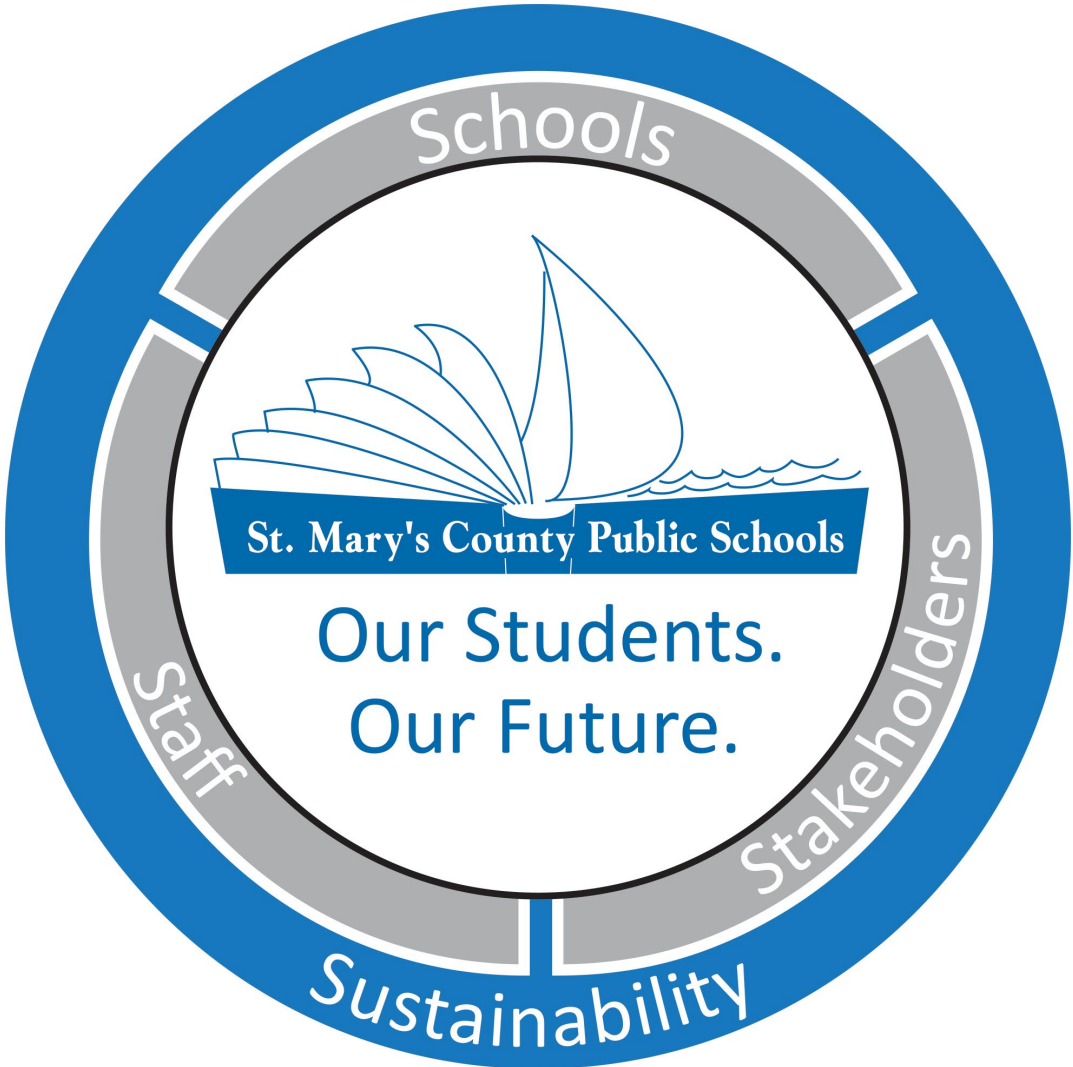


ST. MARY'S COUNTY PUBLIC SCHOOLS

2019-2020 HIGH SCHOOL PROGRAM OF STUDIES



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Note: For more information, please visit our website at <http://www.smcps.org>

