will be able to:

1. Collect, evaluate, use, and document research from a variety of sources for various purposes, including the construction of an argument.  
2. Produce presentations and documents that are clear, concise, substantive, and grammatically standard.  
3. Recognize, identify, and evaluate major literary techniques, terms, and trends.  
4. Demonstrate cultural awareness through writing, speaking, and literary analysis.

**Transfer Information**

Students should be aware that each transfer institution has unique curricular requirements. Certain transfer institutions, for example, may require foreign languages. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

**Employment Information**

An English degree provides an excellent basis for a wide variety of careers in law, education, business and politics, and the expanding fields in technology.

### Degree Requirements

#### Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 101 or CMST 105</td>
<td>Speech Fundamentals (GI) or Interpersonal Communication (GI) (D)</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<tr>
<td>HIST 101 or HIST 103</td>
<td>History of Western Civilization I (GB) (D) or History of the United States I (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
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<td>1</td>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 102 or ENG 109</td>
<td>English Composition and Literature or English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102 or HIST 104</td>
<td>History of Western Civilization II (GB) (D) or History of the United States II (GB) (D)</td>
<td>3</td>
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<tr>
<td>Humanities Elective</td>
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<td>3</td>
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<tr>
<td>General Elective</td>
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<td>General Elective</td>
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<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Literature Electives (GH) (p. 157)</td>
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<td>6</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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<td>3</td>
</tr>
<tr>
<td>General Elective</td>
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<tr>
<td>Humanities Elective</td>
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</tbody>
</table>
Literature Electives (GH) (p. 157) 6
Credits 15
Total Credits 60

1 Must complete sequence HIST 101 History of Western Civilization I (GB) (D)-HIST 102 History of Western Civilization II (GB) (D) or HIST 103 History of the United States I (GB) (D)-HIST 104 History of the United States II (GB) (D).
2 As advised for transfer.
3 Refer to Other Elective Options (p. 10) under Academic Information in the catalog.

Literature Electives
Select four courses:

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>DRAM 203</td>
<td>Survey of World Drama (D)</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 204</td>
<td>Survey of Modern Drama (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 201</td>
<td>World Literature: 800 B.C. to 1600 A.D. (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 202</td>
<td>World Literature: 1600 A.D. to the Present (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 203</td>
<td>English Literature: Survey of English Literature I (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 204</td>
<td>English Literature: Survey of English Literature II (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205</td>
<td>American Literature: Colonial Through the Civil War (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 206</td>
<td>American Literature: Late 19th and 20th Centuries (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 210</td>
<td>Literature for Children and Adolescents (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 214</td>
<td>Great Writers: Lives and Works (GH)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 215</td>
<td>Multicultural Literature: The 20th Century (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 219</td>
<td>American Women Writers (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 233</td>
<td>African-American Literature (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 234</td>
<td>Ethnic American Literature (D)</td>
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</tr>
<tr>
<td>ENG 237</td>
<td>Literature to Film (GH)</td>
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<tr>
<td>RELG 207</td>
<td>Literature and Religious Thought of the Old Testament (GH)</td>
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<tr>
<td>RELG 208</td>
<td>Literature and Religious Thought of the New Testament (GH)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Entrepreneurship, Area of Concentration in Business Management (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Assistant Professor Maurice Brown, 443-412-2466, mabrown@harford.edu; or Admissions, 443-412-2109.

Program Description
The Business Management program is designed to enable students to obtain knowledge, skills, and competencies in the challenging business fields of Marketing Management, Entrepreneurship, Human Resources Management, Administrative Professions, and Agribusiness.

Students have the option to complete certificates in each of these business management career fields initially. Upon successful completion of the certificate, students are able to incorporate the 24 credit hours earned into an Associate of Applied Science degree in Business Management to satisfy their individual career goals.

Program Goals
Upon successful completion of this program of study students will be able to:

1. Use the language of business and demonstrate effective and professional communication skills.
2. Analyze ethical and social responsibilities in business decision making.
3. Examine different types of business systems, organizations, management practices and theories related to the global economy.
4. Demonstrate problem-solving skills in business decision making.
5. Use information technology applications to develop business solutions.
6. Demonstrate acquired proficiencies in a business or organizational setting.

Employment Information
The Business Management Entrepreneurship program provides aspiring entrepreneurs and small business owners with the fundamental business knowledge and skills to create, organize, and manage a new business venture that is viable.

Statistics show that a majority of small businesses fail in the first year of operation primarily because of ineffective management and undercapitalization. Small businesses are critical to the economic survival of Harford County and the State of Maryland at large. According to the 2016 Kauffman Foundation report, "entrepreneurism will be the primary source of new job creation."

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI) 1</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Introduction to Entrepreneurship 1</td>
<td>3</td>
</tr>
<tr>
<td>BA 112</td>
<td>Business Innovation Economics 1</td>
<td>3</td>
</tr>
<tr>
<td>BA 206</td>
<td>Entrepreneurship and Small Business 1</td>
<td>3</td>
</tr>
</tbody>
</table>
Select one of the following:  
- BA 246 Legal Environment of Business 3
- BA 205 Business Law 3
- OS 136 Introduction to Bookkeeping: Quickbooks 1 3
- BA 210 Business Computer Applications 1 3
- BA 245 Contemporary Issues in Business 3
- BA 212 Internet Research 1
- OS 116 Communication Technologies 4
- BA 107 Principles of Supervision 3
- BA 109 Principles of Management 3
- ACCT 104 Payroll Accounting 1
- ACCT 105 Financial Statement Interpretation and Analysis 1
- CMST 105 Interpersonal Communication (GI) (D) 3
- ENG 101 English Composition (GE) 3
- ENG 216 Business Communications 3
- ACCT 101 Accounting Principles I 3
- Behavioral/Social Science Elective (GB) (p. 110) 3
- Biological/Physical Lab Science Elective (GL) (p. 111) 4
- Arts/Humanities Elective (GH) (p. 110) 3
- Mathematics Elective (GM) (p. 111) 3
- Physical Education Elective 1

Total Credits 60

1 Upon successful completion of these 24 credit hours, the student will be able to obtain a Business Management Entrepreneurship Certificate.

Program Goals
At the successful completion of the AS Environmental Science degree program, the student will be able to:

1. Describe and apply scientific principles and utilize the mathematical tools that are basic to supporting environmentally-related work in science and technology.
2. Explain environmental regulations in relationship to scientific principles and law and the impact of these regulations on business.
3. Comply with the pertinent environmental regulations by understanding the scientific, technical and legal issues involved, and assist in developing environmental monitoring programs.
4. Interpret environmental analysis to provide input to technical and process decisions.
5. Transfer to an environmentally-related curriculum at a four-year institution.

Transfer Information
Students planning to transfer to a four-year college or university should check the degree requirements of that institution. If they differ significantly from those listed, students should consult with an advisor for academic guidance.

Employment Information
Federal, State, and local governments employ over half of all environmental scientists and specialists. The strongest job growth is expected to be in private-sector consulting firms. According to the Bureau of Labor Statistics, the average growth rate for occupations in this field is 11% from 2014-2024.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 111</td>
<td>Introduction to Environmental Science (GS)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
<td></td>
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<tr>
<td><strong>Credits</strong></td>
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<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Description
The A.S. degree in Environmental Science offers students the opportunity to transfer to a senior institution as well as to gain applied skills in order to compete in the job market for technical positions. Environmental scientists engage in work to protect the environment, study the properties of underground and surface waters, locate water and energy resources, predict water-related geologic hazards, and offer environmental site assessments and advice on indoor air quality and hazardous-waste-site remediation.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Environmental Science, Area of Concentration in Arts & Sciences (AS)

Award: Associate of Sciences Degree
No. of credits required: 60
For more information: Contact Professor Tami Imbierowicz, 443-412-2122, timbierowicz@harford.edu or Assistant Professor Andy Adams, 443-412-2283, anadams@harford.edu (August 15 – June 15); and stem@harford.edu or Admissions, 443-412-2019, admissions@harford.edu (year-round).
GEOG 101 Physical Geography (GB) 3
MATH 109 Precalculus Mathematics (GM) 1 4
or MATH 203 Calculus I (GM) 4

Credits 14

Third Semester
BIO 121 General Biology II (GL) 4
Select one of the following: 4
PHYS 101 Introductory Physics I (GL)
Core Elective (p. 159) 1,2
Behavioral/Social Science Elective (GB) (p. 110) 3
Core Elective (p. 159) 2 6

Credits 17

Fourth Semester
Behavioral/Social Science Elective (GB) (p. 110) 3
Core Electives (p. 159) 2 12

Credits 15

Total Credits 60

1 Consult Program Director to ascertain which course(s) best suit individual needs.
2 Core electives are chosen based on the transfer institution degree program. The student is encouraged to consult the transfer institution and HCC advisors to select core electives.

Core Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 110</td>
<td>Introduction to Plant Sciences (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 107</td>
<td>General Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Biodiversity</td>
<td>3</td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 208</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 204</td>
<td>Analytical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 208</td>
<td>Organic Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 112</td>
<td>Environmental Science Laboratory (GL)</td>
<td>1</td>
</tr>
<tr>
<td>ENV 122</td>
<td>Introduction to Soil Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ENV 191</td>
<td>Indep Study: Environ Science</td>
<td>1</td>
</tr>
<tr>
<td>ENV 193</td>
<td>Independent Study: Environmental Sciences</td>
<td>3</td>
</tr>
<tr>
<td>ENV 202</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>ENV 220</td>
<td>Principles of Environmental Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>ES 105</td>
<td>Earth Science (GS)</td>
<td>3</td>
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<tr>
<td>ES 106</td>
<td>Earth Science Laboratory (GL)</td>
<td>1</td>
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<tr>
<td>ES 108</td>
<td>General Meteorology (GL)</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 203</td>
<td>Fundamentals of Geospatial Technology</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 204</td>
<td>Introduction to Geographic Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 104</td>
<td>Environmental Health (GI)</td>
<td>3</td>
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<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>Introductory Physics II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>SCI 109</td>
<td>Introduction to Energy &amp; Sustainability (GS)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Environmental Technology (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Tami Imbierowicz, 443-412-2122, timbiero@harford.edu; Andrew Adams, 443-412-2283, anadams@harford.edu; Admissions, 443-412-2109; or stem@harford.edu.

Program Description
The A.A.S. degree in Environmental Technology prepares students to immediately integrate into a wide array of jobs in the environmental arena, including air and water quality monitoring, radiologic, sound and biological sampling, and hazardous material handling. Both laboratory and field skills are emphasized, as well as chain-of-custody and other paperwork requirements. The breadth of the program allows graduates to compete in the job market for a variety of technical positions. A broad base of knowledge in the sciences, as well as communications skills are developed by the time the degree is earned.

Program Goals
At the completion of the AAS in Environmental Technology degree, the student will be able to:

1. Apply technical skills important in the environmental field to support important scientific and legal principles.
2. Explain and apply sustainable practices to businesses in which they are employed and to their own lives.
3. Provide technical support for established environmental monitoring programs.
4. Provide technical assistance and support in remedial actions at hazardous waste sites.
5. Collect technical data for environmental analysis.
6. Comply with the pertinent environmental regulations by understanding the scientific, technical and legal issues involved and assisting in the development of environmental monitoring programs.
7. Interpret environmental analysis to provide input to technical and process decisions.

Employment Information
Employment of environmental science technicians should grow about as fast as the average; employers indicate that positions as environmental technicians will be needed to help regulate waste products; to collect air, water, and soil samples for measuring levels of pollutants; to monitor compliance with environmental regulations; and to clean up contaminated sites. Possible positions of employment include field
Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 111</td>
<td>Introduction to Environmental Science (GS)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
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<tr>
<td>CHEM 114 or CHEM 112</td>
<td>General Chemistry IIB (GL) or General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 220</td>
<td>Principles of Environmental Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>ES 105</td>
<td>Earth Science (GS)</td>
<td>3</td>
</tr>
<tr>
<td>ES 106</td>
<td>Earth Science Laboratory (GL)</td>
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</tr>
<tr>
<td>MATH 109</td>
<td>Precalculus Mathematics (GM)</td>
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<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV 202</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>ENV 122</td>
<td>Introduction to Soil Sciences</td>
<td>3</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
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<tr>
<td>ENV 274</td>
<td>Cooperative Education IV: Environmental Science</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 204</td>
<td>Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
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<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
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<tr>
<td>CIS Elective</td>
<td></td>
<td>3</td>
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<tr>
<td>ENV 225</td>
<td>Environmental Problems - Assessment and Evaluation</td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

| Total Credits   | 60                                          |         |

1 Students planning to take CHEM 204 Analytical Chemistry or CHEM 207 Organic Chemistry I should take CHEM 112 General Chemistry II A (GL) instead of CHEM 114 General Chemistry IIB (GL).

2 Students should contact Advising, Career and Transfer services for permission to register for Cooperative Education courses, 443-412-2301.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:
- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Exercise Science (AS)
Award: Associate of Science
No. of credits required: 60
For more information: Contact Assistant Professor Cindy Kelley at 443-412-2225 or ckelley@harford.edu, or Admissions at 443-412-2109.

Program Description
The Exercise Science Associate Degree program prepares students with the knowledge and experience required to complete any National Commission for Certifying Agencies (NCCA) certification. Graduates may enter the work force directly, choosing from a wide variety of careers that include personal training, group exercise leaders, health club professionals, community health leaders and more. This degree program prepares students for transfer to a four-year institution in an exercise science or kinesiology program for careers in exercise science, physical therapy, strength and conditioning, or athletic training.

Program Goals
Upon completion of the Exercise Science, A.S. degree program the student will:
1. Explain the fundamental concepts of exercise science.
2. Demonstrate entry level knowledge and skills necessary for safe and appropriate health screenings and assessment.
3. Design and implement effective exercise prescriptions for various populations.
4. Demonstrate standards of professional practices.
5. Demonstrate the knowledge and skills needed to take a national industry leading certification exam (ACSM, ACE, NSCA, NASM).

Transfer Information
The Exercise Science program offers many opportunities for transfer. Students should be aware that each transfer institution has unique curricular requirements. Students interested in transferring to a four-year institution should seek advisement and consult the catalog of the college or university to which they plan to transfer to determine appropriate electives and discipline specific courses which transfer toward a major. Students must still meet department requirements at the transfer institution.
Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXSC 101</td>
<td>Introduction to Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 210</td>
<td>Group Communication and Leadership (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 120, or BIO 119</td>
<td>General Biology I (GL) or Biology for Health Professionals (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
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<tr>
<td>HLTH 101</td>
<td>Contemporary Health Issues (GI)</td>
<td>3</td>
</tr>
<tr>
<td>EXSC 201</td>
<td>Fitness Assessment &amp; Program Design</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 203, or EXSC 202</td>
<td>Anatomy and Physiology I (GL) or Fitness Instruction</td>
<td>4</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PE 229</td>
<td>Advanced Weight Training</td>
<td>1</td>
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<tr>
<td>General Elective 1</td>
<td></td>
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</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>EXSC 283</td>
<td>Exercise Science Internship</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 102</td>
<td>EMC, First Aid, and Safety</td>
<td>3</td>
</tr>
<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>General Elective 2</td>
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<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<td>16</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1 Students wanting to be physical education teachers are recommended to take EDUC 101 Introduction to Education.

2 Students will be advised to select a course that satisfies their transfer institution’s program requirement.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Fine Art, Area of Concentration in Art + Design (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor Heidi Neff Chuffo, 443-412-2276, hneff@harford.edu; Professor James McFarland, 443-412-2247, jmcfarla@harford.edu; or Admissions, 443-412-2109.

Program Description

The Art + Design program offers students an Associate of Arts degree and preparation to transfer to a B.A. or B.F.A. Art + Design program. This program challenges students with an intensive, hands-on, studio-based curriculum that emphasizes art-making skills and critical thinking. Classes are taught by professional, exhibiting artists who have expertise in their disciplines. This program also provides the community with the opportunity to study for personal enrichment.

The Fine Art concentration gives students the opportunity to study a variety of traditional art-making disciplines while building a strong artistic foundation. Students are taught fundamental art techniques and principles, and are encouraged to realize their individual artistic visions. The Fine Art concentration prepares students for continued studies in specific Fine Art disciplines such as Ceramics, Drawing, Fibers, Illustration, Painting, or Sculpture. The Fine Art concentration will also prepare students for further study in Art Education, Arts Administration, Decorative Painting, Display Design, Fashion Design, Furniture Design, Medical Illustration, and Museum Studies.

Students planning to transfer to a private art college, or who need more intensive development of their portfolios for transfer to any institution, should enroll in the Associate of Fine Arts (A.F.A.) degree. The Associate of Arts (A.A.) degree is well-suited for those transferring to a state institution. Please consult with an advisor.

Program Goals

Upon completion of the Associate of Arts in Art+Design degree students will be able to:

1. Create works with proper use of design elements.
2. Create works with a demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development.
6. Successfully transfer to a four-year institution.

Transfer Information

HCC graduates have successfully transferred to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Some art schools require portfolios for admission and financial aid consideration. The HCC faculty
is well-versed in these requirements and assist students in portfolio preparation.

**Employment Information**

Approximately 588,000 Americans work in the art and design industries. It should be noted that artists with fine art degrees not only continue to become fine artists but are also well prepared to work in art-related fields. Opportunities for employment may also be found in arts administration, art criticism, art therapy, industrial design, theater set design, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Studio Drawing I: Observation</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 109</td>
<td>Sculpture I</td>
<td>3</td>
</tr>
<tr>
<td>ART 113</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<td>3</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 115</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GL) (p. 111)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
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<td>3</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Studio Courses (p. 162)</td>
<td></td>
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</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective (p. 109)</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
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<td>1</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1. If a four-credit course in mathematics (GM) is substituted, the one-credit General Elective in the fourth semester is not necessary.
2. Students planning on transferring into an Art Education program may want to take EDUC 101 Introduction to Education for their general elective. Consult with an advisor.

**Field Trip Statement**

Courses in this discipline may require field trip(s).

**Additional Information**

Students who wish to pursue further study in art may, with instructor permission, enroll in Independent Study.

**Advanced Studio Courses**

Check catalog for prerequisites.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART 213</td>
<td>Studio Drawing II: Contemporary Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 214</td>
<td>Painting II</td>
<td>3</td>
</tr>
<tr>
<td>ART 219</td>
<td>Sculpture II</td>
<td>3</td>
</tr>
<tr>
<td>ART 220</td>
<td>Ceramics II</td>
<td>3</td>
</tr>
<tr>
<td>ART 233</td>
<td>Portfolio Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

1. ART 213 Studio Drawing II: Contemporary Practice is a recommended transfer class to many state schools. Students should check the requirements of their preferred transfer institution.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Fine Art, Area of Concentration in Art + Design (AFA)**

**Award:** Associate of Fine Arts Degree

**No. of credits required:** 60

For more information: Contact Professor Heidi Neff Chuffo, 443-412-2276, hneff@harford.edu; Professor James McFarland, 443-412-2247, jmcfarla@harford.edu; or Admissions, 443-412-2109.

**Program Description**

The Art + Design program offers students an Associate of Fine Arts (A.F.A) degree and preparation to transfer to a B.F.A. Art + Design program. The A.F.A degree is a pre-professional degree. In comparison with an A.A. in Art + Design, there is a higher concentration of studio classes and fewer general education courses. Students wishing to pursue a Bachelor of Fine Arts (B.F.A.) at a private art college, or who need more intensive development of their portfolios for transfer to any institution, should choose this degree. Students planning to transfer to a state institution may want to consider enrolling in the Associate of Arts (A.A.) Art + Design degree. Please consult with an advisor. The B.F.A. is the best choice for students who plan on pursuing their M.F.A. and a career as an exhibiting artist or a professional illustrator.

This program challenges students with an intensive, hands-on, studio-based curriculum that emphasizes art-making skills and critical thinking.
Classes are taught by professional, exhibiting artists who have expertise in their disciplines.

The Fine Art concentration gives students the opportunity to study a variety of traditional art-making disciplines while building a strong artistic foundation. Students are taught fundamental art techniques and principles, and are encouraged to realize their individual artistic visions. Students may choose to focus on two-dimensional or three-dimensional work and may include electives in other disciplines such as photography and digital arts. The wide variety of experiences in the Fine Art A.F.A. concentration prepares students to focus in any studio discipline of their choice in their B.F.A. program.

Program Goals
Upon completion of the Associate of Arts in Art + Design degree students will be able to:

1. Create works with proper use of design elements.
2. Create works with a demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development.
6. Successfully transfer to a four-year B.F.A. program.

Transfer Information
HCC graduates have successfully transferred to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Some art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students in portfolio preparation.

Employment Information
Approximately 588,000 Americans work in the art and design industries. It should be noted that artists with fine art degrees not only continue to become fine artists but are also well prepared to work in art-related fields. Opportunities for employment may also be found in arts administration, art criticism, art therapy, industrial design, theater set design, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

Field Trip Statement
Courses in this discipline may require field trip(s).

Additional Information
Students who wish to pursue further study in art may, with instructor permission, enroll in Independent Study.

### Degree Requirements

#### Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Studio Drawing I: Observation</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 109</td>
<td>Sculpture I</td>
<td>3</td>
</tr>
<tr>
<td>ART 113</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
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<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 115</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 213</td>
<td>Studio Drawing II: Contemporary Practice</td>
<td>3</td>
</tr>
<tr>
<td>ART 233</td>
<td>Portfolio Workshop</td>
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</tr>
<tr>
<td><strong>Credits</strong></td>
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<td><strong>15</strong></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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<td></td>
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<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
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<tr>
<td>Advanced Studio Courses (p. 163)</td>
<td>6</td>
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<tr>
<td>ART 122</td>
<td>Color: Art, Science &amp; Culture (GH)</td>
<td>3</td>
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<tr>
<td>ART 192</td>
<td>Independent Study:Art  (^3)</td>
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<tr>
<td>or PHOT 192</td>
<td>or Independent Study:Photography</td>
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<tr>
<td>Physical Education Elective</td>
<td>1</td>
<td></td>
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<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

1. A four-credit course in mathematics may be substituted.
2. A four credit Biological/Physical Science Lab course may be substituted.
3. A three credit course in ART or PHOT may be substituted, and in most cases would be a better option for transfer.

### Advanced Studio Courses

Check catalog for prerequisites

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</tr>
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<tr>
<td>ART 214</td>
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<td>ART 219</td>
<td>Sculpture II</td>
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</tr>
<tr>
<td>ART 220</td>
<td>Ceramics II</td>
<td>3</td>
</tr>
</tbody>
</table>
General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

General Studies (AA)

**Award:** Associate of Arts Degree

**No. of credits required:** 60

**For more information:** Contact Dean Tony Wohlers Admissions, 443-412-2109.

**Program Description**

The General Studies program permits students to pursue a structured program that allows them to achieve a balance between depth of knowledge acquired through specialization in a twelve-credit concentration in a single field of knowledge and breadth of knowledge gained through exploration of various disciplines.

The degree program allows students to tailor their studies for specific requirements for selected transfer institutions. In addition, the degree program provides students an opportunity to prepare for a profession or a career.

The degree program consists of four major components:

1. Twelve (12) Credit Discipline: 12 credits must be taken in a single discipline. A discipline is indicated in the Catalog by the prefix to the course number, e.g., PSY or ENG.
2. General Education Core Requirements: 34 credits must be taken in courses in written and oral communication, mathematics, science, history, humanities, and health.
3. Graduation requirements: 3 credits of diversity and 1 credit of physical education.
4. General Electives: 19 credits of general electives must be taken to complete the requirements and further explore areas of academic and personal interest.

**Program Goals**

Upon successful completion of this program of study students will be able to:

1. Read, comprehend, and communicate analytically and critically.
2. Apply the scientific method to gather and analyze data.
3. Apply reasoning, creativity, estimation, and/or computational skills to solve problems.
4. Locate and evaluate information.
5. Apply knowledge and skills to become an informed global citizen.
6. Pursue occupational and/or transfer goals related to the twelve credit concentration.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE) ¹</td>
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<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
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</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111) ²</td>
<td>3</td>
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<tr>
<td>General Elective</td>
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<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Second Semester</strong></td>
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<tr>
<td>ENG 102</td>
<td>English Composition and Literature</td>
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<tr>
<td>or ENG 109</td>
<td>or English Composition: Research Writing</td>
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<tr>
<td>Health Elective</td>
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<tr>
<td>History Elective (GB)</td>
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<tr>
<td>General Education Elective (p. 109) ³</td>
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<tr>
<td>General Elective</td>
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<td><strong>Credits</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
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</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>General Elective  ⁴</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
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</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111) ⁵</td>
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<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>General Electives  ⁴</td>
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<td><strong>Credits</strong></td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>60</strong></td>
<td></td>
</tr>
</tbody>
</table>

¹ ENG 101 English Composition (GE) and physical education elective will not count toward the 12-credit concentration.
² A four credit course in Mathematics (GM) may be substituted.
³ Students must choose a course with one of the general education identifiers: (GB)(GH)(GS)(GL)(GI)(GM)
⁴ As advised for transfer or goals.
⁵ A four credit Biological/Physical Science Lab (GL) may be substituted.

**Recommended Procedure**

1. Students should meet with an advisor during their first semester to outline a program, which will meet their goals.
2. Students cannot graduate with a General Studies Undecided major. Students need to declare General Studies or another major by the time they have accumulated 24 credits.
3. To change a major, students need to fill out a Change in Academic Intent form.
4. At the completion of 28 credits, any student who wishes to develop a concentration of study that differs from the 12-credit discipline format should consult with an academic advisor. Students must fill out an Exception to Discipline Concentration Form through the Academic Advising Office.
5. Any request for an exception to the 12-credit discipline must be made prior to the semester in which the student plans to graduate.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Geospatial Technology (AAS)**

**Award:** Associate of Applied Sciences Degree

**No. of credits required:** 60

**For more information:** Contact Assistant Professor Tamara Biegas, 443-412-2034, tbiegas@harford.edu; or Admissions, 443-412-2109.

**Program Description**

The Geospatial Technology Program provides students with the skills, knowledge and hands-on experience to pursue a career in geospatial technology. The Geospatial Technology Program offers a comprehensive array of Geographic Information Systems, Remote Sensing, and Global Positioning Systems. Geospatial Technology can be applied in a variety of fields including, but not limited to Education, Public Safety, Local, State, and Federal Government, Banking, Health and Human Services, Transportation, Utilities, Natural Resources, Business, Manufacturing, and Telecommunication to make informed data driven decisions by analyzing geospatial data.

**Program Goals**

Upon completion of the Geospatial Technology program, students will be able to:

2. Develop maps using GIS and remote sensing software to visualize geospatial data.
3. Apply principles of geospatial technology through experiential learning with real world data in a laboratory setting, cooperative education, classroom discussions.
4. Describe the design, management and implementation of a geospatial project.
5. Evaluate, generate, manage, acquire, and process geospatial information.
6. Demonstrate effective written and oral communication skills.

**Transfer Information**

Students interested in transferring to a four-year institution should seek advising.

**Diversity Requirement**

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 101</td>
<td>College Algebra (GM)</td>
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</tr>
<tr>
<td>GEOG 101</td>
<td>Physical Geography (GB)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 203</td>
<td>Fundamentals of Geospatial Technology</td>
<td>3</td>
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<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
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<tr>
<td><strong>Second Semester</strong></td>
<td></td>
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<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
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<tr>
<td>CIS 118</td>
<td>Introduction to Microsoft Access</td>
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<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
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<td>GEOG 204</td>
<td>Introduction to Geographic Information Systems</td>
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<td><strong>Physical Education Elective</strong></td>
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<td><strong>Credits</strong></td>
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<td>15</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 210</td>
<td>Remote Sensing &amp; Global Positioning</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 220</td>
<td>Advanced Geospatial Information Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Arts/Humanities Elective (GH) (p. 110)</strong></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Program Electives (p. 165)</strong></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
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<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOG 230</td>
<td>Geospatial Project</td>
<td>4</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
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</tr>
<tr>
<td><strong>Program Electives (p. 165)</strong></td>
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<td>7</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
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**Program Electives**

<table>
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<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Programming I: C/C++</td>
<td>4</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 229</td>
<td>Python Programming Language</td>
<td>4</td>
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</tbody>
</table>
General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Graphic Design, Area of Concentration in Art + Design (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Associate Professor Kenneth Jones, 443-412-2326, kjones@harford.edu; or Admissions, 443-412-2109.

Program Description
The Art + Design program offers students an Associate of Arts degree and preparation to transfer to a B.A. or B.F.A. Art + Design program. This program challenges students with an intensive, hands-on, studio-based curriculum that emphasizes art-making skills and critical thinking. Classes are taught by professional, exhibiting artists who have expertise in their disciplines. This program also provides the community with the opportunity to study for personal enrichment.

The Graphic Design concentration focuses on the design process by investigating the methods of researching, creating, and presenting visual communication. By embracing the elements of design and complex relationships of forms in our visual culture, students learn critical thinking strategies for conceptualizing and problem solving and work towards establishing design literacy in their practice. Through the study of images and symbols, typography, and layout, students create sophisticated advertising, identity, and branding projects for print and screen media culminating in the production of a professional portfolio. Students develop production skills in the studio as they relate and are integrated to the creative processes of design. Graduates are prepared for further study as art/creative directors, graphic and web designers, print production artists, industrial designers, public relations and marketing consultants.

Students planning to transfer to a private art college, or who need more intensive development of their portfolios for transfer to any institution, should enroll in the Associate of Fine Arts (A.F.A.) degree. The Associate of Arts (A.A.) degree is well-suited for those transferring to a state institution. Please consult with an advisor.

Program Goals
Upon completion of the Associate of Arts in Art + Design degree students will be able to:
1. Create works with proper use of design elements.
2. Create works with a demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development.
6. Successfully transfer to a four-year institution.

Transfer Information
HCC graduates have successfully transferred to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Some art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students in portfolio preparation.

Employment Information
Nationally, 673,656 businesses are involved in the creation or distribution of the arts, and they employ 3.48 million people. This represents 4.01 percent of all U.S. businesses and 2.04 percent of all U.S. employees—demonstrating statistically that the arts are a formidable business presence and broadly distributed across our communities. Arts businesses and the creative people they employ stimulate innovation, strengthen America’s competitiveness in the global marketplace, and play an important role in building and sustaining economic vibrancy.

Art + Design graduates are offered educational opportunities and critical thinking skills that give them the flexibility to use their visual training in many related fields. Opportunities for employment may also be found in architecture, arts administration, art criticism, industrial design, theater set design, film and video production, game design, emerging markets in technology, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

Field Trip Statement
Courses in this discipline may require field trip(s).

Additional Information
Students who wish to pursue further study in art may, with instructor permission, enroll in Independent Study.

