


ALLEGANY COUNTY PUBLIC SCHOOLS

# A Publication of the Division of Instruction and Staff Development 

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Although great care has been taken to ensure the accuracy, completeness, and timeliness of information in this publication, please note that ACPS makes no guarantees that such information will be error free. Information is subject to change at any time in order to add, update, or correct information provided in this publication. The information is intended to serve as an educational resource for students, parents, and educators. The most up-to -date information will be provided in the online Program of Study guide on the ACPS website. The professional staff in each school shares responsibility for providing access to course selection forms and information. Parents and students should check with the specific college or university regarding admission requirements and/or with the NCAA regarding Divisions I and II Initial-Eligibility requirements. If questions arise, students and parents should contact school administrators, guidance counselors, or teachers for clarification and assistance. Any errors or omissions should be reported for investigation.

Welcome to the Allegany County Public Schools Programs of Study guide! Planning the high school program is an important process that requires careful thought and attention. The information inside outlines the approved curriculum for secondary schools in Allegany County and is intended to serve as an educational resource for students, parents, and educators.

Our secondary schools in Allegany County offer an appropriately challenging curriculum in language arts, science, social studies, mathematics, world language, fine arts, physical education, and career and technology education. We also offer a wide variety of elective courses and extra-curricular activities.

To begin planning a program of study, students should become familiar with the graduation requirements established by the State of Maryland. Courses which fulfill career goals, college goals, and/or personal goals must also be considered when examining the curriculum and planning a sequential high school program.

I want to personally encourage each student to consider the many options available in the course selection process and to select courses which are consistent with individual student goals, interests, and abilities. Career cluster booklets explain and serve as a reference for developing high school and postsecondary educational plans. We offer many dual enrollment and Advanced Placement courses that can provide excellent opportunities for advanced study.

Every program of study listed in this booklet may not be available in every school. Each school makes a determination of the course offerings and programs available to students based on course demand. Student interest in a particular course and the availability of qualified and certified staff to teach the course are two factors which determine course offerings.

The professional staff in each school shares responsibility for providing access to course selection forms and information. If questions arise, students and parents are encouraged to contact school administrators, guidance counselors, or teachers for clarification and assistance. This guide is intended to enhance the valuable guidance of parents and school staff as our students plan their course of study that will help them maximize their learning potential.

Best regards,

## Kim Kalleaugh

Chief Academic Officer

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A Program of Study is "an instructional program that includes a combination of courses and experiences designed to accomplish a predetermined objective or set of allied objectives such as preparation for advanced study, qualification for an occupation or range of occupations, or simply the increase of knowledge and understanding." (Chrismore and Hill, A Classification of Educational Subject Matter, NCES, 1978, p.165.)

The Maryland State Department of Education's goal is for every high school student to be a completer in one or more of the following completer programs. Dual completers are strongly encouraged.

## University of Maryland System Completer Program (page 9)

To be a University of Maryland System Completer, a student must complete a sequence of courses that satisfies the requirement for entrance in various colleges or universities in the University of Maryland System.

The university requires, at a minimum, to have completed the following course work by high school graduation: four (4) years of English, four (4) years of math, including Algebra I, Geometry, and Algebra II. (Students who complete Algebra II prior to their final year must complete the four-year mathematics requirement by taking a course or courses that utilize non-trivial algebra. Examples of courses meeting this requirement include Algebra II, Trigonometry, Pre-calculus, Calculus and successor courses, Statistics, and College Algebra.); three (3) years of history or social science; three (3) years of science in at least two different areas, with at least two lab experiences; and two (2) years of foreign language.

## Occupational Completer Programs (page 10-30)

To be an Occupational Completer, a student must complete a State approved Career and Technology program sequence of courses which develop skill and knowledge in career areas leading to employment, college, or both.

An approved Occupational Completer Program must have a minimum sequence of four (4) credits. Some Occupational Completer Programs offer students the opportunity to participate in internship/work-based learning experiences and earn articulated college credits or apprenticeship credit.

Occupational Completer Programs will be offered based on enrollment demand.

## Dual Enrollment/Early College Program

At the end of the junior year (exception P-TECH students), a student with satisfactory credits, assessment requirements and the College and Career Ready (CCR) Memorandum of Understanding (MOU) multiple measures of assessment met, may enroll in the Dual Enrollment Program. Successful completion of Dual Enrollment courses outlined in the Program of Study awards a student ACPS credit and local college credit, and it will be part of the high school GPA. Students enrolled in Dual Enrollment courses may participate in extra curricular activities.

Information on Dual Enrollment courses is found in Section V in the Program of Study starting on page 84:

- Students must register with the college/university each semester for dual enrollment courses.
- ACM via the annual CCR MOU accepts a variety of assessment measures for college- level courses. Students may qualify to take a college-level course if they meet at least one of the following set criteria for PARCC/ MCAP, SAT, ACT, AP, IB, Accuplacer, and GPA. For specific criteria please talk to your high school counselor or the ACM/ACPS Career and College Coach.
- Students can study for the Accuplacer at https://accuplacer.collegeboard.org on the study app. They will be directed to make an account before they begin. Students may need to test in Reading, Quantitative Reading, Algebra, and Statistics.
- Senior English credit may be satisfied by taking College English in the Comprehensive High School.
- Senior math credit may be satisfied by taking College Algebra or College Probability and Statistics in the Comprehensive High School.
- All Dual Enrollment Courses will be offered based on enrollment demand.
- Only ACPS approved courses at ACM or FSU during the fall or spring semester will be awarded dual enrollment credit.
- Credits from a college or university other than ACM or FSU will not be recognized for dual enrollment credit without prior written approval of the superintendent.



# PROGRAMS OF STUDY 

Introduction<br>University Completer Program Occupational Completer Programs<br>Course Descriptions Post Secondary Connections Planning

Section I Introduction
Graduation Requirements ..... 1-3
NCAA Freshman Eligibility Standards ..... 4-6
High School Certificate ..... 7
Student Service Learning/Internships ..... 8
Section II University Completer Program
University of Maryland System Completer Requirements ..... 9
Section III Occupational Completer Programs
Occupational Completer Programs by Career Cluster ..... 10
Academy of Health Professions ..... 11
Auto Collision Repair. ..... 12
Automotive Technology MLR ..... 13
Biomedical Sciences (PLTW) ..... 14
Careers in Cosmetology ..... 15
Construction Maintenance - HVAC ..... 16
Construction Maintenance - Welding ..... 17
Construction Trades - Carpentry ..... 18
Construction Trades - Electrical ..... 19
Criminal Justice/Law Enforcement ..... 20
Culinary Arts (ACF) ..... 21
Engineering Technology (PLTW) ..... 22
Graphic Communications (PrintED) ..... 23
Interactive Media Production (IMP) ..... 24
IT Networking Academy/P-TECH (CISCO) ..... 25
Manufacturing Engineering Technology ..... 26
Teacher Academy of Maryland ..... 27



## Section

## Introduction

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## MARYLAND HIGH SCHOOL DIPLOMA

The Maryland High School Diploma is awarded in recognition of the fulfillment of the minimum enrollment, competency prerequisite, credit, and student service requirements. Students who meet the following requirements shall be awarded a Maryland High School Diploma.

Specified Core Credit Requirements

## Credits

${ }^{4}{ }^{*}$

## Subject Area

English
Mathematics
one with algebraic concepts
one with geometric concepts
*additional math credits (see below)
3**
Science
**science credits (see below)
3 Social Studies
U.S. History, World History

Local, State, Federal Government
Fine Arts
Physical Education
Technology Education
Health Education
Personal Financial Literacy
Choose one of the following:
23
Minimum Total Credits Required for Graduation

## Completer** and Electives

**Completer refers to a specified sequence of courses required for completing graduation requirements.

2 credits of World Language (in sequence preferred) and any remaining credits in electives

## OR

$\mathbf{2}$ credits of Advanced Technology Education and any remaining credits in electives

## OR

Complete a MSDE CTE Program and any remaining credit in electives needed

## ACPS Certificates

In addition to earning the Maryland High School Diploma, students who earn at least 12 credits in honors courses as indicated in the course descriptions, Section IV during their high school program and meet the following GPA requirements shall be eligible for a:

## Honors Certificate Cumulative Weighted Grade Point Average-3.5 GPA

Students shall obtain at least a 3.5 total cumulative weighted grade point average for the high school years.

## Auditing a Course

A student is enrolled in a course identified in the Program of Study, but is not to be assigned a grade. It will be noted on their transcript that the course was audited, no grade will be provided, no credit will be earned and the GPA will not be affected in any way. This applies to eighth period classes offered before or after regular school hours, teachers' aides, and office aides.

## Additional Requirements

In addition to the specified core credit requirements for a Maryland High School Diploma:

- Students must complete 75 hours of Student Service Learning.
- Students must satisfactorily complete four years of approved study beyond grade eight.
- Students must take and pass the Algebra I, English 10, and LSF Government assessments to meet graduation requirements.
- Students must take the science high school assessment to meet graduation requirements.
- Students who have not passed a required graduation assessment after two attempts will complete the content specific bridge plan for academic validation pathway to satisfy the graduation requirement.
- All students who have not met a CCR indicator for ELA and mathematics by the end of the junior year will be enrolled in a transition experience during their senior year for ELA and/or math. This may be in addition to a required ELA or math class needed for graduation.
- Students earning Algebra I credit in Grade 8 are required to take four years of high school mathematics in Grades 9-12, including Geometry and Algebra II.
- In ACPS, students are required to take four years of mathematics and earn a minimum of four credits in mathematics during high school to meet graduation requirements.
- Beginning with students entering 9th grade in 2017-18, students are required to take Earth Science, Biology, and Chemistry to prepare for the Maryland Integrated Science Assessment (MISA). Biology is a graduation requirement. There is an academic and honors pathway for each course. AP Environmental Science may be taken in place of Earth Science.
- Exploring Computer Science, AP Computer Science Principles, or Foundations of Technology fulfills the Technology Education graduation requirement.
- Students earning World Language credit in Grade 8 are required to take a minimum of 2 additional World Language classes while in Grades 9-12.
- Environmental Literacy Standards and experiences are infused throughout the Pre K-12 curriculum.


## MARYLAND HIGH SCHOOL DIPLOMA

## Maryland High School Assessments

 Required for Graduation
## MARYLAND COMPREHENSIVE

 ASSESSMENT PROGRAM (MCAP)**The Maryland Comprehensive Assessment Program (MCAP) will replace PARCC, beginning the 2019-20 school year. MCAP will provide students, parents, educators and the community with better student information at a faster pace. The goal remains the same" to gather information that helps Maryland schools strengthen our instruction and improve student performance so that our graduates are ready to move into the workforce or a postsecondary institution.

MCAP will continue to assess the Maryland College and Career Ready Standards in English language arts and mathematics. Maryland's mathematics and English language arts assessments will continue to use test items developed by the PARCC consortium. The assessments have received high marks from education experts for their quality and rigor. The same scale scores and performance level descriptors will be utilized. All high school assessments will fall under the umbrella of MCAP.
"Maryland High School Assessments" means the HSA, PARCC, or other assessments in algebra, science, English, and government developed or adopted by the Maryland State Department of Education that are aligned with the measure a student's skills and knowledge as set forth in the Maryland Standards for those subjects. See COMAR 13A.03.02.02.

Students take Maryland High School Assessments (MHSAs) if the student received credit for taking any of the following courses aligned with the Maryland High School Assessment. See COMAR 13A.03.02.06.

- English
- Algebra
- Science
- Government


## Algebra I and ELA 10

MSDE approved a passing score of 750 on the Algebra I and ELA 10 assessments for the cohort that is expected to graduate from high school in 2023-2024 and beyond and a passing score of 725 for students currently in Grade 8 and above.

## Government

All students will need to take and pass the LSF Government assessment with a passing score of 394.

## Science

To fulfill the science graduation assessment requirement, students are required to take the HS MISA.

## Maryland College and Career Readiness

The College and Career Readiness and College Completion Act of 2013 established a number of requirements designed to increase college and career readiness as well as degree completion in Maryland.
"Beginning with the 2015-2016 school year, all students shall be assessed using acceptable college placement cut scores no later than 11th grade to determine whether the student is ready for collegelevel credit-bearing course work in English Language Arts, Literacy and Mathematics." It further requires that "transition courses or other instructional opportunities shall be delivered in the 12th grade to students who have not achieved College and Career Readiness (CCR) by the end of the 11th grade. The implementation of transition courses or other instructional opportunities...shall include an assessment or reassessment of the student after completion of the course; and may not preclude or replace enrollment in a course otherwise required for graduation from high school."

Assessment Options include: MCAP, PARCC, SAT, ACT, AP, Accuplacer, Dual Enrollment eligibility. Students must be determined CCR in both English Language Arts (ELA) and Math. If students are not deemed CCR by the end of their junior year, they will be placed in a transition experience during their senior year and re-assessed. Passing an eligible (CTE) Program Technical Skills Assessment will meet the CCR re-assessment requirement.

For questions about students receiving Special Education services, please call 301-759-2084.

## MARYLAND HIGH SCHOOL DIPLOMA

Coursework Options for High School Content

| Weights for GPA Calculation by Course Title |  |  |  |
| :---: | :---: | :---: | :---: |
| Grade | Academic | Honors | Dual Enrollment <br> Advanced Placement |
| A | 4 | 4.5 | 5 |
| B | 3 | 3.5 | 4 |
| C | 2 | 2.5 | 3 |
| D | 1 | 1 | 1 |


| Allegany County Public Schools Offers Four Levels of Courses |  |
| :--- | :--- |
| Academic <br> 4.0 GPA scale | includes Essential Learner Outcomes or core content <br> identified in the Maryland College and Career Ready <br> Standards or Maryland Core Learning Goals. |
| Honors | includes content in the Maryland College and Career <br> Ready Standards or the Maryland Core Learning <br> Goals that includes an increased emphasis on the <br> synthesis of content knowledge demonstrated by an <br> integration of reading and writing processes. |
| 4.5 GPA scale | includes syllabi content that represents the highest <br> common standards between ACPS and the cooperat- <br> ing college. Successful completion (a grade of Cor <br> better) awards local college credit hours. A grade of D <br> may not be awarded college credit or be transferable <br> to other institutions. |
| 5.0 GPA scale |  |

Academic Certification Decisions: An academic certification will be conducted to determine if you meet the Division I or Division II academic standards. Academic certifications are required for all college-bound stu-dent-athletes planning to compete at a Division I or Division II school. (An amateurism certification is also required. The following items are required in order to complete your academic certification: A final official transcript with proof of graduation, official transcripts from all high schools attended, test scores, no open academic tasks in your Eligibility Center Certification Account, and be on a Division I or Division II school's institutional request list. Being placed on a school's institutional request list notifies the NCAA Eligibility Center to complete an academic evaluation for you after all of your appropriate documents have been submitted.



What if I Don't Graduate on Time? In Division I, if you do not graduate on time (in four years/eight semesters), the NCAA Eligibility Center will still use your grades and coursework for the first four years/eight semesters for your certification. You will still need to provide proof of graduation (once you graduate) and you may not use any coursework taken after your high school graduation toward your certification.

What if I Don't Meet the Division I Standards? If you have not met all of the Division I academic standards, you may not compete in your first year at a Division I college. However, if you qualify as an academic redshirt, you may practice during your first term in college and receive an athletics scholarship for the entire year. To qualify as an academic redshirt, you must graduate high school and meet all of the following academic standards: Complete 16 core courses and earn an SAT combined score or ACT sum score matching your core-course GPA (minimum 2.000) on the Division I sliding scale.

What if I Don't Meet the Division II Standards? If you enroll full time at a Division II school and you have not met all Division II academic standards, you may not compete in your first year. However, if you meet the standards to be a partial qualifier, you may practice and receive an athletics scholarship in your first year at college. To be a partial qualifier, you must graduate high school and meet all of the following standards: Complete 16 core courses and earn an SAT combined score or ACT sum score matching your core-course GPA (minimum 2.000 ) on the Division II partial-qualifier sliding scale.

Core-Course Timeline: For Division I, only courses completed in your first eight semesters will qualify as core courses. If you graduate from high school on time (in eight semesters) with your incoming ninth-grade class, you may use one core course completed in the year after graduation (summer or academic year) before full-time collegiate enrollment. You may complete the core course at a location other than the high school from which you graduated as long as the course is taken prior to full-time enrollment at any college or university. A college course taken after high school graduation may be used toward your initial eligibility and awarded 0.5 units from your college transcript (unless awarded one full unit on your home high school transcript). An additional core-course unit taken after on-time high school graduation cannot replace a course used to meet the core course progression (10/7) requirement, but an additional core course after on-time graduation may replace one of the remaining six core-course units necessary to meet core course requirements. If you plan to attend a Division II school, you must complete 16 NCAA core courses after starting grade nine and before your first full-time college enrollment. For Division II, you may use an unlimited number of core courses completed after graduation (summer or academic year) before full-time collegiate enrollment. You may complete the core course(s) at a location other than the high school from which you graduated. A college course taken after high school graduation can be used toward your initial eligibility and will be awarded 0.5 units (unless awarded one full unit by your home high school). It must appear on your home high school transcript with grade and credit.

## ONE OPPORTUNITY. LIMITLESS POSSIBILITIES.

If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at eligibilitycenter.org. If you want to play Division III sports or you aren't sure where you want to compete, start by creating a Profile Page at eligibilitycenter.org.

## ACADEMIC REQUIREMENTS

To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA.

CORE COURSES
Only courses that appear on your high school's list of NCAA core courses will count toward the 16 core-course requirement; visit eligibilitycenter.org/courselist for a full list of your high school's approved core courses. Complete 16 core courses in the following areas:

## DIVISION I

Complete 10 NCAA core courses, including seven in English, math or natural/physical science, before your seventh semester.


4 years


3 years


2 years


1 year


2 years


4 years

## DIVISION II



## TEST SCORES

You may take the SAT or ACT an unlimited number of times before you enroll full time in college. Every time you register for the SAT or ACT, use the NCAA Eligibility Center code 9999 to send your scores directly to us from the testing agency. We accept official scores only from the ACT or SAT, and won't use scores shown on your high school transcript. If you take either test more than once, the best subscore from different tests are used to give you the best possible score.

## Test Scores

If a student plans to attend an NCAA Division I college or university in the 2019-20 or 2020-21 academic years, use the following charts to understand the core-course GPA he or she will need to meet NCAA Division I requirements.
A combined SAT score is calculated by adding critical reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. A student may take the SAT or ACT an unlimited number of times before he or she enrolls full time in college. If a student takes either test more than once, the best subscores from each test are used for the academic certification process.
When a student registers for the SAT or ACT, he or she can use the NCAA Eligibility Center code of 9999 to send their scores directly to the NCAA Eligibility Center from the testing agency. Test scores on transcripts CANNOT be used in an academic certification.

| Core CPA | SAT* | ACT Sum* |
| :---: | :---: | :---: |
| 3.550 | 400 | 37 |
| 3.525 | 410 | 38 |
| 3.500 | 430 | 39 |
| 3.475 | 440 | 40 |
| 3.450 | 460 | 41 |
| 3.425 | 470 | 41 |
| 3.400 | 490 | 42 |
| 3.375 | 500 | 42 |
| 3.350 | 520 | 43 |
| 3.325 | 530 | 44 |
| 3.300 | 550 | 44 |
| 3.275 | 560 | 45 |
| 3.250 | 580 | 46 |
| 3.225 | 590 | 46 |
| 3.200 | 600 | 47 |
| 3.175 | 620 | 47 |
| 3.150 | 630 | 48 |
| 3.125 | 650 | 49 |
| 3.100 | 660 | 49 |
| 3.075 | 680 | 50 |
| 3.050 | 690 | 50 |
| 3.025 | 710 | 51 |
| 3.000 | 720 | 52 |
| 2.975 | 730 | 52 |
| 2.950 | 740 | 53 |
| 2.925 | 750 | 53 |
| 2.900 | 750 | 54 |
| 2.875 | 760 | 55 |
| 2.850 | 770 | 56 |
| 2.825 | 780 | 56 |
| 2.800 | 790 | 57 |
| 2.775 | 800 | 58 |


| DIVISION I |  |  |
| :---: | :---: | :---: |
| Core EPA | SAT* | ACT Sum* |
| 2.750 | 810 | 59 |
| 2.725 | 820 | 60 |
| 2.700 | 830 | 61 |
| 2.675 | 840 | 61 |
| 2.650 | 850 | 62 |
| 2.625 | 860 | 63 |
| 2.600 | 860 | 64 |
| 2.575 | 870 | 65 |
| 2.550 | 880 | 66 |
| 2.525 | 890 | 67 |
| 2.500 | 900 | 68 |
| 2.475 | 910 | 69 |
| 2.450 | 920 | 70 |
| 2.425 | 930 | 70 |
| 2.400 | 940 | 71 |
| 2.375 | 950 | 72 |
| 2.350 | 960 | 73 |
| 2.325 | 970 | 74 |
| 2.300 | 980 | 75 |
| 2.299 | 990 | 76 |
| 2.275 | 990 | 76 |
| 2.250 | 1000 | 77 |
| 2.225 | 1010 | 78 |
| 2.200 | 1020 | 79 |
| 2.175 | 1030 | 80 |
| 2.150 | 1040 | 81 |
| 2.125 | 1050 | 82 |
| 2.100 | 1060 | 83 |
| 2.075 | 1070 | 84 |
| 2.050 | 1080 | 85 |
| 2.025 | 1090 | 86 |
| 2.000 | 1100 | 86 |

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## HIGH SCHOOL CERTIFICATE

## COMAR 13A.03.02.09E

There shall be a State certificate for completion of a special education program named the Maryland High School Certificate of Program Completion.

1. This certificate shall be awarded only to students with disabilities who cannot meet the requirements for a diploma but who meet the following standards:
A. The student is enrolled in an education program for at least four (4) years beyond grade eight or its age equivalent, and is determined by an Individual Education Plan (IEP) Committee, with the agreement of the parents of the student with disabilities, to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life, with the world of work including, but not limited to:
(i) Gainful employment;
(ii) Work activity centers;
(iii) Sheltered workshops; and
(iv) Supported employment; or
B. The student has been enrolled in an educational program for four (4) years beyond grade eight or its age equivalent and has reached age 21 by the end of the student's current school year.

## ADDITIONAL STANDARDS

- Instruction in computer use shall be included in the curriculum or each appropriate subject area.
- Students shall receive appropriate instruction in study skills and such thinking skills as gathering, analyzing, synthesizing, and evaluating information.
- Program offerings shall be open to enrollment for all students in:

Community Service
Family \& Consumer Science
Computer Studies

## Technology Education <br> Health

Career \& Technology Education

- Opportunities for students to participate in structured learning experiences in the community as part of the regular high school program.


## OTHER PROVISIONS FOR EARNING CREDIT

Options for earning credits may be offered by the local school system. These options should be explored at the local school level and may include such alternatives as original credit summer school for health and physical education and approved MVLO courses that are not part of the regular ACPS course offerings. Online courses must be approved by the superintendent or his designee prior to enrollment. Costs associated with online courses are the responsibility of the parent/guardian. The high school counselor can provide assistance for the above alternatives.


## Section II

## University Completer Program



## UNIVERSITY OF MARYLAND SYSTEM COMPLETER

Regular freshman admission to a four-year college in the University of Maryland System is determined on the following criteria. Each institution shall publish its own decision criteria which may be more rigorous than the system-wide minima stated below.

## or its equivalent <br> \section*{2. Grade Point Average} <br> 3. Test Score

1. High School Diploma

A high school grade point average of $C$ or better is required to admission of full-time and part-time entering freshmen who have graduated from high school within three years of intended enrollment.

A score on a nationally standardized admission examination such as the SAT or the ACT is required of all applicants who have graduated from high school within three years of intended enrollment.

## 4. Minimum Core Content Proficiency

To indicate their readiness for collegelevel work, high school seniors or graduates must demonstrate achievement of the appropriate level of competencies and core content associated with the array of courses that follows:

| Subject | Credits |
| :--- | :---: |
| English | 4 |
| Social Science/History | 3 |
| Science | 3 |
| Mathematics | 4 |
| World Language | 2 |
| (or 2 Advanced Techs) | 6 |
| Academic Electives |  |
| TOTAL | 22 |

## 5. Other Criteria

Each institution shall publish other criteria for admission that may include (a) strength of the high school curriculum, (b) trends in performance, (c) citizenship and leadership, (d) special talents, and (e) personal circumstances.

A University of Maryland System Completer must complete the following course work:

- Four years of English
- Four years of mathematics, must include Algebra I, Geometry, and Algebra II. Students who complete Algebra II prior to their final year must complete the four-year mathematics requirement by taking a course or courses that utilize non-trivial algebra.
- Three years of history or social science
- Three years of science in at least two different areas, with at least two lab experiences
- Two years of a world language or two Advanced Technology electives in some instances. Please check admissions requirements. Two years of the same world language may be required.


## Section III

## Occupational Completer Programs



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# Occupational Completer Programs By <br> Career Clusters 

## Arts, Media and Communication <br> Graphic Communications (PrintED CCTE) <br> Interactive Media Production (IMP CCTE)

## Construction and Development

Construction Maintenance-HVAC (NCCER CCTE)
Construction Maintenance-Welding (NCCER CCTE)
Construction Trades-Carpentry (NCCER CCTE)
Construction Trades-Electrical (NCCER CCTE)

## Consumer Services, Hospitality and Tourism

Culinary Arts (ACF- CCTE)
Careers in Cosmetology (CCTE)
Health and Biosciences
Academy of Health Professions (CCTE)
Biomedical Science-Project Lead the Way (PLTW - AL, FO, MR)
Human Resource Services
Criminal Justice/Law Enforcement/Public Safety (CCTE)
Teacher Academy of Maryland (TAM -CCTE)
Information Technology
IT Networking Academy (CISCO - CCTE)
Manufacturing, Engineering, and Technology
Engineering Technology-Project Lead the Way (PLTW - CCTE)
Manufacturing Engineering Technology (CCTE)
Transportation Technologies
Auto Collision Repair (CCTE)
Automotive Technology MLR (CCTE)
Work-Based Learning
Apprenticeship Maryland Program (AMP)- AL, CCTE, FO, MR


## Program Overview:

The Collision Repair and Refinishing program is a CTE pathway program. It combines technical, academic and workplace skills in an integrated curriculum in accordance with The Inter-Industry Conference on Auto Collision Repair (I-CAR ) curriculum programs, and Automotive Service Excellence (ASE) guidance and directives. The major technical skills and abilities for each course offering are outlined below. The Collision Repair and Refinishing Program incorporates the applied academic and workplace skills for each of the required collision repair, refinish and painting areas utilizing the I-CAR Live Curriculum. The I-CAR curriculum prepares students for careers and/or further education in collision repair and refinishing within the Transportation Technology Cluster.