Please direct inquiries about this document to:

Department of Curriculum and Instruction

23160 Moakley Street

Leonardtown, MD 20650

301-475-5511, Ext. 32249

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LETTER FROM THE SUPERINTENDENT



St. Mary's County Public Schools

Central Administration

Office of the Superintendent
23160 Moakley Street, Suite 109
Leonardtown, Maryland 20650

Phone: 301-475-5511 ext. 32178; Fax: 301-475-4270

Dr. J. Scott Smith
Superintendent

Dear Students and Parent(s)/Guardian(s):

St. Mary's County Public Schools seeks to educate all students with rigor, relevance, respect, and positive relationships. To achieve this mission, schools have adopted a rigorous curriculum that promotes authentic and lifelong learning. Graduates of St. Mary's County Public Schools are expected to be:

- Resourceful, lifelong learners who appreciate and seek knowledge, apply learning to new situations, and pursue personal goals;
- Fluent communicators who can read, write, and integrate information effectively and apply technology appropriately;
- Responsible, productive citizens who contribute to the community as collaborative workers, and as active citizens who value and respect diversity, and;
- Goal-oriented and contributing citizens who are prepared to make career decisions to enter the workforce and/or pursue higher education.

The High School Program of Studies is designed to assist our graduates to meet these expectations. Courses are designed to challenge all students, fulfill the high school graduation requirements, prepare students for the required assessments, and ensure students are prepared for post-secondary programs.

Students and their parent(s)/guardian(s) are encouraged to review this Program of Studies and the school registration material carefully with teachers, school counselors, and administrators. It is very important that students select the most challenging and rigorous program to meet their post-secondary and career goals.

Sincerely,



J. Scott Smith, Ed.D.
Superintendent of Schools

ST. MARY'S COUNTY HIGH SCHOOL GRADUATION REQUIREMENTS

Graduation requirements below are effective *beginning* with students entering grade 9 in the 2019-2020 school year. Students entering grades 10-12 must meet the graduation requirements established for their respective class. Copies of archived Program of Studies documents are on file in the school's counselors office and online at www.smcps.org/dci.

Credits For Graduation

Students are encouraged to present more than the minimum units of credit for graduation. Most students will graduate with more than 26 units of credit. Units of credit are earned at the end of the year with a passing score. A unit of credit is based on all four marking periods for a year-long course.

Maryland Core Requirements (21 Credits)

- English - 4 Credits
- Mathematics - 3 Credits*
 - ◆ Algebra 1
 - ◆ Geometry
 - ◆ Additional Math Credit*Must take math each year in high school
- Science - 3 Credits
- Social Studies - 3 Credits
 - ◆ United States History
 - ◆ American Government
 - ◆ Modern World History
- Physical Education/Health - 1 Credit
 - ◆ Physical Education - (.5 credit)
 - ◆ Health - (.5 credit)
- Fine Arts - 1 Credit
- Technology Education - 1 Credit
 - ◆ Foundations of Technology
 - ◆ Foundations of Computer Science
 - OR
 - ◆ AP Computer Science Principles

CORE CREDIT TOTAL = 16 Credits (As cited above)

OTHER GRADUATION REQUIREMENTS = 5 Credits (minimum)

- World Language OR Advanced Technology OR CTE Completer Sequence
 - ◆ 2 World Languages, OR
 - ◆ 2 Advanced Technology, OR
 - ◆ CTE Completer - CTE Sequence Courses
- Electives
 - ◆ 2 credits for Core or University Completers
 - ◆ 1 credit for CTE Completer
- Assessments
 - ◆ Pass High School Assessments for
 - Government
 - Algebra 1
 - English 10
- Student Service Learning
 - ◆ 75 Hours
- Career Portfolio
 - ◆ Complete

Program Completion

To receive a High School Diploma in St. Mary's County Public Schools (SMCPS), students must select and enroll in a course of study for a program pathway. All students must complete the Maryland core requirements. Students must also select a University Sequence or a Career and Technology Education Completer Sequence. All students are highly encouraged to take advantage of all that SMCPS offers and to be a Dual Completer, meeting the requirements of both sequences.