Degree Requirements

Recommended Course Sequence

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
</tbody>
</table>
**Program Description**

The Art + Design program offers students an Associate of Fine Arts (A.F.A) degree and preparation to transfer to some B.F.A. Art + Design programs. The A.F.A degree is a pre-professional degree. In comparison with an A.A. in Art + Design, there is a higher concentration of studio classes and fewer general education courses. Students wishing to pursue a Bachelor of Fine Arts (B.F.A.) at a private art college, or who need more intensive development of their portfolios for transfer to any institution, should choose this degree. Students planning to transfer to a state institution may want to consider enrolling in the Associate of Arts (A.A.) Art + Design degree. Please consult with an advisor. The B.F.A. is the best choice for students who plan on pursuing their M.F.A.

The Graphic Design concentration focuses on the design process by investigating the methods of researching, creating, and presenting visual communication. By embracing the elements of design and complex relationships of forms in our visual culture, students learn critical thinking strategies for conceptualizing and problem solving and work towards establishing design literacy in their practice. Through the study of images and symbols, typography, and layout, students create sophisticated advertising, identity, and branding projects for print and screen media culminating in the production of a professional portfolio. Students develop production skills in the studio as they relate and are integrated to the creative processes of design. Graduates are prepared for further study as art/creative directors, graphic and web designers, print production artists, industrial designers, public relations and marketing consultants.

**Program Goals**

Upon completion of the Associate of Fine Arts in Art + Design degree students will be able to:

1. Create works with proper use of design elements.
2. Create works with a demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development and increasing sophistication.
6. Successfully transfer to a four-year B.F.A. program.

**Transfer Information**

HCC graduates have successfully transferred to art schools and universities, both In and out of Maryland. Some art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students In portfolio preparation.

The Associate of Fine Arts (A.F.A.) degree is well-suited for those transferring to a private art college. Students planning to transfer to a state institution may want to consider enrolling in the Associate of Arts (A.A.) degree. Please consult with an advisor.

**Employment Information**

Nationally, 673,656 businesses are involved in the creation or distribution of the arts, and they employ 3.48 million people. This represents 4.01 percent of all U.S. businesses and 2.04 percent of all U.S. employees.

### General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

#### Graphic Design, Area of Concentration in Art + Design (AFA)

**Award:** Associate of Fine Arts Degree  
**No. of credits required:** 60  
**For more information:** Contact Associate Professor Kenneth Jones, 443-412-2726, kjones@harford.edu; or Advising, Career and Transfer Services, 443-412-2301.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Semester</strong></td>
<td>ART 103</td>
<td>Introduction to Graphic Communications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 108</td>
<td>Digital Media Culture (GI)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
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<td></td>
<td>Mathematics Elective (GM) (p. 111)</td>
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<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
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<tr>
<td><strong>Third Semester</strong></td>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
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<tr>
<td></td>
<td>ART 204</td>
<td>Typography I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
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<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
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</tr>
<tr>
<td></td>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 207</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 233</td>
<td>Portfolio Workshop</td>
<td>3</td>
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<td></td>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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<tr>
<td></td>
<td><strong>Credits</strong></td>
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<td></td>
<td><strong>Total Credits</strong></td>
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<td></td>
</tr>
</tbody>
</table>

1. If a four-credit course in mathematics (GM) is substituted, the one-credit General Elective in the fourth semester is not necessary.
—demonstrating statistically that the arts are a formidable business presence and broadly distributed across our communities. Arts businesses and the creative people they employ stimulate innovation, strengthen America’s competitiveness in the global marketplace, and play an important role in building and sustaining economic vibrancy.

Art + Design graduates are offered educational opportunities and critical thinking skills that give them the flexibility to use their visual training in many related fields. Opportunities for employment may also be found in architecture, arts administration, art criticism, industrial design, theater set design, film and video production, game design, emerging markets in technology, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

Field Trip Statement
Courses in this discipline may require field trip(s).

Additional Information
Students who wish to pursue further study in art may, with instructor permission, enroll in Independent Study.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>First Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 103</td>
<td>Introduction to Graphic Communications</td>
<td>3</td>
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<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>1</td>
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<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td>15</td>
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<tr>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 204</td>
<td>Typography I</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Studio Drawing I: Observation</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<td>15</td>
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<tr>
<td>ART 160</td>
<td>Time-Based Media</td>
<td>3</td>
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<tr>
<td>or ART 122</td>
<td>or Color: Art, Science &amp; Culture (GH)</td>
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<tr>
<td>ART 233</td>
<td>Portfolio Workshop</td>
<td>3</td>
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<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 207</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 208</td>
<td>Digital Foundations II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td>15</td>
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<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 229</td>
<td>Design for the Web</td>
<td>3</td>
</tr>
<tr>
<td>ART 192</td>
<td>Independent Study:Art</td>
<td>2</td>
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<tr>
<td>or PHOT 192</td>
<td>or Independent Study: Photography</td>
<td></td>
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<tr>
<td>ART or PHOT Elective</td>
<td></td>
<td>3</td>
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</table>

Physical Education Elective 1
Behavioral/Social Science Elective (GB) (p. 110) 3

Credits 15
Total Credits 60

1 A four-credit Biological/Physical Science Lab course may be substituted.
2 A four-credit course in mathematics may be substituted.
3 A three-credit course in ART or PHOT may be substituted, and in most cases would be a better option for transfer.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

History, Area of Concentration in Arts and Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor James Karmel, 443-412-2105, jkarmel@harford.edu; or Admissions, 443-412-2109.

Program Description

This option provides traditional freshman and sophomore year courses for history majors and other liberal arts majors transferring to four-year colleges or universities. The curriculum provides students with an understanding of their political, social, economic, intellectual, scientific and artistic heritage.

Program Goals

Upon completion of the history program, students will be able to:

1. Demonstrate basic knowledge of the historical discipline, United States history, and world history.
2. Conduct research to find and critically examine varied historical material, including primary and secondary sources.
3. Develop coherent and analytical papers, presentations, digital projects and other products using historical sources.
4. Perform successfully in a baccalaureate program.

Transfer Information

Students should be aware that each transfer institution has unique curricular requirements. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information

The history option helps prepare students for careers in teaching, government service, journalism, editing and other writing fields. Many
employers hire history and other liberal arts majors for entry level management and sales positions. According to the Bureau of Labor Statistics, employment for historians will grow 11% from 2008-2018.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>First Semester</strong></td>
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</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
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<td>Select one of the following: 1</td>
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<tr>
<td>HIST 101</td>
<td>History of Western Civilization I (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>History of the United States I (GB) (D)</td>
<td></td>
</tr>
<tr>
<td>HIST 109</td>
<td>World History I (GB) (D)</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111) 2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 102</td>
<td>or English Composition and Literature</td>
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<td>Select one of the following: 1</td>
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<tr>
<td>HIST 102</td>
<td>History of Western Civilization II (GB) (D)</td>
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<td>HIST 104</td>
<td>History of the United States II (GB) (D)</td>
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<td>HIST 110</td>
<td>World History II (GB) (D)</td>
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<tr>
<td>Biological/Physical Science Elective (GS) (p. 111) 3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Electives</td>
<td>6</td>
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<tr>
<td>Physical Education Elective</td>
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<tr>
<td><strong>Credits</strong></td>
<td><strong>16</strong></td>
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<tr>
<td></td>
<td><strong>Third Semester</strong></td>
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</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>100-Level or 200-Level History Elective</td>
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<tr>
<td>200-Level History Elective</td>
<td>3</td>
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<tr>
<td>General Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td><strong>15</strong></td>
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<td>200-Level History Elective</td>
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<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<tr>
<td>General Electives</td>
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<td><strong>Credits</strong></td>
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</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>60</strong></td>
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</table>

1. Must complete sequence HIST 101 History of Western Civilization I (GB) (D)- HIST 102 History of Western Civilization II (GB) (D) or HIST 103 History of the United States I (GB) (D)- HIST 104 History of the United States II (GB) (D) or HIST 109 World History I (GB) (D) - HIST 110 World History II (GB) (D).

2. A four credit course in mathematics (GM) may be substituted.

3. A four credit Biological/Physical Science Lab (GL) course may be substituted.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Human Resources, Area of Concentration in Business Management (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu (%20mwiglesworth@harford.edu); or Admissions, 443-412-2109.

Program Description

The Business Management program is designed to enable students to obtain knowledge, skills, and competencies in the challenging business fields of Marketing Management, Entrepreneurship, Human Resources Management, Administrative Professions, and Agribusiness.

Students have the option to complete certificates in each of these business management career fields initially. Upon successful completion of the certificate, students are able to incorporate the 24 credit hours earned into an Associate of Applied Science degree in Business Management to satisfy their individual career goals.

Program Goals

Upon successful completion of this program of study students will be able to:

1. Use the language of business and demonstrate effective and professional communication skills.
2. Analyze ethical and social responsibilities in business decision making.
3. Examine different types of business systems, organizations, management practices and theories related to the global economy.
4. Demonstrate problem-solving skills in business decision making.
5. Use information technology applications to develop business solutions.
6. Demonstrate acquired proficiencies in a business or organizational setting.

Employment Information

The Business Management Human Resources program prepares students for a human resources career by providing comprehensive human resources knowledge for today’s rapidly changing business environment. According to the Occupational Outlook Handbook, employment is expected to grow 7% and add 39,000 jobs through 2026.
for all human resources, training, and labor relations managers and specialists occupations.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
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<tr>
<td>BA 108</td>
<td>Human Resource Management</td>
<td>3</td>
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<tr>
<td>BA 115</td>
<td>Employee Relations</td>
<td>3</td>
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<td>BA 116</td>
<td>Employee Training and Development</td>
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<td>BA 117</td>
<td>Strategic Human Capital Management</td>
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<tr>
<td>BA 246</td>
<td>Legal Environment of Business</td>
<td>3</td>
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<tr>
<td></td>
<td>or BA 205 Business Law</td>
<td></td>
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<tr>
<td>BA 109</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td>OS 116</td>
<td>Communication Technologies</td>
<td>4</td>
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<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
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<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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<td>ENG 216</td>
<td>Business Communications</td>
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<td>PHIL 221</td>
<td>Business Ethics (GH)</td>
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<td></td>
<td>Total Credits</td>
<td>60</td>
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</table>

1 Upon successful completion of these 24 credit hours, the student will be able to obtain a Business Management Human Resources Certificate.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Information Assurance and Cybersecurity (AAS)**

**Award:** Associate of Applied Sciences Degree

**No. of credits required:** 60

**For more information:** Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu; or Admissions, 443-412-2109.

**Program Description**

This degree program prepares students to enter the high-demand field of information technology security. With the increase of viruses and other security breaches, companies need professionals who can protect their data and equipment from internal and external security threats. Students in this program gain hands-on experience with the latest hardware and software and learn to implement appropriate security policies and procedures. Students planning to transfer should select electives according to the requirements of the receiving institution.

**Program Goals**

Upon successful completion of this program of study students will be able to:

1. Apply software patches to operating systems and applications
2. Assess a computer system’s security vulnerabilities using appropriate resources
3. Use standard software tools to detect attempted security breaches of computer systems
4. Implement computer network security defenses
5. Sit for CCNA (Cisco Certified Network Administrator) certificate examinations if desired

**Employment Information**

According to the *Occupational Outlook Handbook*, computer security specialists plan, coordinate, and maintain an organization’s information security. These workers educate users about computer security, install security software, monitor networks for security breaches, respond to cyber attacks, and, in some cases, gather data and evidence to be used in prosecuting cyber crime. The responsibilities of computer security specialists have increased in recent years as cyber attacks have become more sophisticated. Employment is expected to grow much faster than the average, and job prospects should be excellent. Overall employment may increase by as much as 28% by 2026. Growth will also be driven by the increasing need for information security. As cyber attacks become more sophisticated, demand will increase for workers with security skills.

**Diversity Requirement**

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
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<tr>
<td>(Term 1)</td>
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<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<td>ISS 105</td>
<td>Intro to Cybersecurity (GI)</td>
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<tr>
<td>PHIL 221</td>
<td>Business Ethics (GH)</td>
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<td>CIS 135</td>
<td>Introduction to Networks (Term 2)</td>
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**First Semester**

**Second Semester**

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<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 104</td>
<td>Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 211</td>
<td>MS Windows Server Operating System</td>
<td>3</td>
</tr>
<tr>
<td>ISS 111</td>
<td>Cisco 1</td>
<td>4</td>
</tr>
<tr>
<td>ISS 112</td>
<td>Cisco 2</td>
<td>4</td>
</tr>
</tbody>
</table>
Program Description

Information Systems Management emphasizes business, organizational and management concepts as well as computer technology skills. Coursework in areas such as business fundamentals, accounting, finance, marketing, production, management, computer programming, systems analysis and design, database concepts, and management and data communications are typical for a degree in ISM. Students learn how to analyze, design and implement information systems that will provide managers with the information needed to make operational and strategic decisions for large and small companies.

Program Goals

Information Systems Management is a transfer program focusing on the use of computers in business. Students who successfully complete the Information Systems Management degree will:

1. Analyze the use of commercial software applications, hardware, networks, programming, and other technologies including databases in information systems at a basic level of competence.
2. Use, maintain and modify existing information systems.
3. Design and implement new information systems.
4. Demonstrate the skills to work in a business environment including working in teams, project management, and professional and effective communication with a wider audience.
5. Achieve the necessary level of competence in the subject to continue studying Information Systems at a four-year institution.

Note that these goals are very similar to the CIS Program goals, but at a less advanced level, since instead of taking more advanced computing electives, ISM students will be taking more general education requirement courses and business-related courses.

Transfer Information

This program provides the first two years of a baccalaureate degree in Information Systems Management. After completion of the program, students are prepared to transfer to a four-year institution and specialize in Information Systems Management. Students have numerous opportunities for transfer. Interested students should contact academic advising or program faculty.

Employment Information

According to the Occupational Outlook Handbook, employment for Information Systems Managers is expected to increase 12%, adding 44,200 new jobs by 2026.

Homeland Security and Cyber-Security continue to gain increased emphasis for our nation’s security. This degree program provides the foundation for students preparing for these challenging and critical careers.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
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<td>1</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA 109</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
</tbody>
</table>
Program Goals

Upon completion of the AA in Political Science, students will be able to:

1. Analyze current issues/events through historical and contextual lenses.
2. Construct personal political opinions supported with relevant evidence, and express them in cogent and compelling written and oral formats.
3. Evaluate the connection between themselves and the communities in which they live (local, national and global).
4. Participate effectively in the democratic process.
5. Perform successfully in a baccalaureate program.

Transfer Information

Many liberal arts colleges and universities offer International Relations as a major, either as its own degree program or as an option under the Political Science major. The political science courses at Harford are accepted for transfer to Maryland colleges and universities and to public and private institutions nationwide.

Employment Information

The area of concentration in International Relations prepares students for careers in government, foreign service, international organizations, trade, international business, teaching and research.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EN 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 103</td>
<td>World Regional Geography (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PS 101</td>
<td>American National Government (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
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<tr>
<td>Physical Education Elective</td>
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<tr>
<td><strong>Second Semester</strong></td>
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<td></td>
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<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
<td>3</td>
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<tr>
<td>or ECON 102</td>
<td>Microeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>EN 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>PS 201</td>
<td>Introduction to International Relations (GB)</td>
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<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<tr>
<td>General Elective 3</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>ANTH 102</td>
<td>Introduction to Cultural Anthropology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 202</td>
<td>The Twentieth Century World (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>General Elective 3</td>
<td>3</td>
<td></td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

International Relations, Area of Concentration in Arts & Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor Stephanie Hallock 443-412-2262, shallock@harford.edu; or Admissions, 443-412-2109.

Program Description

This area of concentration is designed primarily to prepare students for transfer to baccalaureate programs with majors in Political Science.
Select one of the following: 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 204</td>
<td>History of Modern Russia</td>
<td>3</td>
</tr>
<tr>
<td>HIST 214</td>
<td>History of the Middle East (D)</td>
<td></td>
</tr>
<tr>
<td>HIST 218</td>
<td>History of the British Isles</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td></td>
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</table>

**General Elective** 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
</table>

**Credits** 15

**Total Credits** 60

1. A four credit Biological/Physical Science Lab (GL) course may be substituted.
2. A four credit mathematics (GM) course may be substituted.
3. Foreign Language and/or BA 101 Introduction to Business (Gi) and/or additional economics courses are strongly recommended based on the student’s career goals or transfer requirements.
4. RELG 210 Comparative Religion (GH) (D) and/or PHIL 205 Ethics (GH) are strongly recommended.

### General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

### Journalism/New Media and Advertising, Area of Concentration in Mass Communication (AAS)

**Award:** Associate of Applied Sciences Degree  
**No. of credits required:** 60  
**For more information:** Contact Associate Professor Claudia Brown, 443-412-2126, clbrown@harford.edu; Professor Wayne Hepler, 443-412-2358 or whepler@harford.edu; or Admissions, 443-412-2109.

### Program Description

Designed to prepare students for entry-level employment in journalism, social media, marketing, advertising or for transfer to a four-year institution. This program emphasizes a multimedia approach, including instruction in journalism, new media, advertising and marketing promotion.

### Program Goals

Upon completion of the Associate of Applied Sciences in Mass Communications degree students will be able to:

1. Demonstrate media literacy;
2. Appraise present-day media content, operation, regulation, impact, and/or implications;
3. Apply current technology to produce or market media content;

### Employment Information

Journalists research stories and present information in written, spoken or digital form. Typical activities in this career field include writing and editing content, reporting on-air, and shooting and editing photography and video. Marketing and advertising account executives oversee the financial resources, administration, and campaign strategy of agency, digital media, online, and broadcast operations. Typical activities in this career field include creating social media and marketing campaigns, selling airtime, developing sales material, calling on clients, and developing online and multimedia presentations.

Entry-level positions in this field are promising. However, minimum standards and employment competition are high. Students are encouraged to prepare a portfolio and a résumé prior to seeking employment.

### Field Trip Statement

Courses in this program may require field trips.

### Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

### Degree Requirements

#### Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MC 103</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MC 105</td>
<td>Introduction to Journalism (GH)</td>
<td>3</td>
</tr>
<tr>
<td>MC 101</td>
<td>Introduction to Electronic Media 1</td>
<td>3</td>
</tr>
<tr>
<td>or BA 101</td>
<td>or Introduction to Business (GI)</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Credits</td>
<td>16</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>MC 102</td>
<td>Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 204</td>
<td>Video Production and Editing</td>
<td>3</td>
</tr>
<tr>
<td>MC 208</td>
<td>Multimedia Journalism I (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111) 2</td>
<td>3</td>
<td></td>
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<tr>
<td>Credits</td>
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</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 201</td>
<td>Writing for the Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>MC 207</td>
<td>Digital Video 1 1 or Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>or BA 104</td>
<td>or Advertising and Sales Promotion</td>
<td></td>
</tr>
<tr>
<td>MC 210</td>
<td>Introduction to Social Media (GI)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 101</td>
<td>Black &amp; White Photography I</td>
<td>3</td>
</tr>
</tbody>
</table>
Fourth Semester
Select one of the following:  
- MC 104 Electronic Media Performance  
- MC 293 Independent Media Project  
- General Elective  

MC 209 Multimedia Journalism II  
or BA 203 Principles of Marketing

MC 284 Field Project: Journalism/New Media and Advertising

Biological/Physical Lab Science Elective (GL) (p. 111)  
Physical Education Elective

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1. Students, through advisement, may elect options toward journalism/new media or advertising promotion.
2. A four credit course in mathematics (GM) may be substituted.
3. General Elective upon advisement and chosen according to personal or career interests or to the requirements of the institution to which transfer is planned.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:
- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

For more information: Visit [http://www.harford.edu/nursing](http://www.harford.edu/nursing) or contact the Nursing office, 443-412-2246; or Admissions, 443-412-2109.

LPN to RN Admission Process into the LPN-RN Transition Course

To be considered for admission to the LPN to RN Transition Course, students must meet the following criteria:

Selected Admission

Registration for all clinical courses (courses that start with NURS) require selective admission based on specific program admission requirements.

1. Complete and submit an HCC enrollment application if not a current student. You must declare Nursing as a program of study in order to have college transcripts evaluated.
2. Complete and submit a LPN to RN application and official transcripts which must be delivered together as a packet to Records and Registration by February 15 for admission to the fall class, September 15 for admission to spring class.

3. A minimum score of 58.7 on the Test of Essential Academic Skills (TEAS) is a requirement for admission to the HCC Nursing Program. Students who have tested at other schools or locations can request to have their TEAS scores sent to Harford Community College for a fee. The request should be made no later than 5 days prior to the application deadline to ensure the scores will be received at HCC by the deadline. Students are able to test and retake up to three times within a year period.

4. To meet the math requirement to qualify for the nursing program, students must do one of the following:
   - Receive a qualifying score on the HCC math assessment test (score valid for 2 years), or
   - Achieve a 500 score on SAT mathematics or an ACT score or 21 or higher (both SAT and ACT scores valid for two years), or
   - Complete the highest transitional math course at HCC (017 or 018 or 023 or 027), or
   - Complete a college-level general education math course (101, 102, 216, etc.)

5. Complete a minimum of 16 college credits which include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition (GE) ¹</td>
<td>3</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL) ¹</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 214</td>
<td>Human Development Across the Life Span ¹</td>
<td></td>
</tr>
<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL) ¹</td>
<td></td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology (GL) ¹</td>
<td></td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH elective (GM)</td>
<td>requirement</td>
<td></td>
</tr>
</tbody>
</table>

1. A grade of C or better must be earned in these courses.

6. Submit satisfactory health evaluation upon acceptance into the nursing program.
7. Obtain criminal background check and drug screening per instructions received after admission into the nursing program.
8. Meet the essential technical standards that include physical abilities and behavioral and professional characteristics necessary for the student to successfully complete the nursing program.
9. Provide a copy of current LPN license.

Successful completion of the LPN to RN Transition Course will result in admission into the second semester of the RN nursing program. In addition, qualified students are given the opportunity to challenge course work offered in the second semester of the nursing program.

Note: Per Item 2 under ‘LPN to RN Admission Process into the LPN-RN Transition Course,’ students must achieve a minimum grade point average (GPA) of 2.50 on the non-nursing courses applicable to the Associate of Sciences degree nursing program.

Marketing, Area of Concentration in Business Management (AAS)

Award: Associate of Applied Sciences Degree

No. of credits required: 60
For more information: Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu (%20mwiglesworth@harford.edu), or Admissions, 443-412-2109.

Program Description

The Business Management program is designed to enable students to obtain knowledge, skills, and competencies in the challenging business fields of Marketing Management, Entrepreneurship, Human Resources Management, Administrative Professions, and Agribusiness.

Students have the option to complete certificates in each of these business management career fields initially. Upon successful completion of the certificate, students are able to incorporate the 24 credit hours earned into an Associate of Applied Science degree in Business Management to satisfy their individual career goals.

Program Goals

Upon successful completion of this program of study students will be able to:

1. Use the language of business and demonstrate effective and professional communication skills.
2. Analyze ethical and social responsibilities in business decision making.
3. Examine different types of business systems, organizations, management practices and theories related to the global economy.
4. Demonstrate problem-solving skills in business decision making.
5. Use information technology applications to develop business solutions.
6. Demonstrate acquired proficiencies in a business or organizational setting.

Employment Information

The Business Management Marketing program provides students with the fundamental knowledge and skills needed for careers in marketing. According to the Occupational Outlook Handbook, employment in the field of advertising, marketing, promotions, public relations, and sales managers is expected to grow 10% and add over 24,000 jobs through 2026. Job growth will be spurred by competition for a growing number of goods and services, both foreign and domestic, and the need to make one's product or service stand out in the crowd. In addition, as the influence of traditional advertising in newspapers, radio, and network television wanes, marketing professionals are being asked to develop new and different ways to advertise and promote products and services better reach potential customers.

Employment positions in the marketing field are projected to grow by 8% over the next few years, according to the Maryland Department of Labor. Entry level position availability in the field, particularly in the Harford County region, is promising as major retailers are slated to provide the county with substantial new job growth. Minimum standards and employment competition are higher for supervisory positions in marketing management.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 103</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>BA 104</td>
<td>Advertising and Sales Promotion</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Upon successful completion of these 24 credit hours, the student will be able to obtain a Business Management Marketing Certificate.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Mathematics, Area of Concentration in Arts & Sciences (AS)

Award: Associate of Sciences Degree
No. of credits required: 60
For more information: Contact Associate Professor Supawan King, sking@harford.edu; Admissions, 443-412-2109; or stem@harford.edu.

Program Description

This program provides a solid background for those who wish to transfer to a Bachelor’s degree program in pure mathematics, applied mathematics, actuarial sciences and risk management, statistics, or mathematics secondary education. Mathematicians use mathematical theory, computational techniques, algorithms, numerical analyses, and the latest technology to solve economic, scientific, engineering, physics, and business problems. Students in this program will attain proficiency in using mathematical techniques and computational ability, explaining the processes used in solving problems, modeling applications settings with mathematics, and communicating and interpreting numerical results.
Program Goals
Upon successful completion of the Mathematics AS degree, the student will be able to:

1. Explain and apply principles of Mathematics.
2. Perform problem solving and computational tasks in the disciplines of Mathematics and others.
3. Demonstrate proficiency in the use of technology.
4. Use appropriate grammatical forms in both oral and written formats to communicate ideas and concepts.

Transfer Information
Students who plan to transfer to a four-year college or university should check the requirements of that institution. If they are significantly different from the courses listed, the student should consult with an academic advisor.

Employment Information
The program in mathematics prepares a student for transfer into a Bachelor’s degree program in pure or applied mathematics. A minimum of a Master’s degree in mathematics is required for most prospective mathematicians. The most successful job seekers will be able to apply mathematical theory to real-world problems and will possess good communication, problem-solving, critical thinking, teamwork, and computer skills. Mathematicians may conduct research in fundamental mathematics and use the application of mathematical techniques to solve problems in other fields, such as science, actuarial science and risk management. Mathematicians with a strong background in computer science, finance, electrical or mechanical engineering, or operations research should have good career opportunities.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
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<td>Credits</td>
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<td>14</td>
</tr>
<tr>
<td>Second Semester</td>
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<td></td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
</tr>
<tr>
<td>General Electives 1,2</td>
<td></td>
<td>6</td>
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<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSI 131</td>
<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 206</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 208</td>
<td>Elementary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td></td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Total Credits 60

1. It is recommended that the student take CIS 115 Fundamentals of Programming.
2. It is recommended that students take PHYS 200 General Physics I Lab (GL) concurrent with PHYS 203 General Physics: Mechanics and Particle Dynamics (GS).
3. It is recommended that the student take MATH 210 Discrete Structures.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:
- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Medical Assisting (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Paige O’Neill, 443-412-2738, poneill@harford.edu, or Admissions, 443-412-2109.

Program Description
The Associate of Applied Sciences degree in Medical Assisting at Harford Community College is a career program designed to prepare students for employment as medical assistants immediately upon completing the course of studies. The program prepares students to work in an administrative and clinical capacity in a variety of medical office and clinical settings. Students learn the knowledge, technical skills and work ethic that are required for an entry level position in medical assisting. The program includes both classroom theory and clinical practice. Graduates of the program are eligible to test for the Registered Medical Assistant (RMA) through American Medical Technologists (AMT) or the Certified Medical Assistant (CMA) through American Association of Medical Assistants (AAMA). Please note that, generally, individuals who have been found guilty of a felony, or pleaded guilty to a felony, are not eligible to take the exam. However, the Certifying Board may grant a waiver based upon mitigating circumstances.
Administrative duties performed by medical assistants include general medical office procedures, scheduling appointments, medical billing, and coding. Clinical duties include recording medical histories and vital signs, preparing patients for examination and procedures, performing laboratory tests, pharmacology and injection training, and phlebotomy and EKG training.

**Program Goals**

Upon completion of the program, the student will:

1. Perform clinical skills within the scope of practice for a medical assistant: phlebotomy, injections, EKG (electrocardiogram), obtaining lab specimens, and vital signs.
2. Perform executive administrative skills within the scope of practice for a medical assistant including: scheduling, billing and coding.
3. Possess knowledge of legal implications and ethical considerations in an ambulatory healthcare setting.
5. Be eligible to take the American Association of Medical Assistants (AAMA) Examination for national certification.
6. Have completed 160 hours of unpaid externship in an ambulatory healthcare setting.
7. Demonstrate professionalism and effective communication skills.
8. Qualify to secure an entry level employment position as a medical assistant.

**Employment Information**

Medical assisting is one of the fastest growing health professional occupations in the United States. According to The Bureau of Labor Statistics, employment of medical assistants will continue to grow much faster than average through the year 2018 as the health care industry expands because of technological advances in medicine and the growth and aging of the population.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AHS 101</td>
<td>Medical Terminology and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>CMST 101 or CMST 105</td>
<td>Speech Fundamentals (GI) or Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MAS 120</td>
<td>Medical Assisting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BIO 108</td>
<td>Human Body in Health and Disease (GS)</td>
<td>1</td>
</tr>
<tr>
<td>BIO 116</td>
<td>Human Body in Health and Disease Laboratory (GL)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MAS 122</td>
<td>Clinical Medical Assistant I</td>
<td>3</td>
</tr>
<tr>
<td>MAS 126</td>
<td>Administrative Medical Assisting I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1. Biology Requirement choose BIO 108 Human Body in Health and Disease (GS) & BIO 116 Human Body in Health and Disease Laboratory (GL) OR BIO 203 Anatomy and Physiology I (GL) & BIO 204 Anatomy and Physiology II (GL)
2. Current Healthcare Provider Level CPR and First Aid certification are required prior to starting this course. PPD status and immunization and health records must be provided prior to orientation to this course.
3. Medical Assisting Practicum requires 160 hours of unpaid work experience in a physician’s office or clinical setting. All other coursework must be completed prior to taking MAS 210 Medical Assisting Practicum. A criminal background check and drug screen will be required prior to placement at a clinical site.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Music, Area of Concentration in Arts & Sciences (AA)**

Area of Concentration in Arts & Sciences

Award: Associate of Arts Degree

No. of credits required: 60

For more information: Assistant Professor Richard Johnson, 443-412-2649; Assistant Professor Janice Mahinka, 443-412-2290; music@harford.edu; or Admissions, 443-412-2109.

**Program Description**

This program provides a variety of opportunities and courses for students who wish to study music either as preparation for a profession in one of many career fields or for personal enrichment.
Program Goals
Upon completion of the Associate of Arts, Area of Concentration in Music degree students will be able to:

1. Successfully transfer to a four-year institution.
2. Perform on a major instrument or voice with an evolved and informed aesthetic.
3. Evaluate historical perspectives of music.
4. Demonstrate proficiency in theoretical concepts.

Transfer Information
Although this program meets the first two years of requirements for music majors at most Maryland colleges, students who plan to transfer should check the requirements of the receiving institution. To facilitate transfer, students should consult with the music faculty early in their studies at HCC.

