ALLEGANY COUNTY PUBLIC SCHOOLS

HIGH SCHOOL PROGRAMS OF STUDY

2018-2019

Introduction
University Completer Program
Occupational Completer Programs
Course Descriptions
Post-Secondary Connections

Board of Education of Allegany County
108 Washington Street, P.O. Box 1724
Cumberland, MD 21502

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.

Message from the Superintendent

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 post-secondary 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 wishes for success and a bright future,

David A. Cox, Ed.D.
Superintendent of Schools

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WHAT IS A PROGRAM OF STUDY?

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 pattern of course work must include two (2) credits in world language or advanced techs and four years of mathematics. The coursework must include Algebra I, Geometry, and Algebra II.

Occupational Completer Program (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, a student with satisfactory credits, assessment requirements met, and a minimum GPA of 3.0 may enroll in the Dual Enrollment Program. Students are enrolled in two places: Allegany County Public Schools (ACPS) and a college. 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 starting on Page 81:

- Students must register with the college/university **each** semester for dual enrollment courses.
- ACM will accept a 3.0 high school cumulative GPA in lieu of the college placement exam for most dual enrollment courses. For College Algebra, students must have a 3.0 cumulative GPA and at least a "B" in Algebra II. ACM is reviewing science requirements. Accuplacer will be used as the secondary assessment tool if students do not meet ACM's requirements; students must take and pass the college placement test before they will be enrolled in college courses.
- ACM will accept other approved College and Career Ready (CCR) indicators in lieu of the placement test such as a score of 530 or higher on the SAT Mathematics, 480 or higher on the SAT Evidence Based Reading and Writing, 21 or higher on the ACT. For other approved indicators, please contact your school counselor.
- Practice Placement Tests are online: http://acps.schoolwires.net/Page/727
- Senior English credit may be satisfied by taking College English or Senior English in the Comprehensive High School. Students are strongly encouraged to take College Speech in addition to College English.
- 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.

WHAT IS A PROGRAM OF STUDY?

Senior Option—Center for Career and Technical Education

At the end of the junior year, a student with satisfactory credits and a cumulative GPA of 2.5 may enroll at the Center for Career and Technical Education to complete a Senior Option in a skill area of interest. Students must take English 4 and one additional elective and complete two levels in a selected skill area. A student requesting Senior Option must complete an application with the Center for Career and Technical Education counselor and there must be available space in the skill area. In addition, Senior Option is contingent upon the approval of the Center for Career and Technical Education principal.

PROGRAMS OF STUDY

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

TABLE OF CONTENTS

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
Carpentry ……..……..… 15
Careers in Cosmetology ……..……...…. 16
Criminal Justice/Law Enforcement…..…… 17
Culinary Arts (ACF) ……. ……..…….. 18
Electrical Construction and Maintenance ……...……. 19
Engineering Technology (PLTW)…… 20
Graphic Communications (PrintED)……..……..... 21
Heating, Ventilation and Air Conditioning (HVAC)…..……...…….. 22
Industrial Manufacturing ……..……...…. 23
Interactive Media Production (IMP)……... 24
IT Networking Academy (CISCO)…… 25
Teacher Academy of Maryland …… 26
Welding and Metal Technology ……..…… 27

TABLE OF CONTENTS

Occupational Completer Programs Summary.....…… 28-30

Section IV Course Descriptions

Art …… 31
Biomedical Sciences…….. 32
Business Education ……..…….. 33
Career and Technology Education (CCTE)..…….. 34-50
Computer Science…..…….. 51-52
English/Language Arts……... 53-55
Entrepreneurship …… 56
Family/Consumer Science……..…… 57
Health Education…….…. 58
Mathematics…….. 59-61
Music…….…. 62-64
Physical Education…….. 65-66
Science…….. 67-70
Social Studies…… 71-73
Special Education……. 74-75
Teacher Academy of Maryland ……. 76
Technology Education……. 77-78
World Language…… 79-80

Section V Dual Enrollment/Early College

ACPS High School Scheduling Timeline for Dual Enrollment/
Early College…… … … … 81
Procedures for Dual Enrollment Course Selection … ……... 82
ACM Placement Test Required for College Courses … ….... 83
Dual Enrollment/Early College Course Descriptions … … ... 84-87

Section VI General Scheduling Information

ACPS High School Scheduling Timeline… … … … … … … ... 88
ACPS Transition Activities … … … … … … … … … … … … .. 89

Section VII Planning

Four-year High School Plan ……..……..…. 90
Four Year High School Plan-Academics … … … … …… … 91
Four Year High School Plan-College Bound … … … … … 92
Four Year High School Plan-Career Center ……. 93
Four Year High School Plan-Biomedical Science-Honors… …. 94
Center for Career and Technical Education (CCTE)…...…..... 95
Allegany College of Maryland (ACM)…….……..……. 96
Frostburg State University (FSU) ……..……. 97

Section I

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	Subject Area
4	English
4*	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
1	Fine Arts
1	Physical Education
1	Technology Education
.5	Health Education
.5	Personal Financial Literacy
Choose one of the following:	
2	World Language (in sequence preferred)
2	Advanced Technology
4-6	State approved Career/ Technology Completer Program
19-24	Total Core Credits
3	Electives
23-27	Minimum Total

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 and English10 PARCC assessments to meet graduation requirements.
- Beginning in 2015-16, all 11th graders 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 fours 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 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.
- Students entering 9th grade in school year 2013-14 and beyond MUST either pass the Government HSA or include the Government HSA score to meet the required combined score.

GRADUATION REQUIREMENTS

GRADUATION REQUIREMENTS

MARYLAND HIGH SCHOOL DIPLOMA

Maryland Tests Required for Graduation

High School Assessments (HSA)

All students will need to take and pass the Government HSA with a passing score of 394. If students fail the Government HSA twice, they are eligible to complete a Government Bridge Project. For every twenty-two points away from the passing score, student will be required to complete one project.

PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREERS (PARCC)

MSDE approved a passing score of 750 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 7 and above.

MARYLAND INTEGRATED SCIENCE ASSESSMENT (MISA)

The Maryland Integrated Science Assessment (MISA) will replace HSA Biology in 2017-2018.

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 college-level 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."

Grade 11 Assessment Options include: PARCC, SAT, ACT, AP, ACCUPLACER, Dual Enrollment. 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 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 4.0 GPA scale	includes Essential Learner Outcomes or core content identified in the Maryland College and Career Ready Standards or Maryland Core Learning Goals.
Honors 4.5 GPA scale	includes content in the Maryland College and Career Ready Standards or the Maryland Core Learning Goals that includes an increased emphasis on the synthesis of content knowledge demonstrated by an integration of reading and writing processes.
Dual Enrollment or Early College on-site 5.0 GPA scale	includes syllabi content that represents the highest common standards between ACPS and the cooperating college. Successful completion (a grade of C or better) awards local college credit hours. A grade of D may not be awarded college credit or be transferable to other institutions.
Advanced Placement 5.0 GPA scale	includes content in the Advanced Placement Course Outline approved by the College Board. College credit is awarded based on the AP test score and the standards set by the receiving college/university. Prerequisites for AP course work are intended to serve as a guideline not a stringent rule. AP Courses are weighted on a 5.0 GPA scale. The course requires a final classroom exam that will count 10% of the final grade. Students are strongly encouraged to take the Advanced Placement examination.

NCAA Divisions I and II Initial-Eligibility Requirements

Academic Certification Decisions

To receive an academic certification, you must have:

- A final official transcript with proof of graduation.
- Official transcripts from ALL other high schools attended.
- Test scores.
- No open academic tasks.
- Be on a 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 once all of your appropriate documents have been submitted.

Once a certification has been completed, you will receive one of the following decisions if you are being recruited by a Division II school:

EARLY ACADEMIC QUALIFIER

If you meet specific criteria listed below after six semesters, you may be deemed an early academic qualifier for Division II and may practice, compete and receive an athletics scholarship. You will need:

Minimum SAT combined score (math and critical reading) of 820 on the old SAT or 900 on the redesigned SAT OR minimum sum score of 68 on the ACT; and a core-course GPA of 2.5 or higher in a minimum of 14 core courses in the following areas:

- 3 years of English.
- 3 years of math.
- 2 years of natural or physical science.
- 6 additional core courses in any area.

A final high school transcript is required to be submitted to the NCAA Eligibility Center after high school graduation for all early academic qualifiers.

QUALIFIER

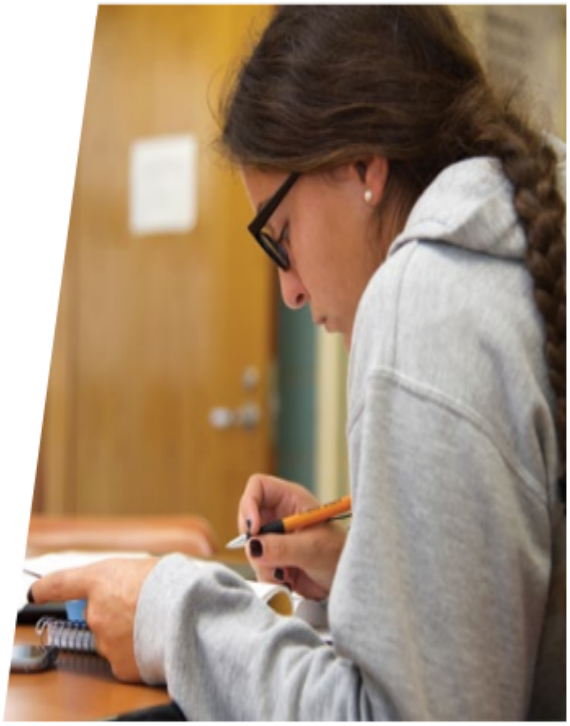
You may practice, compete and receive an athletics scholarship during your first year of full-time enrollment at an NCAA Division II school.

PARTIAL QUALIFIER

You may receive an athletics scholarship during your first year of enrollment and may practice during your first year of enrollment, but may NOT compete.

NONQUALIFIER

You will not be able to practice, receive an athletics scholarship or compete during your first year of full-time enrollment at a Division II school.



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

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.

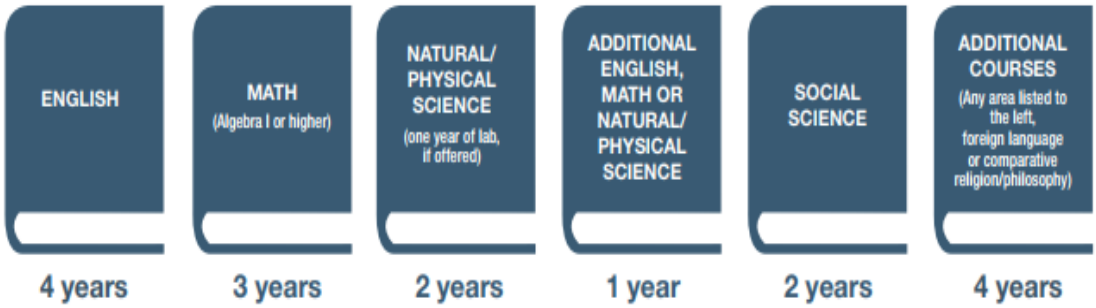
Courses Taken After High School

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, and it must appear on your home high school transcript with grade and credit.

DIVISION I ACADEMIC STANDARDS

Division I schools require you to meet academic standards for NCAA-approved core courses, core-course GPA and test scores. To be eligible to practice, compete and receive athletics scholarships in your first full-time year at a Division I school, you must graduate from high school and meet ALL of the following requirements:

1. Complete a total of 16 core courses in the following areas:



Note: See the core-course progression requirements.