Occupational Careers and Postsecondary Options:
Secondary: Collision Repair Technician, Automobile Insurance Estimator

Postsecondary (2 year): Collision Repair Lead Technician, Collision Repair Team Leader, Collision Repair Estimator, Collision Repair Insurance Adjuster, Collision Repair Quality Technician, Collision Repair Quality Engineer, Automotive Refinishing Technician

## Program Certification:

- Automotive Service Excellence (ASE) Education Foundation- NonStructural Analysis \& Damage Repair
- Automotive Service Excellence (ASE) Education Foundation- Painting and Refinishing


## Articulated Credit:

- Community College of Baltimore County (CCBC) - 10 Credits
- Universal Technical Institute (UTI) - Up to 4 courses - Test Out
- Pennsylvania College of Technology (Williamsport, PA) - 16 Credits

Total Dollars Saved through Articulated Credit dependent on College $\$ 933.00$ to $\$ 3250.00$

## Program Overview:

The Automotive Technology MLR Plus CTE Program of Study (POS) is an instructional program that incorporates the Automotive Service Excellence (ASE) Education Foundation program accreditation standards and task lists. The program prepares students for further education and careers in the Transportation Equipment Pathway and Automotive Technology. Students work in teams to analyze and solve challenging simulated and realworld repair problems utilizing late model vehicles and state-of-the-art diagnostic tools and equipment. Under the supervision of ASE certified automotive instructors, students troubleshoot, solve and repair complex problems as members of teams and individually.

## Occupational Careers and Postsecondary Options:

Secondary: Automobile Service Tech, Automobile Master Mechanic, Automobile Specialty Technician, Electronic Equipment Installer \& Repairer

Postsecondary (2 year): Automobile Lead Technicians, Automobile Team Leaders, Automobile Service Advisors, Diagnosticians

Postsecondary (4 year): Field Representative, Technical Hotline Assistant, Aftermarket Sales Manager, Fleet Equipment Manager, Test Engineering Technician, Service Training Instructor, Insurance Claims Repre-

## Program Certification:

- Automotive Service Excellence (ASE) Education Foundation - Suspension \& Steering
- ASE Education Foundation - Brakes
- ASE Education Foundation - Electrical/Electronics Components
- National Automotive Technicians Education Foundation (NATEF) - Engine Performance


## Articulated Credit:

- University NW Ohio (UOH) - 12 Credits
- Allegany College of Maryland (ACM) - 12 Credits
- Pennsylvania College of Technology (Williamsport, PA) - 16 Credits
- Community College of Baltimore County (CCBC) - 18 Credits

Total Dollars Saved through Articulated Credits dependent on College
\$1230.00 to \$3250.00

## Program Overview:

The Project Lead The Way Biomedical Sciences Program is a CTE Completer Program that is based on the National Standards for Science, Mathematics, and English Language Arts, and the Accountability Criteria for National Health Care Cluster Foundation Standards. The program consists of a sequence of four courses: Principles of Biomedical Sciences, Human Body Systems, Medical Interventions, and Biomedical Innovation. The goal of the program is to increase the number of students pursuing careers in the biomedical sciences, including healthcare. Students who complete the program are prepared for employment and further education at two- and four- year college levels. This completer program is available at all three comprehensive high schools.

## Occupational Careers and Postsecondary Options:

Secondary: Medical Technician, Nursing Assistant.
Postsecondary (2 year): Nurse Dental Hygienist, Dental Assistant, Medical Lab Technician, Phlebotomy Technician, Pharmacy Technician, Physical Therapy Technician, Respiratory Therapist, Radiology Technician, Sonographers, Veterinarian Assistant

Postsecondary (4 year): Doctor, Dentist, Veterinarian, Pharmacist, Research Scientist, Biomedical Engineer, Dietician, Paramedic, Health Information Manager, Radiologist, Medic, Physician Assistant, Medical Assistant, Biotechnology/Biomanufacturing Lab Technician

## Program Certification:

- PLTW National Recognized Exams


## Articulated Credit:

- Allegany College of Maryland (ACM) - Pending Approval 2 Credits for Medical Laboratory Techniques
- Stevenson University (Baltimore, MD) - 4 Credits or 3 Credits Dependent on Degree


## Total Dollars Saved through Articulated Credits dependent on College $\$ 1800.00$ to $\$ 2400.00$



## Program Overview：

Construction Maintenance－HVAC（NCCER）is a CTE completer program designed to provide students with entry level skills and in－ struction in the basic principles of refrigeration，air conditioning，heat－ ing，and plumbing．HVAC provides students with an opportunity to learn about the industry as it relates to residential and commercial building．Participants master a variety of HVAC skills．Students ap－ ply their knowledge and skills by participating in the＂student－built＂ house project．The course of study descriptions correlate to the mod－ ules of the NCCER national standards．

## Occupational Careers and Postsecondary Options：

Secondary：Plumber，Industrial Maintenance Technician，Build－ ing Management，Construction Management，Sheet Metal Worker

Postsecondary（2 year）：Commercial HVAC，Residential HVAC

## Program Certification：

－OSHA 10 Certification
－NCCER Certifications

## Apprenticeship Credit：

－Opportunity to earn first－year apprenticeship credit in the Local \＃489 Plumbers and Steamfitters Union


## Program Overview:

Construction Trades-Carpentry (NCCER) is a CTE completer program which provides students with classroom, shop and on-the-job experience working with tools and materials. Instructional units include layout, fabrication, assembly, installation, and the repair of structural units, as well as Introduction to basic Masonry skills. Instruction will also include exposure to operating equipment of the trade. Students learn blueprint reading, layout techniques, construction techniques, use of building materials, hand and power tool safety, and trim/finish work. Advanced students are encouraged to develop independent skills in form construction and work with commercial specifications. Students are taken to a job site where they receive the ultimate "hands-on" experience as they construct an entire house. The second year of the program qualifies for honors credit. Seniors who have successfully completed all academic requirements except English 4 may earn a certificate in one year by attending CCTE under the senior option. Successful students are guaranteed an interview with Local \#423 United Brotherhood of Carpenters and Joiners of America. If successful, credit towards an apprenticeship program is given. The course of study descriptions correlate to the modules of the NCCER national standards.

## Occupational Careers and Postsecondary Options:

Secondary: Carpenter, Building Management, Construction Management

Postsecondary (2 year): Residential Remodeling and Design, Sustainable Construction

## Program Certification:

- OSHA 10 Certification
- Scaffold User/Erector Certification, Fall Protection Certification
- First Aid/CPR
- NCCER Certifications


## Apprenticeship Credit:

- Opportunity to earn first-year apprenticeship credit in the United Brotherhood of Carpenters and Joiners of America Union \#423



## Program Overview:

CCTE offers the Criminal Justice/Law Enforcement career strand from the Homeland Security and Emergency Preparation (HS/EP). The (HS/EP) Program is a Career and Technology Education instructional program which integrates government, academia, and private sector training/ educational initiatives to help students understand how the United States and its interests worldwide are protected against threats to public safety, both natural and manmade, through effective communication, preparedness, detection, prevention, response and recovery.

## Occupational Careers and Postsecondary Options:

Secondary: Forensic Science Technician, Explosive Ordinance/ Bomb Squad Member, Physical Scientist, Research Chemist, Epidemiologist

Postsecondary (2 year): Local, State and Federal Law Enforcement Officers, Probation and Parole Officers, Customs and Immigration Inspectors, Fish and Game Wardens, Park Rangers, and Correctional Officers

Postsecondary (4 year): Police Officers, Intelligence Analysts, FBI Investigative Assistance, Fire Fighters, Paramedics, Intelligence Officers, Security Officers, Port Security personnel, Transportation Security Administration Officers, Correctional Officers, Private Detectives and Investiga-

## Program Certification:

- CPR/First Aid \& Hunter's Safety


## Articulated Credit:

- Frederick Community College - 3 Credits
- Allegany College of Maryland (ACM) - 3 Credits (Additional Credit Opportunity, Early College Students - 9 credits)
- Potomac State College (Keyser, WV) - 3 Credits
- Anne Arundel Community College (AACC) - 3 Credits
- Harford Community College (HCC) - 3 Credits
- University of Maryland University College (UMUC) - 3 Credits

Total Dollars Saved through Articulated Credits dependent on College
\$321.00 to \$1450.00


## Program Overview:

Engineering Technology Project Lead The Way (PLTW) is a CTE instructional program that incorporates the national standards of The National Council of Teachers of Mathematics, the National Science Standards and the International Technology Education Association. The program prepares students for further education and careers in engineering and engineering technology. Students wishing to be program completers for the PLTW Engineering Program must complete 5 courses as indicated on page 41.

## Occupational Careers and Postsecondary Options:

Secondary: Engineering Technician or Engineering Technician Assistant

Postsecondary (2 year): Engineering Technicians, Project Estimators, Maintenance Support and Computer-aided Design Operators, Industrial maintenance Technicians, Field Service or Sales Technicians, Laboratory Instrument Technicians and Engineering Assistants

Postsecondary (4 year): Computer Systems Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering, Architecture Engineering, Civil Engineering, Biomedical Engineering

## Program Certification:

- PLTW National Recognized Exams - POE, IED, DE, CIM, EDD


## Articulated Credit:

- University of Maryland Eastern Shore - 6 Credits
- Fairmont State University (Fairmont, WV) - 6 Credits
- University of Maryland Baltimore County (UMBC) - 3 Credits

Total Dollars Saved through Articulated Credits dependent on College
$\$ 1240.00$ to $\$ 1550.00$

## Program Overview:

The Graphic Communication (PrintED) Program is designed to give students an overall understanding of the graphics communication industry and its major operations while teaching competencies that lead to national PrintED certification. PrintED, administered by the Graphic Arts Education and Research Foundation (GAERF), is a national accreditation program based on industry standards for graphic communications courses of study at the secondary and postsecondary levels. In Maryland, PrintED is supported by the Printing and Graphics Association MidAtlantic (PGAMA), an industry organization that assists with professional development, curriculum, work based learning and the Skills USA contest.

## Occupational Careers and Postsecondary Options:

Secondary: Graphic Designer, Print and Digital Production Supervisor, Press Operator, Customer Service Representative, Estimator, Salesperson, Electronic Prepress Manager, Desktop Publishing Specialist, Digital Photo Technician
Postsecondary (2 year): Graphic Designer, Computer Publisher
Postsecondary (4 year): Printing Manager

## Program Certification:

- PrintED - Introduction to Graphic Communications
- PrintED - Digital File Preparation
- PrintED - Offset Press Operation
- PrintED - Binding and Finishing
- PrintED - Digital Production Printing
- PrintED - Advanced Graphic Communications


## Articulated Credit:

- Allegany College of Maryland (ACM) - 6 Credits
- Bridgemont Community and Technical College School (Montgomery, WV) - 16 Credits
Total Dollars Saved through Articulated Credits dependent on College \$321.00 to \$2972.00


## Program Overview:

The Interactive Media Production program is a program within the Arts, Media, and Communication Career Cluster. As such, it includes a strong foundation in arts and communication with particular emphasis on design, graphic and media communications, interactive technologies, and project development. Students complete two foundation courses: Principles of Arts, Media and Communication and Interactive Media Production. The Advanced Interactive Media Production course s a two-credit completer course. Interactive Media Production is aligned to National Workforce Center for Emerging Technologies (NWCET) standards and college-level media programs. Students will work in teams to plan and design projects. Student will gain experience in Internet technology and website development, computer graphics, digital media production and project management. Students produce three-dimensional models, two-dimensional animations, layered images, streaming media and web pages for portfolios.

## Occupational Careers and Postsecondary Options:

Secondary: Graphic Designer, Illustrator, Animator, Layout Artist, Packaging Designer, Web Designer, Webmaster, Interactive Media Designer Game Designer, Program Analyst, Technical Writer

Postsecondary (2 year): Graphic Designer, Illustrator, Layout Artist, Packaging Designer, Web Designer

Postsecondary (4 year): Webmaster, Interactive Media Designer, Game designer, Program Analyst

## Program Certification:

- Adobe - Adobe Creative Suites Certification
- World of Web (WOW) - Web Design Certification


## Articulated Credit:

- Allegany College of Maryland (ACM) - 6 Credits
- Community College of Baltimore County (CCBC) - 3 Credits
- University of Baltimore-6 Credits

Total Dollars Saved through Articulated Credits dependent on College \$321.00 to \$3752.00


## Program Overview:

Manufacturing Engineering Technology is a CTE Completer Program in which students are taught to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. Includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

## Occupational Careers and Postsecondary Options:

Secondary: Draftsman
Postsecondary (4 year): Manufacturing Engineering Technologist, Manufacturing Management, Manufacturing Process Engineering Technologist, Line Supervisor, Research and Development Technologist, Industrial/Technical Representative, Industrial/Technical Sales, Production Technologist.

## Program Certification:

- None at this time



OCCUPATIONAL COMPLETER PROGRAMS SUMMARY

| Completer | Courses Required for Completion \& Suggested Electives | Articulation | Major | Crs. College |
| :---: | :---: | :---: | :---: | :---: |
| Academy of Health Professions (CCTE) | Foundations of Medicine \& Health Structure \& Function of the Human Body Honors Medical Specialty-Certified Nursing Assistant <br> Honors Clinical Internship <br> Medical Terminology <br> Honors Medial Terminology <br> Honors Occupational Skills Pharmacy Technician \& CCMA | ACM <br> CCBC <br> Stevenson <br> University | Medical Administrative Assistant (AAS and Certificate) <br> Medical Assistant (AAS) <br> Students earn guaranteed admission under specified conditions to Nursing (RN/ LPN) <br> School of Health Professions <br> Nursing (B.A.) <br> Med Tech (B.S) | 3 Medical Admin Asst 100 <br> 3 Medical Admin Asst 132 <br> 3 Medical Assistant 101 <br> 3 Medical Admin Asst 111 <br> 3 Credits <br> 6 Credits <br> 3 Credits |
| Auto Collision Repair (CCTE) | Non-Structural Analysis \& Damage Repair Honors Painting \& Refinishing <br> Auto Collision Repair I | CCBC <br> UTI <br> Penn Tech | Auto Body/Collision \& Repair <br> Auto Body/Collision \& Repair <br> Collision Repair Technology | 5 AUCR 101 <br> 5 AUCR 103 <br> Up to 4 courses, test out option to earn credit <br> 16 Credits |
| Automotive <br> Technology MLR <br> (CCTE) | Electrical/Electronic Systems \& HVAC Honors Suspension \& Steering \& Brakes Honors MLR Powertrain \& Engine Repair/ Performance <br> Intro to Automobiles | ACM <br> CCBC <br> Penn Tech <br> UTI <br> University of NW Ohio | Automotive Technology (AAS and Certificate) <br> Auto Technology <br> Auto Technology <br> Auto Body/Collision \& Repair <br> Auto Technology | 4 Automotive Tech 103 <br> 2 Automotive Tech 105 <br> 2 Automotive Tech 114 <br> 4 Automotive Tech 215 <br> 4 Auto 126 Brake System <br> 5 Auto 131 Electronic System <br> 5 Auto 141 Engine System <br> 4 Auto 171 Susp. System <br> 3 Brake Systems 112 <br> 3 Steering \& Suspension 113 <br> 2 Fuel \& Emission Control 121 <br> 4 Eng. Electrical System 126 <br> 3 Electrical Fundamentals 109 <br> Up to 4 courses, test out option to earn credit <br> 12 Credits |
| Biomedical <br> Sciences <br> (PLTW) <br> (Comprehensive <br> High Schools) | Honors Principles of Biomedical Sciences Honors Human Body Systems Honors Medical Interventions Honors Biomedical Innovation | Stevenson University | Biology <br> Biotechnology <br> Nursing (BA) <br> Medical Technology (BS) | (4)Bio 113 <br> (4) General Biology I: Cell Biology and Genetics |
| Careers in Cosmetology (CCTE) | Principles and Practices of Cosmetology Advanced Cosmetology: Theory and Application Mastery of Cosmetology | None | Students must take the State Board Examination to earn the completer certificate. |  |
| Construction <br> Maintenance - <br> HVAC (CCTE) | Core HVAC NCCER <br> HVAC 1 <br> Honors HVAC 2 <br> Introduction to HVAC <br> Honors Occupational Skills in HVAC | Plumbers \& Steamfitters Union \#489 |  |  |
| Construction <br> Maintenance - <br> Welding <br> NCCER <br> (CCTE) | Core Welding NCCER <br> Intro to Welding 1 NCCER <br> Honors Welding 2 NCCER <br> Particular Topics in Welding <br> Honors Advanced Topics in Welding | Plumbers \& Steamfitters Union \#489 <br> Ironworkers <br> Union Local \#568 |  |  |


| Completer | Courses Required for Completion \& Suggested Electives | Articulation | Major | Crs. College |
| :---: | :---: | :---: | :---: | :---: |
| Construction <br> Trades-Carpentry <br> (NCCER CCTE) | Intro to Construction-Carpentry <br> Foundations in Carpentry <br> Honors Advanced Topics in Carpentry <br> Honors Carpentry Capstone | United <br> Brotherhood of Carpenters \& Joiners Union \#423 |  | $1^{\text {st }}$ Year Apprenticeship Credit |
| Construction Trades <br> - Electrical <br> (CCTE) | Intro to Construction-Electrical <br> Foundations in Electrical <br> Honors Advanced Topics in Electricity <br> Honors Electrical Capstone <br> Honors Industrial Electricity <br> Union Curricula | Electrical <br> Workers IBEW <br> Local Union <br> \#307 |  | $1^{\text {st }}$ Year Apprenticeship Credit |
| Criminal Justice/ Law Enforcement (CCTE) | Foundations of Homeland Security <br> \& Emergency Preparedness <br> Administration of Justice <br> Honors Public Safety <br> Honors Administration of Justice II <br> Honors Internship, OR <br> Honors Capstone Experience <br> Occupational Skills-Law Enforcement | ACM <br> Potomac State College <br> University of MD University College (UMUC) <br> Frederick Comm. College | Criminal Justice <br> Criminal Justice <br> 1 yr. Criminal Justice Certificate <br> Emergency Management | 3 Criminal Justice 101 <br> 3 Criminal Justice 102 DE* <br> 3 Criminal Justice 103 DE <br> 3 Criminal Justice 104 DE <br> 3 Criminal Justice 101 <br> 3 Criminal Justice 101 <br> 3 Disaster, Crisis, and Emergency Management. 225 |
| Culinary Arts (ACF) (CCTE) | Culinary Basics-Foundations of Professional Cooking Honors Professional Cooking <br> Food Service Honors Professional Internship in Cooking Honors Principles of Restaurant | ACM <br> Stratford University | Culinary Arts <br> Hospitality Management <br> AAS Culinary Arts or BA Degree in Culinary Management | 3 Culinary Arts 150 <br> 3 Culinary Arts 212 <br> 3 Hospitality Management 101 <br> 1 Hospitality Management 110 <br> 3 Hospitality Management 101 <br> 1 Hospitality Management 110 <br> 3 Hospitality Management 160 <br> 18 Credits (Pending Acquisition of Program Certification) |
| Engineering Technology (PLTW) (CCTE) | Honors Intro to Engineering Design <br> Honors Principles of Engineering <br> Honors Digital Electronics <br> Honors Computer Integrated Manuf. <br> Honors Engineering Design \& Development | Fairmont State University (A.A.S., B.S. \& B.A.) <br> UMBC <br> UMES | Mech. Engr. Tech (A.A.S.) \& Engineering (B.S.) <br> Technology Education (B.A.) <br> Engineering (B.S.) <br> Tech Ed (B.A) | 3 DRFT 1100 <br> 3 DRFT 2200 <br> 3 TECH 1104 <br> 3 DRFT 2200 <br> 3 Credits <br> 6 Credits |
| Graphic <br> Communications <br> (PrintED) (CCTE) | Introduction to Graphic Communications Honors Advanced Graphic Communications <br> Honors Advanced Occupational Skills | ACM <br> Bridgemont Community \& Technical College | Multimedia Technology (AAS, Certificate) <br> Digital Design \& Print Communications | 3 Multimedia Tech 207 <br> 3 Multimedia Tech 217 <br> 14 Credits |
| Interactive <br> Media <br> Production (CCTE) | Principles of Arts, Media <br> \& Communication <br> Interactive Media \& Design Level 1 <br> Honors Interactive Media \& Design Level 2 <br> Honors Interactive Media Portfolio Cap- <br> stone <br> Broadcast Technology <br> Honors Broadcasting Technology | ACM | Multimedia Technology (AA) | 3 Multimedia Tech 102 <br> 3 Multimedia Tech 106 |

OCCUPATIONAL COMPLETER PROGRAMS SUMMARY

| Completer |  <br> Suggested Electives | Articulation | Major <br> IT and <br> Networking <br> Academy <br> (CCTE)IT Essentials (A+ Certification)-P-TECH <br> Cybersecurity Essentials-P-TECH <br> Honors CCNA 1 Intro to Networks <br> Honors CCNA 2 Routing \& Switching | ACM |
| :--- | :--- | :--- | :--- | :--- |

Post-Secondary Education Institutions frequently change programs and/or program requirements. All articulated agreements are subject to modification and/or change at any time.

For the most current agreements always check with your school guidance counselor or the articulating institution.
Articulated credits will appear on the college transcript as "Credit by Articulation" and will not, therefore, figure into the college GPA***

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## Section IV

## Course Descriptions

## Agricultural Science

## 811 Introduction to Agriculture and

 Natural Resources(FALL SEMESTER)
1/2 Credit
Introduction to Agriculture and Natural Resources (9-12) is an elective semester course that introduces students to the science of agriculture, plants, animals, and natural resources. Practical hands-on experiences and student collaboration are emphasized in this course. Students will be provided with opportunities for leadership development, personal growth, and career awareness.

## 812 Wildlife and Forest Management (SPRING SEMESTER) 1/2 Credit

Wildlife and Forest Management (9-12) is an elective semester course that introduces students to the biology and relationships among species of wild animals and relationships between forests and other natural resources. Students will learn to identify different wildlife species and types and species of trees. Discussions will also include hunting and fishing. Practical hands-on experiences and student collaboration are emphasized in this course. Students will be provided with opportunities for leadership development, personal growth, and career awareness.


## 511 Art I

1 Credit
Art I (9-12) is an elective course designed to provide an initial high school art experience. Students will become aware of natural and man-made art forms in their environment as well as explore cultural and historical artistic heritage. Students will learn to use the elements and principles of design by incorporating various tools and techniques in the production of works. Skills developed in Art I can enrich leisure time or lead to advanced study.

## 512 Art II

1 Credit
Prerequisite: Art I (511)
Art II (10-12) is an elective course which continues to develop students' awareness of art heritage as it reflects, records and plays a role in every culture. Activities will cover a wide range of media in an effort to develop individual artistic technique, self-image and appreciation of other expressions of art.


513 Honors Art III
1 Credit
Prerequisites: Art I and II $(511,512)$
Honors Art III (11-12) is an elective course in which emphasis is placed on identifying the elements and principles of design in the environment and in student artistic efforts. Students will identify cultural and historical influences of art heritage and its relationship to personal creativity. Students will be presented with an in depth study of numerous media and techniques to enable them to effectively translate their ideas, feelings and emotions to create their own personal artistic style.

514 Honors Art IV
1 Credit
Prerequisites: Art I, II, III (511, 512, 513)
Honors Art IV (12) is an elective course which encourages students to explore individual interests and ideas in a studio atmosphere. Through a variety of media, students will develop the potential to interpret and utilize aesthetic aspects in works of art. Emphasis will be placed upon analysis of the elements and principles of design. This course will synthesize artistic knowledge, production skills, and criticism to develop a high level of artistic understanding.

## Biomedical Sciences (PLTW)

## Biomedical Sciences

Biomedical Sciences (PLTW) (9-12) is a CCTE Complete Program that has a sequence of four courses, all aligned with natural learning standards which follows a proven hands-on, real-world, problem-solving approach to learning. Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology and public health. Through activities like dissecting a heart, students examine the processes, structures, and interactions of the human body-often playing the role of biomedical professionals. They also explore the prevention, diagnosis, and treatment of disease, working collaboratively to investigate and design innovative solutions to the health challenges of the 21st century such as fighting cancer with nanotechnology. All four years of the program are taught in the comprehensive high schools (Allegany, Fort Hill, and Mountain Ridge).

## 805 Honors* Principles of Biomedical Sciences <br> 1 Credit

Honors Principles of Biomedical Sciences (9-10) is a required course for students in the Biomedical Sciences occupational completer program. Students will study several health situations such as analyzing the evidence found at a crime scene and helping the medical examiner uncover clues left on a body to solve a mystery; questioning, diagnosing, and proposing treatment and care for patients in a family medical practice; tracking down the source of a mysterious outbreak at a local hospital; accessing and stabilizing a patient during an emergency and preparing for medical surge and mobile medical care; and collaborating with professionals in other fields to innovate and design solutions to local and global medical problems. Whether seeking a career in medicine or healthcare or simply looking to for the challenge of real-world problems, students in Principles of Biomedical Science will practice how to think creatively and critically to innovate in science and will gain practical experience with experimental design and the design process. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses.
*Honors designation applies only to the 9th grade class of 2017-2018 and beyond.

## 806 Honors* Human Body Systems

## 1 Credit

## Prerequisite: Honors Principles of Biomedical

 Sciences (805)Honors Human Body Systems (10-11) is a required course for students in the Biomedical Sciences occupational completer program. Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin,

# Biomedical Sciences (PLTW) 

807 Honors Medical Interventions

## 1 Credit <br> Prerequisite: Honors Principles of Biomedical Sciences (805) and Honors Human Body Systems (806)

Medical Interventions (11-12) is a required course for students in the Biomedical Sciences occupational completer program. Students investigate a variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the life of a fictitious family. The course is a "How-To" manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

## 808 Honors Biomedical Innovation

## 1 Credit

Prerequisite: Honors Principles of Biomedical Sciences (805), Honors Human Body Systems (806), and Honors Medical Interventions (807)

Biomedical Innovations (12) is a required course for students in the Biomedical Sciences occupational completer program. Students design innovative solutions for the health challenges of the 21st century. They work through progressively challenging, open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project with a mentor or advisor from a university, hospital, research institution, or the biomedical industry. Throughout the course, students are expected to present their work to an audience of STEM professionals.

## Business Education

## 821 Document Processing I 1/2 Credit

Document Processing I (10-12) is an elective semester course designed to develop competencies in touch keyboard techniques essential for the efficient use of microcomputers and other keyboard devices. Students will apply their touch keyboarding skill to basic word processing documents using Microsoft Word software. This course focuses on formatting and editing basic correspondence and reports and serves as a foundation for more advanced word processing and other software applications.

## 822 Document Processing II 1/2 Credit

 Prerequisite: Document Processing I (821)Document Processing II (10-12) is an elective semester course designed to develop competencies in advanced word processing and other computer software applications. Students have the opportunity to apply knowledge and skills through projects and simulation sets.

## 833 Business Communications <br> 1 Credit (CCTE)

Business Communications (11-12) is an elective course of written and oral communication which provides students with reading, listening, speaking, and writing practice they will need to succeed in any business situation. Students will learn how to apply communication skills and talent toward seeking employment and will participate in school leadership experiences that enhance their ability to interact with others.

For other business courses, please see the Entrepreneurial Section on page 57.

# Career and Technology Education (CCTE) Academy of Health Professions 

## Academy of Health Professions

The Academy of Health Professions (AHP) Program uses project and problem-based learning, clinical and internship experiences, and classroom and lab instruction to prepare the next generation of health professionals for the workforce and for further study at the post-secondary level. There are opportunities for students to apply what they are learning to real-life healthcare situations in the Medical Specialty course. Students pursuing this option will also participate in a supervised Clinical Experience course and will earn state and/or nationally recognized certifications. NOTE: Students entering the Academy of Health Professions Program must understand that, due to the patient interaction required of our students in this program at local healthcare facilities, it is mandatory for students to have the seasonal influenza vaccine and the 2-step PPD testing completed prior to program entrance.