Employment Information
Music students have several other career options in addition to teaching and performance careers, particularly if they combine their music major with courses in another field. There are employment possibilities in therapy, music management, booking agencies, sales, television, music libraries, recording and sound engineering, as well as digital/multimedia.

Field Trip Statement
Courses in this program may require field trips.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 103</td>
<td>Music Theory I</td>
<td>4</td>
</tr>
<tr>
<td>MUS 201</td>
<td>The Art of Listening I (H) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Applied Music</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 104</td>
<td>Music Theory II</td>
<td>4</td>
</tr>
<tr>
<td>MUS 202</td>
<td>The Art of Listening II (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>MUS 215</td>
<td>Introduction to Electronic Music</td>
<td>3</td>
</tr>
<tr>
<td>Applied Music</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 203</td>
<td>Music Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUS 275</td>
<td>Applied Music Keyboard Theory</td>
<td>1</td>
</tr>
<tr>
<td>Applied Music</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Music Ensemble</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Total Credits: 60

2. Choose from MUS 105 Chorus I-MUS 114 percussion Ensemble II or MUS 118 Vocal Jazz Ensemble I-MUS 121 Orchestra II or MUS 124 Vocal Performance Workshop I-MUS 125 Vocal Performance Workshop II or MUS 185 Classical Guitar Ensemble I-MUS 188 Chamber Music Ensemble II
3. Students preparing to transfer to a 4-year Music Education program should take EDUC 101 Introduction to Education as their first-semester General Elective and PSY 101 General Psychology (GB) as their fourth-semester Behavioral/Social Science Elective. (Students may also take EDUC 217 Introduction to Special Education in addition to the above classes if they seek more experience in the classroom.)
4. Choose from MUS 205 Chorus III-MUS 214 percussion Ensemble IV or MUS 218 Vocal Jazz Ensemble III-MUS 221 Orchestra IV or MUS 224 Vocal Performance Workshop III-MUS 225 Vocal Performance Workshop IV or MUS 285 Classical Guitar Ensemble III-MUS 288 Chamber Music Ensemble IV
5. As advised for transfer or your personal interest.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Nursing (AS)

Award: Associate of Sciences Degree
No. of credits required: 70
For more information: Visit http://www.harford.edu/academics/nahp/nursing.aspx or contact Laura Cianelli Preston, Dean of Nursing and Allied Health Professions, 443-412-2438, lpreston@harford.edu; or Admissions, 443-412-2109.
Program Description
The Associate of Sciences Degree Nursing Program prepares students for the licensure examination for registered nurses. Graduates of the Associate of Sciences Degree Nursing Program are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The program also provides opportunities to plan for career mobility through courses that articulate with selected baccalaureate nursing programs in the state of Maryland.

The Associate of Sciences Degree Nursing Program is approved by the Maryland Board of Nursing and accredited by:

Accreditation Commission for Education in Nursing (ACEN)
3343 Peachtree Road, Suite 850
Atlanta, GA 30326
404-975-5000
www.acenursing.org (http://www.acenursing.org)

Program Goals
With the guidance of the Mission, Philosophy & Core Concepts, the graduate of the Associate of Sciences Degree Nursing Program will:

1. Practice nursing in a caring manner.
2. Collaborate with clients and other members of the health care team.
3. Utilize nursing practice to continuously improve client and population standards.
4. Demonstrate professional performance within legal, ethical and regulatory standards.
5. Use safe practices and processes to promote high-quality outcomes.

Selected Admission
Registration for all clinical courses (courses that start with NURS) require selective admission based on specific program admission requirements.

RN Program Admission Requirements
Meeting with an academic advisor and/or attending pre-nursing seminars is strongly recommended.

To be considered for admission to the Associate Degree Nursing Program, students must meet the following criteria:

1. Complete and submit an HCC enrollment application if not a current student. You must declare Nursing as a program of study in order to have college transcripts evaluated.
2. Complete and submit a nursing program application and official transcripts which must be delivered together as a packet to Records and Registration by February 15 for admission to the summer accelerated and/or fall class, September 15 for admission to spring class.
3. A minimum score of 58.7 on the Test of Essential Academic Skills (TEAS) is a requirement for admission to the HCC Nursing Program. Students who have tested at other schools or locations can request to have their TEAS scores sent to Harford Community College for a fee. The request should be made no later than 5 days prior to the application deadline to ensure the scores will be received at HCC by the deadline. Students are able to test and retest up to three times within a year period.
4. To meet the math requirement to qualify for the nursing program, students must do one of the following:
   - Receive a qualifying score on the HCC math assessment test (score valid for two years), or
   - Achieve a 500 score on SAT mathematics or an ACT score or 21 or higher (both SAT and ACT scores valid for two years), or
   - Complete the highest transitional math course at HCC (MATH 017 Intermediate Algebra or MATH 018 Combined Algebra or MATH 023 Liberal Arts Track II or MATH 027 STAT Track Mathematics), or
   - Complete a college-level general education math course (MATH 101 College Algebra (GM), MATH 102 Contemporary Mathematics (GM), MATH 216 Introduction to Statistics (GM), etc.)
   - Complete the highest transitional math course at HCC (score valid for two years), or
   - Achieve a 500 score on SAT mathematics or an ACT score or 21 or higher (both SAT and ACT scores valid for two years), or
   - Complete the highest transitional math course at HCC (MATH 017 Intermediate Algebra or MATH 018 Combined Algebra or MATH 023 Liberal Arts Track II or MATH 027 STAT Track Mathematics), or
   - Complete a college-level general education math course (MATH 101 College Algebra (GM), MATH 102 Contemporary Mathematics (GM), MATH 216 Introduction to Statistics (GM), etc.)
5. Submit satisfactory health evaluation upon acceptance into the Nursing Program.
6. Obtain criminal background check and drug screening per instructions received after admission into the Nursing Program
7. Meet the essential technical standards that include physical abilities and behavioral and professional characteristics necessary for the student to successfully complete the Nursing Program.
8. Complete a minimum of 16 college credits which include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition (GE) ¹</td>
<td>3</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL) ¹</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 214</td>
<td>Human Development Across the Life Span ¹</td>
<td></td>
</tr>
<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL) ¹</td>
<td></td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology (GL) ¹</td>
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</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td></td>
</tr>
<tr>
<td>MATH elective (GM) requirement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ A grade of C or better must be earned in these courses.

9. Achieve a minimum grade point average of 2.50 on the courses applicable to the Associate of Sciences Degree Nursing Program.

The program is highly competitive and completion of the admission criteria may not result in admission to the program.

Nursing Progression
Once a student is selected into the Nursing Program a minimum of four semesters is required to meet clinical nursing course degree requirements for the Associate Degree Program. Students who have major home/family or work responsibilities must be aware of the extensive time commitment required by nursing courses.

Students are encouraged to consult with an academic advisor to plan a schedule that will meet program requirements while taking into consideration student capabilities.

The nature of the nursing curriculum, where one concept builds upon another, requires an orderly, sequential progression which follows the curriculum plan. Any break in this sequence of progression in nursing courses due to withdrawal, failure of a required course, failure to maintain a minimum GPA of 2.0 or any need for a leave of absence from the program will require a written request for re-enrollment to the Dean of Nursing and Allied Health Professions.
A student who is dismissed from the Nursing Program for any reason, is no longer eligible for re-enrollment into the Nursing Program. Further details regarding Nursing Program progression and other nursing protocols can be found in the Nursing Student Handbook or on http://www.harford.edu/academics/nahp/nursing.aspx.

In order to protect the well-being of yourself and your patients when you are in clinical, you must complete the following mandatory requirements:

1. CPR Certification by the American Heart Association for Health Care Providers or American Red Cross CPR for the Professional Rescuer is required and must be maintained throughout enrollment once a student is selected into the nursing program.
2. Annual PPD status and immunization and health records must be maintained and up-to-date throughout enrollment in the Nursing Program.
3. Carry health insurance.

Criminal background check and drug screening through a specific vendor will be required one or more times for all students in the Nursing Program. Results could impact clinical attendance, program completion and eventual licensure as a Registered Nurse.

Transfer Information
Students planning to transfer credits to a baccalaureate nursing program are encouraged to confer with an academic advisor for the planning of their academic program of study.

Employment Information
The Registered Nurse (RN) assumes a variety of responsibilities as a member of the health care team, including management of client care through assessment and documentation of symptoms, reactions, and the progress of clients. The nurse plans, implements, supervises, and evaluates activities directed toward health restoration, health promotion, health maintenance, and illness prevention. Employment opportunities for the registered nurse are available in national, metropolitan Baltimore, and local job markets. Future projections for employment of registered nurses are highly favorable, with practice opportunities in a variety of health care settings.

Degree Requirements
Due to the high demand for this program, most students have completed the following required courses prior to beginning the Nursing Program.

Required Non-Clinical Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 205</td>
<td>Microbiology (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 214</td>
<td>Human Development Across the Life Span</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
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<td></td>
</tr>
</tbody>
</table>

A grade of C or better must be earned in these courses.

Required Nursing Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 101</td>
<td>Fundamentals of Nursing</td>
<td>7</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 105</td>
<td>Medical-Surgical Nursing 1</td>
<td>4.5</td>
</tr>
<tr>
<td>NURS 112</td>
<td>Contemporary Issues in Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURS 110</td>
<td>Mental Health Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>8.5</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 210</td>
<td>Medical-Surgical Nursing II</td>
<td>4.5</td>
</tr>
<tr>
<td>NURS 220</td>
<td>Maternal-Newborn Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 230</td>
<td>Pediatric Nursing</td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>10.5</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NURS 211</td>
<td>Medical-Surgical Nursing III</td>
<td>9</td>
</tr>
<tr>
<td>NURS 212</td>
<td>Leadership in Nursing</td>
<td>1</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

1 Only offered online.
2 Registration for NURS 211 Medical-Surgical Nursing III requires concurrent registration of any remaining courses necessary for graduation.

Please note: A grade of C or better must be earned in all NURS courses.

Recommended Course Sequence for 5-Semester Plan

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>MATH elective requirement (GM)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 A grade of C or better must be earned in these courses.

Progression through the Nursing Program may either follow a typical five-semester plan, or the plan may be modified to accommodate part-time study within the limits of nursing course progression.
Physical Education Elective 1

Credits 13.5

Third Semester
NURS 210 Medical-Surgical Nursing II 4.5
NURS 220 Maternal-Newborn Nursing 3
NURS 230 Pediatric Nursing 3
Arts/Humanities Elective (GH) (p. 110) 3

Credits 13.5

Fourth Semester
NURS 211 Medical-Surgical Nursing III 3 9
NURS 212 Leadership in Nursing 1
Arts/Humanities Elective (GH) (p. 110) 3

Credits 13

Total Credits 54

1 A grade of C or better must be earned in these courses.
2 Only offered online.
3 Registration for NURS 211 Medical-Surgical Nursing III requires concurrent registration of any remaining courses necessary for graduation.

Please note: A grade of C or better must be earned in all NURS courses.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Paraeducation (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Associate Professor Laura Hutton, 443-412-2093, lhutton@harford.edu; or Admissions, 443-412-2109.

Program Description

This program prepares students for employment as paraeducators (teaching assistants) in a public or private school. Paraeducators work under the supervision of a teacher to provide instructional and/or behavioral support in a variety of general and special education settings. This program includes two required field placement experiences (30 hours each) which will provide students with experience assisting in both students with and without disabilities.

Program Goals

Upon completion of the Paraeducation AAS Degree Program, students will be able to:

1. Demonstrate professional teaching behavior including effective communication.
2. Develop collaborative relationships with co-workers and parents to support children's learning.
3. Modify and implement curriculum and select instructional techniques appropriate for a variety of students.
4. Identify influences on growth and development and compare theories of learning.
5. Support children in learning appropriate behavior.
6. Make decisions in accordance with legal and ethical standards.

Employment Information

The United States Department of Labor anticipates the number of paraeducator positions to grow by 15% between 2010 and 2020. This growth is predicted as a result of increases in student enrollment. Completion of the Paraeducator A.A.S. program makes students “highly qualified” for a position as a paraeducator and provides graduates with the skills and knowledge necessary to be a valuable addition to a general or special education classroom.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 109</td>
<td>Paraprofessional Success</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Career-Based Elective (p. 182)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>15</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
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</tr>
<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 101 or EDUC 113</td>
<td>Introduction to Education 1 or Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EDUC 103</td>
<td>The Young Child</td>
<td></td>
</tr>
<tr>
<td>PSY 202</td>
<td>Child Psychology</td>
<td></td>
</tr>
<tr>
<td>PSY 216</td>
<td>Adolescent Psychology</td>
<td></td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Career-Based Elective (p. 182)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credits</td>
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<td>Third Semester</td>
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</tr>
<tr>
<td>EDUC 207</td>
<td>Processes and Acquisition of Reading</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 220</td>
<td>Teaching Methods for Differentiating Instruction/Elementary</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Career-Based Elective (p. 182)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
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<tr>
<td></td>
<td>Credits</td>
<td>14</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 219</td>
<td>Everyday Classroom Assessment</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 210</td>
<td>Children with Behavioral Challenges</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 217</td>
<td>Introduction to Special Education 1</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education, EDUC 113 Introduction to Early Childhood Education, and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students entering a school setting.

Career-Based Electives

Select four of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 103</td>
<td>The Young Child</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 104</td>
<td>Materials and Curriculum in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 108</td>
<td>Classroom Management: Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 110</td>
<td>Infant and Toddler Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 113</td>
<td>Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 208</td>
<td>Avenues to Children’s Literacy</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 216</td>
<td>Child Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 214</td>
<td>Juvenile Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>PSY 202</td>
<td>Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 204</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 212</td>
<td>The Helping Relationship</td>
<td>3</td>
</tr>
<tr>
<td>PSY 216</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 191</td>
<td>Independent Study: Education</td>
<td>1</td>
</tr>
<tr>
<td>EDUC 192</td>
<td></td>
<td></td>
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<tr>
<td>EDUC 193</td>
<td></td>
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</tr>
<tr>
<td>EDUC 194</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Paralegal Studies, Area of Concentration in Legal Studies (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60

For more information: Contact Assistant Professor AnnMarie Profili, 443-412-2214, aprofili@harford.edu, or Admissions, 443-412-2109.

Program Description

A legal assistant or paralegal is a person, qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. ABA Guideline G-103(d). Paralegals may not provide legal services directly to the public, except as permitted by law.

The objective of the Paralegal Studies area of concentration is to educate and train laypersons to assist attorneys and other legal professionals in their daily tasks and thereby contribute to the fair, economical and efficient delivery of legal services. The program meets this objective by requiring students to successfully complete its curriculum.

The Paralegal Studies area of concentration is also designed for practicing paralegals who desire to advance their education. The program is approved by the American Bar Association.

Program Goals

Upon completion of the AAS or Certificate in Paralegal Studies, students will be able to:

1. Apply paralegal skills to assist attorneys and other legal professionals in their daily professional tasks.
2. Decide ethical questions consistent with legal ethics.
3. Employ writing and verbal skills that enable them to perform successfully in the legal profession.
4. Obtain employment as a paralegal.

Transfer Information

Students interested in transfer should consult an academic advisor early in their studies and before selecting elective courses.

Additional Information

Permission of the Paralegal Program Coordinator is required to transfer more than 8 credit hours of required paralegal courses into the program. A maximum of 15 transfer credits will be allowed for all paralegal courses (required and electives).

Employment Information

Upon completion of the program, opportunities for employment include law firms, legal departments of banks and other corporations as well as government agencies. The demand for paralegals is growing on the national, state, and local levels. The U.S. Department of Labor, Bureau of Labor Statistics predicts a much faster than average rate of growth for paralegal employment through 2018. In Harford County, rapid population growth has brought about a related need for legal services. The employment outlook for graduates of this program in Harford County and the surrounding area is good.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from
those that also appear on the approved list of diversity course graduation requirements.

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PL 101</td>
<td>Introduction to Law (Same course as PS 106 (GB))</td>
<td>3</td>
</tr>
<tr>
<td>PL 110</td>
<td>Technology in the Legal Profession ¹</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Paralegal Studies Elective (p. 183)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>PL 105</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>PL 242</td>
<td>Real Estate Transactions</td>
<td>3</td>
</tr>
<tr>
<td>PS 101</td>
<td>American National Government (GB)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or State and Local Government (GB)</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111) ²</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or CMST 105</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or Interpersonal Communication (GI) (D)</td>
<td></td>
</tr>
<tr>
<td>PL 106</td>
<td>Legal Writing</td>
<td>3</td>
</tr>
<tr>
<td>PL 203</td>
<td>Contract Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 238</td>
<td>Law Practice and Professional Conduct</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL 122</td>
<td>Torts and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>PL 124</td>
<td>Civil Litigation and Procedure</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL 248</td>
<td>Internship in Paralegal Studies ³</td>
<td>3</td>
</tr>
<tr>
<td>PL 273</td>
<td>Cooperative Education III: Paralegal ³⁴</td>
<td></td>
</tr>
<tr>
<td>Paralegal Studies Elective (p. 183)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

¹ PL 110 Technology in the Legal Profession is generally offered in the fall semester, in the evening.
² MATH 102 Contemporary Mathematics (GM) is recommended.
³ PL 248 Internship in Paralegal Studies and PL 273 Cooperative Education III: Paralegal require students to spend approximately 135 hours in law office settings during normal business hours.
⁴ Students should contact Advising, Career and Transfer services for permission to register for Cooperative Education courses, 443-412-2301.

**Paralegal Studies Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 205</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>CJ 104</td>
<td>Procedural Law and Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CJ 111</td>
<td>Principles of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 201</td>
<td>Conflict Analysis and Resolution</td>
<td>3</td>
</tr>
<tr>
<td>PL 202</td>
<td>Bankruptcy and Collections Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 204</td>
<td>Constitutional Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 233</td>
<td>Probate Practice and Procedure</td>
<td>2</td>
</tr>
<tr>
<td>PL 244</td>
<td>Family Law and Litigation</td>
<td>2</td>
</tr>
<tr>
<td>PL 246</td>
<td>Administrative Law and Procedure</td>
<td>3</td>
</tr>
</tbody>
</table>

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Philosophy, Area of Concentration in Arts & Sciences (AA)**

**Award:** Associate of Arts Degree

**No. of credits required:** 60

**For more information:** Contact Assistant Professor Amy Cedrone, 443-412-2454, acedrone@harford.edu; or Admissions, 443-412-2109.

**Program Description**

This curriculum is designed for students in the arts and sciences who plan to transfer to a baccalaureate degree institution for their upper division major. The core courses constitute a foundation in the field of philosophy and challenge students to think clearly about issues and ideas derived not only from the historical Western intellectual heritage but also from present ideologies and problems.

**Program Goals**

Upon successful completion of this program, a student will be able to achieve the following program goals:

1. Describe and explain selected major philosophical issues and questions.
2. Investigate major philosophers' positions and methods of analysis of major philosophical issues.
3. Construct and design philosophical analyses and criticisms of their own.
4. Assess philosophical arguments using the norms of: clear definition of issues; careful analysis; critical reflection; rational argument; and the impartial pursuit of truth.
5. Apply philosophical thought to other academic disciplines and life outside the class room; apply philosophical skills more widely where appropriate.
Transfer Information
Students should be aware that each transfer institution has unique curricular requirements. Students should consult an academic advisor early in their studies at HCC and before selecting elective courses to facilitate transfer.

Employment Information
A philosophy degree provides an excellent basis on which to build careers in fields of government, law, teaching and theology.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 101</td>
<td>History of Western Civilization I (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 101</td>
<td>Introduction to Philosophy (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>History of Western Civilization II (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 200</td>
<td>Principles of Logic (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
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<td>1</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Third Semester</td>
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<td></td>
</tr>
<tr>
<td>PHIL 205</td>
<td>Ethics (GH)</td>
<td>3</td>
</tr>
<tr>
<td>RELG 210</td>
<td>Comparative Religion (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
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<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHIL 250</td>
<td>Philosophy of Religion (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>General Electives</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
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<td>12</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)

Photography, Area of Concentration in Art + Design (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Assistant Professor Jeff Rollinger, 443-412-2350, jrollinger@harford.edu, Associate Professor Kenneth Jones, 443-412-2326, kjones@harford.edu; or Admissions, 443-412-2109.

Program Description
The Art + Design program offers students an Associate of Arts degree and preparation to transfer with junior status to a B.A. or B.F.A. Art + Design program. This program prepares students with an intensive, hands-on, studio-based curriculum that stresses the development of art-making skills and critical thinking. Classes are taught by professional, exhibiting artists who have expertise in their disciplines. This program also provides the community with the opportunity to study for personal enrichment.

The Photography concentration is designed to train students in a broad range of photographic applications, including traditional black and white and color photography, digital photography, and studio lighting, with an emphasis on technical fundamentals and the development of a personal artistic vision. This track prepares students for continued study in B.A. or B.F.A. programs at four-year institutions, or for a career in various commercial fields of photography.

Students planning to transfer to a private art college, or who need more intensive development of their portfolios for transfer to any institution, should enroll in the Associate of Fine Arts (A.F.A.) degree. The Associate of Arts (A.A.) degree is well-suited for those transferring to a state institution. Please consult with an advisor.

Program Goals
Upon completion of the Associate of Arts in Art + Design degree students will be able to:

1. Create works with proper use of design elements.
2. Create works with a demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development and increasing sophistication.
6. Successfully transfer to a four-year institution.

Transfer Information
HCC graduates have successfully transferred to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Some art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students in portfolio preparation.
Employment Information

Approximately 588,000 Americans work in the art and design industries. News and commercial photographers are likely to face keen competition. Areas such as Internet publications, portrait photography, law enforcement, and scientific and medical research photography should offer the best opportunities.

Art + Design graduates are offered educational opportunities and critical thinking skills that give them the flexibility to use their visual training in many related fields. Opportunities for employment may also be found in architecture, arts administration, art criticism, industrial design, theater set design, film and video production, game design, emerging markets in technology, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

Field Trip Statement

Courses in this discipline may require field trip(s).

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 101</td>
<td>Black &amp; White Photography I</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
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<tr>
<td>Physical Education Elective</td>
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<tr>
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<tr>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Studio Drawing I: Observation</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
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<tr>
<td>Credits</td>
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<td>15</td>
</tr>
<tr>
<td>Third Semester</td>
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</tr>
<tr>
<td>PHOT 102</td>
<td>Black &amp; White Photography II</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 209</td>
<td>The History of Photography (GH)</td>
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<tr>
<td>ART 201</td>
<td>History of Art-Antient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOT 202</td>
<td>Alternative Photographic Processes</td>
<td>3</td>
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<tr>
<td>PHOT 206</td>
<td>Studio Lighting</td>
<td>3</td>
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<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
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<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
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<tr>
<td>Credits</td>
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<td>14</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

1. If a four-credit course in mathematics is substituted, the one-credit General Elective in the fourth semester is not necessary.
2. If a four-credit course in biological/physical science is substituted, the one-credit General Elective in the fourth semester is not necessary.

Additional Information

Students who wish to pursue further study in photography may, with instructor permission, enroll in Independent Study.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Photography, Area of Concentration in Art + Design (AFA)

Award: Associate of Fine Arts Degree
No. of credits required: 60
For more information: Contact Assistant Professor Jeff Rollinger, 443-412-2350, jrollinger@harford.edu; Associate Professor Kenneth Jones, 443-412-2326, kjones@harford.edu; or Admissions, 443-412-2109.

Program Description

The Art + Design program offers students an Associate of Fine Arts degree (A.F.A) and preparation to transfer with junior status to a B.F.A. Art + Design program. This program prepares students with an intensive, hands-on, studio-based curriculum that stresses the development of art-making skills and critical thinking. Classes are taught by professional, exhibiting artists who have expertise in their disciplines. This program also provides the community with the opportunity to study for personal enrichment.

The Photography concentration is designed to train students in a broad range of photographic applications, including traditional black and white and color photography, digital photography, and studio lighting, with an emphasis on technical fundamentals and the development of a personal artistic vision. This concentration prepares students for continued study in B.F.A. programs at some four-year institutions, or for a career in various commercial fields of photography. The A.F.A degree is a pre-professional degree. In comparison with an A.A. in Art + Design, there is a higher concentration of studio classes and fewer general education courses. Students wishing to pursue a Bachelor of Fine Arts (B.F.A.) at a private art college, or who need more intensive development of their portfolios for transfer to any institution, should choose this degree. Students planning to transfer to a state institution may want to consider enrolling in the Associate of Arts (A.A.) Art + Design degree. Please consult with an
advisor. The B.F.A. is the best choice for students who plan on pursuing their M.F.A.

**Program Goals**

Upon completion of the Associate of Fine Arts in Art + Design degree students will be able to:

1. Create works with proper use of design elements.
2. Create works with a demonstrated proficiency in the use of materials, tools, techniques, and processes.
3. Clearly communicate and demonstrate critical thinking to articulate ideas in visual, verbal, and written forms.
4. Demonstrate good habits and behaviors of self-reflection, motivation, confidence, and work ethic.
5. Create work that shows the clear evolution of concept development and increasing sophistication.
6. Successfully transfer to a four-year B.F.A. Program.

**Transfer Information**

HCC graduates have successfully transferred to art schools and universities, both in and out of Maryland. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance. Some art schools require portfolios for admission and financial aid consideration. HCC faculty are well-versed in these requirements and assist students in portfolio preparation.

**Employment Information**

Nationally, 673,656 businesses are involved in the creation or distribution of the arts, and they employ 3.48 million people. This represents 4.01 percent of all U.S. businesses and 2.04 percent of all U.S. employees—demonstrating statistically that the arts are a formidable business presence and broadly distributed across our communities. Arts businesses and the creative people they employ stimulate innovation, strengthen America’s competitiveness in the global marketplace, and play an important role in building and sustaining economic vibrancy. Art + Design graduates are offered educational opportunities and critical thinking skills that give them the flexibility to use their visual training in many related fields. Opportunities for employment may also be found in architecture, arts administration, art criticism, industrial design, theater design, film and video production, game design, emerging markets in technology, and public relations, among others. Employment is usually secured by the presentation of a portfolio that shows evidence of appropriate skills and talent.

**Field Trip Statement**

Courses in this discipline may require field trip(s).

**Degree Requirements**

**Recommended Course Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHOT 101</td>
<td>Black &amp; White Photography I</td>
<td>3</td>
</tr>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<table>
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<th>Second Semester</th>
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<td>PHOT 131</td>
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<td>PHOT 102</td>
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<tr>
<td>ART 111</td>
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<tr>
<td>PHOT 209</td>
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<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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<table>
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<tr>
<th>Third Semester</th>
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<tbody>
<tr>
<td>ART 107</td>
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<td>ART 160</td>
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<tr>
<td>ART 201</td>
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<tr>
<td>PHOT 206</td>
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<tr>
<td>PHOT 231</td>
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<table>
<thead>
<tr>
<th>Fourth Semester</th>
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<tbody>
<tr>
<td>ART 202</td>
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<tr>
<td>ART 192 or PHOT 192</td>
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<tr>
<td>PHOT 105</td>
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<tr>
<td>PHOT 202</td>
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<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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<tr>
<td>Physical Education Elective</td>
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<table>
<thead>
<tr>
<th>Total Credits</th>
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<tbody>
<tr>
<td>60</td>
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</tbody>
</table>

1. A four credit course in mathematics (GM) may be substituted.
2. A three credit course in ART or PHOT may be substituted, and in most cases would be a better option for transfer.
3. A four credit Biological/Physical Science Lab (GL) course may be substituted.

**Additional Information**

Students who wish to pursue further study in photography may, with instructor permission, enroll in Independent Study.

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Physics, Area of Concentration in Arts & Sciences (AS)**

Award: Associate of Sciences Degree
No. of credits required: 60
For more information: Contact Assistant Professor Gene Cooper, 443-412-2031, gcooper@harford.edu (August 15th - June 15th); or Admissions, 443-412-2109; or stem@harford.edu.

Program Description
The physics program is designed to prepare students for transfer to a Bachelor's degree in general physics or applied physics. Physicists seek to discover and describe the rules governing natural phenomena at all scales, from the sub-nuclear building blocks to the large-scale structure of the universe. They are concerned with the properties, changes and interactions of matter, energy and other physical phenomena. They conduct research into physical phenomena, develop theories and laws, and devise methods of applying the laws of physics to industry, medicine and other fields. Physicists may specialize in several areas such as astrophysics, bio- and medical physics, quantum physics, solid state physics, nuclear physics, acoustical physics, fluid and plasma physics, and education.

Program Goals
Upon successful completion of the Associate of Sciences Degree, Option in Arts and Sciences, Physics, the student will be able to:

1. Explain and apply the fundamental principles of physics.
2. Perform laboratory experiments and projects (collect, report and analyze data) by applying theoretical concepts and the scientific method.
3. Demonstrate safe laboratory skills.
4. Recognize and discuss the ethical issues in the discipline.
5. Locate, identify, evaluate and use scientific information effectively.
6. Apply computational skills in reasoning, estimation, problem-solving, and analysis.
7. Use appropriate grammatical forms in both oral and written formats to effectively communicate ideas and concepts.

Transfer Information
Students planning to transfer to a four-year college or university should check the requirements of that institution. If they are significantly different from the courses listed, the student should consult an advisor for academic guidance and other curriculum options to follow such as General Studies.

Employment Information
This program provides the first two years of a Bachelor's degree in physics. Scientific research and development services firms and the Federal Government employ three out of five physicists. Employment opportunities are more numerous for those with an advanced degree, particularly graduates from programs preparing them for applied research and development, product design, and manufacturing positions in the industry. Despite keen competition for traditional physics positions, individuals with a physics degree at any level will find their skills useful for entry into many other occupations that involve problem solving using scientific methods.

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<td></td>
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<td><strong>Total Credits</strong></td>
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<tr>
<td><strong>Second Semester</strong></td>
<td></td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
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<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
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<td>General Elective 1,2</td>
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<tr>
<td><strong>Third Semester</strong></td>
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<tr>
<td>MATH 208</td>
<td>Elementary Differential Equations</td>
<td>3</td>
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<tr>
<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
<td>4</td>
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<tr>
<td>CIS Elective</td>
<td>3</td>
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<td><strong>Fourth Semester</strong></td>
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<td></td>
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<tr>
<td>MATH 206</td>
<td>Calculus III</td>
<td>4</td>
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<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
<td>4</td>
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<tr>
<td>PHYS 205</td>
<td>General Physics: Electrodynamics, Light Relativity and Modern Physics</td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
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<td><strong>Total Credits</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

1 The general elective should be chosen to satisfy requirements of the institution to which transfer is planned. ENG 109 English Composition: Research Writing is recommended.
2 It is recommended that students take PHYS 200 General Physics I Lab (GL) concurrent with PHYS 203 General Physics: Mechanics and Particle Dynamics (GS).

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
### Political Science, Area of Concentration in Arts & Sciences (AA)

**Award:** Associate of Arts Degree  
**No. of credits required:** 60  
**For more information:** Contact Professor Stephanie Hallock 443-412-2262, shallock@harford.edu; or Admissions, 443-412-2109.