2. Complete 10 out of your 16 core courses, including seven in English, math or natural/physical science, before the start of your seventh semester. Once you begin your seventh semester, you must have more than 10 core courses completed to be able to repeat or replace any of the 10 courses used to meet the 10/7 requirement. Students whose academic credentials are solely international (including Canada) are not required to meet the 10/7 requirement.

3. Complete the 16 NCAA-approved core courses in eight academic semesters or four consecutive academic years from the start of ninth grade. If you graduate from high school early, you still must meet core-course requirements.

4. Earn an SAT combined score or ACT sum score that matches your core-course GPA (minimum 2.300) on the Division I sliding scale. SAT scores earned on or after March 2016 will be evaluated based on concordance tables established by the College Board.

How to plan your high school courses to meet the 16 core-course requirement:

4 X 4 = 16

4 English courses (one per year)
+ 4 math courses (one per year)
+ 4 science courses (one per year)
+ 4 social science (and/or additional) courses (one per year)

16 NCAA core courses

NCAA Divisions I and II Initial-Eligibility Requirements

NCAA Divisions I and II Initial-Eligibility Requirements

Sliding Scale for Division I

Remember, if you took the SAT on or after March 2016 you need to compare your score on the College Board concordance table. Learn more about the concordance table on page 24 or visit **ncaa.org/test-scores.*

DIVISION I FULL QUALIFIER SLIDING SCALE		
CORE GPA	SAT* READING/MATH	ACT SUM
3.550	400	37
3.525	410	38
3.500	420	39
3.475	430	40
3.450	440	41
3.425	450	41
3.400	460	42
3.375	470	42
3.350	480	43
3.325	490	44
3.300	500	44
3.275	510	45
3.250	520	46
3.225	530	46
3.200	540	47
3.175	550	47
3.150	560	48
3.125	570	49
3.100	580	49
3.075	590	50
3.050	600	50
3.025	610	51
3.000	620	52
2.975	630	52
2.950	640	53
2.925	650	53
2.900	660	54
2.875	670	55
2.850	680	56
2.825	690	56
2.800	700	57
2.775	710	58

DIVISION I FULL QUALIFIER SLIDING SCALE		
CORE GPA	SAT* READING/MATH	ACT SUM
2.750	720	59
2.725	730	60
2.700	740	61
2.675	750	61
2.650	760	62
2.625	770	63
2.600	780	64
2.575	790	65
2.550	800	66
2.525	810	67
2.500	820	68
2.475	830	69
2.450	840	70
2.425	850	70
2.400	860	71
2.375	870	72
2.350	880	73
2.325	890	74
2.300	900	75
2.299	910	76
2.275	910	76
2.250	920	77
2.225	930	78
2.200	940	79
2.175	950	80
2.150	960	81
2.125	970	82
2.100	980	83
2.075	990	84
2.050	1000	85
2.025	1010	86
2.000	1020	86

ACADEMIC REDSHIRT

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	Technology Education
Family & Consumer Science	Health
Computer Studies	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.

HIGH SCHOOL CERTIFICATE

STUDENT SERVICE LEARNING

048 Student Service Learning 0 Credit

Student Service Learning is a graduation requirement for all Maryland public school students. Service-learning is infused into the 6th, 7th, 8th and 9th grade subject areas. Students will have the opportunity to receive hours in Creative Arts, English, Math, Science and/or Social Studies. The 75 hours of service-learning required for high school graduation will be counted when students successfully complete 9th grade. Students will receive hours in the following ways: 6th grade – 15 hours, 7th grade– 30 hours, 8th grade – 15 hours, 9th grade – 15 hours. The credit will be a Pass (P) grade only and will not be averaged with the GPA.

051 Elective Service Learning 1 Credit

Active Service Learning is a program available to all students in grades 6-12. Students wishing to work toward this elective credit must complete a total of 132 hours beyond the initial 75 required service-learning hours. To earn a Service-Learning Elective Credit, students must complete at least one community based individual project in addition to curriculum based projects. To receive the additional credit, students must: 1) participate in or organize approved independent projects or activities which meet school or community needs, 2) receive approval for the project or activity, and 3) complete and return the verification/reflection form to the service learning coordinator at that grade level or at the high school level. Students may earn only one Active Service Learning credit. The credit will be a Pass (P) grade only and will not be averaged with the GPA. Students will receive the elective service learning credit once 132 hours have been completed and recorded in the Service Learning Tracker.

COMPLETER PROGRAM INTERNSHIPS

060 Job Shadowing 0 Credit

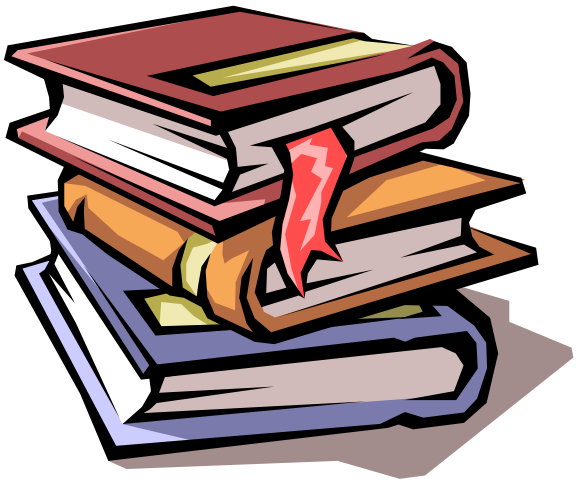
Job Shadowing is a work-based learning opportunity designed to provide hands-on work experience for students for career development exploration.

063 Non-credit Internship 0 Credit

Non-credit Internship is a work-based learning opportunity designed to provide a work related experience for the student as part of an occupational completer program. The credit will be a Pass (P) grade only and will not be averaged with the GPA. Non-credit Internship is related to the student's occupational completer program and requires the approval of the occupational completer teacher. This course is separate from the credit internships required for some occupational completer programs.

Section II

University Completer Program



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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.

1. High School Diploma

or its equivalent

2. Grade Point Average

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.

3. Test Score

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 college-level 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 (or 2 Advanced Techs)	2
Academic Electives	6
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.

UNIVERSITY COMPLETER

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Section III

Occupational Completer Programs

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Occupational Completer Programs
By
Career Clusters

Arts, Media and Communication

Graphic Communications (PrintED CCTE)
Interactive Media Production (IMP CCTE)

Construction and Development

Carpentry (CCTE)
Electrical Construction and Maintenance (CCTE)
Heating, Ventilation and Air Conditioning (HVAC) (CCTE)
Welding and Metal Technology (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) (Comprehensive Schools)

Human Resource Services

Criminal Justice/Law Enforcement/Public Safety (CCTE)
Teacher Academy of Maryland (TAM) (Comprehensive High Schools)

Information Technology

IT Networking Academy (CISCO) (CCTE)

Manufacturing, Engineering, and Technology

Engineering Technology—Project Lead the Way (PLTW) (CCTE)
Industrial Manufacturing (CCTE)

Transportation Technologies

Auto Collision Repair (CCTE)
Automotive Technology MLR (CCTE)

ACADEMY OF HEALTH PROFESSIONS

Program Overview:
The Academy of Health Professions (AHP) 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 postsecondary level. Students are introduced to healthcare knowledge and skills through two foundation courses: Foundations of Medicine and Health Science and Structure and Functions of the Human Body. Within the AHP 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. AHP students will also have the opportunity to design and participate in an Allied Health Internship Course. Students enrolled in this program are able to acquire (4) separate program certifications as a result of program completion: CAN, GNA, CCMA, and Pham Tech.

Occupational Careers and Postsecondary Options:
Secondary: Certified nursing assistant, geriatric nurse assistant

Postsecondary (2 year): Dental Hygienist, Dental Assistant, Massage Therapist, Medical Assistant, Medical Lab Technician, Nurse, Occupational Therapist, Phlebotomy Technician, Pharmacy Technician, Physical Therapy Technician, Respiratory Therapist, Radiology Technician, Sonographers

Postsecondary (4 year): Allied Health Manager, Audiologist, Biological Technician, Clinical Lab Technician, Dietitian, EMT/Paramedic, Forensic Science Technician, Geneticist, Health Educator, Registered Nurse, Occupational Health Specialist, Orthotists, Prosthetist, Pediatric Nurse, Physician Assistant, Substance Abuse Counselor, Social Worker, Speech Pathologist, Toxicologist, Veterinarian Technician

Program Certification:
- Maryland Board of Nursing (MBoN) - Certified Nursing Assistant

Articulated Credit:
- Allegany College of Maryland (ACM)
  - ◊ Students who are Academy of Health Professions Completers may earn guaranteed admission under articulated conditions to the following ACM programs: Medical Assistant, Medical Laboratory Technology, Nursing (RN/PN), Occupational Therapy Assistant, Physical Therapist Assistant, Radiologic Technology, and Respiratory Therapist.
- Community College of Baltimore County (CCBC) - 3 Credits
- Stevenson University (Baltimore, MD) - 6 Credits or 3 Credits Dependent on Degree Chosen

Total Dollars Saved through Articulated Credits dependent on College
$1800.00 to $8000.00

AUTO COLLISION REPAIR

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, all National Automotive Technicians Education Foundation (NATEF) Skill/Program Certification standards, 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. This CTE pathway program consists of the following courses: Paint and Refinishing, Non-Structural Analysis and Damage Repair, - Structural Analysis and Damage Repair, Mechanical and Electrical Components.

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 Quali-

Program Certification:
- National Automotive Technicians Education Foundation (NATEF) - Non-Structural Analysis & Damage Repair
- National Automotive Technicians Education Foundation (NATEF) - Painting and Refinishing
- National Automotive Technicians Education Foundation (NATEF) - Mechanical and Electrical Components

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

AUTOMOTIVE TECHNOLOGY (MLR)+

Program Overview:
The Automotive Technology MLR Plus CTE Program of Study (POS) is an instructional program that incorporates the NATEF 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 real-world 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 Representative

Program Certification:
- National Automotive Technicians Education Foundation (NATEF) - Suspension & Steering
- National Automotive Technicians Education Foundation (NATEF) - Brakes
- National Automotive Technicians Education Foundation (NATEF) - 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

BIOMEDICAL SCIENCES (PLTW)

Program Overview:
The Biomedical Sciences Program 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 the 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.

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) -** Proposed articulation awaiting signature indicates nine potential credits toward designated programs identified at ACM.
- 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

CARPENTRY

Program Overview:
Carpentry 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 #1024 United Brotherhood of Carpenters and Joiners of America. If successful, credit towards an apprenticeship program is given.

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, Rigging Certification, Fall Protection Certification
- First Aid/CPR

Apprenticeship Credit:
- Opportunity to earn first-year apprenticeship credit in the United Brotherhood of Carpenters and Joiners of America Union #1024

CAREERS IN COSMETOLOGY

Program Overview:
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 work-based 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.

Occupational Careers and Postsecondary Options:

Secondary: Cosmetologist, Barbering, Make-up Artist, Nail Technician, Esthetician

Postsecondary (2 year): Massage Therapy, Electrology, Laser Hair Removal, Salon Manager, Cosmetology Instructor

Program Certification:
- Practical MD State Board of Cosmetologist License

Program Credit:
No articulations available. Students are required to take the Maryland State Board of Cosmetologists' Examination. Successful passage of this exam results in cost saving equivalent to enrollment in Post-secondary Cosmetology Program.

Cost savings dependent on Post-secondary Cosmetology Program of Choice.