## Level I

## 926A Medical Terminology 1 Credit

Medical Terminology (11) teaches students how to identify medical terms by analyzing their components. This course emphasizes defining medical prefixes, root words, suffixes, and abbreviations. The primary focus is on developing both oral and written skills in the language used to communicate within healthcare professions.

## 926B Foundations of Medicine \& Health Science <br> 1 Credit

Foundations of Medicine \& Health Science (11) is a required course for the Academy of Health Professions Completer Program. This course is designed to provide students with an overview of the therapeutic, diagnostic, environmental, and information systems of the healthcare industry. Students will begin to prepare for a medical or health science career by developing a broad understanding of the cluster and pathways in the Health and Biosciences Cluster. Students will learn about ethical and legal responsibilities, as well as the history and economics of healthcare. Students will engage in activities, projects, and problems that highlight various health careers, introduce basic health care system, and begin to explore human body systems.

## 926C Structure \& Function of the Human Body <br> 1 Credit

Structure \& Function of the Human Body (11) is a required course for the Academy of Health Professions Completer Program. Students in this course study the structure and functions of the human body, including cellular biology and histology. Systematic study involves homeostatic mechanisms of the integumentary, skeletal, muscular, circulatory, nervous systems and special senses. Students will conduct laboratory investigations and fieldwork, use scientific methods during investigations to solve problems, and make informed decisions.

## Level II <br> 927A Honors Medical Specialty - Certified Nursing Assistant <br> 1 Credit

Honors Medical Specialty-Certified Nursing Assistant (12) is a required course for the Academy of Health Professions Completer Program. Students are prepared for actual experience in the clinical setting with a focus on the specific knowledge, skills, and abilities that relate to the specialized course. Clinical internships, if required in the specialty area, will align with requirements set forth by the governing boards. Students in a specialized course will take the appropriate credentialing and/or end-of-course exam at the completion of the course.

## 927B Honors Clinical Internship 1 Credit

 Honors Clinical Internship (12) is a required course for the Academy of Health Professions Completer Program. The Clinical Internship is designed to give students supervised practical application of previously studied theory.
## 927C Honors Medical Terminology <br> 1 Credit

Honors Medical Terminology (12) is based upon the belief that success in any healthcare career is based on a solid understanding of medical terminology. In this course, students will develop fluency in the highly specialized language of health. The primary focus will be learning medical language relating to the body systems, symptoms of conditions, diseases, tests, surgical procedures, and analysis of medical reports. This knowledge will better prepare students to provide treatment in the most efficient manner for the patient's benefit.

## 927D Honors Occupational Skills <br> Pharmacy Technician \& CCMA 1 Credit

 Honors Occupational Skills Pharmacy Technician \& CCMA (12) is an elective course which prepares students enrolled in the Academy of Health Professions Program to be eligible to earn two additional certifications in the medical field. Students will participate in classroom and lab-based experiences that prepare them for employment as Pharmacy Technicians and/or Certified Clinical Medical Assistants.
## Career and Technology Education (CCTE) Apprenticeship Maryland Program (AMP)

## Apprenticeship Maryland Program (AMP)

The Apprentice Maryland Program (AMP) is a CTE program that gives high school juniors and seniors the opportunity to "earn and learn" while gaining valuable experience as a youth apprentice. The program is designed to lead to sustainable employment and further education based on high-demand career pathways. Students hired by approved employers will be mentored by the ACPS Youth Apprenticeship Coordinator. Participating students must complete a minimum of 450 hours of paid work-based learning under the supervision of an eligible employer. In addition, students will be enrolled in an apprenticeship related instruction course. To be eligible for the program, students must be 16 years or older, have reliable transportation, be on track to graduate, have good attendance, and have two academic references.

## 990A Apprenticeship Related Instruction <br> 1 Credit

Apprenticeship Related Instruction (11-12) is required to complete one year of related classroom instruction. This course will introduce the student to the information needed to be successful and perform the duties necessary for the job. The school system's Youth Apprenticeship Coordinator (YAC) and designees are responsible for ensuring that this is reflected on the student's schedule and that credit is earned towards high school graduation. In addition, the related classroom instruction must assist the student in meeting the goals outlined in the student's training plan. The YAC must collaborate with the classroom instructors and eligible employer to coordinate the design of a realistic training plan that meets the needs of the eligible employer and the capacity of the classroom instructor and school district.

## 991A Apprenticeship Work-Based Learning Experience 1 <br> 1 Credit

Apprenticeship Work-Based Learning Experience 1 (11 -12 ) is the first part of a work-based learning experience which takes place at a work-site and must be a paid experience (at least minimum wage). All three parts of WBL experience must cumulate to a minimum of 450 hours. This experience is directed by the WBL agreement provided by the school system and a student work plan developed among the student, Youth Apprenticeship Coordinator, and eligible employer.

## 991B Apprenticeship Work-Based <br> Learning Experience 2

1 Credit
Apprenticeship Work-Based Learning Experience 2 (12) is the second part of a work-based learning experience which takes place at a work-site and must be a paid experience (at least minimum wage). All three parts of WBL experience must cumulate to a minimum of 450 hours. This experience is directed by the WBL agreement provided by the school system and a student work plan developed among the student, Youth Apprenticeship Coordinator, and eligible employer.

## 991C Apprenticeship Work-Based Learning Experience 3

 1 CreditApprenticeship Work-Based Learning Experience 3 (12) is the third part of a work-based learning experience which takes place at a work-site and must be a paid experience (at least minimum wage). All three parts of WBL experience must cumulate to a minimum of 450 hours. This experience is directed by the WBL agreement provided by the school system and a student work plan developed among the student, Youth Apprenticeship Coordinator, and eligible employer.

## Career and Technology Education (CCTE) Auto Collision Repair

## Auto Collision Repair

This program is a CTE pathway program. It combines technical, academic, and workplace skills in an integrated curriculum in accordance with The InterIndustry Conference on Auto Collision Repair (I-CAR ) curriculum programs, and Automotive Service Excellence (ASE) guidance and directives. The major technical skill knowledge, skills, and abilities for each course offering are outlined below. The Collision Repair and Refinishing Program incorporates the applied academic and workplace skills for each of the required collision repair, refinishing, and painting areas utilizing the I-CAR Live Curriculum . The I-CAR curriculum prepares students for careers and/or further education in collision repair and refinishing within the Transportation Technology Cluster.

## Level I

## 904A Non-Structural Analysis \& Damage Repair 2 Credits <br> Non-Structural Analysis \& Damage Repair (11) is a

 required course for the Auto Collision Repair Completer Program. This course provides the student with the knowledge and skills necessary to pass the written NA3SA Collision Repair and Refinishing End-of Program Exam for Non-Structural Analysis \& Damage Repair (B3) and immediately enter a career in this area and/or attend postsecondary education and/or training. Students develop diagnostic, technical, and academic skills through classroom instruction and hands-on non-structural analysis and damage repair applications. Through theory and real-world experiences, students master the concepts and the ability to identify and perform necessary Non-Structural Analysis and Damage Repair tasks utilizing the latest techniques and applications. The I-CAR Live Curriculum is utilized to demonstrate mastery for this area to formulate accurate estimates of cost of repairs.
## Level I (continues)

## 904B Auto Collision Repair I

## 1 Credit

Auto Collision Repair I (11) is a required course that will address an introduction to automotive welding; personal and environmental safety practices associated with clothing; respiratory protection and eye protection; entry level automotive service technology principles and practices; hand tools; power tools/equipment; proper ventilation; the handling, storage, measuring and mixing procedures; raising and supporting vehicles; and damage report principles and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations.

## Level II

## 905A Honors Painting \& Refinishing

3 Credits
Honors Painting \& Refinishing (12) is a required course for the Auto Collision Repair Completer Program. This course provides the student with the knowledge and skills necessary to pass the written ASF Painting and Refinishing Exam for Paint and Refinishing and immediately enter a career in this area and/or attend postsecondary education and/or training. Utilizing the I-CAR Live Curriculum, students develop diagnostic, technical, and academic skills through their participation in classroom instruction and hands-on applications in the areas of surface preparation, paint mixing, matching, application and paint equipment preparation, identification and correction of defects, final detailing, and the ability to identify and perform other necessary painting and refinishing tasks.

# Career and Technology Education (CCTE) Automotive Technology Maintenance \& Light Repair 


#### Abstract

Automotive Technology Maintenance \& Light Repair The Automotive Technology MLR Plus CTE Program of Study (POS) is an instructional program that incorporates the Automotive Service Excellence (ASE) Education Foundation program accreditation standards and task lists. The program prepares students for further education and careers in the Transportation Equipment Pathway and Automotive Technology. Students work in teams to analyze and solve challenging simulated and realworld repair problems utilizing late model vehicles and state-of-the-art diagnostic tools and equipment. Under the supervision of ASE certified automotive instructors, students troubleshoot, solve, and repair complex problems as members of teams and individually.


## Level I

902A Introduction to Automobiles 1 Credit Introduction to Automobiles (11) explores future careers in automotive technologies. It exposes students to the various mechanical systems in automobiles and provides basic experience in maintenance tasks. This is a recommended elective course for Level I students enrolled in the Automotive Technician Program.

## 902B Electrical/Electronic Systems \& HVAC 2 Credits

Electrical/Electronics \& HVAC (11) is a course designed to teach the principles of electricity and electronics and apply them at the ASE Education Foundation AST level. It builds on the measurement of electrical parameters such as voltage, current, resistance, power, magnetism, electromagnetism, and magnetic induction to connect with Physical Science courses. Students are taught the concept of Ohm's law in both application and mathematical theory. Detailed topics include the use of a digital multimeter (DMM) for the analysis of series, parallel, and series-parallel circuits. Specific automotive systems covered include batteries, charging and starting systems, lighting, gauges, accessories, electronics, automotive computers and solid-state devices, along with communication systems. Students are taught how to apply electrical/electronic principles to repair car and truck electrical systems using a diagnostic strategy.

## Level II <br> 903A Honors Suspension \& Steering, and Brakes <br> 2 Credits

Suspension \& Steering and Brakes (12) is a required course of the Automotive Technician Program designed to teach the principles of automotive suspension/steering systems and 4 -wheel suspension alignment. It builds on the concepts of geometry, gear reduction, hydraulics laws, and characteristics of liquids and how they apply to the operation and diagnosis of power steering and suspension systems. Steering column operation and diagnosis, including supplemental restraint system service, are included. The course covers the fundamentals of short/long-arm and strut suspensions, including: caster, camber, thrust angle, toe-in, steering axis inclination (SAI), including angle, toe-out on turns (turning angle/radius), and how they apply to steering, suspension, and 4-wheel alignment. Wheel balance terms are specifically explained, including static balance, dynamic balance, tramping, and radial force variation. Students learn strategybased diagnostic routines to help interpret and verify customer concerns and proper operation and to perform tests and inspections to determine the causes and make corrections related to suspension/steering/wheel systems and alignment. These areas include steering columns, power steering, wheels/tires, short/long-arm/strut suspensions, and 4wheel alignment. Through the inspection, testing, or measurement of component processes, students will apply this knowledge to determine needed repairs and correctly repair a vehicle.

## 903B Honors MLR Powertrain \& Engine <br> Repair Performance 1 Credit

Honors MLR Powertrain \& Engine Repair/Performance (12) is a required course for the Automotive Technician Program. This course is designed to teach the principles of automotive engine operation and ASE Education Foundation MLR level service. It builds on the essential laws of physics, thermodynamics, and chemical reactions and how these principles apply to the operation of engine systems. It also covers general engine design and operation, cylinder head/valve train, cylinder block, lubrication, and cooling systems. The student is taught to verify customer concerns and proper operation and to perform tests and inspection at the ASE Education Foundation MLR level based on the ASE Education Foundation MLR (A1) task list. Through the inspection, testing, or meas-urement-of-components process, the student is taught to apply this knowledge to determine needed repairs and repair vehicles.

## Career and Technology Education (CCTE) Careers in Cosmetology

## Careers in Cosmetology

The Careers in Cosmetology Program prepares individuals to care for and beautify hair, skin, and nails. Students are instructed in the art and science of cosmetology as well as all aspects of the industry. Hair services taught include giving shampoos, rinses, scalp treatments, styling, setting, cutting, hair coloring and lightening, permanent waving and chemical relaxing. Skin procedures include facials, make-up, and hair removal. Nail techniques include manicures, pedicures, artificial nail enhancements, advanced nail techniques, and foot/ leg and hand/arm massage. Emphasis is placed on hygiene, safety and sanitation as well as State Board of Cosmetologists' rules and regulations. Related areas of instruction include human anatomy and physiology; mathematics and measurement; analysis, diagnosis and histology of hair, skin and nails; chemistry; fundamentals of electricity; product knowledge; customer relations; and employability skills. Salon management is an integral part of the classroom and clinical experience. The 1,500 hour program includes classroom instruction, clinical experience, related mentored workbased learning experience and a senior capstone project. Upon successful completion and the instructor's recommendation the student will be required to take the Maryland State Board of Cosmetologists' Examination. Attendance is monitored throughout the program, and students not meeting the minimum requirements at the end of Level I will be dismissed from the program.

## Level I

## 906A Principles \& Practice of Cosmetology

## 4 Credits

Principles \& Practice of Cosmetology (11) is a required course for the Careers in Cosmetology Completer Program. This course provides an introduction to the field of cosmetology. Students develop and practice basic skills in cosmetology; develop a broad understanding of the variety of career options available to a licensed cosmetologist; and learn how science and math is a fundamental aspect of the practice of cosmetology.

## Level II

907A Honors Advanced Cosmetology: Theory \& Application 3 Credits
Honors Advanced Cosmetology (12) is a required course for the Careers in Cosmetology Completer Program. This course allows students to develop and practice more advanced techniques in the field of cosmetology. Students learn to demonstrate various facial treatments, perform various massage and manipulation techniques, perform make-up application, demonstrate hair press and thermal style, select, apply, and explain various hair coloring techniques, describe human body systems and how they relate to cosmetology, perform artificial nail techniques, and apply knowledge of anatomy, physiology, and chemistry and how it relates to the practice of cosmetology.

## 907B Honors Mastery of Cosmetology

3 Credits
Honors Mastery of Cosmetology (12) provides students the opportunity to further refine and apply skills that support all aspects of the cosmetology industry. It will assist in preparing students to obtain employment and advance in the field of cosmetology upon passing the State Board of Cosmetologists' licensing examination. In this course students will be eligible to participate in up to 300 hours of a supervised work-based learning experience in a salon setting upon completing 1,000 hours of the program. These workbased learning experiences must be organized around a training plan that is cooperatively developed by the school and employer to add value to and extend a student's career preparation. This instruction is planned, organized, and coordinated to assure that each component contributes to the student's education and employability. A workbased learning agreement is designed in cooperation with the employer and jointly monitored by the mentor and the teacher.

## Career and Technology Education (CCTE) Construction Maintenance - HVAC (NCCER)

## Construction Maintenance - HVAC (NCCER)

Construction Maintenance - HVAC (NCCER) is a CTE completer program designed to provide students with entry level skills and instruction in the basic principles of refrigeration, air conditioning, heating, and plumbing. HVAC provides students with an opportunity to learn about the industry as it relates to residential and commercial building. Participants master a variety of HVAC skills. Students apply their knowledge and skills by participating in the "student-built" house project. The course of study descriptions correlate to the modules of the NCCER national standards

## Level I

## 918A Core HVAC NCCER

## 1 Credit

Core HVAC NCCER (11) is a required course for the NCCER HVAC Completer Program. The NCCER Core Curriculum is taught within this course and is the basis for all construction skills. The course of study descriptions correlate to the modules of the NCCER national standards and related work-based learning opportunities. The modules are designed to be completed in approximately 80 hours of instruction and allow for an estimated 20 hours of related "hand-on" applications/work-based learning opportunities to reinforce and extend the learning.

## 918B HVAC 1 <br> 1 Credit

HVAC 1 (11) is a required course for the NCCER HVAC Completer Program. During this course of study, students are provided an introduction into the world of becoming an HVAC technician and the basic operating procedures of HVAC systems. They learn basic electricity, heating fundamentals, basic install procedures, copper and plastic piping practices, as well as basic carbon steel piping practices.

## 918C Introduction to HVAC 1 Credit

Introduction to HVAC (11) is an elective course allowing students to gain knowledge of systems relating to heating and air conditioning. Students opting to take this course who are enrolled in the HVAC NCCER Program may expand their knowledge relating to their skill through the continuation of projects designed to support the NCCER Curriculum. Students opting to take this course as an elective offering will learn basic principles of HVAC systems, air filtration methods, climate control, and basic install procedures.

## Level II

919A Honors HVAC 2
2 Credits
Honors HVAC 2 (12) is a required course for the HVAC Completer Program. This course offers students specialized training in aspects or topics that are common to various climate control systems (heating, ventilation, air conditioning, and refrigeration systems). Students to the program will learn a variety of skills related to the industry to include skills relating to topics such as alternating currents, compressors, refrigerants and oils, leak detection, metering devices, heat pumps, basic maintenance, chimneys, vents and flues, sheet metal duct systems, fiberglass and fabric duct systems, commercial airside systems, air quality equipment operations, and an introduction to hydronic systems.

## 919B Honors Occupational Skills in HVAC 1 Credit

Honors Occupational Skills in HVAC (12) is an elective course supporting the skills learned in the HVAC Completer Program. Students enrolled in this course will expand their skills and knowledge relating to installation of HVAC systems and duct work design. This course will allow students to complete projects which support the house project and work toward mastering skills for competitive events in SkillsUSA.

## Career and Technology Education (CCTE) Construction Maintenance -Welding (NCCER)

## Construction Maintenance - Welding (NCCER)

Construction Maintenance - Welding (NCCER) is a CTE completer program which provides students with an opportunity to learn about the industry as it relates to welding. Participants master a variety of welding skills including oxyfuel cutting and welding including SMAW. The course of study descriptions correlate to the modules of the NCCER national standards. NCCER meets the American Welding Society (AWS) Entry Level Welder-Phase One and Phase Two requirements of the AWS QC-10 and AWS EG2.0-95 guidelines.

## Level I

922A Core Welding NCCER 1 Credit
Core Welding NCCER (11) is a required course for the NCCER Welding Completer Program. The NCCER Core Curriculum is taught within this course and is the basis for all construction skills. The course of study descriptions correlate to the modules of the NCCER national standards and related work-based learning opportunities. The modules are designed to be completed in approximately 80 hours of instruction and allows for an estimated 20 hours of related "hand-on" applications/work-based learning opportunities to reinforce and extend the learning.

## 922B Intro to Welding 1 NCCER 1 Credit

Intro to Welding 1 NCCER (11) is a required course for the NCCER Welding Completer Program. Students in the program will master a variety of skills through instructional and practical hours earned throughout the course. Those skills include the following: Welding Safety, Oxyfuel Cutting, Air Carbon Arc Cutting, Weld Quality, SMAW Equipment and Set-up, SMAW Groove welds, and SMAW Open root Groove Welds.

## 922C Particular Topics in Welding 1 Credit

Particular Topics in Welding (11) is an elective course for students who wish to practice and learn skills in Welding. This course is a recommended elective for all Level I students, and this is an open elective for students enrolled in other skill areas who wish to improve their skills in Welding.

## Level II

## 923A Honors Welding 2 NCCER 2 Credits

Honors Welding (12) is a required course for the NCCER Welding Completer Program. In this course, students master knowledge and skills in particular aspects of welding. Program standards are aligned to the requirements of the American Welding Society (AWS). At their discretion, instructors may include some additional NCCER Welding topics for students who are advanced and prepared to expand their skills in Welding. Completion of the instructional modules, paired with student demonstration of mastery of skills, meets AWS Entry Level Welder certification requirements.

## 923B Honors Advanced Topics in Welding 1 Credit

Honors Advanced Topics in Welding (12) is an elective course for advanced students who wish to master skills in Welding. This course is a recommended elective for all Level II students and is not open for students in other skill areas unless approved by the instructor.

## Career and Technology Education (CCTE) Construction Trades - Carpentry (NCCER)

Construction Trades-Carpentry (NCCER)
Construction Trades-Carpentry (NCCER) is a CTE completer program which provides students with classroom, shop, and on-the-job experience working with carpentry tools and materials. Instructional units include layout, fabrication, assembly, installation, and the repair of structural units, as well as introduction to basic masonry skills. Instruction will also include exposure to operating equipment of the trade. Students learn blueprint reading, layout techniques, construction techniques, use of building materials, hand and power tool safety, and trim/finish work. Advanced students are encouraged to develop independent skills in form construction and work with commercial specifications. Students are taken to a job site where they receive the ultimate "hands-on" experience as they construct an entire house. The course of study descriptions correlate to the modules of the NCCER national standards.

## Level I <br> 910A Foundations of Building and Construction Technology (NCCER CORE Carpentry) <br> 1 Credit

Foundations of Building and Construction Technology (11) is the basis for all construction skills and adheres to the modules of the NCCER national standards and related work-based learning opportunities. An introduction to hand tools, power tools, basic rigging, construction drawings, and construction math will be covered, as well as basic communication and employability skills. Hands-on experience in carpentry will allow students to gain a working knowledge of the construction industry.

## 910B Carpentry I (NCCER) 1 Credit

Carpentry I (11) is a required course for the NCCER Carpentry Completer program and includes demonstration of student mastery of the following topics: wood building materials, fasteners, and adhesives; hand and power tools; floor systems; wall and ceiling framing; roof framing; and windows and trim.

## 910C Particular Topics in Carpentry

1 Credit
Particular Topics in Carpentry (11) is an elective course that provides the opportunity for students to build fundamental carpentry skills necessary in the construction of a building that may include blue print reading and design, using basic building codes, foundation construction, wood building materials, fasteners and adhesives, hand and power tools, framing, leveling instruments and operations. Work-based learning is incorporated as students collaborate in the home building project.

## Level II

911A Honors Carpentry II 1 Credit Honors Carpentry II (12) is a required course for the NCCER Carpentry Completer program that includes demonstration of student mastery of the following topics: floor systems, ceiling joists and roof framing; basic stair layout; and practical applications of carpentry used in the carpentry industry.

911B Honors Carpentry Capstone 1 Credit Honors Carpentry Capstone (12) is a required course in the NCCER Carpentry CTE Completer sequence. This course enables the student to utilize skills taught throughout the duration of the program to complete a capstone project. The Capstone Project requirements are developed at the discretion of the course instructor and may include the house project, as well as the Mock Interview requirement of all Senior Program Completers.

## 911C Honors Advanced Topics in Carpentry

1 Credit
Honors Advanced Topics in Carpentry (12) is an elective course for the NCCER Carpentry Completer Program. This course provides opportunity for students to gain advanced carpentry skills necessary in the construction of a building, which includes instruction in advanced topic areas and hands-on experience to ensure that students can competently complete estimating materials, roofing, energy conservation, exterior and interior finishing, securing building permits and concrete work.

# Career and Technology Education (CCTE) Construction Trades - Electrical 

## Construction Trades-Electrical (NCCER)

The Construction Trades-Electrical (NCCER) is a CTE completer program which prepares the student to install, operate, maintain, and repair electrically energized systems in residential, commercial, and industrial settings. Students learn methods of wiring, how to read diagrams, schematics, and blueprints, electrical safety, electric motor control wiring, and residential wiring. Students are taken to a job site where they receive the ultimate "hands-on" experience as they construct an entire house. Advanced students learn how to produce schematics and complete curriculum in industrial motor control.

## Level I <br> 932A Foundations of Building and Con- struction Technology (NCCER Core Elec- trical) 1 Credit

Foundations of Building and Construction Technology (11) is the basis for all construction skills and adheres to the modules of the NCCER national standards and related work-based learning opportunities. An introduction to hand tools, power tools, basic rigging, construction drawings, and construction math will be covered, as well as basic communication and employability skills. Hands-on experience in carpentry will allow students to gain a working knowledge of the construction industry.

## 932B Electrical I (NCCER)

1 Credit
Electrical I (NCCER) (11) is a required course in the NCCER Electrical Completer Program that includes demonstration of student mastery of the following topics: orientation to the electrical trade, electrical safety, introduction to electrical circuits, electrical theory, introduction to the National Electrical Code, basic electrical construction drawings, electrical test equipment, conductors and cables, alternating current, and practical applications.

## 932C Electricity-General <br> 1 Credit

Electricity-General (11) is an elective course in the NCCER Electrical Completer Program that provides the opportunity for students to build fundamental electrical skills necessary in the construction of a building which may include interpreting and use of the national electrical code, calculating circuit capacity by reading, drawing, and analyzing electrical schematics, diagrams, and blueprints, and installing and maintaining light, power, audio, video, signal, and alarm circuits.

## Level II

933A Honors Electrical II 1 Credit
Honors Electrical II (12) is a required course for the NCCER Electrical Completer Program. This course provides opportunity for students to gain advanced electrical skills necessary in the construction of a building, which includes instruction in advanced topic areas and handson experience to ensure that students can competently complete the grounding and bonding of electrical systems, and the operation, installation, testing, maintenance, and repair of motors, generators, transformers, and associated circuitry.

933B Honors Industrial Electricity 1 Credit Honors Industrial Electricity (12) is an elective course for students enrolled in the Electrical Program. This course applies the knowledge and skills that students acquire to the electrical systems used in industry. Because of this emphasis, these courses may also cover the installation of transformers and control devices, emergency generator systems, and other industrial applications.

933C Honors Electrical Capstone 1 Credit Honors Electrical Capstone (12) is a required course in the NCCER Electrical CTE Completer sequence. This course enables the student to utilize skills taught throughout the duration of the program to complete a capstone project. The Capstone Project requirements are developed at the discretion of the course instructor and may include electrical wiring of the house project, as well as the Mock Interview requirement.

# Career and Technology Education (CCTE) Criminal Justice/Law Enforcement 

## Criminal Justice/Law Enforcement

The Criminal Justice/Law Enforcement Program is a Career and Technology Education instructional program which integrates government, academia, and private sector training/educational initiatives to help students understand how the United States and its interests worldwide are protected against threats to public safety, both natural and manmade, through effective communication, preparedness, detection, prevention, response and recovery. The program offers three career strands: Homeland Security Sciences, Criminal Justice/Law Enforcement, and Information/Communications Technology. These three strands align with the six mission areas of the United States Department of Homeland Security: Intelligence and Warning, Protection of Critical Infrastructure and Key Assets, Border and Transportation Security, Domestic Counterterrorism, Defense against Catastrophic Threats, and Emergency Preparedness and Response. NOTE: Students entering the Criminal Justice/Law Enforcement Program must understand that, due to the internship required of our students in this program at local law enforcement agencies, it is mandatory for students to have a background check prior to placement during the senior year.

## Level I <br> 912A Law Enforcement

1 Credit
Occupational Skills-Law Enforcement (11) covers specific practical skills related to the law enforcement field rather than providing general study of the skill. This is an elective course and is not a required part of the completer sequence.

## 912B Foundations of Homeland Security \& Emergency Preparedness 1 Credit

 Foundations of Homeland Security \& Emergency Preparedness (11) is a required course for the Criminal Justice/ Law Enforcement Completer Program. This course will introduce students to Homeland Security and Emergency Preparedness guidelines, concepts, and action plans. Emphasis will be placed on unique aspects of public safety and public health. The course will explore the various methodologies for intelligence gathering and dissemination and will introduce students to various local, state, and federal assets. Students will prepare an action plan that includes initial notification, emergency response (on and off scene), and recovery.
## 912C Administration of Justice 1 Credit

Administration of Justice (11) is a required course for the Criminal Justice/Law Enforcement Completer Program. This class will introduce students to multiple aspects of criminal justice and law enforcement. Students will explore the criminal process, various forces that impact law enforcement, and the rights of citizens. Students will understand the difference between juvenile and adult justice, and classifications of different crimes. This class will give students general knowledge needed for students to enter various law enforcement careers at the federal, state, and local levels.