#### Program Description
This area of concentration is designed primarily to prepare students for transfer to baccalaureate programs with majors in Political Science.

#### Program Goals
Upon completion of the AA in Political Science, students will be able to:

1. Analyze current issues/events through historical and contextual lenses.
2. Construct personal political opinions supported with relevant evidence, and express them in cogent and compelling written and oral formats.
3. Evaluate the connection between themselves and the communities in which they live (local, national and global).
4. Participate effectively in the democratic process.
5. Perform successfully in a baccalaureate program.

#### Transfer Information
Liberal arts colleges and universities typically offer Political Science as a major. The political science courses at Harford are accepted for transfer to Maryland colleges and universities and to public and private institutions nationwide.

#### Employment Information
The Political Science program prepares students for careers in government, law, urban planning, teaching, foreign service and research.

#### Degree Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
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</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<tr>
<td>PS 101</td>
<td>American National Government (GB)</td>
<td>3</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
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<tr>
<td><strong>Credits</strong></td>
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<tr>
<td><strong>Second Semester</strong></td>
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<td></td>
</tr>
<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>PS 102</td>
<td>State and Local Government (GB)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
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<tr>
<td>Mathematics Elective (GM) (p. 111) 2</td>
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</tr>
<tr>
<td>General Elective 3</td>
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<tr>
<td><strong>Third Semester</strong></td>
<td></td>
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</tr>
<tr>
<td>HIST 103</td>
<td>History of the United States I (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PS 201</td>
<td>Introduction to International Relations (GB)</td>
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<td>Select one of the following:</td>
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<tr>
<td>CJ 101</td>
<td>Introduction to Criminal Justice</td>
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<tr>
<td>PS 106</td>
<td>Introduction to Law (Same course as PL 101) (GB)</td>
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</tr>
<tr>
<td>PS 204</td>
<td>Urban Government and Politics (GB) (D)</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>4</td>
<td></td>
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<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
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</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 104</td>
<td>History of the United States II (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
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<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<tr>
<td>General Elective 3</td>
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<td><strong>Credits</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

1. A four credit Biological/Physical Science Lab (GL) course may be substituted.
2. A four credit course in mathematics may be substituted. MATH 216 Introduction to Statistics (GM) is highly recommended.
3. It is recommended that students choose general elective courses that best meet the degree requirements of the receiving institution.

#### General Education Degree Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral/Social Science (GB)</td>
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<tr>
<td>English Composition (GE)</td>
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<tr>
<td>Arts/Humanities (GH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdisciplinary and Emerging Issues (GI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Laboratory Science (GL)</td>
<td></td>
<td></td>
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<tr>
<td>Mathematics (GM)</td>
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<tr>
<td>Biological/Physical Science (GS)</td>
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</table>

#### Production and Announcing in the Electronic Media, Area of Concentration in Mass Communication (AAS)

**Award:** Associate of Applied Sciences Degree  
**No. of credits required:** 60  
**For more information:** Contact Prof. Wayne Hepler, 443-412-2358, whepler@harford.edu; Prof. Claudia Brown, 443-412-2126, clbrown@harford.edu or Admissions, 443-412-2109.

#### Program Description
The Mass Communications program is designed to prepare students for entry-level employment in digital media and the internet, and for transfer to four-year institutions. Emphasis is on electronic media and
online operations, such as social and new media, digital video, audio, and film production, social and new media, multimedia writing, and on-air performance.

Program Goals

Upon completion of the Associate of Applied Sciences in Mass Communications degree students will be able to:

1. Demonstrate media literacy;
2. Appraise present-day media content, operation, regulation, impact, and/or implications;
3. Apply current technology to produce or market media content;

Employment Information

Electronic media producers, directors, writers, and on-air talent are employed by new media, websites, television and radio stations, satellite and cable systems. They shoot, edit, and upload digital audio and video; write online, social media, journalism, and commercial copy; anchor podcasts, news, sports and podcasts; and record performing artists, among other technical and creative endeavors.

While the U.S. Bureau of Labor Statistics predicts slight declines in employment of on-air talent, significant growth is expected among digital producers, writers, and editors. To this end, the Mass Communications department is equipped with:

- digital video and audio editing systems
- digital field cameras
- digital TV studio and former WJZ News set
- WHFC-FM.org and podcasts
- Owl magazine and social media
- access to Harford Cable Network and online content.

Certificate holders may expect to face employment competition. Students are encouraged to keep a portfolio for transfer or entry into the field.

Field Trip Statement

Courses in this program may require field trips.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MC 101</td>
<td>Introduction to Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>MC 102</td>
<td>Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 103</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

| **Second Semester** |                                          |         |
| CMST 101           | Speech Fundamentals (GI)                  | 3       |
| MC 203             | Advanced Audio Production                 | 3       |
| MC 204             | Video Production and Editing              | 3       |
| Mathematics Elective (GM) (p. 111) |                      | 3       |

| **General Elective** |                          |         |
|                     |                          | 3       |

| **Third Semester** |                                                        |         |
| MUS 222            | Popular Music of the United States (GH) (D)             | 3       |
| MC 201             | Writing for the Electronic Media                       | 3       |
| MC 207             | Digital Video I                                        | 3       |
| Select one of the following: |                                                | 3       |
| MC 293             | Independent Media Project                             |         |
| MC 105             | Introduction to Journalism (GH)                       |         |
| MC 206             | History of Film (GH)                                   |         |
| MC 206             | History of Film · Honors (GH)                           |         |
| Physical Education Elective |                          | 1       |
| Total               |                                                        | 16      |

| **Fourth Semester** |                                                |         |
| MC 104             | Electronic Media Performance                      | 3       |
| MC 283             | Field Project: Announcing/Production in Electronic Media | 3   |
| Behavioral/Social Science Elective (GB) (p. 110)  |                      | 3       |
| Biological/Physical Lab Science Elective (GL) (p. 111) |                      | 4       |
| General Elective 1  |                                                        | 3       |
| Total               |                                                        | 16      |
| **Total Credits**   |                                                | 60      |

1 Choose General Electives upon advisement and according to personal or career interests or to the requirements of the institution to which transfer is planned.

2 Eligible students may choose Honors-level MC 206 History of Film (GH). See the Honors Programs and Societies webpage for more information.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Psychology, Area of Concentration in Arts & Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Associate Professor Manolya Bayar, 443-412-2486, mbayar@harford.edu; or Admissions, 443-412-2109.

Program Description

This area of concentration is designed to prepare students for transfer to baccalaureate programs with major emphasis on psychology and the behavioral sciences. Students planning careers in a variety of related fields may also use this option as a general program guide.
The student may take all courses for the degree online or combination of online and face to face classes. Students who intend to complete all courses online should contact:

Manolya Bayar
443-412-2486
mbayar@harford.edu

Program Goals
Upon completion of the psychology program, students will be able to:

1. Apply basic terminology of the discipline.
2. Compare and contrast psychological models of behavior.
3. Evaluate major psychological theories.
4. Explain major research methods and provide examples of when they can be used most effectively.
5. Compose research papers employing appropriate information literacy skills, and using standard writing formats such as APA or MLA.
6. Perform successfully in a baccalaureate program.

Transfer Information
Students should consult the catalog of the college or university to which they plan to transfer to determine appropriate electives and the number of psychology courses which transfer toward a major. Students must still meet department requirements at the transfer institution.

There are many opportunities for transfer. One option for the Bachelor’s in psychology is the dual admissions program with University of Maryland University College. Interested students should contact academic advising.

Employment Information
Graduates with A.A. and B.A. degrees may be employed in community mental health agencies, crisis centers, correctional facilities, government agencies, and senior citizen centers. Degrees beyond the A.A. and experience are usually necessary for positions above entry level.

Those with a Master of Arts or Science degree may find employment in counseling centers, hospitals, law enforcement and other government agencies, primary and secondary schools, and community colleges.

Psychologists with a Ph.D. degree find employment in universities and colleges, research facilities, hospitals, mental health clinics and private and public counseling centers.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Biological Lab Science Elective (GL) ¹</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>History Elective (GB) ²</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
</tbody>
</table>

1. BIO 100 Fundamentals of Biology (GL) or BIO 120 General Biology I (GL) are recommended.
2. Electives should be chosen according to personal or career interests or to the requirements of the institution to which transfer is planned.
3. A four credit Biological/Physical Science Lab (GL) course may be substituted.
4. It is suggested that students choose from the following as part of their program of study: SOC 102 Social Problems (GB) (D) and CIS 102 Introduction to Information Sciences (GI).

The following courses are taught in online and face to face formats: PSY 101 General Psychology (GB), PSY 202 Child Psychology, PSY 204 Abnormal Psychology, PSY 208 Alcohol/Drugs: Impact on Behavior, PSY 209 Social Psychology (D), and PSY 214 Human Development Across the Life Span.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Public History, Area of Concentration in Arts & Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor James Karmel, 443-412-2105, jkarmel@harford.edu; or Admissions, 443-412-2109.
Program Description
This concentration will provide History majors with an introductory learning experience in Public History. The concentration will allow History majors to engage in the broader interpretation of History for public audiences. This concentration can be used for transfer purposes to four-year colleges and universities to support credentials for students seeking immediate employment or volunteer engagement in Public History. The Public History concentration will supplement the History program's focus on preparing students to understand their political, social, economic, intellectual, scientific and artistic heritage in historical context.

Program Goals
Upon completion of the public history concentration, students will be able to:

1. Demonstrate basic knowledge of the historical discipline, United States history, and world history.
2. Conduct research to find and critically examine varied historical material, including primary and secondary sources.
3. Develop coherent and analytical papers, presentations, digital projects and other products using historical sources.
4. Perform successfully in a baccalaureate program.
5. Express awareness of the Public History field regarding employment and educational options.
6. Create and critically evaluate Public History projects.

Transfer Information
Students should be aware that each transfer institution has unique curricular requirements. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information
The Public History concentration prepares students to be historians who specifically work in jobs that develop and interpret the past for public audiences. These jobs are usually found outside of education in settings such as: historical consulting firms, museums, historical sites, government agencies, living history projects, theatre companies, digital media operations, film and television production companies and local historical societies. The Bureau of Labor Statistics estimates that employment for public historians will grow by 18% from 2010 to 2020.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<tr>
<td>HIST 101</td>
<td>History of Western Civilization I (GB) (D)</td>
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</tr>
<tr>
<td>HIST 103</td>
<td>History of the United States I (GB) (D)</td>
<td></td>
</tr>
<tr>
<td>HIST 109</td>
<td>World History I (GB) (D)</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GL) (p. 111)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
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<td>1</td>
</tr>
<tr>
<td>Total Credits</td>
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<td>14</td>
</tr>
</tbody>
</table>

| Second Semester | | |
| ENG 109 | English Composition: Research Writing | 3 |
| CMST 101 | Speech Fundamentals (GI) | 3 |
| Select one of the following: | | 3 |
| HIST 102 | History of Western Civilization II (GB) (D) | |
| HIST 104 | History of the United States II (GB) (D) | |
| HIST 110 | World History II (GB) (D) | |
| HIST 216 | Introduction to Public History | 3 |
| Biological/Physical Science Elective (GS) (p. 111) | | 3 |
| Total Credits | | 15 |

| **Third Semester** | | |
| Arts/Humanities Elective (GH) (p. 110) | | 3 |
| History Elective | | 3 |
| General Elective | | 3 |
| Behavioral/Social Science Elective (GB) (p. 110) | | 3 |
| Public History Elective (p. 191) | | 3 |
| Total Credits | | 15 |

| **Fourth Semester** | | |
| Arts/Humanities Elective (GH) (p. 110) | | 3 |
| Behavioral/Social Science Elective (GB) (p. 110) | | 3 |
| General Elective | | 3 |
| History Elective | | 3 |
| Public History Elective (p. 191) | | 3 |
| Physical Education Elective | | 1 |
| Total Credits | | 16 |
| Total Credits | | 60 |

1 Must complete sequence HIST 101 History of Western Civilization I (GB) (D) - HIST 102 History of Western Civilization II (GB) (D) or HIST 103 History of the United States I (GB) (D) - HIST 104 History of the United States II (GB) (D) or HIST 109 World History I (GB) (D) - HIST 110 World History II (GB) (D).
2 A four credit course in mathematics (GM) may be substituted.
3 A four credit Biological/Physical Science Lab (GL) may be substituted.
4 HIST 283 Internship in Public History, is strongly recommended for this Public History Elective.

Public History Elective
Select two of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 211</td>
<td>The Archaeology of Maryland</td>
<td>3</td>
</tr>
<tr>
<td>BA 103</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>BA 108</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 109</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 203</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>CIS 217</td>
<td>Introduction to Web Programming</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205</td>
<td>American Literature: Colonial Through the Civil War (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 206</td>
<td>American Literature: Late 19th and 20th Centuries (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 283</td>
<td>Internship in Public History</td>
<td>3</td>
</tr>
</tbody>
</table>
MC 103  Television Studio Production 3
MC 201  Writing for the Electronic Media 3
PS 101  American National Government (GB) 3
SOC 201  Marriage and the Family (GB) (D) 3
THEA 104  Stagecraft I 3
VPA 201  Visual and Performing Arts Survey (GH) (D) 3

1 Prerequisites for CIS 217 Introduction to Web Programming: CIS 115 Fundamentals of Programming and CIS 136 Introduction to Internet Technologies or permission of instructor.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Secondary Education - Chemistry (AAT)

Award: Associate of Arts in Teaching
No. of credits required: 62
For more information: Contact Admissions, 443-412-2109.

Program Description
The A.A.T. degree program prepares students for transfer into a four-year college or university education program. High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE in order to earn an A.A.T. degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from the Test and Assessment Center or the academic division. Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.

Program Goals
Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information
This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland, however, students are not guaranteed admission to any four-year institution and must apply to and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
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</tr>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>17</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
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<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
<td>17</td>
</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 217</td>
<td>Introduction to Special Education</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
<td>4</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
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<td></td>
<td>Credits</td>
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Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 208</td>
<td>Organic Chemistry II</td>
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</tbody>
</table>
PSY 216  Adolescent Psychology 3
Behavioral/Social Science Elective (GB) (p. 110) 3
Arts/Humanities Elective (GH) (p. 110) 3
Physical Education Elective 1

Total Credits 14

1 Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students entering a school setting.

2 Two semesters of calculus-based physics (PHYS 203 General Physics: Mechanics and Particle Dynamics (GS)/PHYS 204 General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)) will transfer to all institutions offering chemistry and secondary teaching certification, or two semesters of algebra-based physics (PHYS 101 Introductory Physics I (GL)/PHYS 102 Introductory Physics II (GL)) will transfer to Towson, Hood, Columbia Union, Goucher, or Frostburg Universities.

3 The EDUC 217 Introduction to Special Education course required by Harford Community College is a necessary requirement of the College’s A.A.T. degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Secondary Education - English (AAT)

Award: Associate of Arts in Teaching
No. of credits required: 62
For more information: Contact Admissions, 443-412-2109.

Program Description

The A.A.T. degree program prepares students for transfer into a four-year college or university education program. High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE in order to earn an A.A.T. degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from the Test and Assessment Center or the academic division. Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.

Program Goals

Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information

This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply to meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information


Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Credits 15

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 101 or CMST 105</td>
<td>Speech Fundamentals (GI) or Intercpersonal Communication (GI) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENG 205 or ENG 206</td>
<td>American Literature: Colonial Through the Civil War (GH) (D) or American Literature: Late 19th and 20th Centuries (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>
**Secondary Education - Mathematics (AAT)**

**Award:** Associate of Arts in Teaching  
**No. of credits required:** 61-62  
**For more information:** Contact Professor Chris Jones at 443-412-2055, cjones@harford.edu; or Admissions, 443-412-2109.

**Program Description**

The A.A.T. degree program prepares students for transfer into a four-year college or university education program. High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE in order to earn an A.A.T. degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from the Test and Assessment Center or the academic division. Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.

**Program Goals**

Upon completion of the Teacher Education A.A.T. degree programs, students will be able to:

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

**Transfer Information**

This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply to and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.
Employment Information


Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
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</tr>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
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<tr>
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<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 204</td>
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<tr>
<td>MATH 217</td>
<td>Linear Algebra</td>
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<td>PSY 207</td>
<td>Educational Psychology</td>
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<tr>
<td>Literature Elective (GH)</td>
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<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
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</tr>
<tr>
<td>PHYS 101</td>
<td>Introductory Physics I (GL)</td>
<td></td>
</tr>
<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td></td>
</tr>
<tr>
<td>EDUC 217</td>
<td>Introduction to Special Education</td>
<td>3</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>MATH 206</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
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<td></td>
<td>13-14</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 111</td>
<td>Programming I: C/C++</td>
<td>4</td>
</tr>
<tr>
<td>Select one of the following:</td>
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<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td></td>
</tr>
<tr>
<td>PHYS 102</td>
<td>Introductory Physics II (GL)</td>
<td></td>
</tr>
<tr>
<td>PHYS 204</td>
<td>General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL)</td>
<td></td>
</tr>
<tr>
<td>PSY 216</td>
<td>Adolescent Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
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<td>3</td>
</tr>
<tr>
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<td><strong>Total Credits</strong></td>
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<td>61-62</td>
</tr>
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</table>

1. Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students being placed in a school setting.

2. See the English program description for a listing of literature electives.

3. Some transfer institutions accept PHYS 203 General Physics: Mechanics and Particle Dynamics (GS)/PHYS 204 General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL) (calculus-based): some transfer institutions allow CHEM 111 General Chemistry I (GL)/CHEM 112 General Chemistry II A (GL) or PHYS 101 Introductory Physics I (GL)/PHYS 102 Introductory Physics II (GL). Students should speak to an advisor at the transfer institution before choosing a PHYS or CHEM selection.

4. The Introduction to Special Education course required by Harford Community College is a necessary requirement of the College’s A.A.T. degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)

Secondary Education - Physics (AAT)

**Award:** Associate of Arts in Teaching  
**No. of credits required:** 62-64  
**For more information:** Contact Admissions, 443-412-2109.

Program Description

The A.A.T. degree program prepares students for transfer into a four-year college or university education program. High school preparation should include four units of English, three units of math of which two should be algebra, and three units of science.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE in order to earn an A.A.T. degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from the Test and Assessment Center or the academic division. Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.
Program Goals
Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information
This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply to and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information

Diversity Requirement
To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 203</td>
<td>Calculus I (GM)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 204</td>
<td>Calculus II (GM)</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 203</td>
<td>General Physics: Mechanics and Particle Dynamics (GS)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Credits</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

| Third Semester |                                               |         |
| EDUC 217     | Introduction to Special Education              | 3       |
| MATH 208     | Elementary Differential Equations              | 3       |
| PHYS 204     | General Physics: Vibrations, Waves, Heat, Electricity and Magnetism (GL) | 4       |
| Arts/Humanities Elective (GH) (p. 110) | 3       |
| Physical Education Elective                 | 1       |
| Credits   |                                                 | 14      |

| Fourth Semester |                                               |         |
| PHYS 205       | General Physics: Electrodynamics, Light Relativity and Modern Physics | 4       |
| PSY 216        | Adolescent Psychology                          | 3       |
| Behavioral/Social Science Elective (GB) (p. 110) | 3       |
| Arts/Humanities Elective (GH) (p. 110) | 3       |
| General Elective |                                              | 1-3     |
| Credits   |                                                 | 14-16   |
| Total Credits |                                               | 62-64   |

1. Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students being placed in a school setting.

2. The EDUC 217 Introduction to Special Education course required by Harford Community College is a necessary requirement of the College’s A.A.T. degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Secondary Education - Spanish (AAT)
Award: Associate of Arts in Teaching
No. of credits required: 60
For more information: Contact Admissions, 443-412-2109.
Program Description
The A.A.T. degree program prepares students for transfer into a four-year college or university education program. High school preparation should include Spanish: students should enter the program with proficiency at the SPAN 102 Elementary Spanish II level.

Students must obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE in order to earn an A.A.T. degree. Students should plan to take Praxis CORE, which includes core English and math competencies, near completion of 45 credit hours. Information can be obtained from the Test and Assessment Center or the academic division. Passing scores on Praxis, SAT, GRE, or ACT may be substituted in place of Praxis CORE, but may not be accepted by all transfer institutions.

Program Goals
Upon completion of the Teacher Education A.A.T. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information
This program requires the successful completion of Praxis CORE and at least a 2.75 GPA. Because the program courses are chosen to fulfill predetermined outcomes, the entire program will transfer to any four-year state or private college in Maryland; however, students are not guaranteed admission to any four-year institution and must apply to and meet the criteria required by that particular institution. Additionally, courses in the program will transfer to private and public colleges nationwide.

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUC 101</td>
<td>Introduction to Education ¹</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>HIST 103</td>
<td>History of the United States I (GB) (D)</td>
<td>3</td>
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<tr>
<td>HIST 104</td>
<td>History of the United States II (GB) (D)</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 202</td>
<td>The Twentieth Century World (GB) (D)</td>
<td></td>
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<tr>
<td>HIST 208</td>
<td>American Ethnic History (D)</td>
<td></td>
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<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 102</td>
<td>Elementary Spanish II ²</td>
<td>3</td>
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<tr>
<td>Physical Education Elective</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>ENG 102</td>
<td>English Composition and Literature Writing</td>
<td>3</td>
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<tr>
<td>or ENG 109</td>
<td>or English Composition: Research Writing</td>
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<tr>
<td>GEOG 102</td>
<td>Human Geography (GB) (D)</td>
<td>3</td>
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<tr>
<td>or GEOG 103</td>
<td>or World Regional Geography (GB) (D)</td>
<td></td>
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<tr>
<td>PSY 207</td>
<td>Educational Psychology</td>
<td>3</td>
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<tr>
<td>SPAN 201</td>
<td>Intermediate Spanish I</td>
<td>3</td>
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<tr>
<td>Mathematics Elective (GM) (p. 111) ³</td>
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Third Semester

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<tr>
<td>EDUC 217</td>
<td>Introduction to Special Education ¹, ⁴</td>
<td>3</td>
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<tr>
<td>CMST 105</td>
<td>Interpersonal Communication (GI) (D) ⁵</td>
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<tr>
<td>or CMST 101</td>
<td>or Speech Fundamentals (GI)</td>
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<tr>
<td>SPAN 202</td>
<td>Intermediate Spanish II</td>
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<td>ENG 234</td>
<td>Ethnic American Literature (GH) (D)</td>
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Fourth Semester

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<tbody>
<tr>
<td>PSY 216</td>
<td>Adolescent Psychology</td>
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<tr>
<td>SPAN 203</td>
<td>Survey of Spanish Literature I (GH)</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 205</td>
<td>Advanced Conversation (D)</td>
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<tr>
<td>Biological/Physical Science Elective (GS) (p. 111) ³</td>
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</tr>
<tr>
<td>Physical Education Elective</td>
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</table>

Total Credits: 60

¹ Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students being placed in a school setting.

² It is assumed that students will enter the program with Spanish proficiency at least at the 102 level.

³ General Education courses should be selected with consideration of the requirements of the college to which the student plans to transfer. Students should select these courses with assistance of an advisor. A four credit course may be substituted.

⁴ The EDUC 217 Introduction to Special Education course required by Harford Community College is a necessary requirement of the College’s A.A.T. degree, but is not sufficient to meet all special education or inclusion course requirements for four-year teacher education programs. Students may be required to take additional special education or inclusion courses as a part of the requirements for a baccalaureate degree and teacher education certification at four-year institutions.

⁵ CMST 105 Interpersonal Communication (GI) (D) is preferred.
General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Social Work, Area of Concentration in Arts & Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor Sharon Stowers, 443-412-2059, stowers@harford.edu; or Admissions, 443-412-2109.

Program Description

The Sociology program prepares students for a wide variety of careers in government, business, and non-profit organizations, such as research and demography, clinical and counseling services, applied anthropology, and human services. Students can choose from three concentrations that have been developed to facilitate transfer to baccalaureate programs in sociology, social work, or anthropology/sociology.

Program Goals

Upon completion of the sociology program, students will be able to:

1. Apply basic concepts and theories of the discipline to various social structures.
2. Compose research papers employing appropriate information literacy skills and using standard writing formats such as APA.
3. Identify patterns of human behavior and apply appropriate human constructs through their participation in an experiential learning activity.
4. Perform successfully in a baccalaureate program.
5. Identify and employ the Council on Social Work Education’s (CSWE) ten core competency standards and practice behaviors for Generalist Social Work practice.

Transfer Information

Students have options for transfer to many institutions, both in Maryland and across the United States.

Employment Information

According to the Bureau of Labor Statistics, positions for sociologists are expected to grow through 2020. Employment for social workers, especially, is expected to increase faster than average (25%) 2010-2020.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
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<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
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<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 102</td>
<td>Social Problems (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 109</td>
<td>English Composition: Research Writing</td>
<td>3</td>
</tr>
<tr>
<td>SOC 200</td>
<td>Introduction to Social Work</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
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</tr>
<tr>
<td>General Elective</td>
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</tr>
<tr>
<td>Third Semester</td>
<td></td>
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</tr>
<tr>
<td>SOC 201</td>
<td>Marriage and the Family (GB) (D)</td>
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<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
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<tr>
<td>SOC 214</td>
<td>Juvenile Delinquency</td>
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<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td></td>
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<tr>
<td>General Elective</td>
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<td>3</td>
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<tr>
<td>Physical Education Elective</td>
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<tr>
<td>Credits</td>
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<td>Fourth Semester</td>
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<td>ECON 102</td>
<td>Microeconomics (GB)</td>
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</tr>
<tr>
<td>PS 101</td>
<td>American National Government (GB)</td>
<td></td>
</tr>
<tr>
<td>PS 102</td>
<td>State and Local Government (GB)</td>
<td></td>
</tr>
<tr>
<td>Social Work Track Elective (p. 198)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
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<td></td>
</tr>
<tr>
<td>History Elective (GB)</td>
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<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Credits</td>
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<td>16</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

**1** BIO 100 Fundamentals of Biology (GL) or BIO 120 General Biology I (GL) is recommended.

**2** MATH 216 Introduction to Statistics (GM) is recommended if transfer is planned.

**3** A four credit course in mathematics (GM) may be substituted.

**4** Electives should be chosen according to personal and career interests or to the requirements of the institution to which transfer is planned. It is suggested students take 3-9 credits of foreign language.

**5** History elective should be chosen to satisfy the requirements of the institution to which transfer is planned.

**6** A four credit Biological/Physical Science Lab (GL) course may be substituted.

Social Work Track Elective

Select one of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 213</td>
<td>Criminology (same course as CJ 213)</td>
<td>3</td>
</tr>
<tr>
<td>CJ 101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
</tbody>
</table>
General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Sociology, Area of Concentration in Arts & Sciences (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Professor Sharon Stowers, 443-412-2059; sstowers@harford.edu; or Assistant Professor Jan Brewer, LCSW-C, 443-412-2636, jbrewer@harford.edu; or Admissions, 443-412-2109.

Program Description
The Sociology program prepares students for a wide variety of careers in government, business, and non-profit organizations, such as research and demography, clinical and counseling services, applied anthropology, and human services. Students can choose from three concentrations that have been developed to facilitate transfer to baccalaureate programs in sociology, social work, or anthropology/sociology.

Program Goals
Upon completion of the sociology program, students will be able to:

1. Apply basic concepts and theories of the discipline to various social structures.
2. Compose research papers employing appropriate information literacy skills and using standard writing formats such as APA.
3. Identify patterns of human behavior and apply appropriate human constructs through their participation in an experiential learning activity.
4. Perform successfully in a baccalaureate program.

Transfer Information
Students have options for transfer to many institutions, both in Maryland and across the United States.

Employment Information
According to the Bureau of Labor Statistics, positions for sociologists are expected to grow through 2020.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
</tbody>
</table>

| ENG 101 | English Composition (GE)           | 3       |
| PSY 101 | General Psychology (GB)            | 3       |
| Biological/Physical Lab Science Elective (GL) (p. 111) | 4       |

| Second Semester  |                                      |         |
| SOC 102 | Social Problems (GB) (D)            | 3       |
| ENG 109 | English Composition: Research Writing | 3       |
| General Sociology Track Elective (p. 199) | 3       |
| Mathematics Elective (GM) (p. 111)  | 3       |
| General Elective  |                                      |         |

| Credits | 13 |

| Third Semester  |                                      |         |
| SOC 201 | Marriage and the Family (GB) (D)     | 3       |
| CMST 101 | Speech Fundamentals (GI)            | 3       |
| General Sociology Track Elective (p. 199) | 3       |
| Arts/Humanities Elective (GH) (p. 110) | 3       |
| General Elective  |                                      |         |
| Physical Education Elective | 1       |

| Credits | 15 |

| Fourth Semester  |                                      |         |
| General Sociology Track Elective (p. 199) | 6       |
| Arts/Humanities Elective (GH) (p. 110) | 3       |
| History Elective (GB)  |                                      | 3       |
| Biological/Physical Science Elective (GS) (p. 111) | 3       |
| Physical Education Elective | 1       |

| Credits | 16 |
| Total Credits | 60 |

1. BIO 100 Fundamentals of Biology (GL) or BIO 120 General Biology I (GL) is recommended.
2. MATH 216 Introduction to Statistics (GM) is recommended if transfer is planned.
3. A four credit course in mathematics (GM) may be substituted.
4. Electives should be chosen according to personal and career interests or to the requirements of the institution to which transfer is planned. It is suggested students take 3-9 credits of foreign language.
5. History elective should be chosen to satisfy the requirements of the institution to which transfer is planned.
6. A four credit Biological/Physical Science Lab (GL) course may be substituted.

General Sociology Track Electives
Select four of the following courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 101</td>
<td>Introduction to Physical Anthropology and Archaeology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 102</td>
<td>Introduction to Cultural Anthropology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 211</td>
<td>The Archaeology of Maryland</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Ceramics</td>
<td>3</td>
</tr>
<tr>
<td>CJ 101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>Physical Geography (GB)</td>
<td>3</td>
</tr>
</tbody>
</table>
200 Teacher Education (AA)

or GEOG 103 World Regional Geography (GB) (D)

PS 101 American National Government (GB) 3
or PS 102 State and Local Government (GB) 3

PSY 208 Alcohol/Drugs: Impact on Behavior 3

PSY 212 The Helping Relationship 3

SOC 200 Introduction to Social Work 3

SOC 213 Criminology (same course as CJ 213) 3

SOC 214 Juvenile Delinquency 3

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Teacher Education (AA)

Award: Associate of Arts Degree
No. of credits required: 60
For more information: Contact Admissions, 443-412-2109.

Program Description

This degree program prepares students for transfer into a four-year college or university education program in a specific area of study (e.g. biology, history, physical education, etc.). High school preparation should include four units of English, four units of math of which two should be algebra, and three units of science. Students should obtain a passing score on Praxis CORE or an alternative measurement of basic skills as set forth by COMAR and MSDE. Check with transfer institution for pre-professional test requirements.