CRIMINAL JUSTICE/LAW ENFORCEMENT

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 Investigators

Program Certification:
- **CPR/First Aid**

Articulated Credit:
- Frederick Community College – 3 Credits
- Allegany College of Maryland (ACM) - 3 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

CULINARY ARTS (ACF)

Program Overview:
The Culinary Arts Program partners with the American Culinary Federation (ACF) program to prepare students for successful careers in the food and beverage industry. This is a two-year CTE program that educates high school students in professional cooking or professional baking. 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 science classes, this program will provide the necessary skills for further education and career success. Students have the opportunity at the end of the program to receive their nationally recognized certification as a Certified Junior Culinarian by successfully completing the ACF NOCTI Written & Practical Exams.

Occupational Careers and Postsecondary Options:

Secondary: First Cook, Professional Chef, Sous Chef, Banquet Chef, and Culinary Manager.

Postsecondary (2 year): Service Managers, First-Line Supervisors/Managers of Food Preparation and Serving Workers, Institution and Cafeteria Cooks and Private Household Cooks

Postsecondary (4 year): General Manager, Executive Chef, Menu Planner, Nutritionist and Registered Dietician Chefs and Head Cooks, Food Preparation Workers, Food Service Managers, First-Line Supervisors/Managers of Food Preparation and Serving Workers, Institution and Cafeteria Cooks and Private Household Cooks

Program Certification:
- National Restaurant Association (NRA) - ServSafe Food Handling

Articulated Credit:
- Allegany College of Maryland (ACM) - Up to 10 Credits Dependent on Degree
- Potomac State College - 2 Credits
- Stratford University
    - ◊ AAS Degree in Culinary Arts (18 credits)
    - ◊ BA Degree in Culinary Management (18 credits)

Total Dollars Saved through Articulated Credits dependent on College
$1800.00 to $8000.00

ELECTRICAL CONSTRUCTION AND MAINTENANCE

Program Overview:
Electrical Construction and Maintenance 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 blue prints, 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 a course in Industrial Motor Control. Each advanced student is required to complete a project in motor control. An articulation agreement with Local #307, International Brotherhood of Electrical Workers has been established for second year students. If successful in the program, the participant is eligible for an interview for apprenticeship. 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.

Occupational Careers and Postsecondary Options:

Secondary: Electrician, Industrial Maintenance Technician, Building Management, Construction Management

Postsecondary (2 year): Industrial maintenance, Field Service Technician, Electronic Apparatus Troubleshooter, Electrical Laboratory Technician, Electrical Engineering Technologist, Design Assistant, Electrical Layout Facilitator, Technical Writer

Program Certification:
- OSHA 10 Certification
- First Aid/CPR

Apprenticeship Credit:
- Opportunity to earn first-year apprenticeship credit in the International Brotherhood of Union Electrical Workers (IBEW) Local #307

ENGINEERING TECHNOLOGY (PLTW)

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. From the program course listing students must take the 1st (4) courses and (1) additional elective course to be a completer: Honors Principles of Engineering, Honors Introduction to Engineering Design, Honors Digital Electronics. Honors Engineering Design & Development. Elective courses to choose from are: Honors Computer Integrated Manufacturing.

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

Program Certification:
- PLTW National Recognized Exams - POE, IED, DE, CIM, CEA, 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

GRAPHIC COMMUNICATIONS (PrintED)

Program Overview:
The Graphics 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) - 3 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

HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

Program Overview:
Heating, Ventilation, and Air Condition (HVAC) 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. Instruction includes basic principles in heat movement and transfer, evaporation, refrigeration, electricity, plumbing, and supply systems. Students are taken to a job site where they receive the ultimate "hands-on" experience as they construct an entire house. Senior students who meet specified conditions are guaranteed an interview with Local #489 of the Plumbers and Steamfitters Union. 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.

Occupational Careers and Postsecondary Options:

Secondary: Plumber, Industrial Maintenance Technician, Building Management, Construction Management, Sheet Metal Worker

Postsecondary (2 year): Commercial HVAC, Residential HVAC

Program Certification:
- OSHA 10 Certification
- First Aid/CPR

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

INDUSTRIAL MANUFACTURING

Program Overview:
Industrial Manufacturing is a sequence of courses designed to prepare students for the manufacturing industry and includes a focus on Manufacturing Process Design and Development, Production, Supply Chain Logistics, Health, Safety and Environment, and Quality Assurance and Continuous Improvement. Course content aligns with Maryland Manufacturing, Engineering and Technology career cluster pathway definitions and the standards outlined in the United State Department of Labor's Framework of Competencies for the Advanced Manufacturing Industry. The focus is applying methodology and tools to effectively implement continuous improvement for success in a global, competitive business environment. 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.

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

Apprenticeship Credit:
- Opportunity to earn first-year credit in United Brotherhood of Carpenters and Joiners of America Local union #1024
- Allegany College of Maryland-Scholarship monies are available to students who enroll in continuing education credits toward Manual and CNC Machinist Training at ACM.

INTERACTIVE MEDIA PRODUCTION (IMP)

Program Overview:
The Interactive Media Production (IMP) 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

IT NETWORKING ACADEMY (CISCO)

Program Overview:
The IT Networking Academy (Cisco Academy) 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 IT Networking Academy (Cisco Academy) 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.

Occupational Careers and Postsecondary Options:

Secondary: Computer Support Specialist, Costumer Service Representative, Information Clerk/Specialist

Postsecondary (2 year): Computer Programmers, Information Security Specialist, Web Developers, Technical Writers

Postsecondary (4 year): Computer System Administrator, Computer Information, Computer Systems Analyst, Database Administrators, Computer Network Architect,

Program Certification:
- Cisco Certified Network Administrator (CCNA) - CCENT, CCNA, PCT certification

Articulated Credit:
- Allegany College of Maryland (ACM) - Up to 13 Credits Available
  - ◊ AAS Degree in Computer Science & Technology. Multiple options available
  - ◊ Certificate Programs in Computer Science and Technology. Multiple options available
  - ◊ Students successfully completing the program and both the A+ Hardware and A+ Operating System Exam will earn 1 additional credit per the articulation agreement.
- Anne Arundel Community College (AACC) - 6 Credits
- Harford Community College (HCC) - 3 Credits

Total Dollars Saved through Articulated Credits dependent on College
$972.00 to $1650.00

TEACHER ACADEMY of MARYLAND

Program Overview:
The Teacher Academy of Maryland (TAM) is a State Approved 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 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. Upon completion of the program and passing the ParaPro test, high school graduates are ready for employment in the teaching profession. This program is based on the outcomes of the Maryland Associate of Arts in Teaching (A.A.T.) degree.

THIS PROGRAM WILL BE OFFERED AT A COMPREHENSIVE HIGH SCHOOL PENDING ADEQUATE STUDENT ENROLLMENT

Occupational Careers and Postsecondary Options:

Secondary: Childcare Worker, Paraprofessional

Postsecondary (2 year): Instructional Assistants, Classroom Aides, Paraprofessionals

Postsecondary (4 year): Classroom Teacher

Program Certification:
- Successful completion of the *ParaPro* examination will certify students to serve in the school setting as Instructional Assistants.

Articulated Credit:
- Allegany College of Maryland (ACM) & Frostburg State University
  ◊Though no current articulations exist for this new program for these institutions, this will be pursued as a locally developed articulated for CCTE students
- Articulated and/or Transcripted Credits are available at various institutions to include: Towson University, Coppin State University, Stevenson University, St. Mary's College of Maryland, Salisbury University, and Hood College.

Total Dollars Saved through Articulated Credits dependent on College Choice

Scholarship Opportunities are available to students successfully completing the TAM Program to the various institutions listed above under qualifying conditions.

WELDING AND METAL TECHNOLOGY

Program Overview:
Welding and Metal Technology is a CTE completer program which includes the study of joining metals with various welding processes and methods, welding symbols, schematic and blueprint reading, marking scale drawings, materials and measurements and cost estimation. Students will be exposed to and use the latest welders, press brakes, shears, lathes, mills, robotic plasma cutters, ox fuel welding and cutting torches.

Occupational Careers and Postsecondary Options:

Secondary: Welder, Agriculture, Automotive Manufacture and Repair, HVAC, Sheet Metal Worker, and Pipefitter

Postsecondary (2 year): Postsecondary options further provide students the opportunity to advance skills in Automotive Manufacturing and Repair, and Shipbuilding

Program Certification:
- OSHA 10 Certification
- First Aid / CPR

Apprenticeship Credit:
- Opportunity to earn first-year Apprenticeship credit in Local #489 of the Plumbers and Steamfitters Union
- Opportunity to earn first-year Apprenticeship credit in Local #568 of the Ironworkers Union

OCCUPATIONAL COMPLETER PROGRAMS SUMMARY

Completer	Course	Articulation	Major	Crs. College
Academy of Health Professions (CCTE)	Medical Terminology Foundations of Medicine & Health Science Structure & Function of the Human Body Honors Medical Specialty—Certified Nursing Assistant Honors Clinical Internship Honors Medical Terminology	ACM	Students earn guaranteed admission under specified conditions to Medical Assistant, Medical Laboratory Technology, Nursing (RN/LPN), Occupational Therapy Asst., Radiology Technology, Physical Therapy Assistant and Respiratory Therapy.	No courses—Guaranteed direct admission into clinic sequence under specified condition
		CCBC	School of Health Professions	3 Credits
		Stevenson University	Nursing (B.A.) Med Tech (B.S)	6 Credits 3 Credits
Auto Collision Repair (CCTE)	Non-Structural Analysis & Damage Repair Honors Painting & Refinishing (two-year program)	CCBC	Auto Body/Collision & Repair	5 AUCR 101 5 AUCR 103
		UTI	Auto Body/Collision & Repair	Up to 4 courses, test out option to earn credit
		Penn Tech	Collison Repair Technology	16 Credits
Automotive Technology MLR (CCTE)	Intro to Automobiles Suspension & Steering & Brakes Honors Electrical/Electronics & HVAC Honors MLR Powertrain & Engine Repair/ Performance	ACM	Automotive Technology (AA)	4 Automotive Tech 103 2 Automotive Tech 105 2 Automotive Tech 114 4 Automotive Tech 215
		ACM	Auto Tech Certificate	2 Automotive Technology
		CCBC	Auto Technology	4 Auto 126 Brake System 5 Auto 131 Electronic System 5 Auto 141 Engine System 4 Auto 171 Susp. System
		Penn Tech	Auto Technology	3 Brake Systems 112 3 Steering & Suspension 113 2 Fuel & Emission Control 121 4 Eng. Electrical System 126 3 Electrical Fundamentals 109
		UTI	Auto Body/Collision & Repair	Up to 4 courses, test out option to earn credit
		University of NW Ohio	Auto Technology	12 Credits
Biomedical Sciences (PLTW) (Comprehensive High Schools)	Principles of Biomedical Sciences Human Body Systems Honors Medical Interventions Honors Biomedical Innovation	Stevenson University	Biology Biotechnology Nursing (BA) Medical Technology (BS)	(4)Bio 113 (4) General Biology I: Cell Biology and Genetics
		Allegany College of Maryland	Medical Laboratory Program, Allied Health Program, or Career Transfer or Pre-Professional Programs	2 Credits Medical Lab Technology
Careers in Cosmetology (CCTE)	Principles and Practices of Cosmetology Advanced Cosmetology: Theory and Application Cosmetology Science Mastery of Cosmetology Cosmetology-Workplace Experience Cosmetology Science II	None	Students must take the State Board Examination to earn the completer certificate.	
Carpentry (CCTE)	Carpentry Honors Particular Topics in Carpentry	United Brotherhood of Carpenters & Joiners Union #1024		1st Year Apprenticeship Credit