## Level II

## 913A Honors Public Safety

1 Credit Honors Public Safety (12) is an elective course which introduces students to the field of public safety and extends their knowledge and skills pertaining to the safety and security of homes, workplaces, and the community. These courses cover such topics as policing, law enforcement, emergency service, private security and corrections and may cover all or a subset of these services.

## 913B Honors Administration of Justice II

1 Credit
Honors Administration of Justice II (12) is a required course for the Criminal Justice/Law Enforcement Completer Program. This class will continue to increase student's knowledge of criminal justice and law enforcement. In this course students will be introduced to evidence collection, analysis, and forensic examination. The role of law enforcement officials as a first responder will also be discussed as well as the duties of police officers. Students will also identify various careers in law enforcement.

## Continues next page.

## Career and Technology Education (CCTE) Criminal Justice/Law Enforcement Continued

## Criminal Justice/Law Enforcement Level II Continues <br> 913C Honors Internship Experience

1 Credit
Honors Internship Experience (12) is an option for the required final course for the Criminal Justice/Law Enforcement Completer Program. The Internship Experience is the culminating course for the Homeland Security and Emergency Preparedness Program. Students choosing this option will complete an assigned internship experience at a designated location related to the Criminal Justice/Law Enforcement Program. Students, along with their instructor, will work together to determine a site location that best fits with their individual goals.

## OR

## 913F Honors Capstone Experience

1 Credit
Honors Capstone Experience (12) is an option for the required final course for the Criminal Justice/Law Enforcement Completer Program. The Capstone Experience is the culminating course for the Homeland Security and Emergency Preparedness Program. Students choosing this option have the option to complete an industry-mentored project. Students and instructor will work together to determine which type of experience will be most beneficial and supportive of their individual goals.

# Career and Technology Education (CCTE) Culinary Arts 

## Culinary Arts

The Culinary Arts Program partners with the American Culinary Federation (ACF) program to prepare students for successful careers in the food service and hospitality industry. This is a two-year CTE program that educates high school students in professional cooking Students will progress through a program that includes hands-on education in food production, while developing professionalism and proficiency in cooking, baking, cost control, nutrition, sanitation, and food marketing. Students in this program gain practical experience through (school-based enterprises and/or work-based learning in the culinary industry). When the clinical experience is combined with classroom learning, this program will provide the necessary skills for further education and career success. Students have the opportunity at the end of the program to earn their ServSafe Manager and/ or Food Handler Certification from the National Restaurant Association, and also a Certified Fundamental Cook (CFC) Certification from the American Culinary Federation (ACF).

## Level I

980A Basic Cooking Principles 1 Credit Basic Cooking Principles (11) is a required course in the first half of the introduction to the fundamental concepts and techniques in the profession of culinary arts. It provides hands-on clinical experience through schoolbased enterprises, giving the students the opportunity to develop the technical skills required in future culinary and baking courses as well as the foodservice industry. Students will be introduced to professional standards of the industry, safety and sanitation procedures, knife skills, including handling and care, cooking processes and procedures, product identification, vocabulary and terminology, industry equipment, recipe costing and quantity adjustments. Students participate in demonstrations and group exercises to supplement their development of technical skills and knowledge.

## 980B Introduction to Food Service

1 Credit
Introduction to Food Service is an elective course (11) that provides a foundation for students interested in pursuing careers in a wide variety of professions in the food services industry. Topics may include basic principles of food preparation, equipment identification and usage, and career opportunities in restaurant, commercial and retail food service preparation, distribution and management.

## 980C Foundation of Professional Cooking

1 Credit
Foundation of Professional Cooking (11) is a required course in the second half of the introduction to the fundamental concepts and techniques in the profession of culinary arts. It provides hands-on clinical experience through school-based enterprises, giving the students the opportunity to develop the technical skills required in future culinary and baking courses as well as the foodservice industry. Students will be introduced to professional standards of the industry, safety and sanitation procedures, knife skills, including handling and care, cooking processes and procedures, product identification, vocabulary and terminology, industry equipment, recipe costing and quantity adjustments. Students participate in demonstrations and group exercises to supplement their development of technical skills and knowledge.

## Level II <br> 981A Honors Professional Cooking

2 Credits
Honors Professional Cooking (12) is a required course for the Culinary Arts Completer Program. This course continues to build on the foundation concepts and techniques from the Culinary Basics course. Students will be instructed on the fundamental concepts, techniques, theories, ingredients, and methodologies involved in the preparation of basic menu items. Students rotate through food handling methods and techniques, portion control, costing, production, plating and garnishing of soups, salads, starches, vegetables, and entrees. Students participate in demonstrations, group exercises, and school-based enterprises to supplement the students' development of technical skills and knowledge.

## 981B Honors Professional Internship in Cooking 1 Credit

Honors Professional Internship in Cooking (12) is an elective course for the Culinary Arts Completer Program. Students participating in a school based internship will be placed in a professional setting allowing them to apply the skills and knowledge of professional cooking or baking acquired from their previous coursework. The internship includes a minimum of 135 hours.

## 981C Honors Principles of

 Restaurant Management 1 Credit Prerequisites: Level I Culinary Arts Program CompletionHonors Principles of Restaurant Management (12) is an elective course designed to provide students with an understanding of the American restaurant system, its organizational structure, and its management. This course examines the various leadership and management styles and the fiscal operating procedures necessary for running a successful restaurant business, large or small.

# Career and Technology Education (CCTE) Engineering Technology-PLTW 

## Engineering Technology-PLTW

Engineering Technology-Project Lead the Way (PLTW) is a CTE instructional program that incorporates the standards of The National Council of Teachers of Mathematics, the National Science Standards and the International Technology Education Association. The program prepares students for further education and careers in engineering and engineering technology.

## Level I

940C Honors Introduction to Engineering Design 1 Credit Honors Introduction to Engineering Design (11) is a required course for the Engineering Technology-PLTW Completer Program. This foundation course emphasizes the development of a design. Students use computer software to produce, analyze, and evaluate models of projects solutions. They study the design concepts of form and function then use state-of-the-art technology to translate conceptual design into reproducible products. This course may be counted as the required Tech Ed credit but cannot be counted as both a course in the completer sequence and a Tech Ed credit.

## 952B Honors Principles of Engineering 1 Credit

## or <br> 473 Honors Principles of Engineering

1 Credit
Honors Principles of Engineering (11) is a required course for the Engineering Technology-PLTW Completer Program. This foundation course provides an overview of engineering and engineering technology. Students develop problem-solving skills by solving real-world engineering problems. Through theory and practical hands-on experiences, students address the emerging social and political consequences of technological change. It may be counted as a science credit (473); however, it cannot be counted as both. This course may be counted as the required Tech Ed credit but cannot be counted as both a course in the completer sequence and a Tech Ed credit. Also, it may be counted as a science credit (473); however, it cannot be counted as both.

## Level II

## 953A Honors Digital Electronics

1 Credit or
484 Honors Digital Electronics 1 Credit
Honors Digital Electronics (12) is a required course for the Engineering Technology-PLTW Completer Program. This foundation course introduces students to applied digital logic, a key element of careers in engineering and engineering technology. This course explores the smart circuits found in watches, calculators, video games and computers. Students use industry-standard computer software in testing and analyzing digital circuitry. Students design circuits to solve problems, export their designs to a printed circuit auto-routing program that generates printed circuit boards, and use appropriate components to build their designs. It may be counted as a science credit (484); however, it cannot be counted as both.

## 941C Honors Computer Integrated Manufacturing <br> 1 Credit

Honors Computer Integrated Manufacturing (12) is a required course for the Engineering Technology-PLTW Completer Program. This pathway course teaches the fundamentals of computerized manufacturing technology. It builds on the solid-modeling skills developed in the Honors Introduction to Engineering Design course. Students use 3-D computer software to solve design problems. They assess their solutions through mass propriety analysis (the relationship of design, function and materials), modify their designs, and use prototyping equipment to produce 3-D models.

## 953D Honors Engineering Design \& <br> Development <br> 1 Credit

 Honors Engineering Design \& Development (12) is a required course for the Engineering Technology-PLTW Completer Program. This capstone course enables students to apply what they have learned in academic and pre-engineering courses as they complete challenging, self-directed projects. Students work in teams to design and build solutions to authentic engineering problems. An engineer from the school's partnership team mentors each student team. Students keep journals of notes, sketches, mathematical calculations, and scientific research. Student teams make progress reports to their peers, mentor, and instructor, and they also exchange constructive criticism and consultation. At the end of the course, teams present their research paper and defend their projects to a panel of engineers, business leaders, and engineering college educators for professional review and feedback. This course equips students with the independent study skills that they will need in postsecondary education and careers in engineering and engineering technology.
# Career and Technology Education (CCTE) Graphic Communications-PrintED 

## Graphic Communications - PrintED

The Graphic Communications Program (PrintED) www.gaerf.org is designed to give students an overall understanding of the graphics communication industry and its major operations while teaching competencies that lead to national PrintED certification. PrintED, administered by the Graphic Arts Education and Research Foundation (GAERF), is a national accreditation program based on industry standards for graphic communications courses of study at the secondary and post secondary levels. In Maryland, PrintED is supported by the Printing and Graphics Association Mid-Atlantic, (www.pgama.com) an industry organization that assists with professional development, curriculum, work based learning, and the Skills USA contest.

## Level I

## 920A Fundamentals of Printing 1 Credit

The Fundamentals of Printing course (11) is a required foundation course that all PrintED schools must offer. Fundamentals of Printing provides an overview of the graphic communications industry. Students demonstrate 70 competencies while developing an overall understanding of the industry and its major operations. The competencies include four Subject Areas: Industry Overview; Safety and Health; File Creation to Output; and Offset Press.

## 920B Introduction to Graphic

 Communication
## 1 Credit

Introduction to Graphic Communication (11) is a second required foundation course that all PrintED schools must offer that provides the continuation of an overview of the graphic communications industry. Students demonstrate 43 competencies while developing an overall understanding of the industry and its major operations. The competencies include five Subject Areas: Digital Press; Substrates; Bindery, Finishing and Distribution; Math and Measurement; and Job Application and Interpersonal Skills.

## Level II

## 921A Honors Advanced Graphic Communications

## 2 Credits

Honors Advanced Graphic Communications (12) is a required course for the Graphic Communications Completer Program. This course has 98 Competencies in Graphic Design. Graphic design is the art of communication, stylizing, and problem-solving through the use of type, space, and image. The field also requires creativity and the knowledge of ever changing technology. The competencies address copyright, ethics and intellectual property rights, creating a digital portfolio, typefaces, page layout, image capture, digital illustration and design principles, and corporate branding. Students demonstrate an understanding of additive and subtractive color, design a logo, create an illustration, and pitch an advertising concept.

## 921B Honors Advanced Occupational Skills-Graphics <br> 1 Credit

 Honors Advanced Occupational Skills (12) is an elective course designed to allow Level II students the opportunity to assist with Print Shop operations and graphic design projects. Students opting to make this course selection must have instructor approval. This course is not open to all program students and is designed to operate as a work-study component of the established program.
# Career and Technology Education (CCTE) Interactive Media Production 

## Interactive Media Production

The Interactive Media Production program is a program within the Art, Media, and Communication Career Cluster. As such, it includes a strong foundation in arts and communication with particular emphasis on design, graphic and media communications, interactive technologies, and project development.

## Level I <br> 900A Principles of Arts, Media \& Communication

1 Credit
Principles of Arts, Media \& Communication (11) is a required course for the Interactive Media Production Completer Program. This course provides students an understanding of all aspects of the Arts, Media and Communication industry. Students will examine the opportunities and requirements of the major career pathways in this industry including: Communication and Broadcast Technologies, Multimedia Production, Graphic Design and Print Communication.

## 900B Interactive Media \& Design Level 1 1 Credit

Interactive Media \& Design Level 1 (11) is a required course for the Interactive Media Production Completer Program. This course further develops student mastery of media design and the interactive media production process. Students will advance their knowledge and skills in media design and production through project planning and product development. Students will demonstrate the use of multiple tools and modalities in the production process. During this course an emphasis will be placed on group project development and individual portfolio development using knowledge gained in the areas of Graphic Design, Digital Media, and Interactive Media pathways.

## 900C Broadcasting Technology

1 Credit
Broadcasting Technology (11) is an elective course providing students with the knowledge and skills to produce television broadcast programs. Typically, students prepare and produce short programs, learning the technical aspects of the operation, and how to evaluate programming and assess audience reaction and impact. Students in the Graphic Communications Program are encouraged to take this course for elective credit.

Level II
901A Honors Interactive Media \& Design Level 2 1 Credit
Honors Interactive Media \& Design Level 2 (12) is a required course for the Interactive Media Production Completer Program. Students will advance their knowledge and skills in multimedia design and production through project planning and product development. Students will demonstrate the use of multiple tools and modalities in the production process. Students will update their IMP Portfolios with exemplars of their best work and will advance their knowledge and skills of multimedia design and production through project planning and product development.

## 901B Honors Interactive Media Portfolio Capstone

1 Credit
Honors Interactive Media Portfolio Capstone (12) is a required course in the Interactive Media Production Program. The course provides students with the opportunity to apply what they learned in their previous academic and IMP classes to complete a challenging, client-driven project. Students work individually and in teams to design and create a solution to satisfy or fill a client's need or want. Students are also expected to refine the products that comprise their portfolio to meet the specifications identified.

## 901C Honors Broadcasting Technology

1 Credit
Honors Broadcasting Technology (12) is an elective course providing students with advanced skills and knowledge of video production and broadcast. Students are able to explore video communications, incorporating both the technical and artistic aspects of video media. During this advance course of study, students will create various forms of film media which may include silent films, sport and/or music video. Students in the Graphic Communications Program are encouraged to take this course for elective credit.

## Career and Technology Education (CCTE) IT Networking Academy/P-TECH (CISCO)

## IT Networking Academy/P-TECH (CISCO)

The IT Networking Academy (CISCO) is a nationally recognized program that prepares students for successful careers in information technology fields such as computer network design and administration, hardware, software and network installation, local and wide-area network (LAN/WAN) management and systems engineering. The program is open only to students who are currently enrolled in the P-TECH Program. The IT Networking Academy (CISCO) prepares high school students with the professional skills they require to pursue quality academic and professional opportunities. Particular emphasis is given to using decision-making and problem-solving techniques in the application of science, mathematics, communication and social studies concepts to solve networking problems.

## Level I - PTECH ONLY 930A IT Essentials (A+ Certification)-

 P-TECH ONLY1 Credit
IT Essentials (A+Certification) (11) is a required course for the IT Networking Academy Completer Program that is open only for students currently enrolled in P-TECH. The course covers fundamental computer and career skills for entry-level IT jobs. The IT Essentials course includes hands-on labs that provide practical experience to prepare students for enterprise networking. Simulation tools will help students hone troubleshooting skills and practice what is learned. Students will develop working knowledge of how computers and mobile devices operate, identify common security threats and vulnerabilities like malware, phishing, spoofing and social engineering, and apply skills and procedures to install, configure, and troubleshoot computers, mobile devices, and software. During the course, students will develop critical thinking and problem solving skills using both real equipment and Cisco Packet Tracer, a network configuration simulation tool. This course prepares students for the CompTIA A+ Certification Exam.

## 930B Cybersecurity Essentials-P-TECH ONLY

1 Credit
Cybersecurity Essentials (11) course is a required course for the IT Networking Academy Completer Program that is open only for students currently enrolled in P-TECH. This course develops a foundational understanding of cybersecurity and how it relates to information and network security. The course introduces students to characteristics of cyber crime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical and professional skills to pursue careers in cybersecurity.

930C Advanced IT \& Networking 1 Credit Advanced IT \& Networking (11) is an elective course designed to provide authentic learning experiences for students interested in computer technology. Students gain hands-on experience in IT service \& repair including inventory control. This course provides work-based experience under the direction of the Career Center Technology Coordinator.

## Level II

## 931A Honors CCNA 1 Intro to Networks P-TECH ONLY 1 Credit

 Honors CCNA 1 Intro to Networks (12) is a required course for the IT Networking Academy Completer Program. This course covers basic networking concepts within the context of the networks encountered every day. Students will develop hands-on networking skills and understand the role networks play in our lives. In this course, students will learn how to plan and install a network using real equipment and connect it to the Internet, practice verifying and troubleshooting network and Internet connectivity, learn how to recognize and mitigate security threats to a home network, configure common Internet applications, set up sharing between computers, and configure basic IP services. Students will apply skills through practice, using labs and Cisco Packet Tracer activities and connect with the global Cisco Networking Academy community.
## 931B Honors CCNA 2 Routing \& Switching Essentials P-TECH ONLY 1 Credit

 Honors CCNA 2 Routing \& Switching Essentials (12) is a required course for the IT Networking Academy Completer Program. This course is a gateway to entry-level networking jobs and IT careers. The curriculum consists of 4, 70-hour courses: Introduction to Networks, Routing and Switching Essentials, Scaling Networks, and Connecting Networks. The first 2 courses prepare you for the Cisco CCENT certification exam or to study CCNA Security. All 4 courses are recommended before taking the Cisco CCNA Routing and Switching certification exam.
## 931C Honors Advanced IT P-TECH ONLY

1 Credit Honors Advanced IT (12) provides students with work experience in fields related to networking systems. Students in this course will utilize the time to fulfill work order requests throughout the school or for the county board of education. Students are required to document their work site learning experiences. This course may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

## Career and Technology Education (CCTE) Manufacturing Engineering Technology

## Manufacturing Engineering Technology

Manufacturing Engineering Technology is a CTE Completer Program in which students are taught to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. Includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

## Level I

## 940A Introduction to Manufacturing

1 Credit
Introduction to Manufacturing (11) is a required course for the Manufacturing Engineering Completer Program. This course provides an overview of the design and manufacturing process as well as an introduction to many career options within the field of manufacturing. This course involves learning sketching, blueprint interpretation, CAD commands and designing using computer design software. Students will be designing drawings in two dimensional, detail drawings and assembly drawings of mechanical designs.

## 940B Foundation Topics in Manufacturing Engineering Technology 1 Credit

 Foundation Topics in Manufacturing Engineering Technology (11) is a required course for the Manufacturing Engineering Technology Completer Program. This course provides opportunity for students to develop the related knowledge and the skills of a manufacturing engineering profession. Topics may include machining techniques and processes, design, quality control, automation/robotics materials, handling manufacturing processes, electricity/ electronics mechanical systems, and fluid systems.
## Level II

## 941A Honors Advanced Manufacturing <br> Capstone 1 Credit

 Honors Advanced Manufacturing Capstone (12) is a required course for the Manufacturing Engineering Technology Completer Program. This course involves designing mechanical blueprints. Models of the product are created using solid modeling computer design software. Students will be designing drawings in three dimensional, detail drawings, and assembly drawings of mechanical designs. Students will build upon an understanding of the construction design process to complete a capstone project.
## 941B Honors Advanced Topics \& Applications of Manufacturing Engineering Technology 1 Credit

 Honors Advanced Topics \& Applications of Manufacturing Engineering Technology (12) is a required course for the Manufacturing Engineering Technology Completer Program. This course provides opportunity for students to gain advanced knowledge and skills necessary in a manufacturing engineering profession. The course focuses on advanced topic areas in manufacturing and hands-on experience to ensure that students can competently complete various manufacturing processes.
# Career and Technology Education (CCTE) Teacher Academy of Maryland (TAM) 

## Teacher Academy of Maryland

The Teacher Academy of Maryland is a Career and Technology Education (CTE) instructional program that aligns with the Interstate Teacher Assessment and Support Consortium (InTASC) and the Maryland Essential Dimensions of Teaching (EdoTs). The program prepares students for further education and careers in the education profession. The program consists of four Honors Level High School credits that focus on teaching as a profession, human growth and development, learning theory, and curriculum and instruction. These credits are designed to articulate to a Maryland post secondary teacher education program. Various opportunities for articulated college credit exists throughout the state. Upon completion of the program students are provided the opportunity for program certification by taking the ParaPro test.

## Level I

## 975A Honors Human Growth \& Development Through Adolescence (FALL SEMESTER) 1 Credit

Human Growth \& Development Through Adolescence (11) focuses on human development from birth through adolescence. Emphasis is placed on theories of physical, cognitive, and psychosocial development, the effect of heredity and the environment, the role of caregivers and the family, health and safety concerns, and contemporary issues. Students explore special challenges to growth and development. Students will have opportunities for guided observation of children from birth through adolescence in a variety of settings to help students further understand theories of human development. Students will begin to develop the components of a working portfolio to be assembled upon completion of the internship.

## 975B Honors Teaching as a Profession (SPRING SEMESTER) <br> 1 Credit

 Prerequisite: 975ATeaching as a Profession (11) focuses on the profession of teaching - its history, purposes, issues, ethics, laws and regulations, roles, and qualifications. Emphasis is placed on identifying the current, historical, philosophical and social perspectives of American education, including trends and issues. Students will explore major approaches to human learning. Students will participate in guided observations and field experiences in multiple settings to help them assess their personal interest in pursuing careers in this field and to identify effective learning environments. Students will continue to develop the components of a working portfolio to be assembled upon completion of the internship
*Elective Course required for 2020-2021 year. (11)
1 Credit
Check with School Counselor regarding options

## Level II

## 976A Honors Foundations of Curriculum \& Instruction <br> (FALL SEMESTER) <br> 1 Credit

Prerequisite: 975A and 975B or with 975B
Foundations of Curriculum \& Instruction (12) explores curriculum delivery models in response to the developmental needs of all children. Emphasis is placed on the development of varied instructional materials and activities to promote learning, classroom management strategies, and a supportive classroom environment. Students will explore basic theories of motivation that increase learning. Students will participate in guided observations and field experiences to critique classroom lessons in preparation for developing and implementing their own. Students will continue to develop the components of a working portfolio to be assembled upon completion of the internship. This course is not yet available for selection and is projected to be implemented during the 2020-2021 school year.

## 976B Honors Education Academy Internship (SPRING SEMESTER) 1 Credit

 Prerequisite: 975A, 975B, 976AThe Education Academy Internship (12) is the culminating course of the Education Academy Program. Students will have an opportunity to integrate content and pedagogical knowledge in an educational area of interest. They will have an opportunity to extend and apply their knowledge about teaching in a classroom setting under the supervision of a mentor teacher. The students will complete their working portfolio and present it for critique. This course is not yet available for selection and is projected to be implemented during the 20202021 school year.

## Career and Technology Education (CCTE) CCTE Program Electives

## 950B Welding for HVAC

1 Credit
Welding for HVAC (11-12) is an elective credit course designed for HVAC students. Students will gain metal technology skills necessary for a career in HVAC. This includes safety, use and care of tools, shielded metal arc welding, blue print reading, gas metal arc welding, and oxy-fuel cutting and welding. This course assists students in meeting the requirements for the Plumbers \& Steamfitters apprenticeship training program.

## 950C Advanced Graphics

1 Credit
Advanced Graphics (12) is an elective course designed for Level II graphic students. This course provides graphic students an opportunity of advance skills in the graphics and printing careers. Students will gain advanced skills for employment and postsecondary education.

## 950G Solar Power

1 Credit
Solar Power (11-12) is an elective course in Photovoltaics. Students will have the opportunity learn the principle of generating electricity from the sun, basics of solar energy concepts, components of a photovoltaic system, and the layout with eventual construction of a total system. Students will explore the types of systems available to the consumer, proper sizing of a system for a particular house along with safety and electrical codes associated with these systems.

## 950H Advanced Auto Collision Repair

 1 CreditAdvanced Auto Collision Repair (12) is an elective course designed to reinforce and expand core concepts learned in the regular auto collision repair classes. Students will experience more individualized instruction in welding, painting and body repair, as well as have the opportunity for additional hands on projects.

## 9501 Auto Collision Repair Elective

1 Credit
Auto Collision Repair Elective (11-12) is an elective course designed to acquaint students with the basic fundamentals of welding, painting and body repair. Students will have the opportunity to work on individual projects with instructor guidance and supervision.

## 950K HVAC for Welding

1 Credit
HVAC for Welding (11-12) is an elective credit course designed for welding students. This includes use and care of tools, basic mathematics and shop related math, drawing interpretation and plan reading, rigging and signaling, soldering and brazing, and job safety.

## 950L Union Curricula

1 Credit
Union Curricula (12) is an elective credit course offered to Level II Electrical students who have passed the IBEW (International Brotherhood of Electrical Workers) Apprenticeship aptitude exam. This course is offered in conjunction with the Joint Apprenticeship and Training Committee of Local \#307 Electrical Workers. This course is the first year apprenticeship course, and if successful, the student is eligible for an interview into the 5 year apprenticeship electrical workers program. If student is accepted into the apprenticeship program following the interview, credit for the first year apprenticeship program is given and student will continue into the second year of the program. If successful, the student is also eligible to receive 6 ACE credits applied technology towards an Associate Degree at Allegany College of Maryland.

## 950N Advanced Automotive

## Technology

1 Credit
Advanced Automotive Technology (11-12) is an elective course designed to reinforce and expand core concepts learned in the regular automotive classes. Students will experience more instructor assigned hands on learning or may select a student project with instructor approval. This class is recommended for any student considering postsecondary automotive education.

## 9500 Welding Elective

1 Credit
Welding Elective (11-12) is an elective course designed to reinforce and expand the core concepts learned during the first level of the MSDE approved welding program. Students will experience more individualized instruction and gain practical hours in preparation for taking the welding certification.


## 030 Exploring Computer Science

1 Credit
Exploring Computer Science (9-12) is an entry level course for students with little to no Computer Science Background. Students will become computational thinkers by applying a variety of problem-solving techniques as they create solutions to problems situated in a variety of contexts. Assignments and instruction are contextualized to be socially relevant and meaningful. Ethical and social issues in computing as well as careers in computing are woven throughout the course. Emphasis will be placed on how computing enables innovation in a variety of fields and the impacts those innovations have on society. The course also fulfills the technology education graduation requirement.

## 031 Computer Literacy <br> 1 Credit

 Computer Literacy (9-12) is an elective course which provides an introduction to Computer Science. The course emphasizes computer information systems, hardware and software, programming, computer operating systems, and software applications. Several software applications are used to allow students an opportunity to gain hands-on experience with microcomputers. Use of the internet is also included in the course content.
## 033 AP Computer Science Principles 1 Credit

 AP Computer Science Principles (10-12) is a 1 credit course offered in the Comprehensive High Schools which introduces students to the central ideas of computer science, inviting students to develop the computational thinking vital for success across multiple disciplines. The course is unique in its focus on fostering students to be creative and encouraging students to apply creative processes when developing computational artifacts. Students design and implement innovative solutions using an interactive process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life. The AP Computer Science Principles course is designed to be equivalent to a first semester introductory college computing course, and fulfills the technology education graduation requirement.
## Computer Science

## 035 Web Design I

 1 CreditPrerequisite: Exploring Computer Science (030), Computer Literacy (031) or Document Processing I (821) \& II (822)
Web Design I (10-12) is an elective course designed to acquaint students with basic web design skills. From basic HTML code through dynamic and exciting web site design, students are taught the essential skills necessary to conceptualize, create, and publish a professional website to the Internet. The course uses hands on approach to creating dynamic web sites using the latest Web technologies. Students learn how to make web pages look aesthetically pleasing and to include elements that make them handicapped accessible. Students learn how to implement their web pages to the web through FTP (File transfer protocol) and to add graphics, forms, tables, links, sound, and movement to their web pages.