University Completer

- Complete 16 core credits
- Complete 4 credits in Mathematics to include Algebra 1, Geometry, and Algebra 2 (non-trivial Algebra minimum in senior year)
- Complete 2 credits in a World Language OR 2 credits in Advanced Technology

Career & Technology Education (CTE) Completer

- Complete the 16 core credits
- Complete 4 credits in an approved Career and Technology Program Sequence

Dual Completer

- Complete the 16 core credits
- Complete 4 credits in an approved Career and Technology Program Sequence
- Meet all the requirements of the University Sequence

PROGRAM COMPLETER SEQUENCES

In addition to the completion of the core credit requirements for a High School Diploma, a student must complete one or more of the following program sequences:

University Sequence

A completer of the University Sequence must complete a core program of four credits of English; three credits of social studies; three credits of laboratory science; four credits of mathematics, including Algebra 1, Geometry, and Algebra 2. Students who complete Algebra 2 prior to their final year must complete the fourth year math requirement with non-trivial Algebra. Students must also complete two credits in a language other than English or complete two credits in Advanced Technology. For further details regarding the University Sequence requirements and other college/university opportunities, contact your school counseling office.

Example Of University Sequence Four Year Educational Plan

	Grade 9	Grade 10	Grade 11	Grade 12
English	Freshman English (Pre-AP)	World Literature (Pre-AP)	AP Language	AP Literature
Math	Core Algebra 1	Geometry	Algebra 2	Precalculus
Science	Earth/Space Science	Biology	Chemistry (H) or Physics (H)	Elective
Social Studies	United States History (H)	Government (H)	World History (AP)	Elective
World Language	World Language or Advanced Technology	World Language or Advanced Technology	World Language	Elective
Other	Technology Credit	Elective	Elective	Elective
Other	PE/Health or Fine Arts	Fine Arts or PE/Health	Elective	Elective

Career and Technology Education (CTE) Program Completer Sequence

A completer of the Career and Technology Education program sequence must complete at least four additional credits in a career specialization beyond the required core credits. Within the eleven career clusters, the student will select one program in which to complete four or more credits. Students completing a two-year program at the Dr. James A. Forrest Career and Technology Center earn a total of five credits in their career specialization. Students who complete the Career and Technology Education program sequence may also meet University Sequence requirements and/or qualify to enter a community college, technical college, or other approved post-secondary training program. For further details regarding Career and Technology Education program opportunities, contact your school's counseling office.

Example Of Career And Technology Education Four Year Educational Plan

	Grade 9	Grade 10	Grade 11	Grade 12	
English	Freshman English	World Literature	American Literature	Digital Composition	
Math	Core Algebra 1	Geometry	Algebra 2	Precalculus	
Science	Earth/Space Science	Biology	Chemistry or Physics (H)	Elective	
Social Studies	United States History	Government	Modern World History	Elective	
CTE	Technology Credit	CTE sequenced course	CTE sequenced course	CTE sequenced course	
Other	Fine Arts	CTE sequenced course	Elective	Elective	
Other	PE/Health or Fine Arts	Fine Arts or PE/Health	Elective	Elective	

Dual Completer Sequence

A dual completer will meet all the requirements of the University Sequence requirements as well as an approved Career and Technology Education Completer Sequence.