OCCUPATIONAL COMPLETER PROGRAMS SUMMARY

Completer	Course	Articulation	Major	Crs. College
Criminal Justice/Law Enforcement (CCTE)	Law Enforcement Foundations of Homeland Security & Emergency Preparedness Administration of Justice Honors Public Safety Honors Administration of Justice Honors Internship/Capstone Experience	ACM Potomac State College University of MD University College (UMUC) Frederick Comm. College	Criminal Justice Criminal Justice 1 yr. Criminal Justice Certificate Emergency Management	3 Criminal Justice 101 3 Criminal Justice 101 3 Criminal Justice 101 3 Disaster, Crisis, and Emerg. Mngmt. 225
Culinary Arts (ACF) (CCTE)	Culinary Basics—Foundations of Professional Cooking Food Service Honors Professional Cooking Honors Professional Internship in Cooking	ACM Stratford University	Culinary Arts Hospitality Management AAS Culinary Arts or BA Degree in Culinary Management	3 Culinary Arts 150 3 Culinary Arts 212 3 Hospitality Management 101 1 Hospitality Management 110 3 Hospitality Management 101 1 Hospitality Management 110 18 Credits (Pending Acquisition of Program Certification)
Electrical Construction (CCTE)	Residential Wiring Honors Electricity – Comprehensive Honors Industrial Electricity Union Curricula	Electrical Workers IBEW Local Union #307		1st Year Apprenticeship Credit
Engineering Technology (PLTW) (CCTE)	Honors Intro to Engineering Design Honors Principles of Engineering Honors Digital Electronics Honors Civil Engineering & Architecture (CEA) Honors Computer Integrated Manuf. Honors Engineering Design & Development	Fairmont State University (A.A.S., B.S. & B.A.) UMBC UMES	Mech. Engr. Tech (A.A.S.) & Engineering (B.S.) Technology Education (B.A.) Engineering (B.S.) Tech Ed (B.A)	3 DRFT 1100 3 DRFT 2200 3 TECH 1104 3 DRFT 2200 3 Credits 6 Credits
Graphic Communications (PrintED) (CCTE)	Introduction to Graphic Communications Digital File Preparation Digital Production Printing Honors Offset Press Operations Honors Binding & Finishing Honors Advanced Graphic Communications	ACM Bridgemont Community & Technical College	Multimedia Technology Digital Design & Print Communications	3 Multimedia Tech 207 14 Credits
Heating, Ventilation and Air Conditioning (HVAC) (CCTE)	Heating, Ventilation & Air Conditioning Honors Particular Topics in HVAC	Plumbers & Steamfitters Union #489		1st Year Apprenticeship Credit
Industrial Manufacturing (CCTE) NOTE: 5 of 6 courses must be taken	Basic CAD Design Basic Metal Shop Honors CAD Design Honors Metal Shop Honors Computer Integrated Manuf. Recommended NOT Required: Honors Intro to Engineering Design	United Brotherhood of Carpenters & Joiners #1024		1st Year Apprenticeship Credit

OCCUPATIONAL COMPLETER PROGRAMS SUMMARY

Completer	Course	Articulation	Major	Crs. College
Interactive Media Production (IMP) (CCTE)	Principles of Arts, Media & Communication Interactive Media Production Broadcast Technology Honors Advanced Interactive Multimedia Production Honors Broadcasting Technology	ACM	Multimedia Technology (AA)	3 Multimedia Tech 102 3 Multimedia Tech 106
IT and Networking Academy (CCTE)	IT Essentials I & II: PC Hardware & Software Ethics & the Information Age Honors Working at a Small-to-Medium Business Honors Networking for Home and Small Business Honors Networking Systems—Workplace Experience	ACM	ACM Computer Science & Technology Program Computer Technology Cybersecurity (AAS or Certificate) Additional options available	3 PC Architecture 180 3 Operating Systems 219 3 Introduction to Networking 225 3 Cisco Networking II 239 *Successful completion of A+ Hardware and A+ Operating System Exam will earn one additional credit for Comp 188.
Teacher Academy of Maryland (TAM) *To Be Determined Based on Enrollment	Honors Human Growth and Development Honors Teaching as a Profession Honors Foundations of Curriculum & Instruction Honors Education Academy Internship	Towson University, Coppin State University, Stevenson University, St. Mary's College of Maryland, Salisbury University, and Hood College Agreements and partnerships with local institutions (ACM & FSU) will be sought upon program implementation.	Elementary Education, Secondary Education, or Early Childhood Education	Courses vary by institution. Students should refer to the individual Memorandum of Understanding documents developed for each institution available in the school guidance office. Potential course credits include: 3 or 4 Transcripted or Articulated credits for: EDUC 202 Historical Contemporary Perspectives on America's Urban Schools EDUC 200 History of Education PSY 206 Child Growth and Development EDU 204 Foundations of Education in a Diverse Society EDUC 140 Special topics in Educational Studies
Welding & Metal Technology (CCTE)	Welding Honors Particular Topics in Welding	Plumbers & Steamfitters Union #489 Ironworkers Union Local #568		1st Year Apprenticeship Credit 1st Year Apprenticeship Credit

*****All articulations are accurate as of the date of print and to the best knowledge of ACPS Administrative Staff. Post-Secondary Education Institutions frequently change programs and/or program requirements. All articulated agreements are subject to modification and/or change at any time.*****

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Section IV

Course Descriptions

Art

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.

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 (PLTW)

Biomedical Sciences

Biomedical Sciences (PLTW) (9-12) is 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 Honor* Principles of the Biomedical Sciences 1 Credit

Honors Principles of the Biomedical Sciences (9-10) is a required course for students in the Biomedical Sciences occupational completer program. Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research processes. 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 the 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, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.

807 Honors Medical Interventions 1 Credit

Prerequisite: Honors Principles of the 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 the 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 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 59.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Academy of Health Professions

The Academy of Health Professions (AHP) 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. teach students about the field of healthcare. There are opportunities for students to apply what they are learning to real-life healthcare situations in the *Medical Specialty* course, and to pursue one or more of the three certification options available to them. Students pursuing this option will also participate in a supervised *Clinical Experience* course and will earn state and/or nationally recognized certifications. AHP students will also have the opportunity to design and participate in an *Allied Health Internship Course*. 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) teachers 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 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 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 investigate the body's responses to the external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy processes. Students will conduct laboratory investigations and fieldwork, use scientific methods during investigations to solve problems and make informed decisions. Students will learn the medical terminology related to body systems.

Level II

927A Honors Medical Specialty - Certified Nursing Assistant, Pharmacy Technician, Certified Clinical Medical Assistant 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 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 analyzing medical reports. This knowledge will better prepare students to provide treatment in the most efficient manner for the patient's benefit.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

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 Inter-Industry Conference on Auto Collision Repair (I-CAR) curriculum programs, all National Automotive Technicians Education Foundation (NATEF) Skill/Program Certification standards, 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, 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.

Level I

904A Non-Structural Analysis & Damage Repair 3 Credits

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. In addition, this course will address an introduction to welding; personal and environmental safety practices associated with clothing; respiratory protection, eye protection; entry level automotive service technology principles and practices; hand tools; power tools/equipment; proper ventilation; and the handling, storage, measuring and mixing procedures, raising and supporting vehicles, damage report principles and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations. The I-CAR Live Curriculum and NATEF Task List are utilized to demonstrate mastery for this area to formulate accurate estimates of cost of repairs.

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 NATEF Painting and Refinishing NA3SA 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)

Career and Technology Education (CCTE)

Automotive Technology Maintenance & Light Repair

The Automotive Technology MLR Plus CTE Program of Study (POS) is an instructional program that incorporates the NATEF 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 real- world 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.

902B Suspension, Steering & Brakes 2 Credits

Suspension & Steering & Brakes (11) 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 among various other topics. The technical content relating to brakes is also designed to teach the principles of automotive hydraulic brake systems. It builds on the essential laws of physics, motion, forces, hydraulics, thermodynamics, and chemical reactions and how these principles apply to the operation and diagnosis of automotive brake systems. This course covers the energy conversion of motion changed to heat energy (when you apply brakes), the effects of weight and speed on braking and stopping distance, thermal expansion, friction, force, and coefficient of friction as they apply to braking systems. This course prepares students for the successful completion of the ASE Student Certification Exam at the AST level for Steering and Suspension (A4), and Brakes (A5)

Level II

903A Honors Electrical/Electronic & HVAC 2 Credits

Honors Electrical/Electronics & HVAC (12) is a course designed to prepare students for successful completion of the ASE MLR Student Certification Exams for HVAC (A7) and Electrical & Electronic Systems Repair (A6). Topics in this 2 credit course includes 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. The course content is designed to also teach the principles of automotive heating and air conditioning operation, and service at the NATEF MLR level. The course builds on the fundamental principles of refrigeration, refrigerant compressor, and refrigerant flow. Students are taught the difference between refrigerants, as well as the function and application of an engine coolant. They learn the uses of the scan equipment in communicating with body HVAC computers and will be able to perform needed maintenance on HVAC systems.

903B Honors MLR Powertrain & Engine 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 NATEF 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. Students learn to verify customer concerns and to perform tests and inspections based on the NATEF MLR task list. This course covers distributorless (electronic ignition) and distributor ignition systems, fuel management, exhaust emission control, and computer input and output signals and identifies the different types of sensors used by automotive engine computers. The student learns to locate and interpret vehicle component identification numbers, check and adjust ignition system timing, emission component service, and computerized engine control system data and service.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Carpentry

Carpentry 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.

Level I

910A Carpentry **3 Credits**

Carpentry (11) is a required course for the Carpentry Completer Program. This course provides information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills such as laying sills and joists; erecting sills and rafters applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finishing work inside of buildings, and do limited cabinet work. This course also includes career exploration, good work habits, and employability skills.

Level II

911A Honors Particular Topics in Carpentry **3 Credits**

Honors Particular Topics in Carpentry (12) is a required course for the Carpentry Completer Program. This course covers specific aspects of building construction. All coursework focuses upon a particular skill or set of skills related to one subtopic, such as floor framing, wall and partition framing, interior finishing, or exterior finishing.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

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 work-based 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.

Level I

906A Principles & Practice of Cosmetology 1 Credit

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.

906B Advanced Cosmetology: Theory & Application 2 Credits

Advanced Cosmetology: Theory & Application (11) 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.

444 Cosmetology Science I 1 Credit

Cosmetology Science I (11) is a required course for cosmetology students. 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 disease, 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. This course is counted as a science credit.

Level II

907A Mastery of Cosmetology 1 Credit

Mastery of Cosmetology (12) is a required course for the Careers in Cosmetology Completer Program. This course 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.

907B Cosmetology — Workplace Experience 2 Credits

Cosmetology—Workplace Experience (12) provides students with work experience in the cosmetology field. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). This course may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

445 Cosmetology Science II 1 Credit

Cosmetology Science II (12) is a required course for cosmetology students. 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. This course is counted as a science credit.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Culinary Arts

The Culinary Arts Program partners with the American Culinary Federation (ACF) program to prepare students for successful careers in the food and beverage industry. This is a two-year CTE program that educates high school students in professional cooking or professional baking. 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 clinical (school-based enterprises and/or work-based learning in the culinary industry). When the clinical experience is combined with science classes, this program will provide the necessary skills for further education and career success. Students have the opportunity at the end of the program to receive their nationally recognized certification as a Certified Junior Culinarian by successfully completing the ACFNOCTI Written & Practical Exams.