## 036 Web Design II <br> 1 Credit <br> Prerequisite: Web Design I (035)

Web Design II (11-12) is an elective course which is designed to expand students' knowledge of web design with emphasis on maintaining and improving the school's website using Dreamweaver, Flash and Fireworks software. From basic HTML code through dynamic and exciting website design, students are taught the advanced skills necessary to conceptualize, create, and publish a professional website to the Internet. The course uses a hands-on approach to creating dynamic web sites using the latest Web technologies. Students learn how to make web pages look aesthetically pleasing and to include elements that make them handicapped accessible. Students learn how to implement their web pages to the web through FTP (file transfer protocol) and to add graphics, forms, tables, links, sound, and movement to their web pages.

# STUDENTS MUST COMPLETE (1) CREDIT IN COMPUTER SCIENCE AND ENGINEERING EDUCATION AS A HIGH SCHOOL GRADUATION REQUIREMENT. 

## The one credit requirement may be achieved through completion of one of the following course options:

## 030-Exploring Computer Science Page 52 <br> 033-AP Computer Science Principles Page 53 <br> 940 C -Introduction to Engineering Design CCTE Only - Page 41 <br> 952B-Honors Principles of Engineering CCTE Only- Page 41 <br> 871 Foundations of Technology See Below <br> 871 Foundations of Technology 1 Credit

 Foundations of Technology (9-12) is a required course divided into the following segments to introduce the fundamentals of the following: (1) Communications Technology -mechanical drawing, graphic representation and introductory computer design (2) Manufacturing Technology - basic processes and techniques of manufacturing a product using different materials. (3) Construction Technology - teaching the development of basic building and product structures. (4) Power and Transportation Technology - focusing on energy converting machines, such as engines, to assist with the movement of materials and products such as cars, etc. This class meets the required technology education credit for graduation.

019A College Test Prep/Fall $\quad 1 / 2$ Credit 019B College Test Prep/Spring $1 / 2$ Credit College Test Prep (11-12) is an elective semester course offered in selected schools. Emphasis in the course is placed on test-taking skills and sample content questions similar to test items on the newly revised Scholastic Aptitude Test (SAT) and the American College Test (ACT).

## 042 Journalism I

1 Credit
Journalism I (10-12) is an elective course offered to students interested in learning the basics of journalism. Emphasis is on copy writing, development of editing skills, photography, design, desktop publishing and graphics programs, and financial management. Skills are utilized when students pursue more intense study in the production of a newspaper or yearbook/ magazine.

## 043 Journalism II

1 Credit
Journalism II (11-12) is an elective course offered to students interested in a particular branch of journalism, i.e. yearbook or newspaper. Students learn to write news, feature stories, editorial, and sports stories, as well as advertising copy. They plan layouts, edit copy, proofread, design graphics, and use desktop publishing programs. Students produce a newsletter or homecoming booklet.

## 044 Honors Journalism III

1 Credit
Honors Journalism III (12) is a course in which students produce a newspaper or yearbook. Students employ the skills and concepts learned in Journalism. I and II They write, design, edit, and finance the production. Students must have successfully completed Journalism II before serving in an editorial capacity on the staff.

## 121 Developmental Reading 9

## 1 Credit

Developmental Reading (9) is a remedial reading course designed for students who read significantly below grade level and score at the basic level on the MCAP ELA 8 assessments. Students will receive instruction in a research-based program that addresses decoding, comprehension and fluency skills. The course qualifies as one elective credit. It does not fulfill the English 1 requirement.


122 Developmental Reading 10
1 Credit
Developmental Reading (10) is the continuation of Developmental Reading 9. Students who demonstrate a need for additional reading instruction will qualify for this course. Students will continue to receive instruction in the program begun in $9^{\text {th }}$ grade. This course qualifies for one elective credit. It does not fulfill the English 2 requirement.

## 131 Honors English 1

1 Credit
Honors English 1 (9) is an elective course which fulfills the English 1 requirement. There is an intensified focus on the areas of literary analysis, composition, and critical thinking. The College and Career Ready Standards dictate the skills covered in this class, as well as the College Board's recommended course of study for Pre-AP English. Rigorous pacing and complexity of issues will challenge students capable of higher-level thinking. The coursework is arranged thematically with an emphasis on literary genres. Completion of summer reading and writing assignments prior to the class is strongly recommended in the Honors program.

## 132 Honors English 2

1 Credit
Honors English 2 (10) is an elective course which fulfills the English 2 requirement. The College and Career Ready Standards, as well as the College Board's recommended course of study for Pre-AP English, dictate the skills covered. Students will write essays of a greater length and sophistication than that of an English 2 class, demonstrate the proper use of MLA format in all research, and read and analyze a higher level of world literature in terms of language, literary elements and thematic content. Successful completion of summer reading and writing assignments prior to the class is strongly recommended in the Honors program.

## English/ Language Arts

## 133 AP English Language \& Composition (Advanced Placement) <br> 1 Credit

## Prerequisite: Honors English 2 (132)

Advanced Placement English Language and Composition (11-12) is an elective Honors course which fulfills the English 3 or 4 requirement. It is designed to help students become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and to become skilled writers who can compose for a variety of purposes. Skill in writing follows from students' awareness of their own composing process: the way they explore ideas, reconsider strategies, and revise their work. This process is the essence of the AP English Language and Composition course. All College and Career Ready Standards for the 11-12 grade band are covered. Successful completion of summer reading and writing assignments prior to the class is strongly recommended. This course is weighted for GPA at the 5.0 level. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 135 Honors English 3

1 Credit
Honors English 3 (11) is an elective course which fulfills the English 3 requirement. The College and Career Ready Standards, as well as the College Board's recommended course of study for Pre-AP English, dictate the skills covered as they apply to the American literature content. A strong focus of the course will be preparing students for the complexity of AP and college level writing. Students will write essays of a greater length and sophistication than that of an English 3 class, writing expository and persuasive essays and a research paper that demonstrate the proper use of MLA format. Students will read and analyze complex informational, non-fiction, and literary texts in terms of language, structure, literary elements, rhetoric, thematic content, and historical context. Successful completion of summer reading and writing assignments prior to the class is strongly recommended in the Honors program.

## 137 Speech and Communication

1/2 Credit
Speech and Communication (12) is an elective semester course for high school credit only, that provides students with the skills they need to communicate successfully in personal, social, and workplace interactions. These skills include perceptual and listening effectiveness, verbal and nonverbal message construction and reception, interpersonal communication, interviewing, small group communication, public speaking, and media literacy.

## English/ <br> Language Arts

141 English 1
1 Credit
English 1 (9) is a required course for all students in Grade 9. The College and Career Ready Standards dictate the skills covered in this class. Students write narrative, explanatory, descriptive, and persuasive essays, as well as short research papers. Students study poetry, short stories, nonfiction, and fiction in order to have a fuller understanding of communication. To fulfill state requirements, and to prepare for the MCAP Assessment, all classes are aligned to the College and Career Ready Standards.

## 142 English 2

1 Credit English 2 (10) is a required course for all students in Grade 10. English 2 is designed to enable students to gain conscious control of their language and to help pupils enjoy language as an art and entertainment. The literary focus is world literature. Dialectology is studied, and grammar and mechanics are reviewed. Students write essays, prepare speeches, interpret literature, and critique media. In addition, as in English 1, students will prepare for the MCAP Assessment in English. To fulfill state requirements, all classes meet or exceed the assessment limits for the Maryland College and Career Ready Standards.

## 143 English 3

1 Credit
English 3 (11) is a required course for all students in Grade 11. Students are involved in an integrated language arts program that includes writing expository and persuasive essays and a research paper. The literary focus is American literature. The College and Career Ready Standards dictate the skills covered in this class and assistance will be given to students who have not achieved a proficient score on the MCAP 10 Assessment.

## 144 English 4

1 Credit
English 4 (12) is a required course for all students. English 4 is designed to enable students to gain conscious control of their language and to help pupils enjoy language as an art and as an entertainment. The literary focus is British Literature. Students write essays, prepare speeches, interpret literature, and critique media. The College and Career Ready Standards for English dictate the skills covered in this class, and assistance will be given to students who have not achieved a proficient score on the English High School Assessment.


## 145 AP English Literature \& Composition (Advanced Placement) 1 Credit Prerequisite: Honors English 2 (132)

AP English Literature and Composition (11-12) is an elective Honors course which fulfills the English 3 or 4 requirement. It is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students will consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Writing is an integral part of this course, for the AP examination is weighted toward students writing about literature. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. Successful completion of summer reading and writing assignments prior to the class is strongly recommended. All College and Career Ready Standards for the 11-12 grade band are covered. This course is weighted for GPA at the 5.0 level. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 163 American Novel I

1/2 Credit American Novel I (11-12) is an elective semester course in which students are expected to gain an understanding of an author's writing style and factors influencing the themes and techniques used in the novel. The in-depth study emphasizes the works of such novelists as Baldwin, Cather, Faulkner, Fitzgerald, Hemingway, Hurston, James, Melville, Steinbeck, and Twain.

## 164 American Novel II

1/2 Credit
American Novel II (11-12) is an elective semester course in which students are expected to gain an understanding of an author's writing style and factors influencing the themes and techniques used in the novel. The in-depth study emphasizes the works of such novelists as Bradbury, Cather, Crane, Faulkner, Hemingway, Morrison, Steinbeck, Wharton, Wolfe, and Wright.


## Entrepreneurial Studies

Allegany County Public Schools, in collaboration with members from the business and post-secondary community, have recognized the need to provide our students with an exciting opportunity! Students will explore entrepreneurship through a set of courses designed to promote creativity, leadership, and self-esteem. The courses are designed to create an atmosphere of teamwork and to promote the use of critical thinking skills and will be used to enhance student understanding of what it takes to maximize their potential in our growing economy.

## 840 Leadership

1/2 Credit
The word "leadership" can bring to mind a variety of images. It can bring to mind a political leader, pursuing a passionate human rights issue; a developer creating a new technological device; or an executive who creates a winning vision and strategies to move her company ahead of the competition. Leaders set direction, build an inspiring vision, and create something new. Leadership is dynamic, exciting, and inspiring. The Leadership (9-12) course is designed to teach students how to develop leadership skills that will be important to their future regardless of their career goals. This class teaches several of the basic skills identified as crucial for success into the next century. These skills include problem solving and creative thinking; self-esteem, goal setting, and motivation; interpersonal skills and teamwork; situational leadership and communication. The class emphasizes small group work and hands-on learning experiences.

## Entrepreneurship

## 841 Business \& Marketing Essentials

1 Credit
How do you know what consumers really want? How do you know which consumers to go after and how to get them interested in your products and services? You need to develop an effective marketing strategy! Business and Marketing Essentials (9-12) offers an intro to the fundamentals of marketing. This course looks at marketing as a key business process and examines how online businesses and social media are changing the face of marketing by bringing companies and customers closer together through new technologies. Throughout the course, students are presented problem -solving situations for which they must apply academic and critical-thinking skills.

## 842 Principles of Entrepreneurship

1 Credit
Do you want to own your own business? Does being your own boss sound appealing to you? Principles of Entrepreneurship (10-12) will provide you with the basics of planning and launching your own successful business. Whether you want to start your own for profit business or create a non-profit to help others, this course will help you develop the core skills you will need to be successful. Students will learn how to come up with new business ideas, attract investors, market their business, and manage expenses.

## Family/Consumer Science

## 852 Skills for Living

1/2 Credit
Skills for Living (9-12) is an elective semester course designed to provide students with an opportunity to acquire basic skills to meet the challenges of their daily lives with confidence. Students will learn basic information and practical skills related to such topics as interpersonal and family relationships, communication, child birth, parenthood and adolescence, healthy living and clothing. The value and responsibility of children are stressed as well as concerns of young people. Students are taught skills in coping and decision making and to realize goals they must set for themselves.

## 853 Nutrition and Food Preparation

## 1/2 Credit

Nutrition and Food Preparation (9-12) is an elective semester course that prepares students to make a lifetime of healthy food choices. Topics include healthful eating, meal management, basic kitchen skills, buying and preparing foods, serving foods and dining out. Emphasis will be placed on nutrition and planning balanced meals. Students will practice a variety of culinary skills related to recipe usage, kitchen appliances and equipment, handling food and maintaining a safe and sanitary kitchen.

## 854 Food Trends

## 1/2 Credit

Food Trends (9-12) is an elective semester course designed to teach students about cooking in the real world based on Beyond Oodles and Noodles and Cardboard Mac and Cheese. It will broaden an understanding and appreciation of food while strengthening management and decision making skills based on food choices and nutritional values. Students will select, prepare, compare and serve foods from various food groups. Students will also compare "home cooked" to packaged convenience foods. As they learn budgeting skills, students will focus on balancing convenience and cost in preparing family meals. An exploration of food-related careers will round out the program.

## 855 Entertaining with Food 1/2 Credit

Entertaining with Food (9-12) is an elective semester course designed to teach students skills and techniques about the preparation of food as it relates to entertaining at home and as a career based on The Fine Art of Dining. Students will have opportunities to plan, prepare, and present their culinary skills using good china and crystal, linen tablecloths, and silver service while focusing on proper etiquette and table manners. It will broaden an understanding and appreciation of fine dining at home and in restaurants. An exploration of food-related careers will round out the program.

## Family/Consumer Science

## 860A Learning About Children I

1/2 Credit
Learning About Children I is an elective semester course designed to provide students with an opportunity to acquire basic skills for effective parenting. Emphasis is placed on the growth and development of the preschool child with practical experience in teaching and observing a child development laboratory at the school.

## 860B Learning About Children II

## 1/2 Credit

Learning About Children II is an elective semester course designed to provide students with opportunities to acquire basic skills for effective parenting. Emphasis is placed on the growth and development of the child from birth to age six.

## 870 Personal Financial Literacy

1/2 Credit
Personal Financial Literacy (9-12) is a required semester course. This course is designed to place the student in the role of citizen, family member, consumer, and active participant in managing personal finances. Students will learn ways to maximize their earnings potential, develop ways for managing financial resources, understand, and develop skills for using credit, and explore ways to invest money for future security. Themes of study will include career decisions, money management, financial security, credit management and consumer rights and responsibilities. Personal Financial Literacy is a required semester course for students in grade (9-11). Students with intention of enrolling at CCTE MUST enroll in this course prior to grade 11.


## 481 Comprehensive Health Education

1/2 Credit
Comprehensive Health Education (9-12) is a required one-semester course designed to provide students with valid information for living a healthy lifestyle by emphasizing lifelong positive healthrelated attitudes and behaviors that promote selfreliance and self-regulation. The intent of this course is to help students in identifying beliefs, attitudes, and motivations; decision-making skills, refusal skills, and goal setting skills in seven topic areas: Mental and Emotional Health, Alcohol, Tobacco, and other drugs including lessons on heroin and opioid use, Personal and Consumer Health, Family Life and Human Sexuality, Safety and Injury Prevention, Nutrition and Fitness, and Disease Prevention and Control. The National Health Education Standards and Maryland State Curriculum provide a guideline for the practice of those health-related skills. Additionally, students will have instruction in Hands-only CPR, that will include the use of an AED.

## 019A College Test Prep/Fall 019B College Test Prep/Spring

1/2 Credit
1/2 Credit
College Test Prep (11-12) is an elective semester course offered in selected schools. Emphasis in the course is placed on test-taking skills and sample content questions similar to test items on the newly revised Scholastic Aptitude Test (SAT) and the American College Test (ACT).

## 301 Integrated Algebra

1 Credit
Integrated Algebra (9) is preparatory course designed to build upon the mathematics that students learned in the middle grades. Based on the Maryland College and Career Ready Standards, this course provides essential topics leading to success in Algebra I. topics include: (1) exploring the relationships among fractions, decimals, percent and ratios; (2) investigating integers, equations, inequalities, functions and patterns, linear equations and their graphs, operations on matrices, and formulas to solve real-world problems; and (3) analyzing data using statistics and probability topics. The use of a graphing calculator will be emphasized throughout this course to aid in exploring patterns, understanding concepts, and solving problems. After successful completion of this course, students will enroll in a Algebra I (341).

## 341 Algebra I

1 Credit
Algebra I (9-12) is a high school graduation requirement course which serves as a gateway to advanced mathematics. The purpose of this course is to formalize and extend the middle school content of the Maryland College and Career-Ready Standards (CCRS). This course focuses on the mastery of five critical areas: (1) developing understanding and investigating relationships between quantities and reasoning with equations; (2) developing understanding and applying linear and exponential relationships; (3) investigating trends and modeling with descriptive statistics; (4) performing arithmetic operations on polynomial expressions, solving equations, inequalities, and systems of equations; and (5) using properties of rational and irrational numbers to develop an understanding of quadratic functions. The Mathematical Practice Standards apply throughout the course and, together, with the Algebra I content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. This course requires students to demonstrate proficiency in the use of a graphing calculator. In addition, students must take MCAP assessment in Algebra I at the conclusion of the course and attain a passing score to satisfy Maryland assessment requirements for high school Algebra. After successful completion of this course, students will enroll in Geometry (362) or Honors Geometry (372).


351 Algebra II
1 Credit
Prerequisite: Geometry (362) or Honors
Geometry (372)
Algebra II (10-12) is an elective course which serves as a gateway to advanced mathematics and prepares students for their first college-level credit-bearing course. Building on linear, quadratic, and exponential functions, students will expand on their knowledge of functions to include polynomial, rational, and radical functions. This course focuses on the mastery of five critical areas: (1) Polynomial, Rational and Radical Relationships, (2) Trigonometric Functions, (3) Modeling with Functions, (4) Inferences and Conclusions from Data, (5) Applications of Probability. The Mathematical Practice Standards apply throughout the course and, together, with the Algebra II content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. This course requires students to demonstrate proficiency in the use of a graphing calculator. In addition, students may be required to take the MCAP assessment in Algebra II at the conclusion of the course and attain a passing score to be identified as College and Career Ready (CCR) in mathematics or to satisfy their high school testing requirement in mathematics. An exception to the CCR requirement is if a student has met the CCR status through another CCR indicator such as SAT or ACT.

## 361 Honors Algebra II Prerequisite: Honors Geometry (372)

1 Credit
Honors Algebra II (10-12) is an elective course which serves as a gateway to advanced mathematics and prepares students for their first college-level credit-bearing course. Building on linear, quadratic, and exponential functions, students will expand on their knowledge of functions to include polynomial, rational, and radical functions. This course focuses on the mastery of five critical areas: (1) Polynomial, Rational and Radical Relationships, (2) Trigonometric Functions, (3) Modeling with Functions, (4) Inferences and Conclusions from Data, (5) Applications of Probability. The Mathematical Practice Standards apply throughout the course and, together, with the Algebra II content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Building on these concepts, Honors Algebra II is designed for students seeking more academically challenging coursework. The honors content is more rigorous and has greater depth of the College and CareerReady Standards for Algebra II. Students are required to collaboratively and independently complete content rich assignments. This course requires students to demonstrate proficiency in the use of a graphing calculator. In addition, students may be required to take the MCAP assessment in Algebra 2 at the conclusion of the course and attain a passing score to be identified as College and Career Ready (CCR) in mathematics or to satisfy their high school testing requirement in mathematics. An exception to the CCR requirement is if a student has met the CCR status through another CCR indicator such as GPA, SAT, or ACT.

## Mathematics

## 362 Geometry <br> Prerequisite: Algebra I (341)

Geometry (9-12) is a high school graduation requirement course which serves as a gateway to advanced mathematics. The purpose of this course in is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. This course focuses on the mastery of five critical areas: (1) Congruence, Proof, and Constructions, (2) Similarity, Proof, and Trigonometry, (3) Extending to Three Dimensions, (4) Connecting Algebra and Geometry through Coordinates, (5) Circles With and Without Coordinates. The Mathematical Practice Standards apply throughout the course and, together, with the Geometry content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. This course requires students to demonstrate proficiency in the use of a graphing calculator.

## 372 Honors Geometry Prerequisites: Algebra I (341)

## 1 Credit

Honors Geometry (9-12) satisfies the high school graduation requirement for Geometry and serves as a gateway to advanced mathematics designed for students seeking more academically challenging coursework. The purpose of this course in is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. This course focuses on the mastery of five critical areas: (1) Congruence, Proof, and Constructions, (2) Similarity, Proof, and Trigonometry, (3) Extending to Three Dimensions, (4) Connecting Algebra and Geometry through Coordinates, (5) Circles With and Without Coordinates. The Mathematical Practice Standards apply throughout the course and, together, with the Geometry content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. The honors content is more rigorous and has greater depth of the College and Career-Ready Standards. Students are required to collaboratively and independently complete content rich college-preparatory assignments. This course requires students to demonstrate proficiency in the use of a graphing calculator.

## Mathematics

## 373 Trigonometry/Pre-calculus 1 Credit Prerequisites: Algebra II (351) or Honors Algebra II (361) and Geometry (362) or Honors Geometry (372)

Trigonometry/Pre-calculus (11-12) is an elective course. This course establishes the foundation for additional study in mathematics including calculus and advanced math. The course content is divided into two parts. Part one consists of traditional topics of trigonometry including basic functions, solutions or triangles, identity proofs, sinusoidal graphs, solution of trigonometric equations, and polar numbers. Part two of the course includes the study of advanced algebra topics with computer applications when appropriate. The course includes the extensive use of graphing calculators.

## 383 Honors Trigonometry/Pre-calculus 1 Credit Prerequisites: Geometry (362) or Honors Geometry (372) and Honors Algebra II (361)

Honors Trigonometry/Pre-calculus (11-12) is an elective course offered to students who desire an accelerated mathematics experience leading to the future study of calculus and advanced math. The course content is divided into two parts. Part one consists of traditional topics of trigonometry including basic functions, solutions of triangles, identity proofs, sinusoidal graphs, solution of trigonometric equations, and polar numbers. Part two of the course includes the study of advanced algebra topics, including the expansion of logarithmic and exponential functions introduced in Algebra 2. An additional unit of study on limits with an introduction to Calculus concludes the course. This course is supplemented with enrichment activities, college placement practice, and computer applications. This course includes the extensive use of graphing calculators.

## 384 Honors Calculus <br> 1 Credit Prerequisites: Trigonometry/Pre-calculus (373) or Honors Trigonometry/Pre-calculus (383)

Honors Calculus (12) is an elective course. This course contains comprehensive material in the areas of differential and integral calculus. Emphasis is placed on application rather than theory. Knowledge of algebra, geometry, and trigonometry is essential for the study of calculus and are essential prerequisites for this course.

## 391 Integrated Mathematics Prerequisite: Geometry (362)

Integrated Mathematics (11-12) is an elective course This course builds on the content and skills taught in Algebra I (340 and 341) and Geometry (362). Emphasis is on skill development required for SAT testing and college placement exams. Students will be required to use graphing calculators in problem-solving throughout the course. While this course contains many Algebra II concepts, it is not a substitute for Algebra II and it does not meet the core content NCAA requirements for eligibility.

## 392 Elements of Math

1 Credit

## Prerequisite: Geometry (362)

Elements of Math (11-12) is an elective course. This course is a study of mathematical structures that are discreet in the sense of not supporting or requiring the notion of continuity. The following topics will be included: Problem Solving and Critical Thinking, Set Theory, Number Theory, Graph Theory (Networks), Propositional Logic (the study of reasoning), Combinatorics (permutations, combinations, factorial), Probability (average, expected values, sample space, events, conditional probability circuits), and case study analyses of models from areas such as the sciences, medicine, engineering and industry. While not required, this course is designed to be taken after the completion of Algebra II.

## 393 Probability and Statistics 1/2 Credit Prerequisite: Algebra II (351) preferred

Probability and Statistics (11-12) is an elective semester course. Topics include basic probability concepts, descriptive statistics, and inferential statistics. Students will conduct an independent project and prepare an analysis in both descriptive and inferential statistics as part of this course. Scientific and graphing calculators play an integral role in the development of the topics.

## 394 Advanced Placement (AP) Calculus 1 Credit Prerequisite: Honors Trigonometry/Pre-calculus (383)

Advanced Placement (AP) Calculus (12) is an elective course. This course prepares students for taking Advanced Placement Examination (AB form) for college credit. The course includes extensive use of graphing calculators. A knowledge of algebra, geometry, and trig-onometry/Pre-calculus is essential for the study of calculus and are recommended prerequisites for this course. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## Mathematics

## 396 Advanced Placement (AP) Statistics 1 Credit

Prerequisite: Honors Algebra II (361)
Advanced Placement (AP) Statistics (11-12) is an elective course. This course prepares students for taking the Advanced Placement Examination for college credit. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) Exploring Data: Describing patterns and departures from patterns, (2) Sampling and Experimentation: Planning and conducting a study, (3) Anticipating Patterns: Exploring random phenomena using probability and simulation, and (4) Statistical Inference: Estimating population parameters and testing hypotheses. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 398 Applied Probability and Statistics 1 Credit

Prerequisite: Algebra II (351) preferred
Applied Probability and Statistics (11-12) is an elective course which will prepare students for an entry level college statistics course. The course is divided into descriptive and inferential statistics: Descriptive statistics includes topics on organizing data; averages and variation; correlation and regression; elementary probability; binomial probability; and the normal distribution. Inferential statistics topics include: confidence intervals for means and proportions; hypothesis testing for means and proportions,; inferences about differences, and Chi-square. Graphing calculators and computer based programs are an integral part of the course.


601-604 Small Ensembles I-IV 1 Credit
Small Ensembles (9-12) is an elective instrumental music course that provides students with the opportunity to develop, apply and refine tone, technique, balance, and interpretation, as related to percussion, brass, woodwind, and string. Compositions for small instrumental groups will be prepared and performed in a concert setting. Students must receive approval from the instructor before scheduling this class.

## 611 Contemporary Music

1 Credit
Contemporary Music (9-12) is a general music course designed for students who enjoy listening to and learning about a wide variety of music. Music in contemporary society is presented through topics such as jazz, country, rock, electronic music, and 20th Century compositions. Emphasis will be placed on the common elements of these styles as well as their social/cultural context. The course will be divided into several mini-units covering the contemporary period.

## 613 Drama in the Performing Arts 1 Credit

Drama in the Performing Arts (11-12) is an elective course in which students improve their voice and diction, learn to act, move on stage, gain poise, participate in plays, learn about production, prepare speeches, and learn about costuming. Theater history, improvisation, skit making, public speaking, debate, and one-act play production are emphasized. To gain confidence to speak or interact with others, and to pursue an interest in public speaking or dramatics are the main objectives.

## 614 Music Theory

## 1 Credit

Music Theory (11-12) is an elective music course that provides students with introductory music training in musicianship, theory, musical materials, and procedures. A study of melody, harmony, texture, rhythm, form, music analysis, elementary composition, as well as history and style will provide the foundation of this course. Musicianship skills in dictation, listening, sight-singing, and keyboard harmony, will also be integrated into this class. The course will provide students preparation for college level theory and harmony.


American Musical Theater (9-12) is an elective music course which focuses on the history and development of musical theater. Musicals from various historical periods are presented with emphasis placed on musical style, character, analysis, plot and musical score.