The teacher education student is expected to select an area of specialization for this degree based on the subject that he/she plans to teach. A minimum of twelve credits should be taken in the area of specialization or in related subjects. Consult with an advisor for appropriate course selection.

Twelve (12) credits must be taken in an area of specialization. See the following page for appropriate course selection in your area of specialization. Select courses in accordance with transfer institution requirements. See an advisor for assistance.

Program Goals

Upon completion of the Teacher Education A.A. degree programs, students will be able to

1. Demonstrate professional teaching behavior including effective communication.
2. Discuss the development of education/curriculum and select instructional techniques appropriate for a variety of students.
3. Describe influences on growth and development, as well as theories of learning.
4. Make decisions in accordance with legal and ethical standards.
5. Summarize past and present practices pertaining to education.

Transfer Information

Past graduates of this program have transferred to four-year state colleges and universities in Maryland and to private and public colleges nationwide. To facilitate transfer, students should consult with an academic advisor early in their studies at HCC and before selecting elective courses.

Employment Information

According to the United States Department of Labor, Bureau of Labor Statistics, elementary and middle school teaching positions will grow by 12% from 2012-2022 while high school teaching positions will grow by 6%.

Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 101 Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101 English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101 General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
</tr>
<tr>
<td>CMST 101 Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 207 Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
</tr>
<tr>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Credits</td>
</tr>
<tr>
<td>EDUC 217 Introduction to Special Education</td>
<td>3</td>
</tr>
<tr>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective (p. 109)</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td>6</td>
</tr>
</tbody>
</table>
Students are required to participate in a thirty-hour field placement experience in addition to time spent in EDUC 101 Introduction to Education and EDUC 217 Introduction to Special Education. Field placement experiences take place sometime during regular school hours, generally between 8:00 a.m. and 3:30 p.m. A criminal record check will be conducted prior to students entering a school setting.

Students must choose a course with one of the general education identifiers: (GB)(GH)(GS)(GI)(GM)

Area of Specialization Requirements

Art

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 107</td>
<td>Fundamentals of 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>ART 109</td>
<td>Sculpture I</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Studio Drawing I: Observation</td>
<td>3</td>
</tr>
<tr>
<td>ART 113</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>ART 115</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>ART 201</td>
<td>History of Art-Ancient and Medieval (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 202</td>
<td>History of Art-Renaissance to Modern (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ART 213</td>
<td>Studio Drawing II: Contemporary Practice</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 101</td>
<td>Black &amp; White Photography I</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>or PHOT 101</td>
<td>Black &amp; White Photography I</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Depending on your expected transfer institution or art discipline interest, other art courses may be substituted. For some transfer institutions, the Art and Design program may provide better courses for transfer. Consult with an advisor.

Biology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 107</td>
<td>General Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 121</td>
<td>General Biology II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 208</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>General Chemistry II A (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 207</td>
<td>Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>Introductory Physics I (GL)</td>
<td>4</td>
</tr>
</tbody>
</table>

Earth and Space Science

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 151</td>
<td>Introduction to Astronomy (GS)</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 152</td>
<td>Sky and Telescope Laboratory (GL)</td>
<td>1</td>
</tr>
<tr>
<td>BIO 100</td>
<td>Fundamentals of Biology (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 210</td>
<td>Nutrition (GS)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 114</td>
<td>General Chemistry IIB (GL)</td>
<td>4</td>
</tr>
</tbody>
</table>

ES 105 | Earth Science (GS)                  | 3       |
ES 106 | Earth Science Laboratory (GL)       | 1       |
PHYS 101 | Introductory Physics I (GL)        | 4       |
PHYS 102 | Introductory Physics II (GL)       | 4       |

History

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 102</td>
<td>Introduction to Cultural Anthropology (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 102</td>
<td>Microeconomics (GB)</td>
<td></td>
</tr>
<tr>
<td>HIST 101</td>
<td>History of Western Civilization I (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>History of Western Civilization II (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 103</td>
<td>History of the United States I (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 104</td>
<td>History of the United States II (GB) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PS 101</td>
<td>American National Government (GB)</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology (GB) (D)</td>
<td>3</td>
</tr>
</tbody>
</table>

Music Specialization

(Instrumental and/or Vocal)

Students interested in teaching music should major in music and register for EDUC 101 Introduction to Education in the first semester as the general elective and PSY 101 General Psychology (GB) as the GB elective. Students are encouraged to also take EDUC 217 Introduction to Special Education although it is not required for the music degree.

Physical Education Specialization

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 119</td>
<td>Biology for Health Professionals (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Anatomy and Physiology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 204</td>
<td>Anatomy and Physiology II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>HLTH 101</td>
<td>Contemporary Health Issues (GI)</td>
<td>3</td>
</tr>
<tr>
<td>PE 160</td>
<td>Beginning Swimming 1</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: These courses are inactive. Please meet with an advisor to discuss possibilities.

Technology and Engineering

(all substitutions must be made for full transfer to UMES)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 101</td>
<td>College Algebra (GM)</td>
<td>3</td>
</tr>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>Introductory Physics I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 103</td>
<td>Trigonometry (GM)</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Macroeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>Introductory Physics II (GL)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition and Literature</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 219</td>
<td>Everyday Classroom Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
</tbody>
</table>
Select concentration courses in accordance with requirements at transfer institution. See an advisor for assistance. Speak with an advisor if you are interested in teaching a subject which is not listed.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Technical/Professional Studies (AAS)

Designated Statewide Program

Award: Associate of Applied Sciences Degree

No. of credits required: 60

For more information: Contact Admissions, 443-412-2109. Student is required to meet with Faculty Advisor or Academic Division Dean.

Program Description

This program of study enables students to combine courses from various disciplines to meet employment training and retraining requirements. For example, a student interested in becoming a legal office administrator could take core courses in Office Management coupled with Legal Studies, or for instance, a student interested in administrative and management positions could take core courses in Business Management coupled with Computer Information Systems courses. Electives in Accounting, Computer Information Systems, Business Management and Legal Studies might be appropriate for either of these examples.

In order to graduate with this degree, a student must have an approved written learning plan including concentration area on file in the Advising, Career, and Transfer Services Office. The plan must be developed in collaboration with a Faculty Advisor or an Academic Division Dean and include courses from the Technical/Professional electives and Technical/Professional core courses listed below. For additional information on developing a learning plan, contact the Advising, Career, and Transfer Services Office at 443-412-2301.

Program Goals

Upon successful completion of this program of study students will be able to:

1. Acquire career competencies to meet individual career goals.
2. Demonstrate communication, critical thinking and problem-solving skills.

Employment Information

The program prepares students for a career in a rapidly changing work environment that often requires expertise in several areas. Opportunities in the workplace exist for students who possess multi-skills, particularly in high demand as well as emerging technical and professional areas.
Diversity Requirement

To satisfy the diversity requirement: Associate degree students must complete one 3-credit diversity course (D). It is recommended that students select one of the 3-credit (GB), (GH), (GI) course electives from those that also appear on the approved list of diversity course graduation requirements.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Arts/Humanities Elective (GH) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>General Education Elective (p. 109)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Technical/Professional Electives</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Technical/Professional Core Courses</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Physical Education/Fitness Elective</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>60</td>
</tr>
</tbody>
</table>

1. Students must choose a course with one of the general education identifiers: (GB)(GH)(GS)(GL)(GI)(GM)
2. Select from at least two disciplines.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Theatre: Design/Production (AAS)

Award: Associate of Applied Sciences Degree
No. of credits required: 60
For more information: Contact Associate Professor Ben Fisler, 443-412-2644, bfisler@harford.edu; or Admissions, 443-412-2109.

Program Description

The Theatre: Design/Production A.A.S. degree offers students the opportunity to learn, train, and gain the specialized technical and artistic skills required to execute contemporary theatrical productions. Harford Community College faculty work with each student to create an artistic point of view within a professional work ethic appropriate for the theatre.

The major in Theatre: Design/Production is time-consuming and physically demanding. Participation in productions is a part of the educational program. All majors must participate in theatre activities on weekends and during the evening.

Between traveling road shows and guest productions that perform at the APG Federal Credit Union Arena, The Amoss Center, and The Chesapeake Theatre, along with College and community productions on the thrust stage of the Chesapeake Center, students have the opportunity to work in all forms of theatre such as plays, musicals, mime, and children’s drama.

Program Goals

Upon completion of the Associate of Arts in Theatre: Performance / Associate of Applied Sciences in Theatre: Design/Production degree students will be able to:

1. Successfully transfer to a four-year institution.
2. Perform specific, marketable skills in theatre.
3. Demonstrate professional standards of behavior.
4. Apply appropriate performance or production skills to a variety of theatrical projects.
5. Use appropriate resources to identify jobs and training opportunities in theatre.

Transfer Information

Graduates may transfer to such institutions as Towson University and University of Maryland campuses in Baltimore County and College Park. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance as early as possible in their academic career.

Employment Information

Graduates of this program, with close professional advising and job networking provided by the faculty, find employment opportunities with performing arts organizations and a variety of businesses and promoters involved in theatre, film, television, broadcasting, and news media.

Field Trip Statement

Courses in this program may require field trips.

Degree Requirements

Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 101</td>
<td>Introduction to Theatre (GH)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 104</td>
<td>Stagecraft I</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Elective</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>16</td>
</tr>
<tr>
<td>Second Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 108</td>
<td>Digital Media Culture (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>THEA 279</td>
<td>Theatre Workshop I</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Upper-level Theatre Course (p. 204)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>13</td>
</tr>
<tr>
<td>Third Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 122</td>
<td>Color: Art, Science &amp; Culture (GH)</td>
<td>3</td>
</tr>
<tr>
<td>CADD 102</td>
<td>Intermediate CADD</td>
<td>3</td>
</tr>
</tbody>
</table>
The Theatre: Performance (AA) program is designed to provide a broad liberal education as well as specialized professional training in which emphasis is placed on performance skills. Harford Community College faculty work with each student to create an artistic point of view within a professional work ethic appropriate for the theatre. The major in Theatre: Performance is time-consuming and physically demanding. Participation in mainstage and studio productions is part of the educational program. All majors must participate in theatre activities on weekends and during the evening. Performance students work in all forms of theatre such as plays, musicals, mime, and children's drama.

Program Goals
Upon completion of the Associate of Arts in Performing Arts degree students will be able to:

1. Successfully transfer to a four-year institution.
2. Perform specific, marketable skills in theatre.
3. Demonstrate professional standards of behavior.
4. Apply appropriate performance or production skills to a variety of theatrical projects.
5. Use appropriate resources to identify jobs and training opportunities in theatre.

Transfer Information
Graduates of this program may transfer to such institutions as Towson University and University of Maryland campuses in Baltimore County and College Park. Students who plan to transfer to a four-year institution should check the requirements of that institution. If they are significantly different from the courses listed, students should consult with an advisor for academic guidance as early as possible in their academic careers.

Employment Information
Close professional advising and job networking provided by the faculty allows graduates to find employment opportunities with performing arts organizations and a variety of businesses and promoters involved in live theatrical and musical performances including: live theater, cruise ship lines, theme parks, film, television, commercial promotions, and new media.

Field Trip Statement
Courses in this program may require field trips.

Degree Requirements
Recommended Course Sequence

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology (GB)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 101</td>
<td>Introduction to Theatre (GH)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 102</td>
<td>Acting I</td>
<td>3</td>
</tr>
<tr>
<td>THEA 104</td>
<td>Stagecraft I</td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Credits: 16
### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MC 206</td>
<td>History of Film (GH)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 103</td>
<td>Acting II</td>
<td>3</td>
</tr>
<tr>
<td>THEA 279</td>
<td>Theatre Workshop I</td>
<td>1</td>
</tr>
<tr>
<td>Behavioral/Social Science Elective (GB) (p. 110)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics Elective (GM) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

### Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 108</td>
<td>Digital Media Culture (GI)</td>
<td>3</td>
</tr>
<tr>
<td>DRAM 203 or THEA 106</td>
<td>Survey of World Drama (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 221</td>
<td>Vocal Performance for the Stage</td>
<td>3</td>
</tr>
<tr>
<td>THEA 222</td>
<td>Movement for the Actor</td>
<td>3</td>
</tr>
<tr>
<td>THEA 280</td>
<td>Theatre Workshop II</td>
<td>1</td>
</tr>
<tr>
<td>Biological/Physical Science Elective (GS) (p. 111)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

### Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAM 204</td>
<td>Survey of Modern Drama (GH) (D)</td>
<td>3</td>
</tr>
<tr>
<td>PE 178</td>
<td>Dance Movement</td>
<td>1</td>
</tr>
<tr>
<td>THEA 201</td>
<td>Fundamentals of Play Directing</td>
<td>3</td>
</tr>
<tr>
<td>THEA 223</td>
<td>Makeup for the Performer</td>
<td>3</td>
</tr>
<tr>
<td>THEA 281</td>
<td>Theatre Workshop III</td>
<td>1</td>
</tr>
<tr>
<td>Biological/Physical Lab Science Elective (GL) (p. 111)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits:** 60

1. If a four-credit course in mathematics is substituted, the one-credit General Elective in the first semester is not necessary.
2. If a four-credit course in biological/physical science is substituted, the one-credit General Elective in the first semester is not necessary.
3. THEA 106 Script Analysis: From Page to Stage (GH) is required for students intending to transfer to Towson University or Stevenson University.

### General Education Degree Requirements

**Note:** The following codes identify courses which satisfy the General Education Degree Requirements:

**Behavioral/Social Science (GB)**

**English Composition (GE)**

**Arts/Humanities (GH)**

**Interdisciplinary and Emerging Issues (GI)**

**Biological/Physical Laboratory Science (GL)**

**Mathematics (GM)**

**Biological/Physical Science (GS)**

### Certificates

- Accounting Certificate (p. 205)
- Additive Manufacturing Technician Certificate (p. 206)
- Administrative Professions, Business Management Certificate (p. 207)
- Agribusiness, Business Management Certificate (p. 207)
- Agribusiness, Business Management Certificate (p. 207)
- Biotechnology Certificate (p. 208)
- Business Administration Lower-Level Certificate (p. 209)
- Computer Aided Design and Drafting (CADD) Certificate (p. 210)
- CPA Exam Qualification Lower-Level Certificate (p. 210)
- Cyber Defense Certificate (p. 211)
- Entrepreneurship, Business Management Certificate (p. 212)
- Environmental Technology Certificate (p. 213)
- Health Information Technology Certificate (p. 214)
- Human Resources, Business Management Certificate (p. 214)
- Information Assurance and Cybersecurity Certificate (p. 215)
- Journalism/New Media and Advertising, Mass Communications Certificate (p. 216)
- Marketing, Business Management Certificate (p. 216)
- Medical Assisting Certificate (p. 217)
- Medical Office Assistant Certificate (p. 218)
- Paralegal Studies Certificate (p. 219)
- Photography Certificate (p. 220)
- Production and Announcing in the Electronic Media, Mass Communications Certificate (p. 220)
- Professional Education Courses for Maryland Certification (p. 221)
- Programming, Computer Information Systems Certificate (p. 221)
- programs-study-majors/certificates/additive-manufacturing-tech-cert/ (https://catalog.harford.edu/programs-study-majors/certificates/additive-manufacturing-tech-cert/)
- Software, Computer Information Systems Certificate (p. 222)
- Unix Computer Information Systems Certificate (p. 223)

### Accounting Certificate

**Award:** Certificate in Accounting

**No. of credits required:** 16

**For more information:** Contact Assistant Professor James Baker, 443-412-2374, jbaker@harford.edu; Assistant Professor Cynthia Lewis, 443-412-2058, clewis@harford.edu; or Admissions, 443-412-2109.

### Program Description

The program is designed to provide students with specific skills needed for employment in the field of accounting and bookkeeping, including positions such as bookkeeper, accounts receivable clerk or accounts payable clerk. Upon completion of the certificate, students will be prepared to sit for the AIPB’s Bookkeeper Certification exam, as well as the Intuit QuickBooks Certified User Exam.

### Program Goals

Students who successfully complete the Accounting Certificate will be able to:

1. Apply basic generally accepted accounting principles and techniques.
2. Analyze financial information for errors.
3. Explain and demonstrate accounting for payroll and inventory.
4. Establish and evaluate internal control and fraud prevention procedures.
5. Earn AIPB Certified Bookkeeper status.

### Employment Information

The U.S. Bureau of Labor Statistics Occupational Outlook Handbook job outlook for Bookkeepers, Accounting, and Auditing Clerks expects
a decline of about 1% through 2026, although the number of jobs is expected to be over 1,700,000 by 2026.

**Certificate Requirements**

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Accounting Principles II</td>
<td>3</td>
</tr>
<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>or CIS 145</td>
<td>Introduction to Microsoft Excel</td>
<td></td>
</tr>
<tr>
<td>ACCT 108</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 210</td>
<td>Capstone - Certified Bookkeeper Preparation</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

**Gainful Employment**

Accounting, 16 credits  
Program Level: Undergraduate certificate  
Program Length: 1 year  
Occupations: Bookkeeping, Accounting and Auditing Clerks  
CIP Code: 52.0302  
SOC Code: 43-3031  
Link to O*Net: [http://www.onetonline.org/link/summary/43-3031.00](http://www.onetonline.org/link/summary/43-3031.00)

*How much will this program cost me?*

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State (in-county) Tuition and fees</td>
<td>$2,568.00</td>
</tr>
<tr>
<td>Out-of-State Tuition and fees</td>
<td>$4,017.00</td>
</tr>
<tr>
<td>Books and supplies</td>
<td>$822.00</td>
</tr>
<tr>
<td>On-campus room &amp; board</td>
<td>not offered</td>
</tr>
</tbody>
</table>

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

**Program Description**

This certificate prepares students for employment in advanced manufacturing, including additive manufacturing (3D printing) and a variety of other industries that use technicians or technology specialists to support engineering staff. A strong emphasis is placed on applications, problem solving, critical thinking, and communication skills. Upon graduation, students will be able to use these skills to organize, and carry out engineering technology projects. Graduates of this certificate will demonstrate knowledge of CADD, electronics, hydraulics, pneumatics, blueprint reading, and mechanics. Engineering and science courses are important parts of this program.

**Program Goals**

Upon successful completion of this certificate students will be able to:

1. Apply appropriate communications skills to work independently and collaboratively within an organization to promote the goals and objectives of the work unit.
2. Recognize how to facilitate successful completion of technical projects.
3. Demonstrate competency in using technical tools, technology, methods, and processes.
4. Recognize professional and ethical behavior.
5. Apply problem solving skills to technical problems.

**Employment Information**

Data illustrates a significant demand for well-educated and highly-skilled additive manufacturing workers in Harford County and in the State of Maryland. In 2015 Maryland's 3,680 manufacturing businesses generated $20.2 billion in gross state product and employed more than 109,000 persons. The state supports numerous 21st century manufacturing industries including defense electronics, aeronautics, systems engineering, medical diagnostics, specialty chemicals, software and aircraft engines. Sixty percent of these manufacturers are advanced, producing a profound multiplier effect on Maryland's economy. High-
technology manufacturers in Maryland generate almost two additional jobs for each new manufacturing job created.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGT 106</td>
<td>Introduction to Additive Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 110</td>
<td>3D Printing in Additive Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 115</td>
<td>Optimizing Print Files</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 225</td>
<td>Quality Control &amp; Metrology for Additive</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>ENGT 230</td>
<td>Additive Manufacturing Capstone</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>15</td>
</tr>
</tbody>
</table>

Administrative Professions, Business Management Certificate

Award: Certificate in Business Management
No. of credits required: 24
For more information: Contact Admissions, 443-412-2109.

Program Description
The Business Management Administrative Professions Certificate is designed to enable students to obtain knowledge, skills, and competencies in the challenging business field of Administrative Professions. Students completing the certificate in Administrative Professions are able to combine the credits earned to complete an Associate of Applied Science (A.A.S.) Business Management degree to satisfy their individual career goals.

Program Goals
Upon successful completion of this certificate program of study students will be able to:

1. Use the language of business and demonstrate effective and professional communication skills.
2. Demonstrate administrative problem-solving skills in business decision making.
3. Use information technology applications to develop business solutions.
4. Prepare for Associate of Applied Sciences (A.A.S.) degree in Business Management

Employment Information
The Business Management Administrative Professions program prepares students for a business career by providing comprehensive skills for today's rapidly changing business environment. Employment projections provided by the U.S. Department of Labor and regional workforce development data indicate that opportunities in administrative support professions will continue to increase.

According to the Occupational Outlook Handbook, employment of administrative professionals is expected to decline 5% through 2026, although there are still projected to be nearly 4,000,000 jobs in this field.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>OS 100</td>
<td>Keyboarding Basics</td>
<td>1</td>
</tr>
<tr>
<td>OS 113</td>
<td>Intermediate Keyboarding and Document</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Processing</td>
<td></td>
</tr>
<tr>
<td>OS 214</td>
<td>Advanced Keyboarding &amp; Document Processing</td>
<td>3</td>
</tr>
<tr>
<td>OS 129</td>
<td>Introduction to Office Procedures and</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>OS 136</td>
<td>Introduction to Bookkeeping: Quickbooks</td>
<td>3</td>
</tr>
<tr>
<td>OS 116</td>
<td>Communication Technologies</td>
<td>4</td>
</tr>
<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>24</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Agribusiness, Business Management Certificate

Award: Certificate in Business Management
No. of credits required: 24
For more information: Contact Assistant Professor Miriam Huddleston, 443-412-2426, mwiglesworth@harford.edu (%20mwiglesworth@harford.edu); or Admissions, 443-412-2109.

Program Description
The Business Management Agribusiness Certificate is designed to enable students to obtain knowledge, skills, and competencies in the challenging field of Agribusiness. Students completing the certificate in Agribusiness are able to combine the credits earned to complete an Associate of Applied Science (A.A.S.) degree to satisfy their individual career goals.

Program Goals
Upon successful completion of this program of study students will be able to:
1. Apply business management skills to effectively manage farms and agribusinesses.
2. Demonstrate marketing skills appropriate to farms and agribusiness (commodity marketing in areas such as livestock, diary, poultry, fruits, and vegetables).
3. Demonstrate skills and knowledge to successfully create, develop, and run agribusinesses and farms.
4. Prepare for Associate of Applied Sciences (AAS) degree in Business Management.

**Certificate Requirements**

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 110</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>BA 145</td>
<td>Farm and Agribusiness Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 209</td>
<td>Agricultural Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 246</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or BA 205 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 242</td>
<td>Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong> 24</td>
<td></td>
</tr>
</tbody>
</table>

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

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**Biotechnology Certificate**

**Award:** Certificate in Biotechnology  
**No. of credits required:** 34

For more information: Contact Associate Professor Jaclyn Madden, 443-412-2046, jmadden@harford.edu (August 15 - June 15); stem@harford.edu or Admissions, 443-412-2109.

**Program Description**

The Biotechnology Certificate program prepares students in the techniques and skills needed for entry-level bioscience laboratory work. By stressing the basic principles of the natural and physical sciences, with strong emphasis on biotechnology and analytical techniques and applications, the program prepares students for semiprofessional employment in biotechnology, chemical, and biological laboratories. The certificate also lays the foundation for more advanced education in the sciences, and will allow students with a previous degree in the sciences to obtain the skills necessary for employment in the rapidly-expanding biotechnology sector. The bioscience/biotechnology industry is expected to continue to experience growth and to remain a high priority in Maryland.

**Program Goals**

Upon completion of the Biotechnology Certificate, the student will be able to:

1. Describe and explain concepts in biotechnology and the biomanufacturing process.
2. Practice professional integrity and competency integral to biotechnology research, industry, and ethics.
3. Design, organize, and manage a laboratory notebook including protocols and experimental results.
4. Perform basic laboratory skills essential for following Standard Operating Procedures (SOPs), Good Laboratory Practices (GLPs), and laboratory safety.
5. Collect, analyze and interpret scientific data, using computer technologies and established research and statistical methods.
6. Use and apply the scientific method to develop, organize, execute and interpret experiments in a logical and timely manner.
7. Communicate effectively in oral and written English.
8. Evaluate the effects of biotechnology on society.
9. Illustrate the potential for teamwork by working effectively with others.
10. Employ laboratory methods and techniques required by emerging technologies in the field of biotechnology.

**Certificate Requirements**

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 120</td>
<td>General Biology I (GL)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 124</td>
<td>Foundations of Biotechnology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 125</td>
<td>Laboratory Methods for Biotechnology</td>
<td>1</td>
</tr>
</tbody>
</table>
**Biotechnology Certificate Electives**

Select four credits from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 205</td>
<td>Microbiology (GL)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 191</td>
<td>Independent Study: Biology</td>
<td>1-4</td>
</tr>
<tr>
<td>BIO 192</td>
<td>Independent Study: Biology</td>
<td></td>
</tr>
<tr>
<td>BIO 193</td>
<td>Independent Study: Biology</td>
<td></td>
</tr>
<tr>
<td>BIO 194</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 204</td>
<td>Analytical Chemistry</td>
<td>4</td>
</tr>
</tbody>
</table>

1. For the Independent Study: Biology course contact STEM division dean for more information.

**Note:** It is recommended that students complete the required courses for the biotechnology certificate in the sequence they are listed.

**Gainful Employment**

Biotechnology
Program Level - Undergraduate certificate
Program Length - 2 years

*How much will this program cost me?*

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-State (in-county) Tuition and fees</td>
<td>$5,528.00</td>
</tr>
<tr>
<td>Out-of-State Tuition and fees</td>
<td>$8,606.00</td>
</tr>
<tr>
<td>Books and supplies</td>
<td>$1,059.00</td>
</tr>
<tr>
<td>On-campus room &amp; board</td>
<td>not offered</td>
</tr>
</tbody>
</table>

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?  
Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:  
Federal loans:*  
Private education loans:*  
Institutional financing plan:*  

* Less than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?  
The program is designed to take 2 year to complete. Of those that completed the program in 2016-2017, *% finished in 2 year.

*Less than 10 students completed this program in 2016-2017. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?  
The job placement rate for students who completed this program in 2016-2017 is *%.

* This institution is not currently required to calculate a job placement rate for program completers.

Gainful Employment Disclosure Template: [http://ww2.harford.edu/gedt/41.0101-GEDT.html](http://ww2.harford.edu/gedt/41.0101-GEDT.html)

**General Education Degree Requirements**

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

**Business Administration Lower-Level Certificate**

**Award:** Certificate in Business Administration  
**No. of credits required:** 24  
**For more information:** Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu; or Admissions, 443-412-2109.

**Program Description**

The Business Administration Lower-Level Certificate is designed for students who have completed a bachelor’s degree in a field other than business administration. As such, this certificate is intended to provide students with a business administration foundation which will prepare them for many federal government management and administrative positions. Although some of the courses in this certificate may transfer into the A.S. Business Administration and A.A.S. Business Management degrees, the purpose of this certificate is to provide the necessary additional business administration courses which will enable students to meet federal government management and administrative related position requirements.

**Program Goals**

Upon successful completion of this program of study, students will be able to:

1. Apply appropriate communications skills to work independently and collaboratively within an organization to promote the goals and objectives of the work unit.
2. Recognize how to facilitate successful completion of technical projects.
Computer Aided Design and Drafting (CADD) Certificate

3. Demonstrate competency in using technical tools, technology, methods, and processes.
4. Recognize professional and ethical behavior.
5. Apply problem solving skills to technical problems.

Employment Information
Numerous federal government and Department of Defense administrative/business, contracting, administrative assistant and information technology positions will require a bachelor's degree, including 24 credit hours in business administration.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Accounting Principles II</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 109</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 111</td>
<td>Purchasing and Materials Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>BA 225</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 246</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:
- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Computer Aided Design and Drafting (CADD) Certificate

Award: Certificate in Computer Aided Design and Drafting
No. of credits required: 12
For more information: Contact Assistant Professor Steve Johnson, 443-412-2641, sjohnson@harford.edu, or Admissions, 443-412-2109.

Program Description
This certificate program is designed to provide students with a solid foundation of Computer Aided Design and Drafting (CADD) through familiarization with the computer, peripheral devices and specialized software. This program prepares students to function as entry-level CADD technicians and operators who assist engineers and architects in all design and drawing preparation phases.

Program Goals
Upon successful completion of the CADD certificate, students will be able to:
1. Create and revise CADD drawings.
2. Choose appropriate tools and techniques to produce effective and well organized CADD drawings.
3. Use industry terminology and standards.
4. Identify opportunities to improve productivity and accuracy and construct appropriate solutions.

Employment Information
Conventional drafting practices have given way to the use of CADD. With the number of CADD positions continuing to increase into the future, employment opportunities will continue to grow. These opportunities include, but are not limited to the following: CADD Operator, Design Assistant, Layout or Mechanical Draftsperson, CADD Technician or Engineering technicians. Credits earned in this certificate program are applicable to the Associate of Applied Science degree in CADD.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 101</td>
<td>Introduction to CADD</td>
<td>3</td>
</tr>
<tr>
<td>CADD 102</td>
<td>Intermediate CADD</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the folllowing:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CADD 250</td>
<td>Solid Modeling</td>
<td></td>
</tr>
<tr>
<td>CADD 131</td>
<td>Revit 1</td>
<td></td>
</tr>
<tr>
<td>CADD 265</td>
<td>Solidworks</td>
<td></td>
</tr>
<tr>
<td>CADD 252</td>
<td>Customizing AutoCAD</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

CPA Exam Qualification Lower-Level Certificate

Award: Certificate in Lower-Level CPA
No. of credits required: 54
For more information: Contact Assistant Professor L.J. Baker, 443-412-2374, jbaker@harford.edu; Assistant Professor Cynthia Lewis, 443-412-2058, clewis@harford.edu; or Admissions, 443-412-2109; or the state: http://www.dllr.state.md.us/license/cpa/.

Program Description
The state of Maryland requires candidates for the CPA examination to have completed 150 college-level credits and obtained a bachelor's degree in any area of study. As part of the 150 credit requirement, candidates must have completed specific business, accounting, ethics, and communication courses. This certificate is designed
for students who have a baccalaureate degree in majors other than accounting attempting to sit for the CPA exam. The Lower-Level CPA Exam Qualification Certificate includes all required coursework to sit for the CPA exam.

**CPA Educational Requirements**

Candidates for the CPA must have completed 150 semester hours, including the attainment of a baccalaureate degree or higher. A minimum of 57 semester hours in accounting and related business subjects is required. This includes:

- A minimum of 27 semester hours of accounting, including at least 3 semester hours in each of the following:
  - Auditing
  - Financial Accounting (at least 9 hours)
  - Cost Accounting
  - U.S. Federal Income Tax
- A minimum of 21 semester hours in business-related subjects, including 3 semester hours in 5 of the 7 following topics:
  - Statistics
  - Management
  - Marketing
  - U.S. Business Law
  - Economics
  - Corporation or Business Finance
  - Business Communication
- A minimum of 3 semester hours of ethics education.
- Students should refer to the Department of Labor, Licensing and Regulation at [http://www.dllr.state.md.us/license/cpa/](http://www.dllr.state.md.us/license/cpa/) for most current requirements.