Level I

980A Culinary Basics-Foundation of Professional Cooking 2 Credits

Culinary Basics—Foundation of Professional Cooking (11) is a required course for the Culinary Arts Completer Program. This course is 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.

980B Food Service 1 Credit

Food Service (11) will provide instruction regarding nutrition, principles of healthy eating, and the preparation of food. Among the topics covered are large-scale meal preparation, preserving nutrients throughout the food preparation process, use and care of commercial cooking equipment, food storage, advances in food technology, sanitation, management, and career options available in the food service industry.

Level II

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 a required course for the Culinary Arts Completer Program. Students participating in an internship will be placed in a professional setting under the supervision of a chef or pastry chef that allows students 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 Completion

Honors 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)

Career and Technology Education (CCTE)

Electrical Construction and Maintenance

Electrical Construction & Maintenance 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

932A Residential Wiring 3 Credits

Residential Wiring (11) is a required course for the Electrical Construction & Maintenance Completer Program. This course applies the knowledge and skills that students acquire to the electrical systems found in family dwellings. Because these courses emphasize residential electricity, topics may also include cable installation, telephone systems, and the installation of lighting fixtures and outlets. Maintenance and repair skills are often included as course topics.

Level II

933A Honors Electricity-Comprehensive 2 Credits

Honors Electricity—Comprehensive (12) is a required course for the Electrical Construction & Maintenance Completer Program. This course provides a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. This course includes AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial and/or industrial buildings; installing lighting, power circuits and cables; and estimating job costs. As students progress, their projects become more complex and expansive. Safety is stressed and a career exploration component is included.

933B Honors Industrial Electricity 1 Credit

Honors Industrial Electricity (12) is a required course for the Electrical Construction & Maintenance Completer 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.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

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.

952B Honors Principles of Engineering 1 Credit

or

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.

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 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 & Development 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 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 post-secondary education and careers in engineering and engineering technology.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

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 Introduction to Graphic Communications 1 Credit

Introduction to Graphic Communications (11) is a required course for the Graphic Communications Completer Program. This required foundation course provides an overview of the graphic communications industry. Students demonstrate 103 competencies while developing an overall understanding of the industry and its major operations.

920B Digital File Preparation 1 Credit

Digital File Preparation (11) is a required course for the Graphic Communications Completer Program. In this course students demonstrate 80 competencies that are procedures required in each step of file preparation. These include basic design elements and principles, file construction, fonts, page layout, image capture, illustration, and PDF creation. Many of the competencies require students to describe, identify, explain, measure and/or distinguish file-related issues. Approximately half the competencies require students to demonstrate various skills in creating and exporting images and laying out a page in appropriate software.

920C Digital Production Printing 1 Credit

Digital Production Printing (11) is a required course for the Graphic Communications Completer Program. Students master 36 competencies in digital production printing that are designed teach concepts and competencies that ensure that the student is able to operate any vendor's digital press. Students will understand apply the digital workflow concepts to print production. The competencies range from introductory skills such as describing the types of jobs that use a digital press to more advanced skills such as printing two and four color jobs, printing and finishing a perfect-bound booklet and printing a variable data print job.

Level II

921A Honors Offset Press Operations 1 Credit

Honors Offset Press Operations (12) is a required course for the Graphic Communications Completer Program. This course covers 42 competencies that ensure a sound knowledge of plate making, ink, paper, and fountain solution used for offset lithography. Some competencies require students to identify press parts and basic operations procedures, while 20 of the competencies require student to demonstrate their ability to perform make ready steps, print different types of one-and two-color jobs, evaluate and adjust print quality, color measurement, and perform clean-up functions.

921B Honors Binding & Finishing 1 Credit

Honors Binding & Finishing (12) is a required course for the Graphic Communications Completer Program. Students master 57 competencies to learn about the equipment, materials and procedures for folding, cutting, stitching, adhesive binding, case binding, foil stamping coating and laminating and spiral and wire binding. Students demonstrate the use of folding equipment to make different folds and perform preventative maintenance on folders and cutters. They demonstrate knowledge of paper types as well as the tools and procedures for quality control. Students identify and solve common bindery and finishing problems.

921C Honors Advanced Graphic Communications 1 Credit

Honors Advanced Graphic Communications (12) is a required course for the Graphic Communications Completer Program. This course has three components: Advanced File Preparation, Advanced Printing Procedures and Advanced Page Imposition. Projects may be substituted for course content and senior projects to keep pace with changing industry standards as advised by the Printing and Graphics Association Mid-Atlantic Industry. They will print, fold, saddle staple and trim the document and print, fold and GBC bind the children's booklet.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Heating Ventilation & Air Conditioning (HVAC)

Heating Ventilation & Air Conditioning 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. Instruction includes basic principles in heat movement and transfer, evaporation, refrigeration, electricity, plumbing, and supply systems. Students are taken to a job site where they receive the ultimate "hands-on" experience as they construct an entire house.

Level I

918A Heating Ventilation & Air Conditioning **3 Credits**

Heating Ventilation & Air Conditioning (11) is a required course for the HVAC Completer Program. This course synthesizes basic and advanced principles in heating, ventilation, and air conditioning and includes topics such as air filtration methods, humidity control, and the installation and maintenance of heat pumps, furnaces, and air conditioners. Students also learn about climate control systems; electrical wiring; systems design; sizing, fabricating, and installing ductwork; installing and maintaining climate control systems; and safety.

Level II

919A Honors Particular Topics in HVAC **3 Credits**

Honors Particular Topics in HVAC (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). Such topics may include electrical components, diagrams and blueprints, welding and soldering techniques.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Industrial Manufacturing

Industrial manufacturing is a CTE Completer Program in which students set up and operate machines commonly used in the machine trades including engine lathes, milling machines, drill presses, precision grinders, shapers, and power saws. Students learn how to operate in work teams as they study product design, environmental and safety science, computer-assisted drafting (CAD), computer-assisted manufacturing, equipment operation and quality control. Advanced students learn computer controlled machines in addition to basic training.

Level I

940A Basic CAD Design 1 Credit

Basic CAD Design (11) is a required course for the Industrial Manufacturing Completer Program. 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 Basic Metal Shop 1 Credit

Basic Metal Shop (11) is a required course for the Industrial Manufacturing Completer Program. This course involves learning machine shop safety, operating manual for machinery such as lathes, mills, grinders, drill presses and hand tools. Students will learn set-ups of materials to be machined, process operations and manufacturing of projects. Students will use and understand how to read measuring equipment used in manufacturing of metal products. Students will know and identify tooling used in machining and how to calculate speeds and feeds as per cutting tool.

940C Honors Introduction to Engineering Design 1 Credit

Introduction to Engineering Design (11) is a recommended course for the Industrial Manufacturing Completer Program, but is not required for Program Completion. This foundation course emphasizes the development of a design. Students use computer software to produce, analyze and evaluate models of project solutions. They study the design concepts of form and function, then use state-of-the-art technology to translate conceptual design into reproducible products.

Level II

941A Honors CAD Design 1 Credit

Honors CAD Design (12) is a required course for the Industrial Manufacturing 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.

941B Honors Metal Shop 1 Credit

Honors Metal Shop (12) is a required course for the Industrial Manufacturing Completer Program. This course involves learning manufacturing processes, how to develop and manufacture products for consumers. Students will learn and operate CNC milling centers, CNC turning centers and a computerized measuring machine (CMM). Students will do set-ups, operations and inspections on manual machinery to develop products. Students will learn about entrepreneurship by being on a team and developing a product to be sold. Students will learn the logistics of developing a manufacturing company.

941C Honors Computer Integrated Manufacturing 1 Credit

Honors Computer Integrated Manufacturing (12) is a required course for the Industrial Manufacturing 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.

Industrial Manufacturing Completer Courses:
From the listing of 5 courses, 4 must be taken to complete:

- **Basic CAD Design**
- **Basic Metal Shop**
- **Honors CAD Design**
- **Honors Metal Shop**
- **Honors Computer Integrated Manufacturing**

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Interactive Media Production (IMP)

The Interactive Media Production (IMP) 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

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 Multimedia Production 1 Credit

Interactive Multimedia Production (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.

900C Broadcasting Technology 1 Credit

Broadcasting Technology (11) provides 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.

Level II

901A Honors Advanced Interactive Multimedia Production 2 Credits

Honors Advanced Interactive Multimedia Production (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.

901B Honors Broadcasting Technology 1 Credit

Honors Broadcasting Technology (12) provides 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.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

IT Networking Academy (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 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

930A IT Essentials (A+ Certification) 2 Credits

IT Essentials (A+ Certification) (11) is a required course for the IT Networking Academy Completer Program. 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 1 Credit

Cybersecurity Essentials (11) course is a required course for the IT Networking Academy Completer Program. 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.

Level II

931A Honors Intro to Networks 1 Credit

Honors 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 Routing & Switching Essentials 1 Credit

Honors 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 Networking Systems-Workplace Experience 1 Credit

Honors Networking Systems—Workplace Experience (12) provides students with work experience in fields related to networking systems. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). 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)

Criminal Justice/Law Enforcement

The Homeland Security and Emergency Preparedness (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. 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

912A Law Enforcement 1 Credit

Law Enforcement (11) covers specific practical skills related to the law enforcement field rather than providing general study of the skill.

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.

Career and Technology Education (CCTE)

Level II

913A Honors Public Safety 1 Credit

Honors Public Safety (12) 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 1 Credit

Honors Administration of Justice (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.

913C Honors Internship/Capstone Experience 1 Credit

Honors Internship/Capstone Experience (12) is a required course for the Criminal Justice/Law Enforcement Completer Program. The Internship/Capstone Experience is the culminating course for the Homeland Security and Emergency Preparedness Program. Students will have the option of completing an industry-mentored project, internship, or enrolling in a post-secondary course. They will play an integral part in determining which type of experience will be most beneficial and supportive of their individual goals.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

Welding and Metal Technology

Welding and Metal Technology is a CTE completer program which includes the study of joining metals with various welding processes and methods, welding symbols, schematic and blueprint reading, materials and measurements and cost estimation. Students will be exposed to and use the latest welders, press brakes, shears, pipe benders, lathes, mills, robotic plasma cutters, oxyfuel welding and cutting torches.

Level I

922A Welding **3 Credits**

Welding (11) is a required course for the Welding & Metal Technology Completer Program. This course enables students to gain knowledge of the properties, uses and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques.

Level II

923A Honors Particular Topics in Welding **3 Credits**

Honors Particular Topics in Welding (12) is a required course for the Welding & Metal Technology Completer Program. In this course, students gain knowledge and skills in particular aspects of welding. Examples include individual courses in each of the following types of welding: gas metal, gas tungsten, and shielded metal and flux core arc welding.

Career and Technology Education (CCTE)

Career and Technology Education (CCTE)

950A Advanced IT & Networking 1 Credit

Advanced IT & Networking (12) 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.

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.

950E Cosmetology Hours I 1 Credit

Cosmetology Hours I (11-12) is an elective course which provides an opportunity for students to practice hands on skills provided during the regular cosmetology skill training class. Under teacher supervision, students demonstrate skills and receive individual instruction in areas requiring more intense practice. This course helps students meet the 1500 clock hours required prior to taking the State Board Examination.

950F Cosmetology Hours II 1 Credit

Cosmetology Hours II (12) is an elective course which provides preparation for the cosmetologist and nail technician examinations. Practice theory tests and practical tests are administered by the instructor on a daily basis. The results are used as a diagnostic tool so appropriate instruction can be given prior to taking the State Board Exams. This course helps students meet the 1500 clock hours required prior to examination and graduation.

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 Credit

Advanced 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.