## 631-634 Senior High School Band I-IV <br> 1 Credit

Senior High School Band (9-12) is an elective instrumental music course which provides ensemble performance opportunities in concert and marching settings for students with intermediate to advanced performing skills. The band program emphasizes continued development of technical and musical proficiency and expands the student's repertoire of band literature. Individual excellence is further encouraged through participation in solo and small ensemble performances. The band presents numerous public performances throughout the school year.

## 635 Honors Senior High School Band III 1 Credit

## Prerequisites: 631 and 632

Honors Senior High School Band (11) is an elective instrumental music course which provides ensemble performance opportunities in concert and marching settings for students with advanced performing skills. This course is reserved for students who have successfully completed course 631 and 632. Students will participate in the solo ensemble festival and may audition for all-state and all-county festivals. Leadership roles in the organization are expected of students participating in this course. The band presents numerous public performances throughout the school year.


## 639 Honors Senior High School Band IV 1 Credit

Prerequisite: 631, 632 and 635
Honors Senior High School Band (12) is an elective honors instrumental music course which provides ensemble performance opportunities in concert and marching settings for students with advanced performing skills. This course is reserved for students who have successfully completed course 631, 632 and 635. Students will participate in the solo ensemble festival and may audition for all-state and all-county festivals. Leadership roles in the organization are expected of students participating in this course. The band presents numerous public performances throughout the school year.

## 641-644 Jazz Ensemble I-IV 1 Credit

Jazz Ensemble (9-12) is an elective instrumental music course available to band students with advanced performing skills. Students use these skills in the performance of jazz, pop, blues, soul, and rock. Improvisation is developed and encouraged throughout this course. Membership is by audition and may be limited by instrumentation. The jazz ensemble presents several public performances throughout the year.

## 651-654 Senior High School Chorus I-IV 1 Credit

Senior High School Chorus (9-12) is an elective vocal music course available to students who demonstrate an interest and ability in singing. Ear training, sight reading, and proper singing techniques are incorporated into the teaching of choral literature. Through the study of selected literature, students are afforded opportunities to experience various styles of choral music. Public performances are scheduled throughout the year.

Music

## 655 Honors Senior High School Chorus III

 1 Credit
## Prerequisite: 651 and 652

Honors Senior High School Chorus (11) is an elective honors vocal music course available to students who demonstrate advanced performance skills. This course is reserved for students who have successfully completed course 651 and 652. Students will audition for allcounty chorus and may participate in all-state chorus and the solo ensemble festival. Leadership roles in the organization are expected of students participating in this course. Through the study of selected literature, students are afforded opportunities to experience various styles of choral music. Public performances are scheduled throughout the year.

## 659 Honors Senior High School Chorus IV 1 Credit

Prerequisite: 651, 652 and 655
Honors Senior High School Chorus (12) is an elective honors vocal music course available to students who demonstrate advanced performance skills in singing. This course is reserved for students who have successfully completed course 651, 652 and 655 . Students will audition for all-county chorus and may participate in allstate chorus and the solo ensemble festival. Leadership roles in the organization are expected of students participating in this course. Through the study of selected literature, students are afforded opportunities to experience various styles of choral music. Public performances are scheduled throughout the year.

661-664 Show Choir I-IV
1 Credit
Show Choir (9-12) is an elective vocal music course available to vocal music students with advanced performing skills. Students utilize these skills in the performance of jazz, popular, show and small ensemble literature. Membership is selected by audition and may be limited by voice part. The show choir presents numerous public performances throughout the year.


671-674 Voice Class I-IV
1 Credit
Voice Class (9-12) is an elective course for beginning vocal music students who wish to refine singing skills in a more small class setting before joining chorus. Music fundamentals and vocal technique are studied, requiring two concerts performed within the year of the course. Additional performances in solo and small ensemble settings are possible.

## 681-684 Senior High School Orchestra I-IV

1 Credit
Senior High School Orchestra (9-12) provides ensemble performance opportunities for students with intermediate to advanced performing skills. The orchestra program emphasizes continued development of technical and musical proficiency. Individual excellence is further encouraged through participation in solo and small ensemble performances. The orchestra presents several public performances throughout the year.

## 685 Honors Senior High School

 Orchestra III
## 1 Credit

 Prerequisite: 681 and 682Honors Senior High School Orchestra III (11) is an elective orchestra program course available to students who demonstrate an interest and ability in a stringed instrument. This course is reserved for students who have successfully completed course 681 and 682 . Students will participate in the solo and ensemble festival and may audition for the all-state and all-county orchestras. Leadership roles in the organization are expected of students enrolled in this course. The orchestra presents several public performances throughout the year.


## 689 Honors Senior High School Orchestra IV <br> 1 Credit

 Prerequisite: 681, 682 and 685Honors Senior High School Orchestra IV (12) is an elective orchestra program course available to students who demonstrate an interest and ability in a stringed instrument. This course is reserved for students who have successfully completed course 681 or 682 and 685 . Students will participate in the solo and ensemble festival and may audition for the all-state and all-county orchestras. Leadership roles in the organization are expected of students enrolled in this course. The orchestra presents several public performances throughout the year.

## 690-697 Dance/Visual Ensemble

1/2 Credit
Dance/Visual Ensemble (9-12) is an elective semester course that provides basic skills and an understanding of dance. It can include drill team, color guard or traditional dance ensemble-whatever the individual school resources provide. An audition or demonstration of basic skills may be required for admission to this class. There may be an extra-curricular component required to complete the course. Two semesters of Dance/Visual Ensemble fulfill the requirements for the fine arts graduation credit.

## Physical Education

## 711 Physical Education

1 Credit
Physical Education (9-12) is a required course designed to introduce students to a basic program of physical fitness, team sports, and individual lifetime recreational activities. Emphasis is placed on developing physical skills, acquiring knowledge of movement, rules, and promoting a positive self image as related to social and emotional behavior.

## 712 Aerobics and Fitness

1/2 Credit
Aerobics and Fitness (10-12) is an elective semester course in which students are introduced to low to mid level aerobics, step aerobics, and rigorous fitness activities. Emphasis is placed on the development of basic knowledge, technique, and attitudes.

## 713 Weight Training/Fitness <br> 1/2 Credit

Weight Training/Fitness (10-12) is an elective semester course in which students are introduced to all aspects of weight training. Factors such as nutrition, body composition, and the proper use of free weights are emphasized. Cardiovascular conditioning and advanced fitness will also be an integral part of this course.

## 714 Individual/Lifetime Sports I 1/2 Credit

 Individual/Lifetime Sports I (10-12) is an elective semester course in which students are introduced to such lifetime activities as archery, golf, shuffleboard, badminton, cross country, rollerblading and orienteering. Emphasis is placed on basic knowledge, rules, scoring and proper techniques.
## 715 Individual/Lifetime Sports II

1/2 Credit
Individual/Lifetime Sports II (10-12) is an elective semester course in which students are introduced to such lifetime activities as tennis, angling, modern dance, table tennis and swimming. Emphasis is placed on basic knowledge, rules, scoring and proper techniques.

## Physical Education

## 718 Adventure Sports

1/2 Credit
Adventure Sports (10-12) is an elective semester course in which students participate in activities such as biking, hiking, tubing, snowboarding, wall climbing, outdoor survival and cross country skiing. Emphasis is placed on basic knowledge, skill, attitude and safety.

## 721A Team Sports \& Conditioning

## Freshman-Fall

1/2 Credit
Team Sports and Conditioning (9-12) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. This course cannot replace 711 Physical Education required to meet graduation requirements. (The title "Team Training" will appear on the report card.)

## 721B Team Sports \& Conditioning

## Freshman-Spring

1/2 Credit
Team Sports and Conditioning (9-12) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. This course cannot replace 711 Physical Education required to meet graduation requirements. (The title "Team Training" will appear on the report card.)

## 722A Team Sports \& Conditioning <br> Sophomore-Fall <br> 1/2 Credit

Team Sports and Conditioning (9-12) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. This course cannot replace 711 Physical Education required to meet graduation requirements. (The title "Team Training" will appear on the report card.)

## Physical Education

## 722B Team Sports \& Conditioning <br> Sophomore-Spring <br> 1/2 Credit

Team Sports and Conditioning (9-12) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. This course cannot replace 711 Physical Education required to meet graduation requirements. (The title "Team Training" will appear on the report card.)

## 723A Team Sports \& Conditioning Junior-Fall <br> 1/2 Credit

Team Sports and Conditioning (9-12) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. (The title "Team Training" will appear on the report card.)

## 723B Team Sports \& Conditioning

Junior-Spring
1/2 Credit
Team Sports and Conditioning ( $9-12$ ) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. (The title "Team Training" will appear on the report card.)

## 724A Team Sports \& Conditioning Senior-Fall 1/2 Credit

Team Sports and Conditioning (9-12) is an elective semester course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. (The title "Team Training" will appear on the report card.)

## 724B Team Sports \& Conditioning

 Senior-Spring1/2 Credit
Team Sports and Conditioning (9-12) is an elective course designed to develop physical strength, endurance, coordination, agility, flexibility, balance, and speed in the skilled athlete. Selected students are provided an opportunity to develop these advanced skills in an area of personal preference. (The title "Team Training" will appear on the report card.)


## 411 Earth/Space Science

1 Credit
Earth/Space Science (9-12) is one of the three ACPS required laboratory science courses that meets the high school graduation requirement for science. The curriculum includes scientific process skills and content specified in the Next Generation Science Standards including materials and processes that shape a planet, Earth history, plate tectonics, astronomy, and interactions of hydrosphere and atmosphere. Students will study techniques used to investigate the universe and Earth, describe natural forces and apply them to the study of Earth/Space Science, analyze the dynamic nature of the geosphere, investigate methods that geologists use to determine the history of the Earth, and learn how the transfer of energy and mass affect Earth systems. Students will also study performance expectations in the area of physical science in order to be prepared for the MISA (Maryland Integrated Science Assessment). Physical science topics included are: Newton's 2nd Law of motion, energy, magnetism, electricity, gravitation, waves, and electromagnetic radiation.
*For students entering grade 9 in 2017-18 and thereafter, course number 411 should be taken in grades 9-11.

## 412 Environmental Science <br> 1 Credit Prerequisite: Biology (432)

Environmental Science (11-12) is an elective laboratory science course that meets the high school graduation requirement for science. The curriculum includes scientific process skills and content specified in the Next Generation Science Standards including movement of matter and energy through the biosphere, interdependence of organisms with their biotic environment, relationships between humans and the Earth's resources, development and application of knowledge and skills gained from environmental issue investigation, culminating with a project which protects and sustains the environment.

## 412H Honors Environmental Science

## 1 Credit

## Prerequisite: Biology (432)

Honors Environmental Science (11-12) is an elective laboratory science course that meets the high school graduation requirement for science. The curriculum includes scientific process skills and content specified in the Next Generation Science Standards including movement of matter and energy through the biosphere, interdependence of organisms with their biotic environment, relationships between humans and the Earth's resources, development and application of knowledge and skills gained from environmental issue investigation, culminating with a project which protects and sustains the environment. Students enrolled in Honors Environmental Science will be expected to participate in the ACPS Envirothon training and competition events.

## Science

## 413 Advanced Placement (AP) Environmental Science 1 Credit

 Prerequisite: Honors Biology (430) or Honors Chemistry (440)Advanced Placement (AP) Environmental Science (1012) is an elective laboratory science course designed to be the equivalent of a first year college environmental science course. The AP Environmental Science can be used in substitution of an Earth/Space Science content course in fulfilling the three science course graduation requirement. Students may earn college credit by passing the College Board AP Examination. The course syllabus approved by the College Board identifies the following topics for study: interdependence of earth systems, human population dynamics, renewable and nonrenewable resources, environmental quality, global order for this course to changes and their consequences, environmental trade-offs and societal decision-making. Additional performance expectations dealing with space will be added to adequately prepare students for the MISA. Laboratory and field investigations will be required. Beginning in the 2018-19 school year, students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 414 Honors Earth/Space Science

1 Credit
Honors Earth/Space Science (9-12) is one of the ACPS required laboratory science courses that meets the high school graduation requirement for science. The curriculum includes the same scientific process skills and content specified in the Next Generation Science Standards from the academic Earth/Space Science course but with more in-depth study of the materials and processes that shape a planet, Earth history, plate tectonics, astronomy, and interactions of hydrosphere and atmosphere through the completion of an Honors Investigation Project each marking period. Students will study techniques used to investigate the universe and Earth, describe natural forces and apply them to the study of Earth/Space Science, analyze the dynamic nature of the geosphere, investigate methods that geologists use to determine the history of the Earth, and learn how the transfer of energy and mass affect Earth systems with quarterly student investigation projects. Students will also study performance expectations in the area of physical science in order to be prepared for the MISA (Maryland Integrated Science Assessment). Physical science topics included are: Newton's 2nd Law of Motion, energy, magnetism, electricity, gravitation, waves, and electromagnetic radiation.
*For students entering grade 9 in 2017-18 and thereafter, course number 414 should be taken in grades 9-11.

## Science

## 423 Honors Anatomy and Physiology I (CCTE) 1 Credit

Honors Anatomy and Physiology I (11) is an elective laboratory science course at the Center for Career and Technical Education (CCTE) designed for students in the Academy of Health Professions. The content will provide an understanding of the structure and function of the integumentary, nervous, endocrine, lymphatic and reproductive systems. Basic concepts, including chemistry, cytology, disorders and diseases of the human body are emphasized. The laboratory work involves microscopic and physiology exercises and dissection of a fetal pig for the purpose of making comparisons to human anatomy. In addition, students will be introduced to researching and writing scientific papers. Students from other career programs may enroll in this course for a science credit.

## 430 Honors Biology <br> 1 Credit

Honors Biology ( $9-12^{*}$ ) is one of the three ACPS required Pre-AP laboratory science course that satisfy the Maryland high school graduation requirement. The curriculum includes scientific process skills and content as specified in the Next Generation Science Standards. This course provides an in-depth introduction to the structure and function of biological molecules, structure and function of cells and organisms, inheritance of traits, mechanisms of evolutionary change, and interdependence of organisms in the biosphere. Honors Biology requires laboratory investigations and synthesis of content knowledge demonstrated by an integration of reading and writing in research and laboratory reports. Honors Biology is a prerequisite for AP Biology (435) and highly recommended for students wishing to enroll in College Biology I (439). Students who enroll in Honors Biology in 9th or 10th grade are expected to enroll in College Biology or Advanced Placement science courses in Grades 11 and 12. This course is recommended for students who are considering continuing their education at a four-year college or university especially in a biological science or health field. All students must pass the Maryland Integrated Science Assessment (MISA). Students will also study performance expectations in the area of physical science in order to be prepared for the MISA. Topics in physical science are: periodic trends, electromagnetic forces, reaction rate, attraction and repulsion, energy, and digital storage.
*For students entering grade 9 in 2017-18 and thereafter, course number 430 or 432 should be taken in grades 9 11.


## 432 Biology

1 Credit
Biology $\left(9-12^{*}\right)$ is one of the three ACPS required laboratory science courses that meets the Maryland high school graduation requirement. The curriculum includes scientific process skills and content as specified in the Next Generation Science Standards including structure and function of biological molecules, structure and function of cells and organisms, inheritance of traits, mechanisms of evolutionary change, and interdependence of organisms in the biosphere. All students must pass the Maryland Assessment Students will also study performance expectations in the area of physical science in order to be prepared for the MISA (Maryland Integrated Science Assessment). Topics in physical science are: periodic trends, electromagnetic forces, reaction rate, attraction and repulsion, energy, and digital storage.
*For students entering grade 9 in 2017-18 and thereafter, course number 430 or 432 should be taken in grades 9-11.

## 434 Honors Anatomy and Physiology II (CCTE) <br> 1 Credit

Honors Anatomy and Physiology II (12) is an elective laboratory course designed for Health Occupation students at the Center for Career and Technical Education (CCTE). The content will provide an understanding of the structure and function of the skeletal, muscular, circulatory, respiratory, digestive, and urinary systems. Students will gain knowledge in anatomy and physiology, diseases and abnormalities of the human body, and genetics. The laboratory work involves physiology exercises and cat dissection for the purpose of making comparisons to human anatomy. In addition, students will be introduced to researching and writing scientific papers. This course is part of an articulation agreement with Allegany College of Maryland; however, students from other career programs may enroll in this course for a science credit.

## 435 Advanced Placement (AP) Biology

 2 Credits
## Prerequisites: Honors Biology (430) and Honors Chemistry (440)

Advanced Placement (AP) Biology (11-12) is an elective, double period laboratory science course designed to be the equivalent of a first-year college course. Students may earn college credit by passing the College Board AP Examination. The course syllabus approved by the College Board identifies the following topics for study: chemistry of life, cells, cellular energetics, heredity, molecular genetics, evolutionary biology, diversity of organisms, structure and function of plants and animals, and ecology. Laboratory investigations are required, including dissection. Successful completion of summer reading and writing assignments prior to the class is strongly recommended. Beginning in the 2018-19 school year, students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## Science

## 437 Honors Genetics (Comprehensive HS) 1/2 Credit

Honors Genetics (11-12) is an elective semester college preparatory laboratory science course that meets the high school graduation requirement. The course is designed to introduce students to the foundations of genetics including cytogenetics, Mendelian, advanced human, molecular and medical genetics. Laboratory work will include using Chi Square and the Hardy Weinberg Law to explore population genetics. The sequencing of the Human Genome is studied as a tool that helps develop an understanding of individual patient or disease differences at the molecular or genetic level, enabling a tailored treatment program to be designed. The ethics of genetic testing will also be studied. The course requires a synthesis of content knowledge demonstrated by an integration of reading and writing processes in scientific research papers.

## 438 Honors Anatomy \& Physiology (Comprehensive HS) <br> 1/2 Credit

Honors Anatomy and Physiology (11-12) is an elective semester college preparatory laboratory science course that meets the high school graduation requirement. The course is designed for students pursuing a career in a medical field. The course will provide an understanding of the structure and function of the human body. Basic concepts, including chemistry, cytology, disorders and diseases of the human body are emphasized. The laboratory work involves microscope investigations, physiology exercises and dissection of a mammal for the purpose of making comparisons to human anatomy. The course requires a synthesis of content knowledge demonstrated by an integration of reading and writing processes in researching and writing scientific papers.

## 440 Honors Chemistry 1 Credit Prerequisite: Algebra I (341) or Algebra II (351) taken concurrently.

Honors Chemistry $\left(9-11^{*}\right)$ is a Pre AP laboratory science course and one of the three ACPS required courses that meets the Maryland high school graduation requirement. Experiences in this course prepare students for Advanced Placement Chemistry (445) and college chemistry. The curriculum emphasizes lab safety, extensive mathematical problem solving and laboratory skills. Computer graphing techniques, probeware and graphical analysis software will be used to enhance the lab component of the course. The curriculum includes scientific process skills and content as specified in the Next Generation Science Standards including atomic theory, bonding, phases of matter, the periodic table, acids, bases, salts, solutions, chemical energy, structure and properties of compounds, thermochemistry, chemical formula writing, types of chemical reactions, balancing chemical equations and stoichiometry.
*For students entering grade 9 in 2017-18 and thereafter, course number 440 should be taken in grades 9-11.

## Science

Honors Chemistry is a prerequisite for AP Chemistry (455). Students who enroll in Honors Chemistry in 10th grade are expected to enroll in Advanced Placement science courses and/or Physics in Grades 11 and 12. Additional requirements include a synthesis of content knowledge demonstrated through an integration of reading and writing processes in quarterly projects, one of which is aligned to the American Chemical Society (ACS) competition. Students will also study performance expectations in the area of physical science in order to be prepared for the MISA (Maryland Integrated Science Assessment).

## 442 Chemistry <br> 1 Credit Prerequisites: Biology (432) and Algebra I (341)

 Chemistry $\left(9-11^{*}\right)$ is one of the three ACPS required laboratory science courses that meets the Maryland high school graduation requirement. The course provides an introduction to the scientific process skills and content specified in the Next Generation Science Standards including atomic structure, bonding, phases of matter, formula writing, equation balancing, the periodic table, acids, bases, salts and chemical energy. The scientific process skills of observing, hypothesizing, experimenting, recording, analyzing and communicating results of laboratory investigations are emphasized throughout the course. Algebra I (341) skills are necessary in the study of writing chemical reactions and balancing equations. Students will also study performance expectations in the area of physical science in order to be prepared for the MISA (Maryland Integrated Science Assessment).*For students entering grade 9 in 2017-18 and thereafter, course number 442 should be taken in grades 9-11.

## 444 Cosmetology Science I (CCTE) 1 Credit

 Cosmetology Science I (11) is a required course for cosmetology students at the Center for Career and Technical Education (CCTE). In this course, students study anatomy and physiology of the human body as it relates to the cosmetology sciences. Major concepts studied are the effects of commercial chemical products on the cells of the human body, how microscopic bacteria, viruses and HIV grow and reproduce causing infections, and how the cosmetic industry regulates and promotes principles of prevention of diseases. In addition, the structure of skin, skin tissue, causes of skin diseases, and safety procedures to prevent skin diseases, the growth and structure of hair, hair types, and disorders of the hair and scalp are studied as well as safety procedures to follow when working with clients in a salon.

## 445 Cosmetology Science II (CCTE) <br> 1 Credit

Cosmetology Science II (12) is a required course for cosmetology students at the Center for Career and Technical Education (CCTE). In this course, students study matter and energy, molecular structure, states of matter, chemical and physical changes, compounds and mixtures, solutions, suspensions and emulsions, acids, bases, pH and redox reactions. The level of organization of the human body, the body systems and the direct effect of cosmetics on the human body is studied. Emphasis will be placed on the chemical composition and neutralization of commercial cosmetics. In addition, students will prepare for the Maryland State Board Examination for cosmetology.

## 455 Advanced Placement (AP) Chemistry

## Prerequisite: Honors Chemistry (440)

Advanced Placement (AP) Chemistry (11-12) is a double period laboratory science course designed to be the equivalent of a first year college chemistry course. Students may earn college credit by passing the College Board AP Examination. The course syllabus approved by the College Board identifies the following topics for study: atomic theory and atomic structure, chemical bonding, nuclear chemistry, states of matter, solutions, reaction types, stoichiometry, chemical equilibrium, chemical kinetics, thermodynamics and an introduction to organic chemistry. Emphasis is on chemical calculations, mathematical formulation of principles and lab work. The course requires a synthesis of content knowledge demonstrated by an integration of reading and writing processes which are to be kept in a laboratory notebook. Successful completion of summer reading and writing assignments prior to the class is strongly recommended. Beginning in the 2018-19 school year, students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 463 Honors Physics I <br> Prerequisites: Algebra (341)

1 Credit
Honors Physics I (11-12) is an elective laboratory science course that meets the high school graduation requirement for science. The curriculum includes scientific process skills and content as specified in the Next Generation Science Standards including the Newtonian mechanics, work, energy, and power; mechanical waves and sound. It will also introduce electric circuits and magnetism. The course emphasizes conceptual understanding of mathematical problem solving and laboratory skills as they make observations, collect and record data. Computer applications, probeware, and graphing techniques will be used to enhance the lab component of the course.

## Science

## 464 Honors Physics II

1 Credit
Prerequisites: Algebra (341)
Honors Physics II (11-12) is an elective laboratory science course that meets the high school graduation requirement for science. Physics concepts and skills are enhanced as students use laboratory equipment, probeware, and computer applications to collect and analyze data for engineering projects. Content areas include fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Honors Physics requires laboratory investigations and synthesis of content knowledge demonstrated by an integration of reading and writing of laboratory and engineering project reports.

## 465 Advanced Placement (AP) Physics I 1 Credit <br> Prerequisites: Algebra (341)

AP Physics I (11-12) is an elective laboratory science course designed to be the equivalent of a first semester college Physics course. Students may earn college credit by passing the College Board AP Examination. The course is Algebra-based and the syllabus approved by the College Board identifies the following topics for study: Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Beginning in the 2018-19 school year, students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 467 Advanced Placement (AP) Physics II 1 Credit

## Prerequisites: AP Physics I or the equivalent

AP Physics II (11-12) is an elective laboratory science course designed to be the equivalent of a second semester college course. Students may earn college credit by passing the College Board AP Examination. The course is AI-gebra-based and the syllabus approved by the College Board identifies the following topics for study: fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. Beginning in the 2018-19 school year, students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.


## 473 Honors Principles of Engineering

## (CCTE)

1 Credit
Honors Principles of Engineering (11-12) is a course that helps students understand the field of engineering/ engineering technology. This course is a required course for the Engineering Technology Completer Program or it may be counted as a Science credit, however, it cannot be both. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. This course will meet the requirements for Foundations of Technology for CCTE students.

## 484 Honors Digital Electronics

(CCTE)
1 Credit
Honors Digital Electronics (12) is a course that uses applied logic which encompasses the application of electronic circuits and devices. This course is a required course for the Engineering Technology Completer Program or it may be counted as a Science credit, however, it cannot be both. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices.

# Social Studies 

## 201 Local, State and Federal Government 1 Credit

Local, State and Federal Government (9-12) is a required course. The basis for this course is the Maryland State Curriculum, which includes purposes, forms, types of political and economic structures; foundations and principles of government and the constitution; legislative branches (national, state and local); executive branches (national, state and local); judicial branches (National and State); domestic and foreign policy; and participation in government. Students entering the 9th grade in 20132014, are required to pass the Government HSA as a graduation requirement.

## 202 HSA Government Prep

0 Credit
HSA Government Prep (10-11) is designed as a Government refresher course for the student who has passed the Honors (211) or Local State and Federal Government (201) course, but has not achieved a minimum scale score of 394 on the High School Government Assessment (HSA Government). Students enrolled will retake the HSA Government exam. This course would be taken concurrently with Modern World History (222).

## 203 Honors Historical Research Methods I 1 Credit

Honors Historical Research Methods I (11-12) is an elective course that introduces students to the process of independent research requiring the use of primary and secondary resources. Students may also be instructed in oral history methodology, including the development of interviewing and transcribing skills. Additionally, students may be instructed in practices and skills related to broadcast journalism and apply such practices and skills as they report on current events. Students will apply their research skills to develop a historical product (s) on local, state, or national history.
*Beginning in the 2018-2019 school year and beyond.

## 204 Honors Historical Research Methods II

1 Credit Prerequisite: Honors Historical Research Methods I (203) or a C or higher in AP U.S. History
Honors Historical Research Methods (12) is an elective course that is designed for students who desire to continue the course of study used in researching history on the national, state, and local levels. The course is an indepth study of a particular historical topic for the duration of the school year. Students will be required to conduct historical research that will integrate writing, reading, and technology skills resulting in a historical product (s). Additionally, students may be instructed in practices and skills related to broadcast journalism and apply such practices and skills as they report on current events.

## Social Studies

## 205 Advanced Placement (AP) United States Government and Politics

1 Credit
AP United States Government and Politics (9-12) provides an analytical perspective on government and politics in the United States. This course may be used to fulfill the 201 LSF Government requirement. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. The course must follow certain topics generally covered in college courses. Students may earn college credit hours by passing the College Board AP Examination. Successful completion of summer reading assignments in recommended. In order for this course to be weighted for GPA at the 5.0 level. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 211 Honors Government

## 1 Credit

Honors Government (9) is an elective course that prepares students for future Advanced Placement coursework. This course may be used to fulfill the 201 LSF Government requirement. The Maryland curriculum for Government dictates the skills and content covered in this honors course. The curriculum includes all of the content identified for 201 LSF Government with increasing emphasis on additional assignments which will include an independent research project for class sharing and a visual project that is reflective of advanced technology skills. The integration of reading and writing skills will be emphasized throughout the course. Successful completion of summer assignments is recommended.