**Program Goals**

Students who successfully complete the CPA Exam Qualification Certificate will be able to:

1. Apply basic financial, cost and tax accounting principles.
2. Develop and employ problem-solving skills related to accounting issues.
3. Examine accounting as an information processing system.
4. Analyze and discuss transactions and related financial statements
5. Recognize ethical accounting behavior.

**Employment Information**

According to the *Occupational Outlook Handbook*, employment for a CPA is expected to increase 10%, adding 139,900 new jobs by 2026. Students who meet the requirements for the CPA examination and subsequently pass this exam will be in a position to receive the most prestigious jobs in the field of accounting.

**Certificate Requirements**

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

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### Required Courses

<table>
<thead>
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<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ACCT 101</td>
<td>Accounting Principles I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Accounting Principles II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 203</td>
<td>Tax Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 205</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 206</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>or ACCT 208</td>
<td>Managerial Accounting</td>
<td></td>
</tr>
<tr>
<td>ACCT 211</td>
<td>Intermediate Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCT 212</td>
<td>Intermediate Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 109</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 203</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 205</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>or BA 246</td>
<td>Legal Environment of Business</td>
<td></td>
</tr>
<tr>
<td>ECON 102</td>
<td>Microeconomics (GB)</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 101</td>
<td>Macroeconomics (GB)</td>
<td></td>
</tr>
<tr>
<td>MATH 216</td>
<td>Introduction to Statistics (GM)</td>
<td>4</td>
</tr>
<tr>
<td>ENG 216</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 221</td>
<td>Business Ethics (GH)</td>
<td>3</td>
</tr>
<tr>
<td>Accounting Electives (p. 211)</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

### Accounting Electives

Select six credits from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 105</td>
<td>Financial Statement Interpretation and Analysis</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 107</td>
<td>Spreadsheet Applications For Accounting</td>
<td>1</td>
</tr>
<tr>
<td>ACCT 108</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 204</td>
<td>Tax Accounting II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

### General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

### Cyber Defense Certificate

*Award:* Certificate in Information Systems Security  
*No. of credits required:* 39  
*For more information:* Dawn Grissom, 443-412-2364, dgrissom@harford.edu; or Admissions, 443-412-2109.
Program Description
The Cyber Defense Certificate is designed to enable students to obtain knowledge, skills, and competencies in the challenging cybersecurity field. The certificate is designed in a compressed format so that students complete four courses per semester. Students completing the certificate are able to combine these credits toward the completion of the Information Assurance and Cybersecurity A.A.S. degree to satisfy their individual goals.

Program Goals
Upon successful completion of this program of study, students will be able to:
1. Apply software patches to operating systems and applications
2. Assess a computer system’s security vulnerabilities using appropriate resources
3. Use standard software tools to detect attempted security breaches of computer systems
4. Implement computer network security defenses
5. Prepare for industry recognized certifications

Employment Information
According to the Occupational Handbook, national employment is expected to increase by as much as 28% from 2016-2026 in the cybersecurity field. Demand is expected to be very high, as these individuals will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks.

Recent employment data for the state of Maryland published by EMSI Economic Modeling in 2015 suggests the State has experienced a 53% increase in cyber job postings since 2011.

The Courses listed in the Cyber Defense Certificate are designed to align with the competencies identified and desired by employers. Students successfully completing are prepared to pursue industry certifications such as Net+, Sec+, Linux+, CCENT.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISS 105</td>
<td>Intro to Cybersecurity (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 114</td>
<td>Introduction to Computer User Support</td>
<td>3</td>
</tr>
<tr>
<td>or ISS 222</td>
<td>Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 135</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>CIS 210</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS 104</td>
<td>Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 110</td>
<td>Introduction to UNIX/Linux</td>
<td>4</td>
</tr>
<tr>
<td>CIS 211</td>
<td>MS Windows Server Operating System</td>
<td>3</td>
</tr>
<tr>
<td>ISS 220</td>
<td>Strategic Infrastructure Security</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 39

Entrepreneurship, Business Management Certificate

Award: Certificate in Business Management
No. of credits required: 24
For more information: Contact Maurice Brown, 443-412-2466, mabrown@harford.edu, or Admissions, 443-412-2109.

Program Description
The Business Management Entrepreneurship Certificate is designed to enable students to obtain knowledge, skills, and competencies in the challenging business field of entrepreneurship and innovation.

Students completing the certificate in Entrepreneurship are able to combine the credits earned to complete an Associate of Applied Science (A.A.S.) degree to satisfy their individual career goals.

Program Goals
Upon successful completion of this certificate program of study students will be able to:
1. Examine different types of business systems, organizations, management practices and theories related to entrepreneurial enterprises.
2. Use information technology applications to develop business solutions related to entrepreneurial enterprises.
3. Demonstrate entrepreneurial problem-solving skills in business decision making.
4. Prepare for Associate of Applied Sciences (A.A.S.) degree in Business Management.

Employment Information
An entrepreneur is an individual who undertakes the responsibility of creating and organizing a new business venture to bring an idea, a good, or a service to market. Successful entrepreneurs employ critical business knowledge and skills to create a business and effectively overcome challenges that face their establishment. Consequently, entrepreneurs also assume the risk and accountability associated with establishing a business venture. Statistics demonstrate that even innovative small businesses suffer high risk of failure because of ineffective management decisions. Statistics show that a majority of small businesses fail in the first year of operation primarily because of ineffective management and undercapitalization. Small businesses are critical to the economic survival of Harford County and the State of Maryland at large. According to the 2016 Kauffman Foundation report, Entrepreneurship: The Key to a New Era of American Growth and Opportunity, “entrepreneurism will be the primary source of new job creation.”

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.
The certificate program is designed so that the student can either complete the Associate of Applied Science degree in Environmental Technology, or complete the Associate of Science degree in Environmental Science and transfer to a bachelor degree program in environmental science.

Employment Information
Employment of environmental science technicians should grow about as fast as the average; employers indicate that positions as environmental technicians will be needed to help regulate waste products; to collect air, water, and soil samples for measuring levels of pollutants; to monitor compliance with environmental regulations; and to clean up contaminated sites. Possible positions of employment include field service technician, laboratory technician, remediation technician and hazardous materials technician.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 111</td>
<td>General Chemistry I (GL) ¹</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 111</td>
<td>Introduction to Environmental Science (GS)</td>
<td>3</td>
</tr>
<tr>
<td>ENV 202</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>ENV 210</td>
<td>Introduction to Hazardous Waste/Materials Management</td>
<td>4</td>
</tr>
<tr>
<td>ENV 220</td>
<td>Principles of Environmental Analysis I</td>
<td>4</td>
</tr>
<tr>
<td>ENV 221</td>
<td>Principles of Environmental Analysis II</td>
<td>4</td>
</tr>
<tr>
<td>ES 105</td>
<td>Earth Science (GS)</td>
<td>3</td>
</tr>
<tr>
<td>ES 106</td>
<td>Earth Science Laboratory (GL)</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credits 29

¹ Students must have completed two units of high school algebra, complete MATH 020 Pre-Algebra I, or score at the appropriate level on the Math Assessment Exam prior to taking General Chemistry.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)
Health Information Technology Certificate

Award: Certificate in Health Information Technology
No. of credits required: 24
For more information: Contact Assistant Professor Sherry Massoni, 443-412-2645, smassoni@harford.edu; or Admissions, 443-412-2109.

Program Description
This certificate is designed to enable students to obtain requisite knowledge, skills, and competencies in the challenging healthcare field and be prepared to sit for the CompTIA HIT certification exam.

Maryland’s Health Information Technology Workforce reports the following competencies necessary for HIT positions:

- Critical thinking: focus on the big picture and problem solving
- Clinical integration/interoperability: identifying tools and techniques to improve collaboration regarding patient care
- Informatics: apply data to improvements in outcomes regarding clinical care
- Applications: ability to use specific IT tools and applications
- Project management and leadership: ability to manage workflow and lead diverse, interdisciplinary teams
- Customer relations and service, including patient engagement
- Communication skills: listening, writing, speaking
- Ability to learn and adapt quickly to new trends and technologies
- Change management and process improvement
- Security and privacy issues
- Reporting and compliance issues

Program Goals
Students who successfully complete the Health Information Certificate will be able to:

1. Use the language of health information technology and demonstrate effective and professional communication skills in a healthcare setting.
2. Apply technology skills required of healthcare professionals.
3. Examine various healthcare information system technologies and project management methodologies.
4. Demonstrate problem-solving skills to use healthcare information effectively, ethically, and legally.
5. Describe the general functions, purposes and benefits of database management systems in healthcare organizations.
6. Apply database knowledge in data exchange and information sharing.

Employment Information
According to the latest projected employment data from the Occupational Outlook Handbook, opportunities should be best for applicants with an extensive knowledge base in healthcare information data management and related computer software application skills. According to the Occupational Outlook Handbook, HIT employment is expected to increase by 13% by 2026, faster than the average for all occupations, as the demand for health services increase as our population ages. Plus, an emphasis on electronic medical records is a key focus of healthcare reform.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 135</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>CIS 210</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS 161</td>
<td>Introduction to Health Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 162</td>
<td>Database Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>OS 140</td>
<td>Fundamentals of Healthcare</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3

- AHS 101 Medical Terminology and Ethics
- BIO 108 Human Body in Health and Disease (GS)
- OS 273 Cooperative Education III: Office Systems

Total Credits 24

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Human Resources, Business Management Certificate

Award: Certificate in Business Management
No. of credits required: 24
For more information: Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu; or Admissions, 443-412-2109.

Program Description
This Business Management Human Resources Certificate is designed to enable students to obtain knowledge, skills, and competencies in the challenging business field of Human Resources.

Students completing the certificate in Human Resources are able to combine the credits earned to complete an Associate of Applied Science (A.A.S.) degree to satisfy their individual career goals.
Program Goals
Upon successful completion of this program of study students will be able to:

1. Detail laws specific to and governing the hiring process, the promotion process and training within organizations and businesses.
2. Identify the various theories of management and their possible impact on employee production and morale.
3. Detail the systematic approaches to improving individual and organizational performance.
4. Develop skills and use metrics to align human resource goals, budgets, and outcomes with organizational mission.
5. Prepare for Associate of Applied Sciences (A.A.S.) degree in Business Management.

Employment Information
The Business Management Human Resources program prepares students for a human resources career by providing comprehensive human resources knowledge for today's rapidly changing business environment. According to the Occupational Outlook Handbook, employment is expected to increase by 7% and add 39,000 jobs through 2026 for all human resources, training, and labor relations managers and specialists occupations.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

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<tr>
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<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 108</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 115</td>
<td>Employee Relations</td>
<td>3</td>
</tr>
<tr>
<td>BA 116</td>
<td>Employee Training and Development</td>
<td>3</td>
</tr>
<tr>
<td>BA 117</td>
<td>Strategic Human Capital Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 246</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or BA 205 Business Law</td>
<td></td>
</tr>
<tr>
<td>BA 247</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Information Assurance and Cybersecurity Certificate

Award: Certificate in Information Systems Security
No. of credits required: 27
For more information: Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu; or Admissions, 443-412-2109.

Program Description
This program prepares students to enter the high demand field of Information Technology Security. With the increase of viruses and other security breaches, companies need professionals who can protect data and equipment from internal and external security threats. Students in this program gain hands-on experience with the latest hardware and software and learn to implement appropriate security policies and procedures.

Program Goals
Upon successful completion of this program of study students will be able to:

1. Apply software patches to operating systems and applications
2. Assess a computer system's security vulnerabilities using appropriate resources
3. Use standard software tools to detect attempted security breaches of computer systems
4. Implement computer network security defenses

Employment Information
According to the Occupational Handbook, overall employment may increase by as much as 6% by 2026 for computer network architects due to the integration of sophisticated technologies and the need to implement security measures. The information assurance and cybersecurity field is expected to generate many new jobs over the next decade as firms across all industries place a high priority on safeguarding their data and systems.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 104</td>
<td>Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 135</td>
<td>Introduction to Networks</td>
<td>3</td>
</tr>
<tr>
<td>CIS 210</td>
<td>Fundamentals of Network Security</td>
<td>3</td>
</tr>
<tr>
<td>CIS 211</td>
<td>MS Windows Server Operating System</td>
<td>3</td>
</tr>
<tr>
<td>ISS 220</td>
<td>Strategic Infrastructure Security</td>
<td>3</td>
</tr>
<tr>
<td>ISS 221</td>
<td>Network Defense &amp; Countermeasures</td>
<td>3</td>
</tr>
<tr>
<td>ISS 222</td>
<td>Computer Forensics</td>
<td>3</td>
</tr>
</tbody>
</table>
PHIL 221 Business Ethics (GH) 3

Total Credits 27

Note: Credit by Examination is offered for students who have experience working in the field of information technology. Please contact Ralf Fritze for more information.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Journalism/New Media and Advertising, Mass Communications Certificate

Award: Certificate
No. of credits required: 30

For more information: Contact Associate Professor Claudia Brown, 443-412-2126, clbrown@harford.edu; Professor Wayne Hepler, 443-412-2358 or whepler@harford.edu; or Admissions, 443-412-2109.

Program Description

This program is designed to prepare students for entry level employment in social media, new media, marketing, advertising, and media sales and includes only those courses which are directly related to this field.

Program Goals

Upon completion of the Mass Communications certificate students will be able to:

1. Demonstrate media literacy;
2. Appraise present-day media content, operation, regulation, impact, and/or implications;
3. Apply current technology to produce or market media content;

Employment Information

Journalists research stories and present information in written, spoken or digital form. Typical activities in this career field include writing and editing content, reporting on-air, and shooting and editing photography and video. Marketing and advertising account executives oversee the financial resources, administration, and campaign strategy of agency, digital media, online, and broadcast operations. Typical activities in this career field include creating social media and marketing campaigns, selling airtime, developing sales material, calling on clients, and developing online and multimedia presentations.

Entry-level positions in this field are promising. However, minimum standards and employment competition are high. Students are encouraged to prepare a portfolio and a résumé prior to seeking employment.

Field Trip Statement

Courses in this program may require field trips.

Certificate Requirements

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC 103</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 105</td>
<td>Introduction to Journalism (GH)</td>
<td>3</td>
</tr>
<tr>
<td>MC 101</td>
<td>Introduction to Electronic Media ¹</td>
<td>3</td>
</tr>
<tr>
<td>MC 204</td>
<td>Video Production and Editing ¹</td>
<td>3</td>
</tr>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td></td>
</tr>
<tr>
<td>ART 120</td>
<td>Digital Foundations I</td>
<td>3</td>
</tr>
<tr>
<td>MC 102</td>
<td>Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 208</td>
<td>Multimedia Journalism I (GH)</td>
<td>3</td>
</tr>
<tr>
<td>MC 210</td>
<td>Introduction to Social Media (GI)</td>
<td>3</td>
</tr>
<tr>
<td>MC 284</td>
<td>Field Project: Journalism/New Media and Advertising</td>
<td>3</td>
</tr>
</tbody>
</table>

Select from:

PHOT 101 Black & White Photography I 3
MC 201 Writing for the Electronic Media
BA 203 Principles of Marketing

Total Credits 30

¹ Students, through advisement, may select options leading toward journalism/new media or options leading toward advertising.

Marketing, Business Management Certificate

Award: Certificate in Business Management
No. of credits required: 24

For more information: Contact Associate Professor Miriam Wiglesworth, 443-412-2426, mwiglesworth@harford.edu (%20mwiglesworth@harford.edu); or Admissions, 443-412-2109.

Program Description

Employment opportunities in the marketing field include professional selling, retail sales and management, advertising, public relations and marketing management. According to the Occupational Outlook Handbook, employment in the field of advertising, marketing, promotions, public relations, and sales managers is expected to grow 10% and add nearly 24,000 jobs through 2026. Entry level position availability in the field is promising as major retailers are slated to provide the county with more than 1,000 new jobs. Minimum
standards and employment competition are higher for supervisory positions in marketing.

Program Goals
Upon successful completion of this certificate program of study students will be able to:

1. Examine different types of marketing mix components used in businesses and organizations.
2. Identify trends in the market place and identify opportunities for creating value for customers through marketing strategies.
3. Use information technology applications to develop business solutions related to marketing.
4. Demonstrate marketing problem-solving skills in business decision making.
5. Prepare for Associate of Applied Sciences (A.A.S.) degree in Business Management.

Employment Information
Employment opportunities in the marketing field include professional selling, retail sales and management, advertising, public relations and marketing management. According to the *Occupational Outlook Handbook, 2016-2017 Edition*, employment in the field of advertising, marketing, promotions, public relations, and sales managers is expected to grow 19% and add over 92,300 jobs through 2024.

Entry level position availability in the field is promising as major retailers are slated to provide the county with more than 1,000 new jobs. Minimum standards and employment competition are higher for supervisory positions in marketing.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>BA 103</td>
<td>Public Relations</td>
<td>3</td>
</tr>
<tr>
<td>BA 104</td>
<td>Advertising and Sales Promotion</td>
<td>3</td>
</tr>
<tr>
<td>BA 105</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>BA 203</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BA 205</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>BA 245</td>
<td>Contemporary Issues in Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Business Law
- Professional Selling

Medical Assisting Certificate
Award: Certificate in Medical Assisting
No. of credits required: 39
For more information: Contact Paige O’Neill, 443-412-2738 or ponell@harford.edu, or Admissions, 443-412-2109.

Program Description
The Certificate in Medical Assisting at Harford Community College is a career program designed to prepare students for employment as a medical assistant immediately upon completing the course of studies. The program prepares students to work in an administrative and clinical capacity in a variety of medical office and clinical settings. Students learn the knowledge, technical skills and work ethic that are required for an entry level position in medical assisting. The program includes both classroom theory and clinical practice. The student who completes the certificate program has the option of earning the A.A.S. in Medical Assisting by completing the general education courses required by that degree program. Graduates of the program are eligible to test for the Registered Medical Assistant (RMA) through American Medical Technologists (AMT) or the Certified Medical Assistant (CMA) through American Association of Medical Assistants (AAMA). Please note that, generally, individuals who have been found guilty of a felony, or pleaded guilty to a felony, are not eligible to take the exam. However, the Certifying Board may grant a waiver based upon mitigating circumstances.

Administrative duties performed by medical assistants include general medical office procedures, scheduling appointments, medical billing, and coding. Clinical duties include recording medical histories and vital signs, preparing patients for examination and procedures, performing laboratory tests, pharmacology and injection training, and phlebotomy and EKG training.

Program Goals
Upon completion of the program, the student will:

1. Perform clinical skills within the scope of practice for a medical assistant: phlebotomy, injections, EKG (electrocardiogram), obtaining lab specimens, and vital signs.
2. Perform executive administrative skills within the scope of practice for a medical assistant including: scheduling, billing and coding.
3. Possess knowledge of legal implications and ethical considerations in an ambulatory healthcare setting.
5. Be eligible to take the American Association of Medical Assistants (AAMA) Examination for national certification.
6. Have completed 160 hours of unpaid externship in an ambulatory healthcare setting.
7. Demonstrate professionalism and effective communication skills.
8. Qualify to secure an entry level employment position as a medical assistant.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 101</td>
<td>Medical Terminology and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BIO 108</td>
<td>Human Body in Health and Disease (GS) 1</td>
<td>3</td>
</tr>
<tr>
<td>BIO 116</td>
<td>Human Body in Health and Disease Laboratory (GL) 1</td>
<td>1</td>
</tr>
<tr>
<td>MAS 120</td>
<td>Medical Assisting Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAS 122</td>
<td>Clinical Medical Assistant I 2</td>
<td>3</td>
</tr>
<tr>
<td>MAS 124</td>
<td>Clinical Medical Assistant II 2</td>
<td>4</td>
</tr>
<tr>
<td>MAS 126</td>
<td>Administrative Medical Assisting I</td>
<td>3</td>
</tr>
<tr>
<td>MAS 127</td>
<td>Administrative Medical Assisting II</td>
<td>3</td>
</tr>
<tr>
<td>MAS 200</td>
<td>Laboratory Procedures for Medical Assistant</td>
<td>3</td>
</tr>
<tr>
<td>MAS 202</td>
<td>Pharmacology for the Medical Assistant</td>
<td>3</td>
</tr>
<tr>
<td>MAS 210</td>
<td>Medical Assisting Practicum 2,3</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits 33

1. Biology Requirement choose BIO 108 Human Body in Health and Disease (GS) & BIO 116 Human Body in Health and Disease Laboratory (GL) OR BIO 203 Anatomy and Physiology I (GL) & BIO 204 Anatomy and Physiology II (GL)

2. Current Healthcare Provider Level CPR and First Aid certification are required prior to starting this course. PPD status and immunization and health records must be provided prior to orientation to this course.

3. Medical Assisting Practicum requires 160 hours of unpaid work experience in a physician’s office or clinical setting. All other coursework must be completed prior to taking MAS 210 Medical Assisting Practicum. A criminal background check and drug screen will be required prior to placement at a clinical site.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Medical Office Assistant Certificate

Health Workforce Shortage Program

Award: Certificate in Technical/Professional Studies
No. of credits required: 19
For more information: Contact Sherry Massoni, 443-412-2645, smassoni@harford.edu; or Admissions, 443-412-2109.

Program Description
Students in this program acquire knowledge of medical terminology and office skills for administrative support in hospitals, physicians’ offices, medical labs and clinics. The medical office assistant engages in activities such as greeting patients, answering the telephone, scheduling appointments, operating office equipment, issuing medical bills, and processing medical documentation.

Program Goals
Students who successfully complete the Medical Office Assistant Certificate will be able to:

1. Demonstrate effective and professional communication skills used by a medical office assistant.
2. Demonstrate problem-solving skills used by medical office assistant professionals in business decision making.
3. Use information technology applications required by medical office professionals to develop business solutions.
4. Prepare for a career in a medical office environment.

Admission Information
Students must have a qualifying score on the writing and reading assessment test for admission to the Medical Office Assistant certificate program.

Employment Information
Medical, legal and executive secretaries account for almost half of all secretaries and administrative assistants in the U.S. Locations for employment opportunities include hospitals, nursing homes, medical group practices, clinics, and home health agencies. Employment growth in the health services industries should lead to average growth for medical office assistants. According to the Occupational Handbook, 2016-2017 Edition, projected growth is 25% by 2024.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS 101</td>
<td>Medical Terminology and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BA 210</td>
<td>Business Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>OS 100</td>
<td>Keyboarding Basics</td>
<td>1</td>
</tr>
<tr>
<td>OS 113</td>
<td>Intermediate Keyboarding and Document Processing</td>
<td>3</td>
</tr>
<tr>
<td>OS 135</td>
<td>Medical Office Systems</td>
<td>3</td>
</tr>
</tbody>
</table>
Paralegal Studies Certificate

Award: Certificate in Legal Studies
No. of credits required: 35-37
For more information: Contact Assistant Professor AnnMarie Profili, 443-412-2214, aprofil@harford.edu, or Admissions, 443-412-2109.

Program Description

A legal assistant or paralegal is a person, qualified by education, training, or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible. ABA Guideline G-103(d). Paralegals may not provide legal services directly to the public, except as permitted by law.

The objective of the Paralegal Studies Certificate of the Legal Studies Program is to educate and train laypersons to assist attorneys and other legal professionals in their daily tasks and thereby contribute to the fair, economical and efficient delivery of legal services. The program meets this objective by requiring students to successfully complete its curriculum. The Certificate in Paralegal Studies is designed to permit those students who desire to work in the legal field as paralegals, but who already have an associate or baccalaureate degree, to earn a recognized credential that would enhance their ability to secure employment.

Program Goals

Upon completion of the AAS or Certificate in Paralegal Studies, students will be able to:

1. Apply paralegal skills to assist attorneys and other legal professionals in their daily professional tasks.
2. Decide ethical questions consistent with legal ethics.
3. Employ writing and verbal skills that enable them to perform successfully in the legal profession.
4. Obtain employment as a paralegal.

Additional Information

Permission of the Paralegal Program Coordinator is required to transfer more than 8 credit hours of required paralegal courses into the program. A maximum of 15 transfer credits will be allowed for all paralegal courses (required and electives).

Employment Information

Upon completion of the program, opportunities for employment include law firms, legal departments of banks and other corporations as well as government agencies. The demand for paralegals is growing on the national, state, and local levels. The U.S. Department of Labor, Bureau of Labor Statistics predicts a much faster than average rate of growth for paralegal employment through 2018. In Harford County, rapid population growth has brought about a related need for legal services. The employment outlook for graduates of this program in Harford County and the surrounding area is good.

Certificate Requirements

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL 101</td>
<td>Introduction to Law (Same course as PS 106) (GB)</td>
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</tr>
<tr>
<td>PL 105</td>
<td>Legal Research</td>
<td>3</td>
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<tr>
<td>PL 106</td>
<td>Legal Writing</td>
<td>3</td>
</tr>
<tr>
<td>PL 110</td>
<td>Technology in the Legal Profession</td>
<td>3</td>
</tr>
<tr>
<td>PL 122</td>
<td>Torts and Insurance</td>
<td>3</td>
</tr>
<tr>
<td>PL 124</td>
<td>Civil Litigation and Procedure</td>
<td>3</td>
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<tr>
<td>PL 203</td>
<td>Contract Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 238</td>
<td>Law Practice and Professional Conduct</td>
<td>3</td>
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<tr>
<td>PL 242</td>
<td>Real Estate Transactions</td>
<td>3</td>
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<td>PL 248</td>
<td>Internship in Paralegal Studies</td>
<td>3</td>
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<tr>
<td>or PL 273</td>
<td>Cooperative Education III: Paralegal</td>
<td></td>
</tr>
<tr>
<td>Paralegal Studies Electives (p. 219)</td>
<td>5-7</td>
<td></td>
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</tbody>
</table>

Total Credits 35-37

Paralegal Studies Electives

Choose five to seven credits

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BA 205</td>
<td>Business Law</td>
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</tr>
<tr>
<td>CJ 104</td>
<td>Procedural Law and Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CJ 111</td>
<td>Principles of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 201</td>
<td>Conflict Analysis and Resolution</td>
<td>3</td>
</tr>
<tr>
<td>PL 202</td>
<td>Bankruptcy and Collections Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 204</td>
<td>Constitutional Law</td>
<td>3</td>
</tr>
<tr>
<td>PL 233</td>
<td>Probate Practice and Procedure</td>
<td>2</td>
</tr>
<tr>
<td>PL 244</td>
<td>Family Law and Litigation</td>
<td>2</td>
</tr>
<tr>
<td>PL 246</td>
<td>Administrative Law and Procedure</td>
<td>3</td>
</tr>
</tbody>
</table>

1 Permission of the Paralegal Program Coordinator is required to transfer more than 8 credit hours of required paralegal courses. A maximum of 15 transfer credits will be allowed for all paralegal courses (required and electives).
General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)

Photography Certificate

Award: Certificate in Photography
No. of credits required: 18
For more information: Contact Prof. Jeff Rollinger, 443-412-2350, jrollinger@harford.edu; or Admissions, 443-412-2109.

Program Description
The Photography Certificate is designed to prepare students for employment in the field of photography. This program focuses on the development of skills and competencies in the use of various camera, lighting, and image-processing equipment, and on the development and application of aesthetics and personal style in the creation of photographic images. Certificate holders can expect competition in the job market from Associate of Arts and Bachelor of Arts graduates.

Program Goals
Upon completion of the Certificate in Photography students will be able to:

1. Communicate original content using discipline-specific concepts.
2. Create art and design using multiple specialized techniques and processes.
3. Evaluate art and design with an evolved and informed aesthetic judgment.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>Fundamentals of 2D Design</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 101</td>
<td>Black &amp; White Photography I</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 102</td>
<td>Black &amp; White Photography II</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 131</td>
<td>Digital Photography I</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 202</td>
<td>Alternative Photographic Processes</td>
<td>3</td>
</tr>
<tr>
<td>PHOT 206</td>
<td>Studio Lighting</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

Production and Announcing in the Electronic Media, Mass Communications Certificate

Award: Certificate in Mass Communications
No. of credits required: 30
For more information: Contact Professor Wayne Hepler, 443-412-2358, whepler@harford.edu; or Admissions, 443-412-2109.

Program Description
This program is designed to prepare students for entry level employment in production for the digital media and internet, and includes only those courses directly related to this field. Emphasis is on electronic media and online operations, such as social media and new media, digital audio, and film production, multimedia writing, and on-air performance.

Program Goals
Upon successful completion of this program of study, students will be able to:

1. Demonstrate media literacy;
2. Appraise present-day media content, operation, regulation, impact, and/or implications;
3. Apply current technology to produce or market media content;

Employment Information
Electronic media producers, directors, editors, writers, and on-air talent are employed by new media, online, satellite, television, radio and cable operations. They shoot, edit, and upload digital audio and video; write online, social media, journalism, and commercial copy; anchor podcasts, news, sports; and record performing artists, among other technical and creative endeavors.

While the U.S. Bureau of Labor Statistics predicts slight declines in employment of on-air talent, significant growth is expected among digital producers, writers, and editors. To this end, the Mass Communications department is equipped with:

- digital video and audio editing systems
- digital field cameras
- a digital TV studio and former WJZ News set
- WHFC-FM.org and podcasts
- Owl magazine and social media
- access to Harford Cable Network and online content.

Certificate holders may expect to face employment competition. Students are encouraged to keep a portfolio for transfer or entry into the field.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.
Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 101</td>
<td>Speech Fundamentals (GI)</td>
<td>3</td>
</tr>
<tr>
<td>or MC 293</td>
<td>Independent Media Project</td>
<td></td>
</tr>
<tr>
<td>MC 101</td>
<td>Introduction to Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>MC 102</td>
<td>Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 103</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 201</td>
<td>Writing for the Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>MC 203</td>
<td>Advanced Audio Production</td>
<td>3</td>
</tr>
<tr>
<td>MC 204</td>
<td>Video Production and Editing</td>
<td>3</td>
</tr>
<tr>
<td>MC 283</td>
<td>Field Project: Announcing/Production in Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>MUS 222</td>
<td>Popular Music of the United States (GH) (D)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits 30

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Professional Education Courses for Maryland Certification

Award: Teacher Education Secondary Certificate
For more information: Contact Admissions, 443-412-2109.

Program Description

The Teacher Education Certificate is awarded by Harford Community College and does not constitute a certificate issued by the Maryland State Department of Education. It is primarily designed for provisional teachers seeking secondary certification. Persons who already have a Bachelor's degree in an area other than education and wish to become certified teachers in Maryland may take the courses but will still need to acquire an experiential component before an initial teaching certificate is awarded by the State of Maryland.