950I 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 articulated credits towards an Associate Degree at Allegany College of Maryland.

Career and Technology Education (CCTE)

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.

950O 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.

Computer Science

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 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.

032 Honors Computer Logic 1 Credit

Prerequisite or Concurrent: Computer Literacy (031)

Honors Computer Logic (11-12) is an elective honors course which provides the student with an introductory experience with computer programming. This course will enforce good programming style, logical thinking, and problem solving skills, flowcharting, and software engineering. In addition, a visual programming language will be used to introduce object-oriented programming concepts.

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 Credit

Prerequisite: 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 1 Credit

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.

037 Honors Web Design 1 Credit

Prerequisite: Web Design II (036)

Honors Web Design (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 CS3, Flash and Fireworks software. From advanced HTML and CSS 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 websites using the latest Web technologies. Students learn how to maintain and update complex websites, develop Javascripts and incorporate them into a web page, create surveys that gather data then display results, along with creation of various animated objects and interactive media.

Computer Science

038 College Computer Literacy (CCTE)
1 Credit and 3 College Credit Hours

College Computer Literacy (12) is an elective course which qualifies for dual credit for students at the Center for Career and Technical Education. 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, e-mail, internet, word processing, spreadsheets, data-bases, and presentation software. This is an online learning opportunity for senior students who are self motivated learners.

039 College Computer Logic (CCTE)
1 Credit and 4 College Credit Hours

College Computer Logic (12) is an elective course which qualifies for dual credit for students at the Center for Career and Technical Education. 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.

English/ Language Arts

019A College Test Prep/Fall 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 PARCC ELA 8. 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.

English/ Language Arts

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 9th 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

English/ Language Arts

133 AP English Language & Composition (Advanced Placement) 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. In order for this course to be weighted for GPA at the 5.0 level, the Advanced Placement Test is required. If the Advanced Placement Test is not taken, then the course will be weighted at the 4.5 level.

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.

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 PARCC 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 PARCC 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 PARCC 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. In order for this course to be weighted for GPA at the 5.0 level, the Advanced Placement Test is required. If the Advanced Placement Test is not taken, then the course will be weighted at the 4.5 level.

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.

Entrepreneurship

Entrepreneurship

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.

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.

Health Education

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 health-related attitudes and behaviors that promote self-reliance 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.

Mathematics

019A College Test Prep/Fall 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).

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 the PARCC 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).

Mathematics

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 must take the PARCC 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. An exception to this is if a student has met the CCR status through another CCR indicator such as SAT or ACT.

361 Honors Algebra II 1 Credit

Prerequisite: Honors Geometry (372)

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 Career-Ready 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 must take the PARCC 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.

Mathematics

Mathematics

362 Geometry 1 Credit

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 1 Credit

Prerequisites: Algebra I (341) and PARCC Algebra I Level 4 or 5

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: 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 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.

Mathematics

391 Integrated Mathematics 1 Credit

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.

Mathematics

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 trigonometry/Pre-calculus is essential for the study of calculus and are recommended prerequisites for this course.

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.

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.

Music

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.

Music

622 American Musical Theater 1 Credit

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 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.

Music

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 all-county 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 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.

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.

Music

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 682

Honors 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.

Music

689 Honors Senior High School Orchestra IV 1 Credit

Prerequisite: 681, 682 and 685

Honors 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 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 Sophomore—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.)

Physical Education

722B Team Sports & Conditioning
Sophomore—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.)

723A Team Sports & Conditioning
Junior—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.)

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—Spring **1/2 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.)

Science

Science

411 Earth/Space Science 1 Credit

Earth/Space Science (9-11) 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: Newtown'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 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.

413 Advanced Placement (AP) Environmental Science 1 Credit

Prerequisite: Honors Biology (430) or Honors Chemistry (440)

Advanced Placement (AP) Environmental Science (10-12) 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

Science

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.

414 Honors Earth/Space Science 1 Credit

Honors Earth/Space Science (9-11) 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.

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.

Science

Science

430 Honors Biology 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 (9-12*) 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.

Science

434 Honors Anatomy and Physiology II (CCTE) 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.

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.

Science

438 Honors Anatomy & Physiology (Comprehensive HS) 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 (9-11*) 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. 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).

*For students entering grade 9 in 2017-18 and thereafter, course number 440 should be taken in grades 9-11.

Science

442 Chemistry 1 Credit

Prerequisites: Biology (432) and Algebra I (341)

Chemistry (9-11*) 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) 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.

Science

455 Advanced Placement (AP) Chemistry 2 Credits

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.

463 Honors Physics I 1 Credit

Prerequisites: Algebra (341)

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.

464 Honors Physics II 1 Credit

Prerequisites: Algebra (341)

Honors Physics II (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.

Science

465 Advanced Placement (AP) Physics I 1 Credit

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.

467 Advanced Placement (AP) Physics II 1 Credit

Prerequisites: AP Physics I or the equivalent

AP Physics II (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 Algebra-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.

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 2013-2014, 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. 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 in-depth 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).

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.

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.

Social Studies

213 AP Human Geography 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.

220 AP World History 1 Credit

AP World History (10-12) is organized around five central themes and the development of historical thinking skills. Students will be able to craft historical arguments, use chronological reasoning, compare and contextualize across time, interpret historical document and synthesize historical information. The course will use the following five themes to explore historical content: Interaction between humans and the environment, Development and interaction of cultures, State building, expansion and conflict, Creation, expansion and interaction of economic systems, and Development and transformation of social structures. This course may be used to fulfill the 222 Modern World Cultures requirement. Students may earn college credit hours by passing the College Board AP Examination. In order for this class to be weighted for the GPA at the 5.0 level.

222 Modern World History 1 Credit

Modern World History (10-12) is a required course that provides a comprehensive survey of the political, economic, social, and cultural history of the world from 15th century to modern times. The basis for the course are the Maryland Core Learning Goals.

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.

Social Studies

232 Social Studies Seminar I 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 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 21st Century. Students will also study the effects of competitive global markets on the United States economic

Social Studies

244 Advanced Placement (AP) United States History 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.

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 1 Credit

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.

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.

Special Education

002, 003, 004, 005 Comprehensive Study Skills 1 Credit

Comprehensive 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 Education 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 self-control, and contributing to a positive school climate. Students can refine techniques in 50 pro-social skill areas including responding to failure, bullying prevention, stress management, and goal setting. The course requires permission from the instructor.

Special Education

491 Language and Literacy Skills 0 Credit

Language and Literacy Skills (9-12) is an elective course designed to provide access to modified grade-level reading and writing skills aligned to the Core Content Connectors. The course focuses on acquiring basic reading and writing skills, reading a variety of media to obtain information and reading for pleasure. Students will answer questions about content, understand the main idea of passages, sequence events and information in passages, and acquire and define vocabulary in modified reading material aligned to the Maryland Career and College Readiness Standards. Students will develop and expand writing skills with instruction in spelling, mechanics of writing, editing, and expanding written passages. This course is designed for students working towards a Maryland High School Certificate.

493 Mathematical Skills 0 Credit

Mathematical Skills (9-12) is an elective course designed to provide access to modified grade-level math skills aligned to the Core Content Connectors in the area of Numbers and Quantities, Statistics and Probability, Algebra Expressions, and Math Functions. The course focuses on acquiring basic math skills to solve math equations, interpret data, and solve real word math problems using modified math content. This course is designed for students working towards a Maryland High School Certificate.

498 Personal-Social Skills 0 Credit

Personal-Social Skills (9-12) is an elective course designed to provide training in self-awareness, self-confidence, 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.

Special Education

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.

Teacher Academy of Maryland — CTE Program (NEW Comprehensive High School)

Teacher Academy of Maryland

Allegany County Public Schools is excited to announce the potential implementation of a new program at the Comprehensive High Schools, Teacher Academy of Maryland (TAM)! 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.

975A Honors Human Growth & Development Through Adolescence 1 Credit

Human Growth & Development Through Adolescence (9-10) 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.

THIS IS THE FIRST COURSE OF THE PROGRAM SEQUENCE AND THE ONLY COURSE BEING OFFERED DURING THE 2018-2019 SCHOOL YEAR. COURSES ARE TO BE TAKEN IN SEQUENCE. FUTURE COURSES REQUIRED FOR PROGRAM COMPLETION ARE LOCATED ON THE RIGHT HAND SIDE OF THIS PAGE AND WILL BE MADE AVAILABLE TO STUDENTS ONCE ENROLLMENT IS ESTABLISHED.

Teacher Academy of Maryland — CTE Program (NEW Comprehensive High School)

975B Honors Teaching as a Profession 1 Credit

Prerequisite: 975A

Teaching as a Profession (10-11) 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.

976A Honors Foundations of Curriculum & Instruction 1 Credit

Prerequisite: 975A and 975B

Foundations of Curriculum & Instruction (11-12) 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.

976B Honors Education Academy Internship 1 Credit

Prerequisite: 975A, 975B, 976A

The 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.

Technology Education

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: (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 single required technology education credit for graduation.

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 interpretation 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.

Technology Education

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.

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. Course also counts as Tech Ed requirement for graduation.

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.

Technology Education

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 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.

World Language

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 1 Credit

Prerequisite: French I (171)

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 1 Credit

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 1 Credit

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 1 Credit

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.

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 1 Credit

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.

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

World Language

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 1 Credit

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 Language 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.

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 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 Foreign Language standards.

196 Mandarin Chinese II 1 Credit

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.

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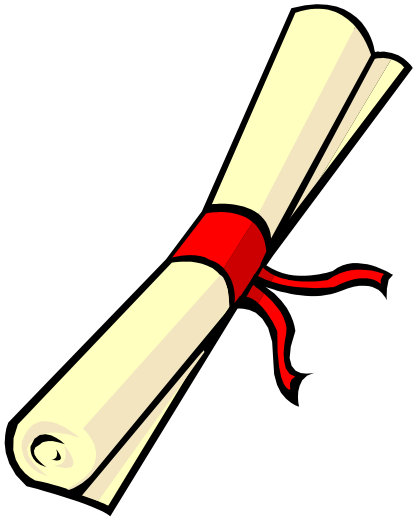
Section V

Dual Enrollment/ Early College Offering



ACPS High School Scheduling Timeline
for
Dual Enrollment Courses

Feb. 5 – Feb. 23 Counselors visit classrooms to speak with students in grade 11 about graduation requirements, course selection and dual enrollment courses for the 2018-2019 school year.

Letter to parents prepared and sent to vendor. Vendor mails letters to arrive in homes by February 16th.

February 5-March 9 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 26– March 9 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 12– March 23 Principals, counselors and supervisors review student requests to determine course offerings, number of sections needed for each course, and to assess staffing needs.

March 26 - 30 Principal and counselor attend Build Meeting at the Board. Teachers will be assigned and the framework for the Master Schedule will be developed.

March 27	8 – 10:30 am	Mountain Ridge
March 27	1 – 3:30 pm	Fort Hill
March 28	8 – 10:30 am	Allegany
March 28	1 – 3:30 pm	CCTE

July 1 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 collect the tuition and fees by September 4, 2018.

March/April Principal and/or counselor complete the Master Schedule Build.

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

September 4 Last date to pay for dual enrollment courses.