Example Of Dual Completer Four Year Educational Plan

		Grade 9	Grade 10	Grade 11	Grade 12
English	Freshman English	World Literature	American or British Literature	Introduction to Composition and Rhetoric or College English	
Math	Core Algebra 1	Geometry	Algebra 2	Precalculus	
Science	Earth/Space Science	Biology	Chemistry (H) or Physics (H)	Elective Intro to Human Anatomy and Physiology (with lab) - CSM Campus	
Social Studies	United States History	Government (AP)	Modern World History (CM)	Elective General Psychology - CSM Campus	
World Language	World Language or Advanced Technology	World Language or Advanced Technology	World Language (recommended but not required)	Elective Advanced Conversation and Composition - CSM Campus	
Other	Technology Credit	CTE sequenced course	CTE sequenced course	CTE sequenced course	
Other	PE/Health or Fine Arts	CTE sequenced course	Fine Arts or PE/Health	Elective	

Portfolio Requirement For A High School Diploma

Students must complete an electronic career portfolio which consists of a series of career exploration activities joined with educational course work for the purpose of post-secondary planning. Career portfolios are accessed through Naviance, through the [Clever Software App](#), located on the SMCPs web page under "[Digital Textbooks and Online Resources](#)." The career portfolio is begun in grade 9 and culminates in an end product that demonstrates a student's knowledge, competencies, and interests. For questions about this requirement, contact your school counselor or the College/Career Readiness Center at your home high school.

Student Service-Learning Requirements For a High School Diploma

Students must complete a program in student service-learning developed by the St. Mary's County Public Schools, including service preparation, action, and reflection components. Students enrolled in St. Mary's County Public Schools meet this requirement through service-learning activities conducted in middle school and through the satisfactory completion of specific courses in high school. Specifically, student service-learning at the high school level is infused into the ninth grade United States History course and the tenth grade Government course. Students not completing these courses in the St. Mary's County Public Schools must have met this requirement through programs in other school systems or through the completion of Independent Study Student Service-Learning or School Student Service-Learning.

High School Assessments

Students entering grade 9 in the 2019-2020 school year MUST pass the Maryland High School Assessments for Government, English 10 and Algebra 1, and take the Science MISA Assessment. Students may meet these requirements by earning a minimum combined score or through the successful completion of the Bridge Plan for Academic Validation.

Maryland High School Certificate

This certificate may be awarded to students with disabilities who do not meet the requirements for a diploma but who meet one of the following criteria. The student is enrolled in a special education program for at least four years beyond grade 8, or its age equivalent, and is determined by an Individualized Educational Program Team (IEP Team), with the agreement of the student's parents/guardians, to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life. The world of work includes but is not limited to gainful employment, supported employment, or sheltered workshops. The student has been enrolled in a special education program for four years beyond grade 8, or its age equivalent, and has reached age 21.

Grade 12 Enrollment

First time students in grade 12 must minimally enroll in four class periods (or its equivalent) to include a Mathematics and English credit. Waivers for full time grade 12 attendance will only be granted when the student can present proof of concurrent enrollment in college, or early admission to approved Vocational, Technical, or Other Post-Secondary School.

Eligibility For Extracurricular Activities

To be eligible to participate in extracurricular activities and athletics, students must be enrolled in a minimum of one credit-bearing course in a SMCPS high school and maintain a grade point average, attendance requirements, and other requirements outlined in the student handbook. In accordance with COMAR 13A.06.03.02.A., in order to be eligible for athletics, students shall be “officially registered and attending the member MPSSAA school they are authorized to attend under regulations of the local school system.”

Course Offerings

The school system reserves the right to cancel or combine any class due to insufficient enrollment. Courses are open to all students without regard to race, sex, age, or disability. Enrollment at the Dr. James A. Forrest Career and Technology Center is limited to space available.

MARYLAND SCHOLARS

REQUIREMENTS

For students entering high school in the 2019-2020 school year, the Maryland Scholars program recognizes students who have taken a rigorous course of study throughout high school. Students recognized for this distinction meet the requirements outlined below.