## 213 AP Human Geography <br> 1 Credit

AP Human Geography (11-12) is an elective course which will introduce students to the systematic study of patterns and processes that have shaped human understandings, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to analyze human social organizations and their environmental consequences. Course content is aligned to the recommendations of the College Board AP Human Geography Examination Course. Students may earn college credit hours by passing the College Board AP Examination. Successful completion of summer assignments is recommended. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## Social Studies

## 220 AP World History: Modern

1 Credit
AP World History: Modern (10-12) is an introductory col-lege-level modern world history course. Students cultivate their understanding of world history from c. 1200 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. (College Board, 2019). This course may be used to fulfill the 222 Modern World History requirement. Students may earn college credit hours by passing the College Board AP Examination. This course is weighted at the 5.0 level. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 222 Modern World History <br> 1 Credit

Modern World History (10-12) focuses on developing students' understanding of world history from approximately 1300 to the present. In world history students interpret evidence and identify significant trends in order to understand major developments across the globe. Students will explore how humans have thought, behaved and interacted across the ages in order to develop an understanding of global patterns of change and continuity. Students of world history study specific people, events, and ideas by situating them in global, interregional, and regional contexts. Organizationally, world history requires students to shift between global, interregional, and regional spatial scales in order to emphasize interactions between different scales of historical study and to identify connections across time and geography. (MSDE, 2019).

## Social Studies

## 223 Economics

1/2 Credit
Economics (11-12) is an elective semester course that examines how goods and services are produced and distributed in different economic systems. Economic policy within the United States, including the role of the Federal Reserve (monetary policy) and Congress (fiscal policy) are examined. Students also study stock markets and their role in free market economies. Within the stock market unit, students participate in a 10 -week simulation that creates competition with other schools in the state of Maryland.

## 232 Social Studies Seminar I <br> 1/2 Credit

Social Studies Seminar I (11-12) is an elective semester course designed for students who desire to become more involved in discussions and research of political, social, and economic issues. The teaching methodology; i.e. discussion format, distinguishes the course from Contemporary World Issues. Students are required to demonstrate independent research skills, critical thinking skills, effective communication skills, and the use of primary and secondary resources.

## 233 Social Studies Seminar II <br> 1/2 Credit

 Social Studies Seminar II (11-12) is an elective semester course that builds on the skills of 232 Social Studies Seminar I. Students will participate in discussions that are based on primary and secondary research of a particular social studies topic(s). Students may also be required to integrate technology with class discussions and submit formal written assignments.
## 242 Honors Modern World History

## 1 Credit

Honors World History (10) is an elective course that prepares students for future Advanced Placement coursework. This course may be used to fulfill the 222 World History requirement. The Maryland Content Standards and Core Learning Goals for world history dictate the skills and content covered in this honors program that provides for a comprehensive survey of the political, economic, social, and cultural history of the world beginning in the 15th Century C.E. and extending into the 20th century. Assignments will emphasize the integration of reading and writing skills necessary to prepare for AP course work.

## 243 United States History

1 Credit
United States History (11-12) is a required course for all students. The Maryland Curriculum for United States History determines the content, which includes the social, economic, and political growth of the United States from the Reconstruction era to the beginning of the $21^{\text {st }}$ Century. Students will also study the effects of competitive global markets on the United States economic and political systems.

## Social Studies

## 243H Honors United States History <br> 1 Credit

Honors United States History (11-12) is an elective course which fulfills the United States History requirement. The Maryland Curriculum for United States History determines the content, which includes the social, economic, and political growth of the United States from the Reconstruction era to the beginning of the 21st Century. A strong focus of the honors course will be on skills and processes. Students will analyze and synthesize information from primary and secondary sources of information as they learn to write and support thesis statements via citing text-based information. Students will learn that writing in history is a process. Students will be exposed to multiple resources, including MiniDBQs, the National Archives, the Stanford History Group, etc. Additionally, honor students are required to create all components of a National History Day (NHD) Project by going through the NHD process.

## 244 Advanced Placement (AP) United States History <br> 1 Credit

Advanced Placement (AP) US History (11-12) satisfies the US History requirement for graduation. Course content is aligned to the recommendations of the College Board and is designed to provide students with analytical skills and factual knowledge necessary to deal critically with the problems and resource materials of United States history. Students will learn to analyze and interpret print and non-print primary sources, including documentary materials, maps, statistical tables, and pictorial and graphic evidence of historical events. In addition, students will be able to compare points of view and apply multiple perspectives to negotiate and reach consensus with others as needed to facilitate responsible decision-making. There will be an increasing emphasis on written assignments and analytical/research papers. Students may earn college credit hours by passing the College Board AP Examination. Successful completion of summer assignments is recommended. Students enrolled in this course are required to take a district comprehensive final examination that will be worth 10\% of their final grade.

## 253 Psychology

1 Credit
Psychology (11-12) is an elective course which focuses on the study of behavior with emphasis on understanding the self and others. A wide range of psychological tools are utilized, including personality testing, learning techniques, and experimentation.

## Social Studies

## 254 Advanced Placement (AP) Psychology

Advanced Placement (AP) Psychology (11-12) is the systematic and scientific study of the behavior and mental processes of human beings. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub fields within psychology. Students will also learn the methods psychologists use in their science and practice. Students may earn three college credit hours, the equivalent of an introductory college class, by earning a qualifying score on the College Board's AP Examination. Successful completion of summer assignments prior to the class is recommended. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 264 Contemporary World Issues

## 1 Credit

Contemporary World Issues (12) is an elective course which emphasizes: (1) government, (2) social, political, and economic issues, and (3) other current issues as they occur. In addition, a detailed study will be made on an issue or topic of the student's choosing. An important aspect of this course is the development and application of critical thinking skills and problem solving.

## 274 Criminal Justice Today 1 Credit

Criminal Justice Today (11-12) is an elective course designed to introduce students to the American criminal justice system through topics such as law enforcement, the correctional system, and the judicial system. Students will be expected to demonstrate an understanding of the rights and freedoms protected by the Constitution, learn about various theories that attempt to explain crime and criminals, learn about the history and structure of the criminal justice system and discuss contemporary issues challenging the criminal justice system.


140M Basic English 0 Credit
The 140M Basic English course teaches the basic skills of reading, writing, and speaking as required for daily living. The purpose of this course is to prepare the student to function as independently as possible. Students will acquire basic reading and writing skills and explore a variety of media to obtain information and to read for pleasure. Students will answer questions about information, understand the main idea of passages, sequence events and information in passages, and define vocabulary in modified reading material. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.

## 200M Basic Social Studies

0 Credit
The 200M Basic Social Studies course is designed to familiarize the student with basic information on how to function as a member of a community. Legal issues, good citizenship, and the basic tenets of the political process at the local, state and federal level are covered. Exploration of authentic documents is emphasized to study United States history and world culture. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.

## 300M Basic Math

0 Credit
The 300M Basic Math course is designed to provide instruction in functional skills in mathematics. The course focuses on preparing students to be as independent as possible in life skills involving basic math skills. Acquisition of basic math skills to solve math equations, interpret data, and solve real word math problems using modified math content will be emphasized. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.

## Special Education

## 400M Basic Science

0 Credit
The 400M Basic Science course is designed to familiarize the student with scientific concepts which relate to independent living. Basic skills in the areas of physical, life, and environmental sciences are presented. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.

## 500M Basic Fine Arts

0 Credit
The 500M Basic Fine Arts class is designed to provide students exposure to a variety of art medium and technique, design, musical styles, and a wide continuum of fine art studies. The principles of this course are designed to help students choose activities that lead to enjoyable and fulfilling leisure time. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.

## 800M Basic Family Consumer Science

0 Credit The 800M Basic Family Consumer Science course is designed to enable the student to function as independently as possible in the areas of home management and life skills. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.

## 890M Basic Tech Ed

0 Credit
The 890M Basic Technology Education course is designed to enable the student to function as independently as possible in the area technology, keyboarding, and basic principles of computers. Strategies and modifications are incorporated into the course which may be aligned to goals and objectives on a student's Individualized Education Plan. Curriculum is adapted to meet alternate learning outcomes. This course is reserved for students working toward a Maryland High School Certificate and does not offer course credit.


## 002, 003, 004, 005 Comprehensive Study

 Skills 1 CreditComprehensive Study Skills (9-12) is an elective course designed to provide training in developing the learning strategies and study skills important for success in school. The course focuses on remembering information, reading and taking notes from textbooks, interpreting graphic aids, taking notes in class, and making good use of study time and space. Students will become aware of the importance of preparing and taking tests, using reference sources, writing research papers, pronouncing unfamiliar words, finding main ideas in the printed text, learning new word meanings and spelling new words. A variety of instructional techniques will be utilized to allow students to become more independent and have the ability to problem solve daily study and organizational challenges within the school setting. This course requires the permission of the instructor.

## 009A, 009B, 009C, 0009D Affective <br> Education <br> 1 Credit

Affective Education (9-12) is an elective course designed to develop appropriate interpersonal skills essential for social and emotional growth. The course focuses on self -concept, communication skills, problem-solving skills, self-control, and goal setting. Students will become more aware of the importance of self-esteem and positive choices. A wide range of teaching strategies, including positive modeling of social skills, and role-playing are utilized. The course requires permission from the instructor.

## 010 Conflict Resolution

1 Credit
Conflict Resolution (9-12) is an elective course designed to provide multiple ways of handling conflict. The course focuses on strategies for de-escalating, collaborating, compromising, avoidance, delaying, etc. Students will become aware of the importance of self-control and positive choices in dealing with conflict. Various instructional strategies are used in the course and may include social skills practice and role-playing. The course requires permission from the instructor.

## 011 Skill Streaming

1 Credit
Skill Streaming (9-12) is an elective course designed to develop appropriate emotional and behavioral reactions. The course allows students to develop competence in dealing with inner personal conflicts, using selfcontrol, and contributing to a positive school climate. Students can refine techniques in 50 prosocial skill areas including responding to failure, bullying prevention, stress management, and goal setting. The course requires permission from the instructor.

## Special Education

## 498 Personal-Social Skills

## 0 Credit

Personal-Social Skills (9-12) is an elective course designed to provide training in self-awareness, selfconfidence, socially responsible behavior, effective interpersonal skills, independence, problem-solving skills, and communicating with others. This course is designed for students working toward a Maryland High School Certificate.

## 499 Career Exploration

0 Credit
Career Exploration (9-12) is an elective course designed to provide skills to identify career options. Students will expand upon career interest by completing interest inventories, defining work skills, world of work vocabulary, and career goals. Students will review functional skills needed for jobs including basic math, reading, and work environment social skills. Students will practice completing job applications and identifying job preparation skills. Students will receive exposure to job related tasks in the school setting. This course is designed for students working towards a Maryland High School Certificate.


499 Career Exploration
0 Credit
Career Exploration (9-12) is an elective course designed to provide skills to identify career options. Students will expand upon career interest by completing interest inventories, defining work skills, world of work vocabulary, and career goals. Students will review functional skills needed for jobs including basic math, reading, and work environment social skills. Students will practice completing job applications and identifying job preparation skills. Students will receive exposure to job related tasks in the school setting. This course is designed for students working towards a Maryland High School Certificate.

## 725 Adaptive Physical Education 0 Credit

 Adaptive Physical Education (9-12) provides developmental activities, games, sports, suited to the interests, capacities, and skill level of students with disabilities. This course does not fulfill the physical education graduation requirement for students with disabilities who can participate in 711 Physical Education with accommodations. This course is designed for students working towards a Maryland High School Certificate.
## 726 Transition to College

0 Credit
Transition to College at Allegany College of Maryland (ACM) provides job training skills for students who are working towards a Certificate of Completion and wish to continue transition education through age 21. Students will participate in job embedded practices that include Breaking Barriers, Life Skills Enrichment, Road to Success, Vocational Readiness and Skills \& Concepts for Employment and Independent Living. This course is designed for students working towards a Maryland High School Certificate.

## Technology Education

## ADVANCED TECHNOLOGY OFFERINGS:

Advanced Tech Classes cannot be used in place of the required Technology Education Credit. Students who choose to select the Advanced Technology Pathway to complete their graduation requirements must select two courses from the following offerings:

## 873 Communication Technology I 1 Credit

Communication Technology I (10-12) is an elective course designed for all students who plan to follow a career in any field that requires reacting to and/or interperetation of technical drawings (e.g., architectural and mechanical design) or the reproduction of all printed material. Emphasis is placed on the knowledge and skills used in the construction and manufacturing industry. Specific studies include architectural and mechanical drawing and design, computer-aided drafting, computerized copy proportions, layout, photography, and printing. For diploma purposes, this course is designated an Advanced Technology Education credit.

## 874 Communication Technology II 1 Credit

Communication Technology II (11-12) is an elective course for students who plan to enter a profession or seek further education in an area that requires a knowledge of technical drawing, the experience to produce architectural or engineering drawings, or the knowledge of the printed media. Content includes commercial architecture, engineering design, using the computer for scale model testing, and methods used by industry to prepare copies for printing such as air brush rendering, continuous tone photography, and computer design. For diploma purposes, this course is designated an Advanced Technology Education credit.

## 875 Manufacturing Technology I 1 Credit

Manufacturing Technology I (10-12) is an elective course in which students develop skills that lead to a management technician and/or an engineering technician career. The course emphasizes background in equipment, layout, production tooling skills, work assignments, industrial and managerial safety requirements, raw industrial materials, inventory requirements, machine utilization, and management schedules through the completion of projects. For diploma purposes, this course is designated an Advanced Technology Education credit.

## 876 Manufacturing Technology II 1 Credit

 Manufacturing Technology II (11-12) is an elective course in which students will develop skills that lead to a management technician and/or an engineering technician career. The student will complete the following skills: equipment layout, production tooling skills, work assignments, industrial and manufacturing safety requirements, inventory requirements machine utilization. For diploma purposes, this course is designated an Advanced Technology Education credit.
## Technology Education

## 877 Construction Technology I 1 Credit

Construction Technology I (10-12) is an elective course in which students develop an understanding of equipment layout, production tooling skill, work assignments, industrial and managerial safety requirements, raw industrial materials, inventory requirements, material lists for industrial standard conformance, proper machine utilization, management schedules, bid estimation, construction schedules, and site preparation by constructing a wall section of a building. Students will be prepared for a higher education career or a career in an engineering technician or management technician program. For diploma purposes, this course is designated an Advanced Technology Education credit.

## 878 Construction Technology II 1 Credit

Construction Technology II (11-12) is an elective course in which students develop analyzing and synthesizing skills to produce a manufactured product. This course is a continuation of Level I course goals. In this course, students will do analysis and synthesis on: equipment layout, production tooling skills, work assignments, industrial and managerial safety requirements, identification of raw industrial materials, inventory requirements, machine utilization, knowledge of management schedules, bid estimation, construction schedules, and site preparations. Students will be prepared for higher education or a career as an engineering technician. For diploma purposes, this course is designated an Advanced Technology Education credit.

## 879 Power, Energy/Transportation Technology I

1 Credit
Power, Energy and Transportation Technology I (10-12) is an elective course designed for students interested in careers associated with Management, Industry, and Engineering. An instructional background into the machines used to convert energy into power for transportation systems in Business and Industry as well as the importance of Engineering in the development of more efficient power and transportation systems will be presented. Students will be given a knowledge of the skills to enhance career opportunities for employment or higher education. Students will assemble and study various transmission devices such as conveyor belts and/or gearing systems. For diploma purposes, this course is designated an Advanced Technology Education credit.

## 880 Power, Energy/Transportation Technology II <br> 1 Credit

Power, Energy and Transportation Technology II (11-12) is an elective course designed for students interested in career opportunities in Engineering, Managerial Technician, or Industrial Technician. Students will assemble various parts of transportation systems such as gearing systems, braking systems, and/or power systems. For diploma purposes, this course is designated an Advanced Technology Education credit.


## 171 French I

1 Credit
French I (9-12) is an elective course in which students learn to communicate about daily life and routine activities, while developing skills of listening, speaking, reading, writing, and using memorized or familiar material. Cultural emphasis will be on greeting, leave-taking, and expressing wants as students attempt to create with the language. Course content will include word order, numbers, common adjectives, adverbs, and question words.

## 172 French II <br> Prerequisite: French I (171)

1 Credit
French II (10-12) is an elective course which emphasizes everyday survival topics (e.g. personal information, restaurants, asking and giving directions, shopping and money matters, transportation, phone). Courtesy and social requirements are also emphasized with students working on combining one or two word answers from Level I into short sentences.

## 173 Honors French III Prerequisites: French I (171) and French II (172)

Honors French III (11-12) is an elective honors course. Students participate in face-to-face conversations on familiar topics. Students learn to expand written assignments into paragraphs while expressing preferences and opinions on topics of interest.

## 174 Honors French IV Prerequisites: French I (171), French II (172) and Honors French III (173)

Honors French IV (12) is an elective honors course. Students begin to discern main ideas and details from conversation regarding current events, weather reports, advertisements, newscasts, etc. Students can initiate conversations, explain topics of interest in detail, and narrate in a variety of tenses. The productive skills of speaking and writing receive more attention than the receptive skills of listening and reading.

## 175 Honors French V <br> 1 Credit <br> Prerequisites: French I (171), French II (172), Honors French III (173) and Honors French IV (174)

Honors French V (12) is an elective honors course. Students engage in reading for literary appreciation and for information in order to prepare oral and written reports. Grammar is reviewed and discussed as the students' weaknesses are revealed. Creative writing and long-range individual projects on selected topics are expected.

## World Language

## 178 AP French

1 Credit
Prerequisites: French I (171), French II (172), and French III (173)
AP French Language (12) prepares students to demonstrate their level of French proficiency across three communicative modes (Interpersonal [interactive communication], Interpretive [receptive communication], and Presentational [productive communication]), and the five goal areas outlined in the Standards for Foreign Language Learning in the 21st Century (Communication, Cultures, Connections, Comparisons, and Communities). The course is meant to be comparable to third year (fifth or sixth semester) college and university courses that focus on speaking and writing in the target language at an advanced level. This course is weighted for GPA at the 5.0 level. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 181 Spanish I

1 Credit
Spanish I (9-12) is an elective course in which students learn to communicate about daily life and routine activities, while developing skills of listening, speaking, reading, writing, and using memorized or familiar material. Cultural emphasis will be on greeting, leave-taking, and expressing wants as students attempt to create with the language. Course content will include word order, numbers, common adjectives, adverbs, and question words.

## 182 Spanish II

1 Credit Prerequisite: Spanish I (181)
Spanish II (9-12) is an elective course which emphasizes everyday survival topics (e.g. personal information, restaurants, asking and giving directions, shopping and money matters, transportation, phone). Courtesy and social requirements are also emphasized with students working on combining one or two word answers from Level I into short sentences.

## 183 Honors Spanish III <br> 1 Credit <br> Prerequisites: Spanish I (181) and Spanish II (182)

Honors Spanish III (10-12) is an elective honors course. Students participate in face-to-face conversations on familiar topics. Students learn to expand written assignments into paragraphs while expressing preferences and opinions on topics of interest.

World Language

## 184 Honors Spanish IV

1 Credit
Prerequisites: Spanish I (181), Spanish II (182) and Honors Spanish III (183)
Honors Spanish IV (11-12) is an elective honors course. Students begin to discern main ideas and details from conversation regarding current events, weather reports, advertisements, newscasts, etc. Students can initiate conversations, explain topics of interest in detail, and narrate in a variety of tenses. The productive skills of speaking and writing receive more attention than the receptive skills of listening and reading.

## 185 Honors Spanish V <br> 1 Credit <br> Prerequisites: Spanish I (181), Spanish II (182), Honors Spanish III (183) and Honors Spanish IV (184)

Honors Spanish V (12) is an elective honors course. Students engage in reading for literary appreciation and for information in order to prepare oral and written reports. Grammar is reviewed and discussed as the students' weaknesses are revealed. Creative writing and long-range individual projects on selected topics are expected.

## 186 AP Spanish

1 Credit
Prerequisites: Spanish I (181), Spanish II (182) and Spanish III (183)
AP Spanish Language (11-12) prepares students to demonstrate their level of Spanish proficiency across three communicative modes (Interpersonal [interactive communication], Interpretive [receptive communication], and Presentational [productive communication]), and the five goal areas outlined in the Standards for Foreign Language Learning in the 21st Century (Communication, Cultures, Connections, Comparisons, and Communities). The course is meant to be comparable to third year (fifth or sixth semester) college and university courses that focus on speaking and writing in the target language at an advanced level. This course is weighted for GPA at the 5.0 level. Students enrolled in this course are required to take a district comprehensive final examination that will be worth $10 \%$ of their final grade.

## 195 Mandarin Chinese I

1 Credit
Mandarin Chinese I (9-12) is a beginning level elective course that introduces the student to a variety of areas of Mandarin Chinese (Simplified). The student will learn listening, speaking, reading and writing skills through activities that are based on accepted methods of foreign language instruction. Throughout the five units of material (Introduction to Chinese, Greetings, Calendar, Weather, and Time), students learn to express themselves using an ever increasing vocabulary. Grammar is introduced and

## World Language

practiced with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese speaking world and their people, geographical locations and histories. The course is aligned to the national world language standards.

## 196 Mandarin Chinese II <br> 1 Credit <br> Prerequisite: Mandarin Chinese I (195)

Mandarin Chinese II (10-12) is an elective course which is the continuation of Chinese I. This course builds on previously developed language skills and provides practice in the use of idiomatic expressions, and further develops skills in reading and writing Chinese characters. It will encourage extensive conversation in Chinese and cover additional aspects of Chinese culture and history.

## 197 Honors Mandarin Chinese III

1 Credit
Prerequisite: Mandarin Chinese I (195) and Mandarin Chinese II (196)
Honors Mandarin Chinese III (11-12) is an elective course in which students continue to develop and refine their proficiency in listening, speaking, reading, and writing-with emphasis on the ability to interact orally and in writing. They communicate using more complex language structures on a variety of topics, moving from concrete to more abstract concepts. At this level, students comprehend the main ideas of the authentic materials that they read and hear, and they are able to identify significant details when the topics are familiar. Students gain a deeper understanding of the world around them while some familiar themes and topics from Chinese I and Chinese II may reoccur at the same time. However, the spiral character of the theme-based instruction requires students to demonstrate their communicative skills and sophistication at a new developmental level.

## 198 Honors Mandarin Chinese IV

1 Credit
Prerequisite: Mandarin Chinese I (195), Mandarin Chinese II (196), Honors Mandarin Chinese III (197)
Honors Mandarin Chinese IV (12) is an elective course which continues to expand upon the theme to "think globally and live locally." This honor level course provides students with opportunities to expand their Chinese listening, speaking, reading, and writing skills with short literary texts, authentic materials, and media on topics such as pollution, economic issues, and world population concerns. Students will continue to learn Chinese characters in traditional and simplified forms.

## Section V

## Dual Enrollment/ Early College Offering



## ACPS High School Scheduling Timeline for Dual Enrollment Courses

Feb. 10-Feb. $28 \quad$ Counselors visit classrooms to speak with students in grade 11 about graduation requirements, course selection and dual enrollment courses for the 20192020 school year.

Letter to parents prepared and sent to vendor. Vendor mails letters to arrive in homes by February $28^{\text {th }}$.

February 10-Feb 24 Counselors/ACM Coordinator will administer college placement tests to juniors who are planning to take college level courses to determine student's eligibility for dual enrollment course (s).

February 28-March 16 Students select courses on-line in ASPEN.
Once the course selection window is closed, counselors meet with each student to verify or amend student requests and to update the four year plan.

March 17-April 8 Principals, counselors and supervisors review student requests to determine course offerings, number of sections needed for each course, and to assess staffing needs.

April 14-April 20

April/May

August/Sept

October 1 Last date to pay for dual enrollment courses. signed and the framework for the Master Schedule will be developed. Principal and/or counselor complete the Master Schedule Build. collect the tuition and fees by October 1, 2020.

Principal and counselor attend Build Meeting at the Board. Teachers will be as-

Once the master schedule is built, counselors review student schedule conflicts and meets with students to resolve conflicts and/or select alternate courses.

BOE sends letter to students/parents to alert them that ACM will be sending an invoice, but they are not to pay any money to ACM. The school counselor will

## Procedures for Dual Enrollment Course Selection

- At the end of the junior year (exception P-TECH students), a student with satisfactory credits, assessment requirements and CCR MOU multiple measures of assessment met, may enroll in the Dual Enrollment Program.
- To be eligible for dual enrollment courses, ACM allows a 3.0 unweighted GPA or successful completion of the college placement test. FSU requires successful completion of their college placement test. Upon meeting eligibility requirements, the school guidance counselor will verify that the student's schedule reflects the college course (s) of choice.
- As a student in the dual enrollment program, students are enrolled in two places: Allegany County Public Schools (ACPS) and a college (ACM or FSU). Successful completion of Dual Enrollment courses outlined in the Program of Study awards a student ACPS credit, local college credit, and will be part of the high school GPA.
- Students enrolled in Dual Enrollment courses may participate in extra curricular activities. Information on Dual Enrollment courses is found in Section V in the Program of Study.
- During course selection, juniors will choose college dual enrollment course (s).
- The College and Career Coach will provide an orientation and registration session for students who have passed the placement test \& selected dual enrollment courses.
- The BOE will send a letter to parents/students to alert them that ACM will be sending an invoice, but they are not to pay any money to ACM. The ACM Coach or school counselor will collect the tuition and fees by October 1, 2020.
- The college/university will invoice the student for the entire cost of the coursework and will invoice the BOE for the tuition only. Parents/students are responsible for any additional fees. FARM students will not pay any tuition per Senate Bill 740.
- The Board of Education will make payment for the tuition invoiced amount directly to the college/university.
- Parents/students pay any additional fees.


## ACM Placement Tests For College Courses

*Students may qualify for a placement test exemption by meeting other CCR indicators. ACM also allows a 3.0 unweighted GPA.

See Counselors

| College Course | Qualifying College Placement Test |  |  |
| :---: | :---: | :---: | :---: |
|  | English | Reading | Mathematics |
| College Algebra |  | X | X |
| College Biology I |  | X | X or Algebra II concurrently |
| College Biology II |  | X | X or Algebra II concurrently |
| College Computer Literacy |  | X |  |
| College Computer Logic |  | X |  |
| College Criminal Evidence \& Procedures (CCTE ONLY) |  | X |  |
| $\begin{aligned} & \text { College Criminal Law } \\ & \text { (CCTE ONLY) } \end{aligned}$ |  | X |  |
| College English | X | X |  |
| College Introduction to Literature | X | X |  |
| College Probability \& Statistics |  | X | X |
| College Psychology |  | X |  |
| College Speech |  | X |  |
| College US History I |  | X |  |
| College US History II |  | X |  |
| Introduction to Literature- ACM Only | $\mathbf{X}$ | X |  |

FSU Placement Test Required For College Courses

| College Course | English | Qualifying College Placement Test |  |  | Mathematics |
| :--- | :---: | :---: | :---: | :---: | :---: |
| College Psychology |  | X |  |  |  |



## COMPUTER SCIENCE

## 038 College Computer Literacy

 1 Credit and 3 College Credit HoursCollege Computer Literacy (12) is an elective course which qualifies for dual credit. Students completing this course will receive both high school and college credit, and course grades will be calculated into both GPAs. Students will acquire and demonstrate proficiency in their understanding of basic computer terminology, the use of basic operating system features, email, internet, word processing, spreadsheets, databases, and presentation software. This is an online learning opportunity for senior students who are selfmotivated learners. Students enrolled as seniors at CCTE during the 2019-2020 school year in the IT Networking Program are encouraged to take this course, and all P-TECH students are required to take this course prior to the end of the 10th grade year.