Procedures for Dual Enrollment Course Selection

- At the end of the junior year, a student with satisfactory credits, the HSA graduation requirements met, and a minimum GPA of 3.0 may enroll in the Dual Enrollment Program which takes places during the regular school year and within regularly scheduled ACPS schools hours. Students must take the placement test and place into college-level coursework before they will be enrolled in college courses. A score of 530 for math will exempt students from the math portion of the ACM placement test. A score of 480 on the SAT will exempt students from the reading and English portions of the ACM placement test. ACM will accept other approved College and Career Ready (CCR) indicators in lieu of the placement test in addition to the SAT score, including 21 or higher on the ACT or a score of 4 or 5 on the English 11 PARCC or a score of 4 or 5 on the Algebra II PARCC for the mathematics component of the college placement test. For other approved CCR indicators, please contact your school counselor.

- During course selection, juniors will choose college dual enrollment course(s).

- Once the student has passed the college placement test, the school guidance counselor will verify that the student's schedule reflects the college course of choice.

- 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 fees by September 4, 2018.

- FSU also holds an orientation and registration session.

- The college/university will invoice the student for the entire cost of the coursework and will invoice the BOE for the <u>tuition only</u>. Parents/students are responsible for any additional fees. FARM students will not pay any tuition or fee costs per Senate Bill 740.
- The Board of Education will make payment for the tuition invoiced amount directly to the college/university.

- Parents/students will pay any <u>additional</u> fees.

ACM Placement Test Required For College Courses

College Course	Required College Placement Test		
	English	Reading	Mathematics
College English	X	X	
College Speech		X	
College Introduction to Literature	X	X	
College Algebra		X	X
College Probability & Statistics		X	X
College Biology I		X	X or Algebra II concurrently
College Biology II		X	X or Algebra II concurrently
College Anatomy & Physiology		X	X
College Psychology		X	
College US History I		X	
College US History II		X	

FSU Placement Test Required For College Courses

College Course	Required College Placement Test		
	English	Reading	Mathematics
College Algebra			X
College Psychology		X	

Dual Enrollment/ Early College

Dual Enrollment/ Early College

134 College English
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.

This class qualifies for dual credit, which will be calculated in both the high school and college GPA.

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. A placement test appropriate for the course is required for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/university to receive college credit. To receive high school credit for senior English, **this course must be taken in conjunction with 138, College Into to Lit, or 136, College Speech.**

136 College Speech (ACM)
1 Credit and 3 College Credit Hours

Prerequisite: 134 College English

This class qualifies for dual credit, which will be calculated in both the high school and college GPA.

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. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/ university to receive college credit. **If College Speech is not offered or available, students will take College Intro to Lit in conjunction with 134, College English to receive high school credit for senior English.**

138 College Intro to Lit (ACM)
1 Credit and 3 College Credit Hours

Prerequisite: 134 College English

This class qualifies for dual credit, which will be calculated in both the high school and college GPA.

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. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/university to receive college credit. **To receive high school credit for senior English, this course must be taken in conjunction with 134, College English or 136, College Speech. If College Speech is not offered, students will need to take 134, College English.**

Dual Enrollment/ Early College

395 College Algebra
1 Credit and 3 College Credit Hours

Prerequisite: Appropriate placement assessment scores for mathematics.
Prerequisite: Algebra II (351) or Honors Algebra II (361) preferred
This class qualifies for dual credit, which will be calculated in both the high school and college GPA.

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 TI-83 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 will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. 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.) **To receive high school credit for senior Math, this course must be taken in conjunction with 397 College Probability and Statistics or another 1/2 credit semester mathematics course.**

Dual Enrollment/ Early College

397 College Probability and Statistics
1 Credit and 3 College Credit Hours

Prerequisite: Appropriate placement assessment scores for mathematics.
Prerequisite: Algebra II (351) or Honors Algebra II (361) preferred
This class qualifies for dual credit, which will be calculated in both the high school and college GPA.

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 will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. 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.) **To receive high school credit for senior Math, this course must be taken in conjunction with 395 College Algebra or another 1/2 credit semester mathematics course.**

Dual Enrollment/ Early College

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 taught by ACPS teachers and qualifies for dual credit which will be calculated in both the high school and college GPA. 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. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/university to receive college credit. College Biology I is considered a general education course accepted at most University of Maryland colleges and universities.

Dual Enrollment/ Early College

439 College Biology II 2 Periods
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 taught by ACPS teachers and qualifies for dual credit which will be calculated in both the high school and college GPA. 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. Students must select the ACPS college course and register with the college/university to receive college credit.

Dual Enrollment/ Early College

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, 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 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. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/university to receive college credit.

246 College US History II
1 Credit and 3 College Credit Hours

College United States History II (12) is an elective semester 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. 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. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/university to receive college credit.

Dual Enrollment/ Early College

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. There will be a reduced tuition fee assessed for this class. A placement test appropriate for the course will need to be taken for admission to the college/university unless a waiver is granted based upon SAT or ACT scores. Students must select the ACPS college course and register with the college/university to receive college credit.

Dual Enrollment/ Early College

913D College Criminal Law
3 College Credit Hours and 1 HS Credit
(offered Fall only)

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.

Dual Enrollment/ Early College

913E College Criminal Evidence and Procedure
3 College Credit Hours and 1 HS Credit
(offered Spring only)

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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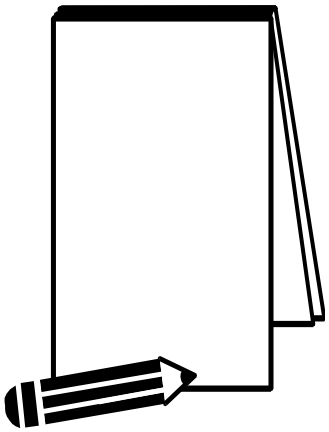
Section VI

General Scheduling



ACPS High School Scheduling Timeline for 2018-2019 Academic School Year

Feb 5 – Feb 23	Counselors visit classrooms to speak with students in grades 8-11 about graduation requirements and course selection for the following school year. 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 16th.
February 5-March 9	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 26– March 9	Students select courses on-line in ASPEN. Once the course selection window is closed, counselors meet with each student in grades 8 – 11 to verify student requests and to update the four year plan.
March 12– March 23	Principals, counselors and supervisors review student requests to determine course offerings, number of sections needed for each course, and to assess staffing needs.
March 26- 30	Principal and counselor attend Build Meeting at the Board. Teachers will be assigned and the framework for the Master Schedule will be developed.
March/April	Principal and/or counselor complete the Master Schedule Build.
April/May	Once the master schedule is built, counselors review student schedule conflicts and meets with students to resolve conflicts, amend and/or select alternate courses.
April 24	10th graders visit CCTE
May	Counselor disseminates summer school information for students needing credit recovery, Prep or Bridge classes, or for those planning to take original credit Summer School.
June*	Counselor reviews student course failures and reschedules failed courses as needed.
June/July	Counselor reviews PARCC and HSA scores and schedules students into Prep Classes/ Remediation or Bridge classes as needed. Counselor adjusts student schedules upon changes in staffing
End of July	School's schedule is finalized, and student schedules are posted August 1st.
August	Counselor makes schedule changes upon student/parent request.
September 4	Last date to pay for dual enrollment courses

*Because students and parents can view schedules on-line, paper copies will not be printed and distributed in June.

**Students transferring in from out-of-county or out-of-state placements with weighted courses recognized by the College Board or an accredited college or university will be assigned weighted credit in the following manner:

100H	College/Honors course	1 credit	050H	College/Honors course	½ credit
100A	AP course	1 credit	050A	AP course	½ credit

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

- Classroom presentation to all 8th 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 middle 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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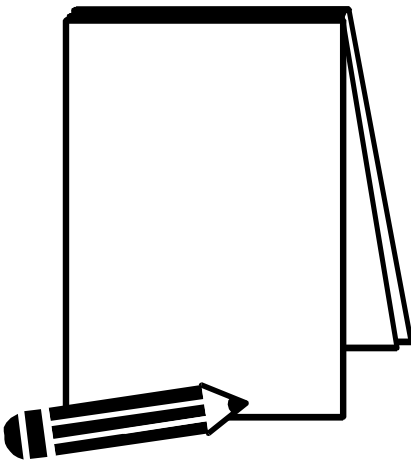
Section VII

Planning



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

Grade _____ Student's ID _____ Counselor's Name _____

Student's Name _____ (Last) (First) (Middle) Date of Birth _____ (Month) (Day) (Year)

Address _____ (Street) (City) (State) (Zipcode)

Mother's Name _____ Business Phone _____ Home Phone _____

Father's Name _____ Business Phone _____ Home Phone _____

Career Goal _____

Career Clusters

___Arts, Media and Communication
___Business, Management and Finance
___Consumer Service, Hospitality & Tourism
___Construction and Development
___Environmental, Agriculture & Natural Resources
___Health & Biosciences
___Human Resource Services
___Information Technology
___Manufacturing, Engineering & Technology
___Transportation Technologies

HSA (High School Assessment)-PARCC Assessments				
Students Must Take & Pass - Achieve a 1450 combined score Algebra I or ELA 10, successfully complete Bridge Projects.				
	1st Attempt	2nd Attempt	3rd Attempt	4th Attempt
Algebra I				
MSA				
ELA 10				
Government				

Post Secondary Goal

___Full Time Employment ___Vocational Training ___Military ___2 year college ___4 year college ___other

SUBJECT	Credits Req	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ENGLISH	4				
WORLD LANGUAGE	2*				
SOCIAL STUDIES	3				
MATH	4				
SCIENCE	3				
HEALTH	0.5				
PERS. FINANCIAL LITERACY	0.5				
FINE ARTS	1				
P.E.	1				
TECH ED	1				
ADVANCED TECH	2*				
CAREER & TECH ED	4-6*				
ELECTIVES	3				
TOTAL CREDITS	23-27				

STUDENT SERVICE COMPLETION

* Only one of the above must be completed.

_____ Parent/Guardian Signature _____ Date _____ Student Signature _____ Date

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

Grade _____ Student's ID _____ Counselor's Name _____

Student's Name _____ (Last) (First) (Middle) Date of Birth _____ (Month) (Day) (Year)

Address _____ (Street) (City) (State) (Zipcode)

Mother's Name _____ Business Phone _____ Home Phone _____

Father's Name _____ Business Phone _____ Home Phone _____

Career Goal _____

Career Clusters

___Arts, Media and Communication
___Business, Management and Finance
___Consumer Service, Hospitality & Tourism
___Construction and Development
___Environmental, Agriculture & Natural Resources
___Health & Biosciences
___Human Resource Services
___Information Technology
___Manufacturing, Engineering & Technology
___Transportation Technologies

HSA (High School Assessment)				
Students Must Take & Pass - Achieve a 1450 combined score Algebra I or ELA 10, successfully complete Bridge Projects.				
	1st Attempt	2nd Attempt	3rd Attempt	4th Attempt
Algebra I				
MISA				
ELA 10				
Government				

Post Secondary Goal

___Full Time Employment ___Vocational Training ___Military ___2 year college ___4 year college ___other

SUBJECT	Credits Req	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ENGLISH	4	ENGLISH 1	ENGLISH 2	ENGLISH 3	ENGLISH 4
WORLD LANGUAGE	2*				
SOCIAL STUDIES	3	LSF GOVERNMENT or HONORS LSF GOVERNMENT	WORLD CULTURES or HONORS WORLD CULTURES	US HISTORY	PSYCHOLOGY
MATH	3	INTEGRATED ALGEBRA	ALGEBRA I	GEOMETRY	ALGEBRA II or INTEGRATED MATH
SCIENCE	3	EARTH/SPACE SCIENCE	BIOLOGY	CHEMISTRY	ENVIRONMENTAL SCIENCE
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	ADVANCE TECHNOLOGY I	ADVANCE TECHNOLOGY II	
ADVANCED TECH	2*				
CAREER & TECH ED	4-6*				
ELECTIVES	3		ELECTIVE	(2) ELECTIVES	(3) ELECTIVE
TOTAL CREDITS	23-27	7	7	7	2 & 5 Additional Electives

STUDENT SERVICE COMPLETION

* Only one of the above must be completed.