Additional Requirements

- All certification areas require documented teaching experience before an initial certification is awarded.
- Most certification areas require Maryland passing scores on the Praxis II: Subject Assessments.
- Additional professional education courses may be required in some certification areas.
- All certification areas require a Bachelor's or higher degree and/or a required number of credits on the certification content area.

Certificate Requirements

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Secondary Certificate

Content Mastery or Secondary (N-12) and (7-12)

The following list displays the professional education courses required by the Maryland State Department of Education to attain certification. Harford Community College course equivalents are shown next to the state requirements. More information about Maryland teaching certification can be found at the Maryland State Department of Education's web site: http://www.msde.state.md.us.

<table>
<thead>
<tr>
<th>MSDE Course Requirement</th>
<th>HCC Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Development PSY 214 or PSY 216</td>
<td></td>
</tr>
<tr>
<td>Human Learning</td>
<td>PSY 207</td>
</tr>
<tr>
<td>Teaching Methodology</td>
<td>EDUC 212</td>
</tr>
<tr>
<td>Inclusion of Special Needs Student Population</td>
<td>EDUC 217</td>
</tr>
<tr>
<td>Assessment of Students</td>
<td>EDUC 213 or EDUC 219</td>
</tr>
<tr>
<td>Teaching Reading in the Secondary Content Areas I</td>
<td>EDUC 206</td>
</tr>
<tr>
<td>Teaching Reading in the Secondary Content Areas II</td>
<td>EDUC 209</td>
</tr>
</tbody>
</table>

Programming, Computer Information Systems Certificate

Award: Certificate in Computer Information Systems
No. of credits required: 32-34
For more information: Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu; or Admissions, 443-412-2109.

Program Description

This certificate program is recommended for students with a baccalaureate degree wishing to explore and/or make a career change to the computer field. The courses prepare students to solve business, administrative or statistical problems by utilizing computer software, language, and systems.

Program Goals

Upon successful completion of this program of study, students will be able to:

1. Analyze the use of commercial software applications, hardware, networks, programming, and other technologies in information systems at a level of competence appropriate to joining the workforce.
2. Use, maintain and modify existing information systems.
3. Design and implement new information systems.
4. Demonstrate the skills to work in a business environment including working in teams, project management, and professional and effective communication with a wider audience.
Employment Information

The Occupational Outlook Handbook from the U.S. Department of Labor forecasts that careers in the computer industry are expected to increase by 11% adding over 88,500 positions by 2026. The report indicates continued growth of the computer industry.

Certificate Requirements

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

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<thead>
<tr>
<th>Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 104</td>
<td>Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Programming I: C/C++ or CIS 205 Introduction to Visual Basic.NET Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 221</td>
<td>C++ Programming Language</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>OS 100</td>
<td>Keyboarding Basics</td>
<td>1</td>
</tr>
<tr>
<td>CIS/CIS Elective ¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>Programming Elective ²</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>32-34</strong></td>
</tr>
</tbody>
</table>

¹ Any CIS/CIS course(s) may be taken to satisfy the CIS elective.

Software, Computer Information Systems Certificate

Award: Certificate in Computer Information Systems

No. of credits required: 34-36

For more information: Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu; or Admissions, 443-412-2109.

Program Description

This certificate program is recommended for students with a baccalaureate degree wishing to explore and/or make a career change to the computer field. The courses prepare students to solve business, administrative or statistical problems by utilizing computer software, language, and systems.

Program Goals

Upon successful completion of this program of study, students will be able to:

1. Analyze the use of commercial software applications, hardware, networks, programming, and other technologies in information systems at a level of competence appropriate to joining the workforce.
2. Use, maintain and modify existing information systems.
3. Design and implement new information systems.
4. Demonstrate the skills to work in a business environment including working in teams, project management, and professional and effective communication with a wider audience.

Employment Information

The Occupational Outlook Handbook from the U.S. Department of Labor forecasts that careers in the computer industry are expected to increase by 11% adding over 88,500 positions by 2026. The report indicates continued growth of the computer industry.

Certificate Requirements

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

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<tr>
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</thead>
<tbody>
<tr>
<td>BA 101</td>
<td>Introduction to Business (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 104</td>
<td>Computer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 205</td>
<td>Introduction to Visual Basic.NET Programming</td>
<td>3-4</td>
</tr>
<tr>
<td>CIS 207</td>
<td>Advanced Visual Basic.NET Programming</td>
<td></td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>OS 100</td>
<td>Keyboarding Basics</td>
<td>1</td>
</tr>
<tr>
<td>CIS Elective ¹</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>34-36</strong></td>
</tr>
</tbody>
</table>

¹ Any CIS course(s) may be taken to satisfy the CIS elective.
General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)

Unix Computer Information Systems Certificate

Award: Certificate in Computer Information Systems
No. of credits required: 30-32
For more information: Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu, or Admissions, 443-412-2109.

Program Description
This certificate program is recommended for students with a baccalaureate degree wishing to explore and/or make a career change to the computer field. The courses prepare students to solve business, administrative or statistical problems by utilizing computer software, language, and systems.

Program Goals
Upon successful completion of this program of study, students will be able to:

1. Analyze the use of commercial software applications, hardware, networks, programming, and other technologies in information systems at a level of competence appropriate to joining the workforce.
2. Use, maintain and modify existing information systems.
3. Design and implement new information systems.
4. Demonstrate the skills to work in a business environment including working in teams, project management, and professional and effective communication with a wider audience.

Employment Information
The Occupational Outlook Handbook from the U.S. Department of Labor forecasts that careers in the computer industry are expected to increase by 11% adding over 88,500 positions by 2026. The report indicates continuing growth of the computer industry.

Certificate Requirements
Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

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</thead>
<tbody>
<tr>
<td>CIS 102</td>
<td>Introduction to Information Sciences (GI)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 110</td>
<td>Introduction to UNIX/Linux</td>
<td>4</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Programming I: C/C++</td>
<td>4</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Fundamentals of Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 225</td>
<td>Introduction to Shell Programming</td>
<td>4</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition (GE)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 209</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>CIS Electives</td>
<td></td>
<td>6-8</td>
</tr>
</tbody>
</table>

Total Credits 30-32

1 Any CIS course(s) may be taken to satisfy the CIS elective.

General Education Degree Requirements
Note: The following codes identify courses which satisfy the General Education Degree Requirements:

Behavioral/Social Science (GB)
English Composition (GE)
Arts/Humanities (GH)
Interdisciplinary and Emerging Issues (GI)
Biological/Physical Laboratory Science (GL)
Mathematics (GM)
Biological/Physical Science (GS)
STUDENT RIGHTS, RESPONSIBILITIES AND CONDUCT

Code for Student Rights, Responsibilities and Conduct (Revised May 2019)

I. Introduction

Harford Community College is an academic community and all members and visitors share the duty and responsibility of securing and maintaining the freedom to learn within that academic community. Freedom carries responsibilities; chief among these is respect for rights and values of others. In order to provide and preserve this freedom and promote safety, security and overall well-being on the HCC campus and at College-sponsored and College-supervised functions, this Student Code was developed by a committee of students, faculty, staff, and administrators and is reviewed periodically to ensure consistency with best practices and strategic priorities of the College.

Within the College community, individuals are accorded respect in an academic environment that is conducive to learning, fosters student development and is free from discrimination on the basis of race, color, religion, sex, national origin, age, status as an individual with a disability, veteran, sexual orientation, gender identity, marital status, or any other characteristic protected by law or by the policies and practices of HCC. All students and student organizations are expected to model good citizenship when participating in instructional settings, during classroom instruction, field experiences, internships, athletic and cultural events, co-op assignments, and other related College endeavors. Such behavior includes but is not limited to appropriate dress, oral and written remarks/statements and other computer-aided communications, per rules and regulations of the College or off-campus site.

The College faculty and staff recognize their role in developing this sense of responsibility through example and guidance. AT HCC, we strive to deliver a student discipline process that is educational. This Student Code is designed to provide educational guidance to assist in developing good citizens and to respond appropriately to behavior that interferes with the learning environment. Whenever possible, sanctions serve as a means to educate students about their mistakes and how to become better citizens. It is our responsibility to help students make better decisions in the future and to help them avoid repeating their mistakes. Additionally, every student is presumed to have sufficient maturity, intelligence, and concern for the rights and values of others to preserve the standards of the academic community.

This Student Code outlines clear expectations of students as members of the College community, the kind of unacceptable behavior that may result in disciplinary action, and sanctions and disciplinary proceedings utilized when the Student Code is not observed. Although HCC will make every effort to make the published Student Code available to students and student organizations, students and student organizations are equally responsible for becoming familiar with the expectations, policies, and procedures contained in the Student Code.

II. Definitions

When used in this Code:

A. 'Administrative Conference' provides the opportunity for the Student Conduct Official or designee and the Respondent to review the alleged violation(s), provide an explanation of the disciplinary process, review the Respondent's history at the College, review the Respondent's account of the situation and any relevant facts, and discuss the options for resolution.

B. 'College' means Harford Community College and, collectively, those responsible for its control and operation.

C. 'College community' means the College and all persons who are students, instructors, and employees of the College.

D. 'College official' means all College employees and authorized Public Safety representatives for the College.

E. 'Complainant' means the person who reports an alleged violation of the Student Code.

F. 'Dean's Hold' means a hold that is placed on a student's record that will prevent the student from making any registration and records transactions with the College, including registering for courses and requesting a transcript.

G. 'Electronic Communication' means a communication transmitted by means of:
   (a) an electronic device, including but not limited to a telephone, cellular phone, computer, or pager; or
   (b) the internet or any social networking or social media websites. This includes the transmission of photographs and audio files.

H. 'Instructor' means any person hired by the College to conduct educational activities. In certain situations, a person may be both 'student' and 'Instructor' and is subject to the rights and responsibilities of both.

I. 'May' is used in the discretionary sense.

J. 'Medical evaluation' means a medical or mental health assessment completed by a qualified physician or psychologist approved by HCC indicating the student's ability to safely participate in activities at the College.

K. 'Records' are those records directly related to a student and maintained by the College or by a party acting for the College. Where appropriate, student records subject to federal educational records privacy laws will be identified as such.

L. 'Registered Student Organization (RSO)' means a group of students who participate in an organization officially recognized by Student Activities.

M. 'Respondent' means a student who allegedly violated this Student Code.

N. 'Shall' is used in the mandatory sense.

O. 'Student' refers to any person who is registered for credit or community education courses on a full-time or part-time basis.

P. 'Student Conduct Review Board (SCRB)' is the group of College persons that is convened to review and take action on cases referred by the Student Conduct Official.

Q. 'Student Conduct Official' means the Student Conduct and Intervention Specialist or her/his designee who is authorized to impose sanctions upon any student(s) found to have violated the Student Code and refer cases to the SCRB.
R. 'Team' means a group of students participating in organized athletic activities who are officially recognized by College Athletics.

S. 'Title IX' states' No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving federal financial assistance (Title IX of the Education Amendments of 1972 Implementing Regulations at: 20 U.A.S.C § 1681 & 34 C.F.R. Part 106).

T. 'Title IX Coordinator' is the person who oversees compliance with Title IX regulations.

U. 'Vice President for Student Affairs and Institutional Effectiveness (VPSAIE)' is the person who is responsible for invoking an interim suspension when necessary and also handles Student Code appeals.

V. 'Work day' means a day when the College is open and does not include weekends or holidays when the College is closed.

III. Jurisdiction

A. The Student Code and all College policies, procedures, practices or related rules and regulations apply to conduct that occurs on campus, at all College-sponsored and College-supervised functions regardless of location, and to off-campus conduct that adversely affects the College, the College Community, and/or the pursuit of the College’s objectives. As noted herein, the mere fact that conduct occurs off-campus and/or after hours when classes are not in session does not remove such conduct from the scope of this Student Code, particularly where such conduct has a negative impact upon teaching and learning within the College.

B. All students are subject to the Student Code. Students are responsible for reading the Student Code. Ignorance of its content does not negate a student’s responsibility.

C. Registered Student Organizations (RSOs) and Teams may be charged with violations of this Student Code. A RSO and its officers and members of a Team and its captains and players may be held collectively and individually responsible for violations of this Student Code by those associated with the RSO or Team, where there is evidence that such violations were committed with the consent or encouragement of the RSO’s leaders or officers or the Team’s captains.

D. All persons, including family members of students, and other guests of students, are required to abide by all College policies, procedures, practices, and related rules, regulations, and laws, while on- or off-campus at all College-supervised and all College-sponsored functions. The College reserves the right to deny any person entrance to the College or to remove any person from the buildings or grounds of the College who poses a risk of harm to our students, employees, other visitors or property.

E. The College prohibits the enrollment of any student or any person who is listed on the National or Maryland Department of Public Safety and Correctional Services Sex Offender Registry or with the Harford County Child Advocacy Unit. Students who are placed on such registries are expected to inform the College of such placement as soon as they become aware of their status. A student who withholds such information from the College shall, upon discovery, be promptly withdrawn from all classes and subject to disciplinary action.

IV. Rights and Responsibilities

A. Freedom of Assembly

The College guarantees to students the rights to free inquiry, expression, and assembly while on campus or while attending College-sponsored or College-supervised activities, subject to requirements of this Student Code and those governing the use of College facilities and grounds. The College reserves the right to determine the time, place, and manner of any such assembly or demonstration so as to ensure the peace and safety of its campus, while at the same time respecting the right of free speech of its students. While the College cannot anticipate that every assembly of students is planned in advance, Students who expect to engage in peaceful assembly or demonstration on campus must file a ‘Student Free Speech and Peaceful Assembly Form’ with the Office of Student Activities. This form should be filed at a reasonable time in advance of the expected event so as to allow the College to take appropriate action to insure the peace, safety, and order of its campus. Advocacy of any cause and peaceful assembly and demonstration are permitted within the College subject to the following regulations:

1. order and safety of persons and property must be maintained;
2. instruction and other normal operations of the College must not be interrupted;
3. movement and passage of persons and vehicles must not be interrupted; and
4. activities may not be of an illegal, violent, threatening, obscene, or hazardous nature.

B. Freedom of Expression

In instructional settings, Students shall have the right to express any views pertinent to the subject matter of the course in which they are enrolled; however, the Instructor shall always be the sole judge of the relevancy of subject matter and shall always have authority over the conduct of the instructional session. Students are responsible for meeting the standards of any course for which they are enrolled. Where there are disputes having to do with the learning process, the Instructor, by virtue of training, education, and experience, is the leader and manager of that process, whose decision shall be given appropriate deference by the College.

C. Freedom of Association

Students are free to organize and join organizations and groups to promote any legal purpose, whether it is religious, political, educational, recreational, or social. Registered Student Organizations (RSO) may invite speakers to campus provided they follow the requirements for use of HCC facilities, and provided that the event is compatible with the policies of the College, with prior approval of the Coordinator of Student Activities and the RSO’s advisor. The RSO must make clear to the academic and larger community that sponsorship of guest speakers does not necessarily imply approval or endorsement of the views expressed either by the sponsoring group or the institution.

V. Prohibited Conduct

Students found to have committed or attempted to commit any of the following types of misconduct are subject to disciplinary action. This list
of violations is intended to provide students with general notice of the types of behavior prohibited by this Student Code, and it is not meant to be an all-inclusive list of every possible violation.

A. Failure of students to possess HCC student identification card; failure to furnish said identification upon the request of a College official; or forgery, alteration, or misuse of said identification (including possessing and/or using or attempting to use another student's ID card). Failure of community education students to possess photo identification or failure to furnish said identification upon the request of a College official, or a forgery, alteration, or misuse of said identification (including possessing and/or using or attempting to use another student's ID card);

B. Failure to comply with directions of College officials acting in the performance of their duties;

C. Intentionally providing false information to a College official, which includes lying, or on any College application, transcript, or other record; or forgery, alteration or misuse of any College record, regardless of when the College learns of such forgery, alteration or misuse.

D. Academic dishonesty, such as:

1. Cheating, which includes but is not limited to knowingly using or attempting to use:
   a. any form of unauthorized assistance in taking quizzes, tests, or examinations,
   b. any unauthorized materials, equipment, devices, information, sources, or study aids in carrying out any assignment; and
   c. behavior specifically prohibited by the Instructor in the course syllabus or class discussion;

2. Fabrication, which means intentional and unauthorized falsification or invention of any information or citation in any assignment or academic exercise;

3. Facilitating academic dishonesty, which means knowingly helping or attempting to help another to commit an act of academic dishonesty;

4. Plagiarism, which includes but is not limited to knowingly representing the work of another as one's own; or

5. Copyright infringement, which means copying or downloading the work of another and distributing or displaying to others without the creator’s permission, unless such copying is determined to be permissible fair use within the meaning of the Technology, Education and Copyright Harmonization Act of 2002 ('The TEACH Act');

E. Obstructing or acting in a manner disruptive or disturbing to the normal educational functions of the College, administration of the College, disciplinary procedures, or other College activities;

F. Participating in an on-campus or off-campus demonstration, riot, or activity that disrupts the normal operations of the College, adversely affects the College, and/or infringes on the rights of other members of the College community; and leading or inciting others to disrupt scheduled and/or normal activities on the HCC campus and at College-sponsored and College-supervised functions;

G. Obstructing or restraining the movement and passage of persons and/or vehicles;

H. All forms of violence; threatening or seriously intimidating behavior; verbal/non-verbal harassment; physical abuse; verbal abuse; bullying (including cyber-bullying); harassment based upon an actual or perceived characteristic including race, color, religion, sex, national origin, age, status as an individual with a disability, veteran, sexual orientation, gender identity, marital status or any other characteristic protected by law or by the policies and practices of HCC; sexual assault, coercion, domestic violence, dating violence, stalking; and/or other conduct that threatens or endangers the health or safety of any persons;

I. Stealing, concealing, defacing, damaging, or misusing College property; or any property associated with a College activity; or the property of a member of the College community or campus visitor; or unauthorized possession of College property;

J. Unauthorized entry to or use of College and off-campus properties, including the failure to leave any of the buildings or grounds after being requested to do so by a College official;

K. Attending an instructional session without properly registering or without the express permission of the Instructor, or bringing unregistered visitors, including children, to an instructional setting;

L. Leaving a child for whom you are responsible (ages 12 and under) unattended at anytime while on campus or at a College-sponsored or College-supervised event;

M. Possession, consumption, sale, and serving of alcoholic beverages on campus or at any College-sponsored or College-supervised activity, except as expressly permitted in writing by the College;

N. Sale, distribution, use, or possession of illegal drugs or controlled dangerous substances as defined by Maryland law except as expressly permitted by law, including marijuana. Although Maryland state law permits the use of medical marijuana by persons possessing lawfully issued medical marijuana cards, federal laws, including The Drug-Free Schools and Communities Act Amendments of 1989, prohibit marijuana use, possession, and/or cultivation at educational institutions;

O. Being under the influence of alcohol or illegal drugs, including marijuana. Although Maryland state law permits the use of medical marijuana by persons possessing lawfully issued medical marijuana cards, federal laws, including The Drug-Free Schools and Communities Act Amendments of 1989, prohibit marijuana use, possession, and/or cultivation at educational institutions;

P. Gambling, disorderly conduct, or lewd or obscene conduct or expression;

Q. Possession or use of firearms, explosives, knives, or any other dangerous or deadly weapon [including multi-tools], or dangerous chemicals on campus or at any College-sponsored or College-supervised function, except as expressly permitted in writing by the College. An item designed to look like a weapon, or an item that is used by a student in a manner that harms, threatens, or causes fear to others, is included within the definition of weapon;

R. Use of any type of any tobacco product, smoking device or equipment, or any item that simulates smoking is prohibited in all buildings and areas of the campus and off-campus sites.
supervised by the College (including parking lots and personal vehicles);
S. Using electronic or other devices to audio or video record any person, while on HCC campus or at College-supervised or College-sponsored activities, without his/her prior knowledge or effective consent. This prohibited conduct includes secretly taking pictures of another person in a locker room or restroom and tape recording or filming classroom activities, including lectures without the Instructor’s permission and lectures shall not be republished or posted without an Instructor’s consent;
T. No student may recklessly or intentionally participate in, do an act or create a situation that subjects a student to the risk of serious bodily injury for the purpose of an initiation into any student organization, regardless of whether such organization is sponsored by HCC.
U. Violation of any College policy, rule, or regulation.
V. Violation of any federal, state, or local law.

VI. Student Code Procedures
(In cases involving Title IX or other discrimination allegations, the Title IX Coordinator and/or the Director of Human Resources and Employee Development will be part of the investigation and decision making process. The Sexual Misconduct Procedures will be followed in cases involving Title IX allegations.)

A. Filing a Complaint: Any member of the College community may file a complaint against any student for violation of the Student Code. The complaint should be filed online via the Report Form for Code of Conduct Violation on OwlNet as soon as possible after the event, preferably within ten (10) work days of the incident giving rise to the Complaint. Anonymous complaints will not be processed. The Complainant is encouraged to submit any supporting documentation as an attachment to the online Report Form for Code of Conduct Violation.

B. Investigation: The Student Conduct Official (SCO) will investigate the allegations through interviews and documentation, including examination by HCC’s IT department of digital information provided to him/her, in order to determine if there is a reasonable basis to believe that a violation may have occurred. If there is no basis for the Complaint, it will be dismissed. If the case is not dismissed, then the SCO will proceed with an Administrative Conference.

C. Notification: If after an investigation the SCO, based on reasonably reliable information, believes the Student may have violated one or more provisions of the Student Code, the SCO shall issue written notice to the Student, thereafter referred to as Respondent. The notice will be sent to the Respondent via his/her College email account, via a personal email address provided to the College, or via certified mail to his/her address of record when necessary. Students are expected to check their email/mail on a frequent and consistent basis as certain communications from the College may be time critical. Failing to read your email or mail does not negate your responsibility. Notice will be provided at least two (2) work days prior to the Administrative Conference. The notice will describe the alleged violation(s), directions for the Respondent to schedule a meeting, and consequences for failing to respond to the notice.

D. Administrative Conference: The SCO, who may be assisted by another College official, shall conduct an Administrative Conference with the Respondent. This conference is the opportunity to review the alleged violation(s) and evidence against the Respondent, provide an explanation of the disciplinary process, review the Respondent's history at the College, review the Respondent's account of the situation and any relevant facts, and discuss the options for resolution.

E. Failure to Comply: Failure to attend the Administrative Conference will result in an additional violation (i.e., failure to comply with directions of College officials acting in performance of their duties); and/or may result in a decision about the Complaint and sanction without the Respondent's input; and/or a dean's hold will be placed on the Respondent’s account. The dean’s hold will prevent the Respondent from further records and registration transactions with the College. A Respondent who has been charged with an alleged violation(s) and who withdraws from the College or stops attending before the disciplinary process is completed will be required to complete the disciplinary process upon re-enrollment to the College or before obtaining any education records, including transcripts.

F. Violation of Law:
1. The Department of Public Safety may charge or arrest students and/or report possible violations of the law (including, but not limited to, violence or threats of violence) to appropriate legal authorities. The College may advise off-campus authorities of the existence of the Student Code and how such matters will be handled internally within the College community. The College will cooperate fully with law enforcement authorities and other agencies in the enforcement of civil or criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators.
2. College disciplinary proceedings may be instituted against a student charged with violation of any federal, state, or local law which is also a violation of this Student Code. Proceedings under this Student Code may be carried out prior to, simultaneously with, or following civil or criminal proceedings on- or off-campus. The outcome of the criminal proceedings will have no bearing on the HCC disciplinary proceedings.
3. If a student is arrested for committing or threatening to commit an act of violence, he/she will immediately be placed on Interim Suspension.

G. Decision:
1. Student Conduct Official (SCO)
   a. In cases where the SCO determines that the Respondent did not violate the Student Code, the Respondent will receive written notice that s/he is found not responsible, no further action is needed, and no official disciplinary file will be maintained.
   b. In cases where the SCO determines that it is more likely than not that the Respondent did violate the Student Code, s/he will also decide the appropriate sanction. The severity of the violation, prior disciplinary history, and other relevant circumstances will be considered in determining the appropriate resolution. If it is determined that the Respondent is responsible for the violation, the SCO will notify the Respondent in writing.
2. Student Conduct Review Board (SCRB)
   a. In cases where the SCO determines that the sanction for the violation may be suspension, expulsion, revocation of admission, credit or degree, or withholding a degree, the SCO will refer the case to the SCRB for review and action. The SCRB shall be comprised of three (3) voting members to include: the Director for Human Resources and Employee Development, or designee; the Director for Financial Aid, or designee; and the Vice President for Academic Affairs, or designee. The SCO will provide the student with information, in writing, regarding the date, time and location of the SCRB hearing, as well as his/her rights and responsibilities during the SCRB hearing. If the SCRB determines that the Respondent did violate the Student Code, it will recommend a sanction(s) to the SCO, who will notify the Respondent of the sanction in writing.

H. Appeals:
   1. If the Respondent chooses to appeal the assigned sanction, s/he must appeal in writing to the Vice President for Student Affairs and Institutional Effectiveness (VPSAIE) within ten (10) work days of the issuance of the sanction.
   2. The VPSAIE’s decision is final.

I. Files and Records:
   1. Complaints will result in a disciplinary file in the name of the Respondent. If the Respondent is found not responsible for the charges, no official disciplinary record will be maintained. The files of Respondents found responsible of any charges against them will be retained as a disciplinary record for three years from the date of the incident. In cases of expulsion, all documents related to the violation shall be maintained as a permanent record.

   The disciplinary record includes notice of charges, evidence of the charges, notice of administrative conference date and/or Student Conduct Review Board date, notice of sanctions, copy of complaint, appeal correspondence, and transcript of hearing (if applicable). The disciplinary record will be maintained in accordance with Family Educational Rights and Privacy Act (FERPA) guidelines. A Student shall have the right to appeal the placement of information in his/her record pursuant to the rights afforded the Student under (FERPA), specifically 20 U.S.C. Section 1232g(a) (2). This means the right to contest the information being placed in his/her student record through an appeal to the Registrar, which shall be limited to the issue of whether the contested record is inaccurate, misleading, or otherwise in violation of the privacy rights of the student. Also in accordance with FERPA, students (or parents, as the case may be) shall have the opportunity to insert into such record(s) a written explanation regarding the content of such record(s).

   2. The College may release information to parents or legal guardians of a Student under age 21 when the College determines that the Student has violated any local, state, or federal laws or campus policy regarding the use of alcohol or other drugs.

   3. The College may disclose the decision of disciplinary proceedings to the victim(s) when a Student is found responsible for a crime of violence. The disclosure will include the name of the Student, the violation committed, and any sanction imposed by the College against the Student who committed such violation.

   4. The College may report general discipline information or disclose records of disciplinary proceedings to parents or legal guardians of dependent Students (within the meaning of the federal Internal Revenue Code) for any Student Code violation.

   5. A student may request that his or her disciplinary record be expunged one year after the date of the incident, but prior to the automatic three (3) year purge date. In order to request to have a record expunged, the student must have completed any/all sanction requirements and not have had any subsequent violations. The request shall be made in writing to the Vice President for Student Affairs and Institutional Effectiveness, or designee. If the request is granted, the disciplinary record is destroyed and the student is deemed to have no disciplinary record with the College. Students who have been expelled from the College may not request to have a disciplinary record expunged.

VII. Sanctions

The following formal disciplinary actions may be imposed upon Students. More than one of the sanctions below may be imposed for any single violation.

A. Sanctions

   1. Warning: Notice, orally or in writing that a Student is violating or has violated any College policy, rule, or regulation.

   2. Educational Project: This sanction requires a Student to complete a specific educational assignment as determined by the Student Conduct Official or his/her designee.

   3. Campus and/or Community Service: This sanction requires a Student to perform a specified number of service hours. The Student Conduct Official or his/her designee shall determine the specific assignment.

   4. Restitution: Reimbursement for loss, damage or injury. This may take the form of appropriate service and/or monetary material replacement.

   5. Fines: Previously established and published fines may be imposed.

   6. Disciplinary Probation: Written notice that continuation or repetition of conduct found wrongful, during a designated period of time not exceeding one year, will be cause for more severe disciplinary action such as suspension or expulsion.

   7. Loss of Privileges: The Student is excluded from participation in privileged or extracurricular
institutional activities, including intercollegiate athletics, registered student organizations, access to campus facilities, and loss of campus employment opportunities for a specified period of time.

8. **Suspension from Course(s):** Separation of the Student from participation in particular course(s) for a period of time not to exceed one semester.

9. **Suspension from the College:** Separation of the Student from the College for a specified period of time, after which the student is eligible to return. Conditions for readmission may be specified.

10. **Expulsion from the College:** Permanent separation of the Student from the College.

11. **Revocation of Admission, Credit, and/or Degree:** Admission to, credit earned, or a degree awarded from the College may be revoked for fraud, misrepresentation, or other violation of College standards in obtaining the degree, or for other serious violations committed by a student prior to graduation.

12. **Withholding Degree:** The College may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Code, including the completion of all sanctions imposed, if any.

**B. Interim Suspension**

The College retains the authority to impose an interim suspension, prior to a resolution of the charges against the Respondent, if such action is necessary to

a. to preserve the safety of persons or property and/or

b. if the student poses an ongoing threat of disruption of, or interference with, the normal operations of the College.

During the interim suspension, a Respondent shall be denied access to the campus and/or off-campus sites (including classes) and/or all other College activities or privileges, for which the Respondent may be otherwise eligible, as the Vice President for Student Affairs and Institutional Effectiveness (VPSAIE) or his/her designee, may determine to be appropriate. The Respondent will immediately be notified of the interim suspension and may request an interim suspension review within two (2) work days of the effective date of the interim suspension notice. The interim suspension notice will contain instructions for how to request a review. During the review, the Respondent will be given an opportunity to demonstrate why his or her continued presence on campus does not constitute a threat to the campus community or to the continuance of normal College functions. Following the interim suspension review, the VPSAIE will make an administrative decision to either continue or cancel the interim suspension. An interim suspension will remain in effect until:

1. a final decision has been made concerning the alleged Student Code violation(s), and/or

2. the VPSAIE determines that the reasons for imposing the interim suspension no longer exist.

As part of the interim suspension process, the Respondent may be required to submit to an immediate medical evaluation. A Respondent placed on interim suspension that is unable to complete course work for the semester in which the interim suspension was issued may be withdrawn and assigned a grade of ‘W’.