## 039 College Computer Logic <br> 1 Credit and 4 College Credit Hours

College Computer Logic (12) is an elective course which qualifies for dual credit. Students completing this course will receive both high school and college credit, and course grades will be calculated into both GPAs. This is the first course in the study of computer programming languages. Topics include details of computer logic, data storage and concepts, computer arithmetic, control structures, and file processing concepts. Major emphasis will be given to computer programming problem analysis and planning with structured flow charting techniques. Several common programming languages will be explored. This is an online learning opportunity for senior students who are self motivated learners. Students enrolled as seniors at CCTE during the 2019-2020 school year in the IT Networking Program are encouraged to take this course, and all P-TECH students in the four year pathway are required to take this course during the 10th grade year.

## Dual Enrollment/ Early College

## ENGLISH

## 134 College English <br> 1 Credit and 3 College Credit Hours Prerequisite: Appropriate placement assessment scores for reading and writing.

Corequisite: Reading 93 may be taken concurrently with
English 101 as a corequisite if all other prerequisites have been met.
College English (12) introduces senior students to different modes of exposition, including narration, comparison/ contrast, and cause and effect. The brief essay is emphasized. Students are also instructed in the use of the library and basic research tools, emphasizing documentation of sources and avoidance of plagiarism. A final essay and objective examinations are required. There will be a reduced tuition fee assessed for this class. Students must select the ACPS college course and register with the college/university to receive college credit.

## 136 College Speech

1 Credit and 3 College Credit Hours
College Speech (12) is a survey course incorporating intrapersonal, interpersonal, and public speaking. A student will acquire theory and develop skills in interviewing, small group discussing, and informative/persuasive speaking. Students must select the ACPS college course and register with the college/university to receive college credit.

## 138 College Intro to Literature

1 Credit and 3 College Credit Hours
College Intro to Literature (12) is a thematic study of literature, looking across genres and cultures at contemporary topics, designed to engage students in the careful reading and critical analysis of imaginative literature. Continued development of writing skills, especially literary criticism, is fostered. Students must select the ACPS college course and register with the college/university to receive college credit.

## Dual Enrollment/ Early College

MATH

## 395 College Algebra

1 Credit and 3 College Credit Hours Students must have attained College and Career Readiness (CCR) status by any acceptable CCR measure and have passed Algebra II (351) or Honors Algebra II (361)
College Algebra (12) begins with a review of topics in intermediate algebra such as operations with exponents, radicals, and solutions of the linear and quadratic equations. The course progresses through the study of functions, solving and graphing equations, and solutions to systems of equations. Topics will be taught with a focus on problem solving and applications. This course reflects the importance the outside world places on thinking and problem solving. Students engage in solving realistic problems using information and the technological tools available in real life. A graphing calculator, such as a TI84 may be required. College credit is awarded through Allegany College of Maryland or Frostburg State University, depending upon the high school in which the course is taught. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course may need to be taken for admission to the college/university This class qualifies for dual credit which will be calculated in both the high school and college GPA. Students must select the ACPS college course and register with the college/university to receive college credit. (Students need one credit of math in their senior year to meet the four year math requirement.)

## 397 College Probability and Statistics <br> 1 Credit and 3 College Credit Hours <br> Prerequisite: Students must have attained College and Career Readiness (CCR) status by any acceptable CCR measure.

College Probability and Statistics (12) is an elective course which qualifies for dual credit. Topics include basic probability concepts, descriptive statistics, and inferential statistics. Students will conduct an independent project and prepare an analysis in both descriptive and inferential statistics as part of this course. Scientific and graphing calculators play an integral role in the development of the topics. College credit is awarded through Allegany College of Maryland or Frostburg State University, depending upon the high school in which the course is taught. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course may need to be taken for admission to the college/university. This class qualifies for dual credit which will be calculated in both the high school and college GPA. Students must select the ACPS college course and register with the college/university to receive college credit. (Students need one credit of math in their senior year to meet the four year math requirement.)

## Dual Enrollment/ Early College

## SCIENCE

431 College Biology I 2 Periods
1 Credit and 4 College Credit Hours
College Biology I (12) is an elective semester laboratory science course offered in ACPS high schools. This course is a double period course (fills 2 periods in student's schedule). The course is designed to provide an introduction to the general characteristics and basic concepts of living organisms, which include the cell, chemical aspects, physical aspects, energy flow, homeostasis, and genetics. College credit is awarded through Allegany College of Maryland or Frostburg State University depending upon the high school in which the course is taught. College Biology I is considered a general education course accepted at most University of Maryland colleges and universities.

## 439 College Biology II 2 Periods <br> 1 Credit and 4 College Credit Hours

## Prerequisite: College Biology I (439)

College Biology II (12) is an elective semester laboratory science course offered in ACPS high schools. This course is a double period course (fills 2 periods in a student's schedule). The course is a continuation of College Biology I and includes the diversity of living organisms, evolution, ecology. Laboratory work involves dissection of organisms. College credit is awarded through Allegany College of Maryland or Frostburg State University depending upon the high school in which the course is taught. There will be a reduced tuition fee assessed for this class. College Biology II may or may not be accepted by University of Maryland colleges and universities as a general education course. Students should check with their chosen college or university to determine whether College Biology II will fulfill the course requirements for their major program of study.


## HISTORY <br> 245 College US History I

1 Credit and 3 College Credit Hours
College United States History (12) is an elective semester course offered in ACPS high schools. College credit is awarded through Allegany College of Maryland or Frostburg State University, depending on the high school in which the course is taught. The curriculum provides for a survey of various forces on American life ranging from European background to the close of Reconstruction. Students will earn 3 college credit hours upon successful completion of the course.

## 246 College US History II <br> 1 Credit and 3 College Credit Hours

College United States History II (12) is an elective semester course offered in ACPS high schools. College credit is awarded through Allegany College of Maryland or Frostburg State University, depending on the high school in which the course is taught. This survey course is a study of industrial, economic, political, and social developments in the United States from the end of Reconstruction to modern times, including an analysis of conflicts which have shaped contemporary events. Students will earn 3 college credit hours upon successful completion of the course.

## PSYCHOLOGY

## 255 College Psychology

1 Credit and 3 College Credit Hours
College Psychology (12) is an elective course offered in ACPS high schools, taught by ACPS teachers that qualifies for dual enrollment credit which will be calculated in both high school and college GPA's. College credit is awarded through Allegany College of Maryland or Frostburg State University, depending on the high school in which the course is taught. The curriculum is a survey of the nature and purpose of psychology, the dynamics of adjustment, sensory development, psychometry, and the application of psychological knowledge to practical problems. Students will earn 3 college credit hours upon successful completion of the course.

## Dual Enrollment/ Early College

## CRIMINAL JUSTICE

## 913D College Criminal Law

 1 Credit and 3 College Credit Hours(FALL SEMESTER)
A study of substantive criminal law as it is applied at local, state and federal levels. Elements of crimes as prosecuted in a court of law are examined, and court decisions are used to study the sources and types of criminal laws. This course is an online opportunity for students enrolled in the Criminal Justice/Law Enforcement Program at CCTE only.

## 913E College Criminal Evidence and Procedure 1 Credit and 3 College Credit Hours <br> (SPRING SEMESTER)

Examines the principles and techniques of criminal procedure employed during trials to determine the admissibility of physical and testimonial evidence. An analysis of laws and court decisions relating to the admissibility is emphasized. This course is an online opportunity for students enrolled in the Criminal Justice/Law Enforcement Program at CCTE only.

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Section VI

## General Scheduling



## ACPS High School Scheduling Timeline for 2020-2021 Academic School Year

| February 10-28 | Counselors visit classrooms to speak with students in grades 8-11 about <br> graduation requirements and course selection for the following school year. <br> CCTE counselor visits comprehensive high schools for recruitment presentation |
| :--- | :--- |
| to 10th grade students. |  |
| Letter to parents prepared and sent to vendor. Vendor mails letters to arrive in homes by |  |
| February 22. |  |

## Allegany County Public Schools Transition Activities for Students Moving from Middle to High School:

- Classroom presentation to all $8^{\text {th }}$ grade students on high school course selection, graduation requirements and the effects of these choices on post-secondary education are conducted by the middle school and high school counselors.
- Evening parent presentation on high school course selection, graduation requirements and the effects of these choices on post-secondary education are conducted by the middle school and high school counselors.
- Middle School Counselors meet individually with EACH 8th grade student to review their course selections and discuss their high school and post-secondary education goals and complete a tentative Four Year High School Plan.
- A transition meeting for each 8th grade special education student is held at the high school to discuss proper placement and to discuss any concerns about entering high school. Special education facilitator, middle and high school special education teachers, student, parent (s), and high school counselor attend the meeting.
- 8th grade students visit and tour the high school to learn about all opportunities, both academic and extracurricular.
- 8th grade students also take a field trip to the Career Center to tour the skill areas and become aware of the opportunities available there.
- Incoming 9th grade students attend an orientation meeting within the first week of school. Administrators present school policies, procedures, and expectations to 9th grade students.
- Counselors meet individually with 9th grade students who seem to be struggling with the transition to high school and assist them with the areas in which they are having difficulty.
- Middle and High School Counselors meet to discuss at-risk students (attendance, behavior, family, academic, etc.) twice a year.

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## Section VII

Board of Education of Allegany County - Four Year High School Plan

STUDENT SERVICE COMPLETION

* Only one of the above must be completed.
Counselor's Name
Business Phone
__
Health \& Biosciences
Human Resource Services
___
Information Technology
Manufacturing, Engineering \&
Arts. Media and Communication
- 

Grade
Student's Name
Address
Mother's Name Father's Name
Career Goal

$$
\begin{aligned}
& \text { _Health \& Biosciences } \\
& \text { _Human Resource Services } \\
& \text { _Information Technology } \\
& \text { _Manufacturing. Engineering \& } \\
& \text { Transportation Technologies }
\end{aligned}
$$

Career Clusters

Board of Education of Allegany County - Four Year High School Plan - College Bound**
Counselor's Name

Board of Education of Allegany County - Four Year High School Plan - Career Center

## Grade

Student's Name
Address
Father's Name
Career Goal
Career Clusters
_Arts, Media and Communication Consumer Service, Hospitality \& Tourism _Construction and Development _Environmental, Agricuture \& Natural Resources Post Secondary Goal
Full Time
___ Full Time Employment

Mitary

| SUBJECT | Credits Req | GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH | 4 | ENGLISH 1 | ENGLISH 2 | ENGLISH 3 | ENGLISH 4 or AP ENGLISH |
| WORLD LANGUAGE | $2^{*}$ | SPANISH I | SPANISH II |  |  |
| SOCIAL STUDIES | 3 | LSF GOVERNMENT or AP US GOVERNMENT \& POLITICS | WORLD CULTURES, HONORS WORLD CULTURES or AP WORLD CULTURES | US HISTORY or AP US HISTORY | PSYCHOLOGY or AP PSYCHOLOGY |
| MATH | 4 | ALGEBRA I | GEOMETRY | ALGEBRA II | TRIG/PRECALCULUS |
| SCIENCE | 3 | EARTH/SPACE SCIENCE or HONORS EARTH/SPACE SCIENCE | BIOLOGY or HONORS BIOLOGY | CHEMISTRY or HONORS CHEMISTRY | PHYSICS or ENV. SCIENCE |
| HEALTH | 0.5 |  | COMP HEALTH ED |  |  |
| PERS. FINANCIAL LITERACY | 0.5 |  | PERSONAL FINANCIAL LITERACY |  |  |
| FINE ARTS | 1 | ART I, MUSIC, BAND or DANCE |  |  |  |
| P.E. | 1 | PHYSICAL EDUCATION (711) |  |  |  |
| TECH ED | 1 |  | FOUNDATIONS OF TECHNOLOGY or EXPLORING COMPUTER SCIENCE |  |  |
| ADVANCED TECH | $2^{*}$ |  |  |  |  |
| CAREER \& TECH ED | 4-6* |  |  | SKILL AREA | SKILL AREA |
| ELECTIVES | 3 |  |  | SKILL AREA ELECTIVE | SKILL AREA ELECTIVE |
| TOTAL CREDITS | 23-27 | 7 | 7 | 8 | 8 |

[^1]$\overline{\text { Parent/Guardian Signature }}$
Board of Education of Allegany County - Four Year High School Plan - Biomedical Science Honors

## Address

Mother's Name
Father's Name
Career Goal
Career Clusters
_Arts, Media and Com ricalion Consumer Service, Hospitality \& Tourism

- Construction and Development
-_Manufacturing. Engineering \& Technology
-Transportation Technologes
__Mitary
_other

| SUBJECT | Credits Req | GRADE 9 | DE 40 | GRADE 11 | GRADE 12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH | 4 | ENGLISH 1 or HONOR ENGLISH I |  | ENGLISH 3 or AP ENGLISH LANGUAGE | ENGLISH 4 or COLLEGE ENGLISH \& COLLEGE SPEECH or AP ENGUSH LITERATURE |
| WORLD LANGUAGE | $2^{*}$ |  | CHINESE I, SPANISH I or FRENCH I | CHINESE II, SPANISH II or FRENCH II |  |
| SOCIAL STUDIES | 3 | LSF GOVERNMENT. HONORS LSF GOVERNMENT or AP US GOV \& POLITICS | WORLD CULTURES, HONORS WORLD CULTURES, or AP WORLD CULTURES | US HISTORY or AP US HISTORY | PSYCHOLGY or AP PSYCHOLOGY |
| MATH | 4 | HONORS GEOMETRY | HONORS ALGEBRA II | HONORS TRIGONOMETRY or TRIG/PRECALC | HONORS CALCULUS, AP CALCULUS or AP STATISTICS |
| SCIENCE | 3 | HONORS EARTH/SPACE SCIENCE | HONORS BIOLOGY | HONORS CHEMISTRY | AP PHYSICS (1 and 2), AP, BIO or AP CHEM |
| HEALTH | 0.5 |  |  | HEALTH |  |
| PERS. FINANCIAL LITERACY | 0.5 |  |  | PERS. FINANCIAL LITERACY |  |
| FINE ARTS | 1 |  | ART, MUSIC, BAND, or DANCE |  |  |
| P.E. | 1 | PHYSICAL EDUCATION |  |  |  |
| TECH ED | 1 | FOUNDATIONS OF TECHNOLOGY or EXPLORING COMPUTER SCIENCE |  |  |  |
| ADVANCED TECH | $2^{*}$ |  |  |  |  |
| CAREER \& TECH ED | 4-6* |  |  |  |  |
| ELECTIVES | 3 | HNRS PRINCIPALS OF BIOMEDICAL SCIENCE | HNRS HUMAN BODY SYSTEMS | HNRS MEDICAL INTERVENTIONS | HNRS BIOMEDICAL INNOVATIONS |
| TOTAL CREDITS | 23-27 | 7 | 7 | 7 | 5 \& 2 Additional Electives |

STUDENT SERVICE COMPLETION

* Only one of the above must be completed.


# CENTER for CAREER and TECHNICAL EDUCATION (CCTE) 

The Center for Career and Technical Education (CCTE) serves the skill training needs of students from the comprehensive high schools in Allegany County by offering 15 different career and technical programs. CTE Completer Programs are also offered at the Comprehensive High Schools as indicated in the list below.

At the Center for Career and Technical Education, the academic curriculum is comparable to courses offered at the comprehensive high schools and students are eligible to participate in extracurricular activities at their comprehensive high schools.

Students who complete CTE programs are prepared for entry-level employment or further study at various post-secondary institutions. Most programs at the Center for Career \& Technical Education are eligible for articulated (free) college credit when complete.

## SKILL TRAINING PROGRAMS

Academy of Health Professions
Auto Collision Repair
Automotive Technology MLR
Biomedical Sciences (PLTW) (FO, AL, and MR)
Careers in Cosmetology
Construction Maintenance-HVAC (NCCER)
Construction Maintenance-Welding (NCCER)
Construction Trades-Carpentry (NCCER)
Construction Trades-Electrical (NCCER)
Criminal Justice/Law Enforcement
Culinary Arts (ACF)
Engineering Technology (PLTW)
Graphic Communications (PrintED)
Interactive Media Production (IMP)
Manufacturing Engineering Technology
P-TECH/IT Networking Academy (CISCO)
Teacher Academy of Maryland (CCTE)

## WHO IS ELIGIBLE TO ATTEND CCTE?

1. Any student enrolled in an Allegany County high school who has successfully completed ninth and tenth grade and has earned a minimum of twelve (12) credits prior to grade 11 is eligible to attend CCTE under the following conditions:

The following courses MUST BE successfully completed prior to admission to CCTE:

## Algebra I and another math Foundations of Technology <br> Biology and another science Government <br> Health <br> English 1 <br> English 2 <br> Fine Arts <br> Personal Financial Literacy <br> Physical Education <br> World History

A minimum of 12 credits must be completed to be enrolled as an 11th grade student at CCTE. Senior Option Students can only be admitted if they have all requirements for graduation met with the exception of: English 4, 4th Year Math, and the Periods required for Skill Area Completion. (Students applying for Senior Option cannot have any Bridge Project Requirements)
2. Some skill training areas have specific program entry requirements. (Example: Students entering the Academy of Health Professions Program must understand that the Internship Experience is conducted in local healthcare facilities and these facilities require students to have the seasonal influenza vaccine and the 2-step PPD testing)
3. In the event requests to enroll in a particular skill area exceed the capacity of the program, attendance, grade point average (GPA) and courses completed will be considered. Furthermore, instructors reserve the right to conduct interviews of students to determine selections when enrollment exceeds capacity. All students are provided the same opportunity to engage in these activities.

## DID YOU KNOW?

1. Many CCTE programs offer internships during the senior year.
2. Future Business Leaders of America (FBLA) and Skills USA participate in local, district, state, and national occupational skill competitions and are just two of the many organizations that you can belong to at CCTE.
3. CCTE has articulation agreements with Allegany College of Maryland and other 2 and 4 year colleges which award college credit.
4. CCTE students can apply and be accepted at two- and four-year colleges and universities.
5. CCTE students may participate in comprehensive high school sports and/or extracurricular activities.
6. CCTE assists students and graduates with job placement.
7. CCTE provides students with tools and materials in their chosen skill area.
8. CCTE provides opportunities for students who wish to participate in the Honors Certificate Program.
9. CCTE has a chapter of the National Technical Honor Society.
10. CCTE offers advanced placement and college courses.

TRANSFER PROGRAMS - (first two years of a Bachelor's degree)

| ARTS AND SCIENCES (ARTS) <br> - Art AOC <br> - English AOC | - History AOC <br> - Nanotechnology AOC <br> - Physics AOC | SECURE COMPUTING/INFORMATION SYSTEMS <br> TEACHER EDUCATION |
| :---: | :---: | :---: |
| ARTS AND SCIENCES (SCIENCES) <br> - Biology AOC <br> - Business Accounting AOC <br> - Businness Economics AOC <br> - Chemistry AOC <br> - Exercise Science AOC <br> - Healtt/Physical Education $A O C$ | - Psychology AOC <br> - Social Work AOC <br> - Sociology AOC | - Early Childhood AOC <br> - Elementary AOC <br> - Secondary AOC |
|  | BUSINESS ADMINISTRATION CRIMINAL JUSTICE | TEACHING - ElEMENTARY (AAT) |
|  | GENERAL STUDIES | AOC $=$ Area of Concentration |
|  | CAREER PROGRAMS - (two year programs of study-Associate degree) |  |
| APPLIED TECHNICAL STUDIES | *DENTAL HYGIENE | *MEDICAL LABORATORY TECHNOLOGY |
| AUTOMOTIVE TECHNOLOGY | FOREST TECHNOLOGY | MULTIMEDIA TECHNOLOGY |
| BUSINESS MANAGEMENT | HOSPITALITY MANAGEMENT | *NURSING |
| COMPUTER TECHNOLOGY <br> - Cybersecurity AOC <br> - Programming ADC <br> - Technical Support AOC <br> - Web Development AOC | - Hotel and Restaurant Management AOC <br> *HUMAN SERVICE ASSOCIATE <br> LEGAL STUDIES <br> *MASSAGE THERAPY | *OCCUPATIONAL THERAPY ASSISTANT <br> *PHYSICAL THERAPIST ASSISTANT <br> *RESPIRATORY THERAPIST $\qquad$ |
| CRIMINAL JUSTICE | *MEDICAL ASSISTANT | Soctive admes sins prayram |
| CULINARY ARTS |  |  |

CERTIFICATE PROGRAMS** - (one year unless otherwise noted)

| ADDICTIONS | DIETARY MANAGER | PHARMACY TECHNICIAN (1 semestar) |
| :---: | :---: | :---: |
| APPLICATIONS USER SPECIALIST | EVENT MANAGEMENT | PHLEBOTOMY/LABORATORY ASSISTANT |
| AUTOMOTIVE SERVICE ATTENDANT 11 samestar) | GENERAL STUDIES | PRACTICAL NURSING |
| AUTOMOTIVE TECHNOLOGY | GRAPHIC DESIGN | RESTAURANT MANAGEMENT |
| BAKING ESSENTIALS | LEGAL STUDIES | SPANISH |
| BUSINESS ACCOUNTING | MASSAGE THERAPY | TECHNICAL SUPPORT |
| BUSINESS ENTREPRENEURSHIP | MEDICAL CODING AND BILLING | TREE CARE TECHNICIAN |
| BUSINESS MARKETING AND SALES | MEDICAL LABORATORY TECHNOLOGY - |  |
| BUSINESS SUPERVISION | BIOTECHNOLOGY |  |
| COOKING ESSENTIALS | MEDICAL SCRIBE SPECIALIST |  |
| CRIMINAL JUSTICE | NURSING ASSISTANT/ | ${ }^{*}$ Framerenpartied infuration aliouthess |
| CYBERSECURITY | GERIATRIC AIDE (1 semstar) | woitrits at wwwaliggayy duggainulampbymerid |

## LETTERS OF RECOGNITION

| ACCOUNTING | INTEGRATIVE HEALTH | PEACE AND CONFLICT STUDIES |
| :--- | :--- | :--- |
| CRIMINAL JUSTICEICORRECTIONS | INTEGRATIVE WELLNESS | PHOTOGRAPHY |
| ENTREPRENEURSHIP TRAINNG | LEADERSHIP DEVELOPMENT | WEB PAGE DEVELOPMENT |
| FIRST-LINE SUPERVISION | MARKETNG AND SALES TRAINING |  |

NON-DEGREE STATUS

- Transient
- Early College
- Non-Degree Students


## EARLY COLLEGE

For current high school students who are at least 16 years of age. All interested students in the Early College program may take college courses at Allegany College of Maryland while still in high school and receive $50 \%$ off their tuition rate.

## FROSTBURG STATE UNIVERSITY-FSU AT A GLANCE

| AVERAGE ENROLLMENT |  |
| :--- | :--- |
| 4,800 undergraduate | 675 graduate |
| STUDENT/FACULTY RATIO |  |
| 16:1 |  |
| Average class size 22 |  |
| TUITION \& FEES* |  |
| In-State | $\$ 9,200$ |
| Out-of-State | $\$ 22,900$ |
| Regional Resident** | $\$ 17,800$ |

*Estimated undergraduate expenses for 2018-19; includes
tuition \& fees for one year
**Discount for out-of-state students residing within 120 miles of Frostburg State University

PROGRAMS OF STUDY
Majors are listed in bold.
Accounting
BS Accounting/MBA Dual Degree
Addictions Counseling*
Adventure Sports Management+ ${ }^{+}$
African American Studies
Animal Behavior
Art \& Design
Teaching Certification
Art History
Athletic Training
Biology
Business Administration+
Chemistry
Child and Family Counseling*
Coaching
Communication Studies
Computer Information Systems
Computer Print Graphics*
Computer Science
Cultural Anthropology
Dance
Earth Science
Economics
Educational Professions:
Early Childhood/Elementary Education ${ }^{+}$
Elementary Education
Elementary/Middle School
Dual Certification
Engineering
Electrical Engineering**
Materials Engineering**
Mechanical Engineering
(Collaborative Program)
English
Professional Writing*
Teaching of Writing*
Environmental Analysis \& Planning
Ethnobotany
Exercise \& Sport Science
Film Studies
Finance
Financial Services
Fine Arts

Foreign Languages \& Literature
French**
Spanish**
Forestry
Geography
Graphic Design
Health \& Physical Education Teaching Certification
Health Science
History
International History
History of the Americas
Information Technology
International Studies International Business** International Development** International Economics** International Politics**
Interpretive Biology \& Natural History
Jazz Studies
Journalism
Law: Bachelor's/Juris Doctor -Dual-degree program
Law and Society
Criminal Justice**
Legal Studies**
Leadership Studies
Liberal Studies ${ }^{+}$
Management
Marketing
Mass Communication
Mathematics
Mathematical Sciences
Music
Music Education
Music Industry**
Music Theatre
Teaching Certification
Vocal Performance**
Nursing: RN to BSN (For transfer students only)
Nursing
(Collaborative B.S. Program)
Philosophy
Physics
Political Science
Psychology ${ }^{+}$
Leadership in Psychology**
Industrial \& Organizational Psychology
Public Administration*
Public Relations
Recreation \& Parks Management
Adventure Sports**
Community Program Delivery**
Hospitality Management \& Tourism**
Therapeutic Recreation**
Secure Computing \& Information Assurance
Social Science
Social Work
Sociology ${ }^{+}$
Sustainability Studies

Theatre
Acting
Design/Technology
Theatrical Studies
Urban and Regional Planning
Veterinary Medicine Preparation
Wildlife \& Fisheries
Women's Studies
PRE-PROFESSIONAL PROGRAMS
Dental Hygiene
Dentistry
Law
Medical Technology
Medicine
Nursing
Occupational Therapy
Optometry
Pharmacy
Physical Therapy
Veterinary Medicine
SPECIAL OPPORTUNITIES
University Honors Program
Learning Communities
Internships
Study Abroad

* emphasis
**concentration
+junior/senior-level course work also offered at the University System of Maryland at Hagerstown
++ in collaboration with Garrett College


## MEN'S INTERCOLLEGIATE SPORTS

Baseball
Basketball
Cross-Country
Football
Lacrosse
Soccer
Swimming
Tennis
Track \& Field (indoor \& outdoor)
WOMEN'S INTERCOLLEGIATE SPORTS
Basketball
Cross-Country
Field Hockey
Lacrosse
Soccer
Softball
Swimming
Tennis
Track \& Field (indoor \& outdoor)
Volleyball
FOR MORE INFORMATION about specific programs, visit our website: www.frostburg.edu

Mail: FSU Office of Admissions
101 Braddock Road
Frostburg, MD 21532-2303
Phone: 301.687.4201
Email: FSUAdmissions@frostburg.edu

AlLEGANY COUNTY PUBLIC SCHOOLS
Programs of study


[^0]:    Final concordance research between the new SAT and ACT is ongoing.

[^1]:    STUDENT SERVICE COMPLETION

    * Only one of the above must be completed.