_____ Parent/Guardian Signature _____ Date _____ Student Signature _____ Date

Board of Education of Allegany County - Four Year High School Plan - College Bound**

Grade _____ Student's ID _____ Counselor's Name _____

Student's Name _____ (Last) (First) (Middle) Date of Birth _____ (Month) (Day) (Year)

Address _____ (Street) (City) (State) (Zipcode)

Mother's Name _____ Business Phone _____ Home Phone _____

Father's Name _____ Business Phone _____ Home Phone _____

Career Goal _____

Career Clusters

___Arts, Media and Communication
___Business, Management and Finance
___Consumer Service, Hospitality & Tourism
___Construction and Development
___Environmental, Agriculture & Natural Resources
___Health & Biosciences
___Human Resource Services
___Information Technology
___Manufacturing, Engineering & Technology
___Transportation Technologies

HSA (High School Assessment)-PARCC Assessments				
Students Must Take & Pass - Achieve a 1450 combined score Algebra I or ELA 10, successfully complete Bridge Projects.				
	1st Attempt	2nd Attempt	3rd Attempt	4th Attempt
Algebra I	421			
MISA				
ELA 10	419			
Government	403			

Post Secondary Goal

___Full Time Employment ___Vocational Training ___Military ___2 year college ___4 year college ___other

SUBJECT	Credits Req	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ENGLISH	4	ENGLISH 1 or HONOR ENGLISH I	ENGLISH 2 or HONORS ENGLISH II	ENGLISH 3 or AP ENGLISH LANGUAGE	ENGLISH 4 or COLLEGE ENGLISH & COLLEGE SPEECH or AP ENGLISH LITERATURE
WORLD LANGUAGE	2*	FRENCH, SPANISH, CHINESE I	FRENCH, SPANISH, CHINESE II	FRENCH, SPANISH, CHINESE III	
SOCIAL STUDIES	3	HONORS LSF GOVERNMENT or AP US GOVERNMENT & POLITICS	HONORS WORLD CULTURES or AP WORLD CULTURES	US HISTORY or AP HISTORY	PSYCHOLOGY or AP PSYCHOLOGY or COLLEGE PSYCHOLOGY
MATH	4	ALGEBRA I	HONORS GEOMETRY	ALGEBRA II or HONORS ALGEBRA II	TRIG/PRECALCULUS or HONORS TRIG
SCIENCE	3	HONORS BIOLOGY	HONORS EARTH/SPACE SCIENCE or AP ENVIRONMENTAL SCIENCE	HONORS CHEMISTRY	AP PHYSICS (1 and 2), AP BIO or AP CHEM
HEALTH	0.5		COMP HEALTH EDUCATION		
PERS. FINANCIAL LITERACY	0.5		PERSONAL 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			(2) ELECTIVES	(3) ELECTIVES
TOTAL CREDITS	23-27	7	7	7	7

STUDENT SERVICE COMPLETION

* Only one of the above must be completed.

_____ Parent/Guardian Signature _____ Date _____ Student Signature _____ Date

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

Grade _____ Student's ID _____ Counselor's Name _____

Student's Name _____ (Last) (First) (Middle) Date of Birth _____ (Month) (Day) (Year)

Address _____ (Street) (City) (State) (Zipcode)

Mother's Name _____ Business Phone _____ Home Phone _____

Father's Name _____ Business Phone _____ Home Phone _____

Career Goal _____

Career Clusters

___Arts, Media and Communication
___Business, Management and Finance
___Consumer Service, Hospitality & Tourism
___Construction and Development
___Environmental, Agriculture & Natural Resources
___Health & Biosciences
___Human Resource Services
___Information Technology
___Manufacturing, Engineering & Technology
___Transportation Technologies

HSA (High School Assessment)-PARCC Assessments				
Students Must Take & Pass - Achieve a 1450 combined score Algebra I or ELA 10, successfully complete Bridge Projects.				
	1st Attempt	2nd Attempt	3rd Attempt	4th Attempt
Algebra I				
MSA				
ELA 10				
Government				

Post Secondary Goal

___Full Time Employment ___Vocational Training ___Military ___2 year college ___4 year college ___other

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

* Senior Option see page III

STUDENT SERVICE COMPLETION
* Only one of the above must be completed.

_____ Parent/Guardian Signature _____ Date _____ Student Signature _____ Date

Board of Education of Allegany County - Four Year High School Plan - Biomedical Science Honors

Grade _____ Student's ID _____ Counselor's Name _____

Student's Name _____ (Last) (First) (Middle) Date of Birth _____ (Month) (Day) (Year)

Address _____ (Street) (City) (State) (Zipcode)

Mother's Name _____ Business Phone _____ Home Phone _____

Father's Name _____ Business Phone _____ Home Phone _____

Career Goal _____

Career Clusters

___Arts, Media and Communication
___Business, Management and Finance
___Consumer Service, Hospitality & Tourism
___Construction and Development
___Environmental, Agriculture & Natural Resources
___Health & Biosciences
___Human Resource Services
___Information Technology
___Manufacturing, Engineering & Technology
___Transportation Technologies

HSA (High School Assessment)				
Students Must Take & Pass - Achieve a 1450 combined score Algebra I or ELA 10, successfully complete Bridge Projects.				
	1st Attempt	2nd Attempt	3rd Attempt	4th Attempt
Algebra I				
MISA				
ELA 10				
Government				

Post Secondary Goal

___Full Time Employment ___Vocational Training ___Military ___2 year college ___4 year college ___other

SUBJECT	Credits Req	GRADE 9	GRADE 10	GRADE 11	GRADE 12
ENGLISH	4	ENGLISH 1 or HONOR ENGLISH I	ENGLISH 2 or HONORS ENGLISH II	ENGLISH 3 or AP ENGLISH LANGUAGE	ENGLISH 4 or COLLEGE ENGLISH & COLLEGE SPEECH or AP ENGLISH 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.

_____ Parent/Guardian Signature _____ Date _____ Student Signature _____ Date

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)-Comp HS
Careers in Cosmetology
Carpentry
Criminal Justice/Law Enforcement
Culinary Arts
Electrical Construction and Maintenance
Engineering Technology (PLTW)
Graphic Communications (PrintED)
Heating, Ventilation and Air Conditioning (HVAC)
Industrial Manufacturing
Interactive Media Production (IMP)
IT Networking Academy
Teacher Academy of Maryland-Comp HS*
Welding and Metal Technology

*Teacher Academy of Maryland is a new program being explored by ACPS. It may/may not be offered at one or more high schools, pending enrollment. Students should indicate during course selection their desire to enter into this new potential program. Pending enrollment, the program would be established at a district site for the 2018-19 school year.

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 <u>MUST BE</u> successfully completed prior to admission to CCTE:

Algebra I and another math
Biology and another science
English 1
English2
Fine Arts
Foundations of Technology
Government
Health
Personal Financial Literacy
Physical Education
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 Six 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.

MAJORS

2018 - 2019 | www.allegany.edu

ALLEGANY COLLEGE of MARYLAND
ENGAGE YOUR FUTURE

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

ARTS AND SCIENCES (ARTS)
- Art AOC
- English AOC

ARTS AND SCIENCES (SCIENCES)
- Athletic Training/Fitness AOC
- Biology AOC
- Business Accounting AOC
- Business Economics AOC
- Chemistry AOC
- Health/Physical Education AOC
- History AOC
- Nanotechnology AOC
- Physics AOC
- Psychology AOC
- Social Work AOC
- Sociology AOC

BUSINESS ADMINISTRATION

COMPUTER SCIENCE/CYBERSECURITY/ INFORMATION SYSTEMS

CRIMINAL JUSTICE

GENERAL STUDIES

TEACHER EDUCATION
- Early Childhood AOC
- Elementary AOC
- Secondary AOC

TEACHING - ELEMENTARY (AAT)

AOC – Area of Concentration

CAREER PROGRAMS - *(two year programs of study - Associate degree)*

APPLIED TECHNICAL STUDIES

AUTOMOTIVE TECHNOLOGY

BUSINESS MANAGEMENT

COMPUTER TECHNOLOGY
- Cybersecurity AOC
- Programming AOC
- Technical Support AOC
- Web Development AOC

CRIMINAL JUSTICE

CULINARY ARTS

*DENTAL HYGIENE

FOREST TECHNOLOGY

HOSPITALITY MANAGEMENT
- Hotel and Restaurant Management AOC
- Professional Golf Management AOC

*HUMAN SERVICE ASSOCIATE

*MASSAGE THERAPY

MEDICAL ADMINISTRATIVE ASSISTANT

*MEDICAL ASSISTANT

*MEDICAL LABORATORY TECHNOLOGY

MULTIMEDIA TECHNOLOGY

*NURSING

*OCCUPATIONAL THERAPY ASSISTANT

PARALEGAL

*PHYSICAL THERAPIST ASSISTANT

*RADIOLOGIC TECHNOLOGY

*RESPIRATORY THERAPIST

**Selective admissions program*
AOC – Area of Concentration

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

APPLICATIONS USER SPECIALIST

AUTOMOTIVE SERVICE ATTENDANT (1 semester)

AUTOMOTIVE TECHNOLOGY

BAKING ESSENTIALS†

BUSINESS ACCOUNTING

BUSINESS ENTREPRENEURSHIP

BUSINESS MARKETING AND SALES

BUSINESS SUPERVISION

COOKING ESSENTIALS†

CRIMINAL JUSTICE

CYBERSECURITY

DIETARY MANAGER

EVENT MANAGEMENT†

GENERAL STUDIES

GRAPHIC DESIGN

MASSAGE THERAPY

MEDICAL CODING AND BILLING

MEDICAL LABORATORY TECHNOLOGY - BIOTECHNOLOGY

NURSING ASSISTANT/ GERIATRIC AIDE (1 semester)

PARALEGAL†

PHARMACY TECHNICIAN (1 semester)

PHLEBOTOMY/EKG TECHNICIAN (1 semester)

PRACTICAL NURSING

PROFESSIONAL GOLF MANAGEMENT

RESTAURANT MANAGEMENT†

SPANISH

TECHNICAL SUPPORT

TREE CARE TECHNICIAN

*** For more reported information about these programs, visit our website at www.allegany.edu/gainfulemploymentdisclosure*
† *Pending MHEC Approval*

LETTERS OF RECOGNITION

ACCOUNTING

ADDICTION TREATMENT

CRIMINAL JUSTICE/CORRECTIONS

ENTREPRENEURSHIP TRAINING

FIRST-LINE SUPERVISION

INTEGRATIVE HEALTH

INTEGRATIVE WELLNESS

LEADERSHIP DEVELOPMENT

MARKETING AND SALES TRAINING

PEACE AND CONFLICT STUDIES

PHOTOGRAPHY

WEB PAGE DEVELOPMENT

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.

Updated: 12/2017

FROSTBURG STATE UNIVERSITY—FSU AT A GLANCE

AVERAGE ENROLLMENT
4,725 undergraduate 671 graduate

STUDENT/FACULTY RATIO
18:1
Average class size 22

TUITION & FEES*

In-State	$8,900
Out-of-State	$22,300
Regional Resident**	$17,300

**Estimated undergraduate expenses for 2017-18; 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 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

FROSTBURG STATE UNIVERSITY

One University. A World of Experiences.

2018-2019

ALLEGANY COUNTY PUBLIC SCHOOLS

PROGRAMS OF STUDY