**VIII. Procedures for Academic Dishonesty and Disruptive Behavior During Instructional Time**

**A. Academic Dishonesty**

The administration and faculty take a firm stand and maintain a united commitment in eliminating and preventing academic dishonesty among students. Each Instructor must state in writing the consequences of academic dishonesty and students should have prior knowledge of the nature of penalties. Before penalties are imposed, there should be clear evidence of cheating. The Instructor is required to notify the Division supervisor of the violation in writing. If the penalty represents failure in the course or seriously jeopardizes the Student’s attainment of a passing grade, the Division supervisor and Instructor must concur with the penalty, and the Student shall promptly be notified in writing and given the option of appealing the decision to the Vice President for Academic Affairs, whose decision is final. At any point, the faculty member or the Division supervisor is expected to consult with the Student Conduct Official concerning the facts of the situation. At minimum, the Student Conduct Official shall be informed if the student is found to have committed a Student Code violation and may take further action and/or may impose additional sanctions. A student’s educational record may reflect a finding that the Student engaged in academic dishonesty.

**B. Disruptive Behavior During Instructional Time**

The College recognizes that in the learning process there are two parties, the Instructor and the Student, and that the learning process requires active participation on the part of both parties. The College further acknowledges that Students can best learn in an atmosphere free of disruption, distraction, or misconduct and instructors shall address behavioral issues as they arise.

In situations where a Student continues to exhibit disruptive behavior despite Instructor intervention or a Student exhibits behavior that seriously disrupts the learning environment, the Instructor has the prerogative to dismiss the Student for instruction.

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In cases where the Student willingly leaves the instructional setting without further incident, the Instructor notifies the Division supervisor of the incident in writing within twenty-four (24) hours and submits an incident report to the Student Conduct Official for record keeping purposes. The Division supervisor, with or without the Instructor, meets with the Student to discuss the situation and review expectations.

If the Instructor and the Division supervisor concur that the Student should not be permitted to continue participating with the instructional activity, the Division supervisor will notify the Student Conduct Official in writing of this recommendation and the Instructor will complete and submit an additional incident report online via the Report Form for Code of Conduct Violation on OwlNet. The Student Conduct Official will notify the Student and proceed with a Student Code violation complaint against the Student. The faculty member and Division supervisor will cooperate with the Student Conduct Official, who will conduct an administrative conference for the purpose of reaching a resolution. The Student Conduct Official will notify the Student
of the sanction in writing, or refer the matter to the SCRB, with a copy to the Division supervisor.

If the Student refuses to leave the instructional setting, the Instructor shall call the Department of Public Safety immediately and a student conduct violation will result. Law enforcement authorities may be notified if the Student does not comply with the Department of Public Safety. The Instructor will notify the Division supervisor of the disruptive behavior in writing within twenty-four (24) hours of the incident and submit an incident report via the Report Form for Code of Conduct on OwlNet. The SCO will begin the Student Code process and if warranted, the Division supervisor may assign the Student to another section of the course or provide another instructional format.

IX. Interpretation and Review

A. Any question of interpretation regarding the Student Code shall be referred to the Student Conduct Official or his or her designee for final determination.

B. The Student Code shall be reviewed periodically under the direction of the Vice President for Student Affairs and Institutional Effectiveness, or her/his designee.

C. Any recommendations for modifications of this Student Code shall be given to the Student Conduct Official and shall go through the College’s governance process for input before being put into effect, when applicable.


Student Grievance Process

General Grievance Process for Student Concerns About Athletic Programs and Activities

The purpose of the Athletic Grievance Process for Students is to provide a clearly-stated, timely, and accessible method of recourse for students who feel that a particular action or series of actions on the part of the Harford Community College Fighting Owls Athletics program has violated reasonable, accepted, or stated institutional practices and standards. Student grievances appropriate to this policy include, but are not limited to:

- Concerns regarding ethical or professional behavior of Fighting Owls Athletics program coaches, staff, administrators, athletes, or related personnel;
- Concerns regarding arbitrary or unreasonable applications of current College policies or institutional practices;
- Concerns regarding unsafe coaching or playing environments, improper treatment of injuries, bullying and/or hazing by coaches or students, inadequate or improperly maintained equipment, or unsafe travel; and
- Concerns regarding perceived violations of accepted rights of students at institutions of higher learning such as the right to free expression and the right to assemble.

This process is intended to be investigative rather than adversarial. Students have the option to confidentially report their grievance(s) through the mechanism described with in the General Grievance Process for Student Concerns About Athletic Programs and Activities. Please note that any form of retaliation or discrimination against students who file a grievance under this policy is strictly prohibited by Harford Community College and the Fighting Owls Athletics program.


Student General Grievance Process

The purpose of the General Grievance Process for Students is to provide a clearly stated, timely, and accessible method of recourse to students who feel that a particular action or series of actions on the part of Harford Community College or its employees has violated reasonable, accepted, or stated institutional practices and standards. Student grievances appropriate to this policy include, but are not necessarily limited to:

- concerns regarding ethical or professional behavior of employees;
- arbitrary or unreasonable application of current College policies; and
- perceived violations by College employees of accepted rights of students in institutions of higher learning such as the right to free expression and the right to assemble.

Within ten (10) work days of the occurrence of the issue/incident, the student must discuss the issue/incident being grieved with the employee to seek resolution. If resolution is not reached or the student is not comfortable discussing the issue with the employee, the student may proceed with the grievance by completing the following Student General Grievance Form and submit it as directed to an immediate supervisor. This written documentation allows for clarity and consistency in reviewing each particular situation.


Student Privacy Information

Family Education Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

- The right to inspect and review the student’s education records within 45 days of the day the College receives a request for access. Students should submit to the Registration and Records Office a written request that identifies the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are
not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

- The right to request an amendment of the student’s education records that the student believes is inaccurate. Students should write the College official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

- The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. In order to consent to disclosure, including to parents, students must contact the Registration and Records Office to complete the FERPA release form.

- The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

  Family Policy Compliance Office
  U.S. Department of Education
  400 Maryland Ave., S.W.
  Washington, D.C. 20202-5920

Exceptions that permit disclosure without consent are:

- To school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel); a person or company with whom the College has contracted (such as an attorney, auditor, collection agent, or psychological service); a person serving on the Board of Trustees; organizations conducting studies in order to improve instruction; or a student serving on an official committee or assisting another school official in performing his or her tasks.

- To parents of a dependent student as defined by the Internal Revenue Code.

- To persons or organizations providing financial support to the student.

- To a person in response to a lawfully issued subpoena or court order.

- To persons in an emergency in order to protect the health and safety of students and other individuals.

- To other institutions in which a student is seeking to enroll, is already currently enrolled, or has previously been enrolled.

**FERPA Directory Information**

FERPA allows the College to release student directory information to anyone who requests it unless the student specifically asks that this not be done. Requests to withhold release of information must be submitted in writing to the Registration and Records Office.

Information that HCC considers student directory information includes:

- Student Name
- Photographs
- Academic Honors and Awards
- Program of Study
- Dates of Enrollment
- Full-Time/Part-Time Status
- Degrees/Certificates Awarded
- Participation in Officially Recognized Activities and Sports

**Solomon Amendment**

The Solomon Amendment is a federal law that mandates that institutions receiving federal funding must give military recruiters access to campus and to lists of students, including personally identifiable student information. The Solomon Amendment supersedes FERPA.

For more information regarding FERPA, please contact the Registration and Records Office at 443-412-2222.
STUDENT SUPPORT SERVICES

Admissions
The Office of Admissions promotes and supports the mission and vision of a community college education to prospective students within the community. Our staff will assist you with application process to the college and assess your needs and goals in order to refer you to the appropriate programs and services. For information please contact the Office of Admissions by calling 443-412-2190, emailing a (admissions@harford.edu) or by visiting the Admissions website (http://www.harford.edu/admissions.aspx) for more information.

Advising, Career, and Transfer Services
Advising, Career and Transfer Services provides individual assistance with academic and career planning, career decision making, and study skills to currently enrolled students. During the first semester, each student seeking a degree or certificate who has selected an academic program of study is assigned a designated advisor through our Advisor Connect program. Advisor Connect is an interactive process in which the advisor partners with their student to set and achieve academic goals, acquire relevant information and support services, and make meaningful decisions consistent with each student's interests, goals, abilities and completion requirements. The office provides information about academic program requirements, College policies, and transfer institutions. The career advisors assist students with the career discernment process through the use of career assessments and credit bearing courses in career and life planning, and job search techniques. Assistance is also available to currently enrolled students in resume writing and interviewing skills. The office has an online job posting system, HCC Career Connect, which is used by area employers to advertise full- and part-time jobs, internships, and cooperative education opportunities through an online job database. For more information, please call 443-412-2301 or visit Advising, Career, and Transfer Services website (http://www.harford.edu/student-services/academic-advising.aspx).

Alumni & Friends
Harford Community College empowers students to continually learn, improve and set a course for their future, and this doesn’t end with the completion of their classes. We want our alumni to be life-long partners. Our goal is to build an alumni community that supports growth and enrichment through continuing education and training, career services, volunteer opportunities, cultural and athletic events, and special programs like the Athletic Hall of Fame and the Distinguished Alumni Award. Visit Harford.edu/Reconnect (http://www2.harford.edu/CMS/OnlineForms/Alumni/reconnect.asp) to update your information and stay connected to HCC.

Athletics
The Harford Fighting Owls athletic program encompasses the Susquehanna Center building, APG Federal Credit Union Arena and the Harford Sports Complex outdoor facilities. A wide array of offerings are available in varsity athletics, club and recreational sports, intramurals, various fitness and wellness offerings, as well as the excitement of spectator opportunities for the Fighting Owl teams.

HCC offers 12 intercollegiate, varsity teams as a Division I member of the National Junior College Athletic Association. The intercollegiate athletic program provides the opportunity for eligible student-athletes to represent the institution in high-level competition, while enhancing their educational experience in areas of skill development, teamwork and sportsmanship. For further information please contact the Athletics Office at 443-412-2568 or by visiting the webpage (https://harfordathletics.com/).

Access to the Fitness Center during Open Recreational hours is specific to the student’s semester of enrollment. The Fitness Center offers individual exercise program instruction designed to facilitate independent Fitness Center usage. A valid Harford Community College I.D. card must be swiped through the electronic scanner upon entry into the Fitness Center. For additional information, including Open Recreation hours, go to the Fitness Center (http://harfordathletics.com/sports/2012/8/14/fitness_center.aspx?tab=fitnesscenter/) webpage or call 443-412-2370.

Additional athletic spaces within the indoor and outdoor complex include the Arena court, auxiliary gymnasium, dance studio, multi-purpose rooms, swimming pool, stadium and practice fields, baseball and softball fields, tennis courts, and a walking track.

College Store
The College Store rents and sells new, used and digital textbooks as well as a wide variety of merchandise. For further information please contact the College Store at 443-412-2209 or visit the College Store webpage (http://bookstore.harford.edu/home.aspx).

Course material requirements can be found in the online schedule (by clicking on the CRN and using the Locate Books link at the bottom of the window) and within OwINet by accessing the view/print my schedule link on the My Academic Life tab.

Dining Services
Harford Community College's Dining Services' provides food services for the employees and students of the college (hot/cold entrees, sandwiches, drinks, etc.) as well as a second location in Joppa Hall. For further information please contact Dining Services at 443-412-2216 or by visiting the Dining Services webpage (http://www.harford.edu/about/offices-and-departments/finance-and-operations/dining-services.aspx).

Disability Support Services
Disability Support Services is available to assist students with documented disabilities to access all the educational opportunities and services offered by the College. While providing accommodations is the primary responsibility of our offices, DSS staff can assist students with academic, career, and transfer advising, and will provide assistance with using assistive technology and adaptive equipment. Our DSS team can provide consultation and support to faculty and staff. For further information, please contact Disability Support Services at 443-412-2402 or by visiting the Disability Support Services webpage (http://www.harford.edu/student-services/disability-support-services.aspx).

eLearning
eLearning offers student assistance with Blackboard and eLearning resources. eLearning can be reached at 443-412-2256. For more information, please email online@harford.edu or visit the eLearning webpage. (http://www.harford.edu/academic-resources/elearning.aspx)
Financial Aid
Financial aid is available to help you meet your financial needs. The financial aid staff is available to assist you with the financial aid application process. The department also assists with veteran’s benefits programs, federal and state aid programs, and scholarships. For further information please contact the Financial Aid Office at 443-412-2257 or by visiting the Financial Aid webpage (http://www.harford.edu/student-services/financial-aid.aspx).

Learning Center
The Learning Center offers walk-in, group, online and individual learning sessions for most courses offered at HCC. Assistance is available for specific course content, learning strategies, and developing skills for success. For more information, please call 443-412-2588 or visit the Learning Center webpage (http://www.harford.edu/student-services/tutoring-center.aspx).

Library
The Library offers students assistance with library resources and research (including one-on-one research consultations), as well as access to computers for student use (including access to course-specific software in the Library Computer Lab), video viewing, group/individual study rooms, and print, audiovisual, and digital resources. For more information, please call 443-412-2268 or visit the Library webpages (http://www.harford.edu/academics/library.aspx).

My College Success Network
The My College Success Network combines campus resources with programs and services designed to highlight the African American student experience in an effort to empower, support, and encourage completion and success. All students, regardless of ethnicity, are welcome to participate. For more information, please visit the My College Success Network (http://www.harford.edu/student-services/my-college-success-network.aspx) webpage or call 443-412-2149.

Public Safety
The Department of Public Safety Department is committed to maintaining a safe environment for all students, employees, and visitors on College property. The department also provides physical security, investigative services, public safety education, first aid, and other assistance in a professional and courteous manner. For further information please call the Public Safety Office at 443-412-2041. For emergencies or after normal business hours, call 443-412-2272. Visit the Public Safety webpage (http://www.harford.edu/about/offices-and-departments/public-safety.aspx) for more information.

Registration and Records
The Registration and Records Office offers information on enrollment application, registration and OwlNet. This office also processes transcript and enrollment verification requests, graduation and nursing program applications. For further information please visit the Registration and Records (http://www.harford.edu/student-services/registration-and-records.aspx) webpage or call 443-412-2222.

Services for Military and Veteran Students
The Harford Community College Office of Military and Veteran Services recognizes and honors the sacrifices and values the life experiences that military connected students bring to our campus. We stand committed to providing military connected students with support and administrative services designed to meet their needs. It is our goal to help students make the transition from active duty to college life as smooth as possible. We are also here to guide and assist students who are on active duty and wish to take online courses. The Military & Veteran Services office provides information to students on VA Educational benefits and how to apply for benefits. All Veterans educational benefit certifications are processed through this office. To better serve our Military connected students, Harford has established two office locations - one on campus and another on site at Aberdeen Proving Ground. Both offices offer a full range of student services. For more information, please call 443-412-2100. The Military and Veteran Services webpage also offers a wide variety of information and services to assist Military connected students as they transition to college life.

Sexual Misconduct and Assault
Harford Community College will not tolerate sexual misconduct by anyone—employees, students, contractors, or any person on campus or involved with College-related activities. The College has implemented specific measures to ensure that all allegations of sexual misconduct are investigated and resolved in a timely, discreet, fair and impartial manner. For more information see the Sexual Misconduct and Assault (http://www.harford.edu/about/sexual-misconduct.aspx) webpage or contact HCC's Title IX Coordinator or one of the designated Title IX Deputy Coordinators:

Title IX Coordinator
Ms. Jennie Towner
Interim Vice President for Student Affairs and Institutional Effectiveness
Harford Community College
Library, Executive Suit
401 Thomas Run Road
Bel Air, MD 21015
443-412-2142 or jtowner@harford.edu

Title IX Deputy Coordinator
Ms. Elizabeth Mosser
Associate Dean for Academic Operations
Title IX Deputy Coordinator
Harford Community College
Library, Executive Suit
401 Thomas Run Road
Bel Air, MD 21015
443-412-2319 or emosser@harford.edu

Student Life
The Office of Student Life (OSL) offers comprehensive programs, activities, community involvement opportunities, and services that enhance the student experience. This office oversees the Student Government Association and registered student organizations. For more information, please call Student Life at 443-412-2140 or visit the Student Life webpage (https://www.harford.edu/student-services/Office%20of%20Student%20Life.aspx).

Student Life offers a variety of co-curricular programming for students. The Soar2Success program focuses on the African American experience at Harford Community College and includes individual guidance, academic support programming, social programming, and multicultural programming. For more information, please contact Sharoll Love at 443-412-2224 or visit the Soar2Success webpage (https://
The Emerging Leaders program is designed to build and enhance leadership skills for students. For more information, please contact Caitlin White at 443-412-2331 or visit the Emerging Leaders webpage (https://www.harford.edu/student-services/Office%20of%20Student%20Life/project-lead.aspx).

Student Life also offers wellness programming (https://www.harford.edu/student-services/Office%20of%20Student%20Life/wellness.aspx) and opportunities for students to be involved in community service activities. For more information, please contact Laura Burke at 443-412-2090.

**Student Conduct Services**

Student Conduct Services administers the Student Code of Conduct. The Student Code outlines clear expectations of students as members of the College community, the kind of unacceptable behavior that may result in disciplinary action, and sanctions and disciplinary proceedings utilized when the Student Code is not observed. The Student Code is designed to provide educational guidance to assist in developing good citizens and to respond appropriately to behavior that interferes with the learning environment. For more information, please call 443-412-2073 or visit the Student Rights & Responsibilities: Code of Conduct webpage.

**Student Intervention and Prevention (SIP)**

The Student Intervention and Prevention (SIP) team is here to provide support to students experiencing personal, academic, or social concerns. The SIP team connects students with needed campus and community resources. The SIP team collaborates with others on campus to proactively identify, assess, and offer a coordinated College response to HCC students displaying varying levels of disruptive, disturbed, distressed, and/or concerning behaviors. For more information, please call 443-412-2132 or visit the Student Intervention and Prevention webpage.

**Test Center**

The Test Center offers proctoring for the academic skills assessment and course testing such as, transitional, make-up, online, and nursing dosage exams. It is also a site for CLEP, DSST, ATI-TEAS and division exams. Testing accommodations are provided as approved by Disability Support Services. For more information, please call 443-412-2352 or visit the Test Center webpage (http://www.harford.edu/student-services/testing.aspx).
**TUITION AND FEES**

**Credit Tuition**

Rates for Academic Year 2020-2021

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<tr>
<th>Fee</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Residents of Harford County</td>
<td>$132.87 per credit hour</td>
</tr>
<tr>
<td>Residents of Maryland - Outside of Harford County</td>
<td>$226.11 per credit hour</td>
</tr>
<tr>
<td>Non-residents of Maryland/Out-of-Country Residents</td>
<td>$319.34 per credit hour</td>
</tr>
<tr>
<td>Consolidated Service (^1)</td>
<td>$26.57 per credit hour</td>
</tr>
</tbody>
</table>

\(^1\) This fee supports services such as parking, schedule changes, and student activities.

Rates for academic year 2020-2021 are subject to change at any time per the action of the Harford Community College Board of Trustees. Tuition and fees are non-refundable after the refund deadline. If you do not plan on attending classes, you must officially drop your classes within the stated refund period in order to avoid an outstanding financial obligation to the college. Non-attendance does not constitute a refund or removal of the debt. Please see the academic calendar (p. 6) for refund and withdrawal deadlines for the semester.

**Residency and Tuition Policy**

Students at Harford Community College are charged tuition according to their residency. A student's residency is determined at the time of admission to the College. For the purposes of assessing tuition charges, Harford Community College adheres to guidelines established by the Maryland Higher Education Commission and the Code of Maryland Regulations. For complete details, please read the Residency and Tuition Policy (p. 97) under Enrollment Information & Policies (p. 96) in the academic catalog for the current academic year.

**Additional Fees**

<table>
<thead>
<tr>
<th>Fee</th>
<th>Cost</th>
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<tr>
<td>Credit by Examination Fee (Division Exams Only)</td>
<td>50% of the in-county tuition based on course credit hours</td>
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<tr>
<td>Late Registration Fee</td>
<td>$25</td>
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<tr>
<td>Transcript Fee</td>
<td>$5</td>
</tr>
<tr>
<td>Returned Check Fee</td>
<td>$35</td>
</tr>
<tr>
<td>Parking Citation</td>
<td>$50 (Handicap Zone: $150)</td>
</tr>
</tbody>
</table>

Course fees vary. Fees are noted within course listing. If you have a scholarship, loan, or other form of financial assistance, you must contact the Financial Aid Office to ensure all of your documentation has been received and your registration is held.

**Responsibility for Payment of Tuition and Fees**

When submitting your registration, you assume responsibility for tuition, fees, and charges. Tuition and fees are non-refundable after the refund deadline. In order to avoid an outstanding financial obligation to the college, you must officially drop your class within the stated refund period. Non-attendance does not constitute a refund or removal of the debt. Refund dates can be found on the academic calendar (p. 6).

The Finance Office performs account collections for HCC. If the Finance Office collection efforts are unsuccessful, or if any mail correspondence is returned by the USPS as undeliverable, the account will be transferred to the Central Collection Unit of the State of Maryland (CCU). A collection fee equal to 17% of the outstanding debt will be charged to the transferred account. This debt may be reported to the credit bureaus. All college services, including registration, transcript and diploma requests, will be suspended until the outstanding debt with CCU has been satisfied in full.

**Payment Schedules**

If you register for an upcoming term more than one week before the due date for that term, an e-bill notification will be emailed to your OwlMail address explaining how to view and/or print your e-bill. It is your responsibility to monitor your HCC OwlMail. If payment is not received by the due date your registration will be canceled.

If you register for an upcoming term less than one week before the payment due date for that term, or if you register after the payment due date, you will not receive an e-bill. In this event, you can view your account and amount due through OwlNet, All About Me, My Bill-Payment Plan, My Bill, My Account. If you register subsequent to the due date, payment is due within ten days of the date you register or you registration will be canceled.

Non-attendance of classes does not constitute a refund or removal of the debt to the College. Refund deadlines can be found in the academic calendar (p. 6).

**How to Pay**

Cash, Check, or Credit Card (Visa, MasterCard, Discover, American Express)

- **In-Person:** at the Cashier's Office, located in the Student Center;
- **Online through OwlNet:** On the All About Me tab, My Account - credit card or check.
- **By Mail:** check only (no cash or credit cards by mail).

Checks payable to HCC should be mailed to:
Harford Community College-Attn: Cashiers Office
401 Thomas Run Road
Bel Air, MD 21015

Please include the student's name and ID# for all mail-in payments.

- **Telephone** (credit card only) by calling the Cashier's Office at 443-412-2208.

Early payment is encouraged.

**NBS Tuition Plan**

The College has contracted with NelNet Business Services, Inc. (NBS) to make available an installment plan for the fall, spring and summer semesters. To establish a payment plan, students need to complete an online NBS/FACTS application form. An application fee and down-payment must be paid when the plan is set up. The remaining balance will be payable in multiple installments of two or more payments based on date the plan is created.

Your NBS down-payment and subsequent payments will come directly out of your designated bank or credit card account. The $35.00 application fee and down-payment will be immediately withdrawn at the time the plan is established. Each NBS payment plan is only valid for one
term. A new NBS online application must be completed for future terms as desired.

Changes in your account balance with the college can affect your NBS payment. Adding/dropping classes and other changes that affect your balance due to the college may automatically be updated with NBS and increase or decrease the payment as appropriate. Please note that automatic updates to NBS are not guaranteed.

For students with pending financial aid
If you are awarded authorized financial aid or secure a loan after establishing your NBS Payment Plan, the update/termination of your payment agreement will not automatically occur. If you wish to terminate your payment plan, call NBS at 800-609-8056. It is best to have your agreement number available when calling NBS.

Email Notifications
The student will be notified of changes in their NBS payments by email. It is important that the student provide a valid email address and check their email for correspondence regarding their NBS agreement and upcoming payments.

After your payment plan is established, you can view your agreement online at www.mypaymentplan.com (http://www.mypaymentplan.com).

Aid & Waivers

Dual Enrollment High School Waiver
Harford County Public Schools (HCPS) high school students can apply for their eligibility to receive a tuition discount under Maryland Senate Bill 740. Students must be approved by HCPS and can apply for eligibility through their high school counseling office. HCPS will send the student a Dual Enrollment Verification Form with an approval letter. Students can submit their Dual Enrollment Verification Form (for the academic year) to the HCC Cashiers Office. HCC waives 25% of tuition for the first four courses taken in an academic year (excluding Summer term) and 10% for any additional courses after the first four courses. For details on the exact amount of the tuition discount, please contact the Cashiers office at 443-412-2208. For more details on eligibility requirements and how to apply, contact your high school counseling office.

Health Manpower Waiver
Students who are out-of-county residents may be eligible for the Health Manpower Waiver if enrolled in an eligible state designated program. This waiver was originally intended to reduce tuition to the in-county rate. Students enrolling in the program will be required to pay the full amount of tuition (based on residency) by payment deadline for the semester. However, at the end of the fiscal year (June 30 or later), eligible students may receive a partial reimbursement of the tuition paid. This reimbursement will depend on the level of funding received from the state for that fiscal year. The reimbursement would be no greater than the difference between the student’s out-of-county and in-county tuition. Contact the Financial Aid Office at 443-412-2257 for more information.

Need-Based Aid
Federal and State financial aid programs, as well as scholarships, are available to financially eligible students. Information and applications are available at the Financial Aid Office in the Student Center.

Merit-Based Aid
State and private scholarships are available to academically eligible students. Information and applications are available at the Financial Aid Office in the Student Center.

Veterans’ Benefits
Students who are eligible for monthly VA benefits may apply for those benefits at the Financial Aid Office in the Student Center or at the Military & Veteran Services Office located in Building 4305 at Aberdeen Proving Ground. Students must pay tuition and fees but are reimbursed through their VA educational benefits. Information about VA educational benefits is available at the Financial Aid Office, the Military & Veteran Services Office, and through the VA website at www.gibill.va.gov (http://www.gibill.va.gov).

Tuition Waiver for Employees of In-County Businesses
Students that have established six (6) months or longer permanent, full-time (a minimum of 32 hours/week) employment with a Harford County business may apply to have their out-of-county or out-of-state tuition waived (difference only between in-county and out-of-county/state tuition) for credit classes. Employment cannot be seasonal in nature. The student pays the full consolidated fee and any course fees. A student’s tuition will be adjusted to the in-county rate once the student submits the required documentation, and gets the approval of the college Finance office. Employment documentation must be submitted at the beginning of each term.

The required documentation consists of:

1. A copy of two (2) recent paystubs (last 4-digits of social security number, name, address, date, and number of hours worked must be visible; rate of pay can be blacked out).

2. On the employer’s official letterhead, a statement of the student’s full-time employment, dated and signed by an authorized representative of the company (original must be submitted), with contact information.

   or

   If the employer’s letterhead displays an address outside of Harford County, Maryland then the student will need to submit an ¹ Employer In-County Waiver Form with the appropriate information completed and signed by the employer.

¹ The Employer In-County Waiver Form can be picked up at the Cashier’s office.

Senior Citizen Tuition Waiver
Any resident of the State of Maryland who is 60 years or older by the start date of a state-supported course shall be exempt from the payment of credit tuition provided course space is available. Seniors should note that all fees must be paid regardless of the waiver of tuition. Students eligible for the senior waiver should contact the Cashiers Office at 443-412-2208 to request the waiver.

Tuition Waiver for Parents of Deaf or Hard of Hearing Individuals
Under House Bill 1384 (effective October 1, 2019), the parent of a deaf or hard of hearing child is exempt from paying tuition at a public institution of higher education for any course that teaches a language or communication mode. This waiver applies to tuition only and all
applicable fees must be paid. Students should contact the Cashiers Office at 443-412-2208 to verify eligibility and request the waiver.

Disability Tuition Waiver

Students who receive Social Security Disability Insurance (SSDI), or those receiving Supplemental Security Income (SSI) can be eligible students for this waiver. The tuition waiver is limited to 6 credits per semester if in an undeclared major and 12 credits per semester if in a declared program of study. To receive the Disability Tuition Waiver, you must be a Maryland resident and be receiving disability benefits from one of the following retirement systems:

1. Social Security Administration: Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI)
2. Railroad Retirement Board, or
3. A Federal Retirement/Pension System (instead of the Social Security System) for former federal employees receiving total and permanent disability.

Steps to Apply - Submitted paperwork is good for the academic year (fall-spring-summer)

1. Complete an HCC Certification of Disability Form (Available online at www.harford.edu and at Cashiers Office).
2. Obtain a Statement of Benefits from the Social Security Administration - must indicate the type of social security benefit being paid to the student.
3. Complete the FAFSA at www.fafsa.gov by March 1st of each year.
4. Present the completed HCC Certification of Disability Form and Statement of Social Security Disability Benefits to the Financial Aid Office for verification of eligibility and aid status.
5. Once approved (stamped) by Financial Aid, deliver to the Cashiers Office. Allow 2 to 3 business days for the waiver to apply.

Visit www.harford.edu or contact Financial Aid or Cashiers Office for more information.

MD National Guard Tuition Waiver

Members of the Maryland National Guard are designated as ‘in state’ and ‘in county’ for residency purposes and are entitled to a credit class waiver of 50% of ‘in county’ tuition. Additionally, all fees for classes taken at Maryland National Guard sites are waived. Student and class fees will be charged for classes taken at non-Maryland National Guard locations.

Eligible students must provide a letter from the Maryland Adjutant General certifying that the member of the Maryland National Guard has at least 24 months remaining to serve or has agreed, in writing, to serve for a minimum of 24 months.

MD National Guard Dependents

Dependent spouses and children of a member of the Maryland National Guard and Maryland Air Guard may request a credit class tuition and fee waiver when a Guard member is called to active duty for a minimum period of six (6) continuous months of service. Eligibility for the waiver for a given semester will be determined by the military status of the Guard member as of the date of the start of a regular fall or spring semester or the start of the first summer session. Eligible students must provide a copy of the spouse’s/parent’s military orders to active duty and a visual confirmation of the dependent military identification card must be made by a Harford Community College representative.

Maryland Foster Care Recipient

Students who have resided in a foster-care home in Maryland are eligible for a waiver of tuition and fees not covered by other financial aid. The student must complete the FAFSA by March 1 of each year and be enrolled in a degree program. Call the Financial Aid Office at 443-412-2257 for information.

Unaccompanied Homeless Youth Waiver

House Bill 482 provides an exemption of tuition and fees to unaccompanied homeless youth who are enrolled as a candidate for an associate degree, bachelor’s degree, or vocational certificate at a Maryland public institution of higher education.

Qualifications: Students must be declared an unaccompanied homeless youth who is not in the physical custody of a parent or guardian and be defined by the McKinney-Vento Homeless Assistance Act as a homeless child or youth. Contact the HCC Financial Aid Office at 443-412-2257 for details on eligibility criteria.
PREVIOUS CATALOGS

Archived Catalogs


2015-2016 Catalog (https://ww2.harford.edu/Catalog/Include/archive.asp?ArchiveYear=2015/)
2013-2014 Catalog (https://ww2.harford.edu/Catalog/Include/archive.asp?ArchiveYear=2013/)

2012-2013 Catalog (https://ww2.harford.edu/Catalog/Include/archive.asp?ArchiveYear=2012/)

Welcome to Course Search
Use the search panel on the left to find and narrow down courses of interest.
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