1. Credit Requirements:

Students must complete the specified credits as part of the 21 credit requirement to receive the distinction of a Maryland Scholars:

- English - 4 Credits
- Social Studies - 3 Credits
 - United States History
 - Government
 - Modern World History
- Mathematics - 4 Credits (Through Algebra 2)
- Science - 3 Credits (Lab Sciences)
 - Biology
 - Chemistry
 - Physics*
- Fine Arts (Visual Arts, Music, Theatre) - 1 Credit
- PE / Health - 1 Credit
- Technology Education - 1 Credit
- World Language - 2 Credits in the same World Language

*Rigorous lab science substitutions for Physics may be selected from the following list of courses: Biochemistry, Anatomy and Physiology, Forensic Science, AP Physics, AP Biology, AP Chemistry, or AP Environmental Science.

2. Cumulative Grade Point Average Requirement:

Students must obtain at least a 3.0 cumulative grade point average on a 4.0 scale.

CERTIFICATE OF MERIT REQUIREMENTS

For students entering high school for years 2017-2018 or earlier, the Certificate of Merit program recognizes students who have taken a rigorous course of study throughout high school. Students recognized for this certificate meet the requirements outlined below. Completing Certificate of Merit courses is not tied to graduation requirements.

1. Credit Requirements:

Students must complete the specified credits as part of the 21 credit requirement to receive a Certificate of Merit:

- English - 4 Credits
- Social Studies - 3 Credits
 - United States History
 - Government
 - Modern World History
- Mathematics - 4 Credits (Beginning with Algebra 1 or beyond)
- Science - 3 Credits
- Fine Arts (Visual Arts, Music, Theatre) - 1 Credit
- PE / Health - 1 Credit
- Technology Education - 1 Credit
- World Language (other than English, completing through Level 3 or above) or Advanced Technology Education - 2 Credits

2. Cumulative Grade Point Average Requirement:

Students must obtain at least a 3.0 cumulative grade point average on a 4.0 scale.

3. Advanced Course Requirements:

Students must complete at least 12 credits of their high school program in advanced courses at the Certificate of Merit, advanced placement, or honors level.

Special Note Regarding the World Language Requirement for the High School Certificate of Merit:

Students must successfully complete through Level 3 of a world language in order to meet the Certificate of Merit World Language requirement. Level 1 credit may be earned in grade 8 with a passing grade in a world language. However, the grade from middle school does not factor into the grade point average (GPA), quality points, or class rank.

Students entering high school in 2018-2019 or years after will be eligible for the Maryland Scholars Recognition.

SEAL OF BILITERACY REQUIREMENTS

The Maryland Seal of Biliteracy is an award given to students at graduation who demonstrate a high level of proficiency in listening, speaking, reading and writing in one or more languages other than English. To be eligible for the Seal of Biliteracy, a student must fulfill the following requirements:

- Pass English 10 Assessment; and
- Score Intermediate High proficiency or equivalent on an approved world language assessment. This would be a minimum score of 4 on the Advanced Placement world language exam or Intermediate High on one of the ACTFL (American Council on the Teaching of Foreign Languages) assessments. For a complete list of approved assessments, please see your WL teacher or school counselor.

ADVANCED PLACEMENT COURSES

All students should have the opportunity to pursue more challenging academic opportunities. The Advanced Placement courses are designed to provide the highly able student with more complex and rigorous academic content, comparable to the demands of college-level course work. The following Advanced Placement courses are offered to students and offerings vary by school and enrollment.

AP Art History	AP Physics I
AP Biology	AP Physics 2
AP Calculus AB	AP Physics C
AP Calculus BC	AP Psychology
AP Chemistry	AP Research (AP Capstone)*
AP Computer Science A	AP Seminar (AP Capstone)*
AP Computer Science Principles	AP Spanish Language
AP Environmental Science	AP Statistics
AP French Language	AP Studio Art – Drawing Portfolio
AP Human Geography	AP Studio Art – Two-Dimensional Design Portfolio
AP Language and Composition	AP Studio Art – Three Dimensional Design Portfolio
AP Latin Literature	AP United States Government/Comparative
AP Literature and Composition	Government and Politics (GIS Only)
AP Macroeconomics	AP United States Government and Politics
AP Microeconomics	AP United States History AP World History
AP Music Theory	

Advanced Placement courses also provide the opportunity to earn college credit or its equivalent through the Advanced Placement testing program. Although not all colleges and universities grant credit for qualifying grades on Advanced Placement examinations, over 400 institutions do grant credit.

Since there are much greater demands placed on those students who enroll in Advanced Placement courses, it is appropriate to establish a grading system that is commensurate with the nature of effort required. Therefore, Advanced Placement grades will be weighted according to A = 5, B = 4, C = 3, D = 1, and F = 0.

*For more information regarding AP Capstone, reference [ADVANCED PLACEMENT CAPSTONE](#)

SCHEDULE AND PROGRAM CHANGES

Once students register for courses in the spring, they have the responsibility to be certain that the correct courses were requested. Students who fail required courses may receive the credit through online learning or retake the course during the next school year. Specific information concerning the online learning program may be obtained from the counseling center at each high school. Students who do not plan to make up failed courses through online learning should submit schedule change requests to school counselors.

Student schedules for the school year will be posted prior to the beginning of the school year. It is important that students carefully review their schedules. The period for student-initiated requests to change schedules will follow the posting of schedules on the Home Access Center. Students must contact their school counselor in person to initiate a request for change. Requests will be considered and changes made depending on the students' career plans and available space in the class requested. It may also become necessary for some administrative schedule changes to occur. The final decision of schedule changes rests with the principal.

Student-initiated requests for a schedule change will not be considered once the marking period begins, unless the subject teacher and school counselor concur that the student is inappropriately placed. A grade of F for the marking period will appear on the report card and the permanent record for any course that is dropped after September 30.

[Credit Worksheet – Link](#)

ALTERNATIVE HIGH SCHOOL PROGRAMS

The Alternative High School programs provide an opportunity for students and young adults to earn high school credits. The Alternative High School programs are designed to:

- provide additional credit courses, for select MSDE-approved courses, for secondary school students enrolled in their comprehensive high school.
- provide options for credit recovery.
- provide flexible schedule for those students who wish to continue their education but are unable to attend their comprehensive high school.
- provide an educational program for those under 21 who only need to earn a few credits in order to obtain a Maryland High School Diploma.

Students participating in Alternative High School programs can earn academic credit in the areas required for graduation and select elective credits.

Students currently enrolled in a SMCPSS high school should contact their school counselor.

Courses completed during the alternative program to satisfy a graduation credit will be added to the student's record as a separate course, unless the credits are units of recovery within a currently-enrolled course. The grade does not eliminate the previous grade for the same course taken at the home school. The course grade will be used to calculate the cumulative grade point average (GPA) for each student. It should be noted, however, that school system policy states that alternative school credit will not apply in determining the grade point average (GPA) for students to become eligible for extracurricular activities.

Eligibility For Enrollment

Applicants must meet the following requirements:

1. The student must be actively enrolled in a SMCPSS school.
2. Written permission of parent(s)/guardian(s), if the student is under 18 years of age.
3. Approval of the appropriate director if the student is expelled from day school.

Transportation And Resources

Students are responsible for providing their own transportation arrangements for alternative programs and any technology resources required for home online access (as appropriate to the course of study).

ALTERNATIVES TO FOUR-YEAR HIGH SCHOOL ATTENDANCE

In recognition of the fact that four-year enrollment in a public high school may not serve the needs of some students, the alternatives described below are available. In any of the Alternative to Four-Year High School Enrollment Requirements, the student assumes responsibility for his/her participation and success in the course of study.

Dual Enrollment Program

Students enrolled in the dual enrollment program take high school courses and accredited college courses from a Maryland institution of higher learning simultaneously. Students pay 50% of the college course tuition as a Dual Enrollment program participant. A student may be accepted in a dual enrollment program in an MSDE approved college provided that:

- The student is in grade 11 or 12.
- The student has demonstrated the ability to do college-level work (as evidenced by a 2.5 grade point average in the preceding year of high school as well as other determining factors).
- The student has completed the Application for Alternatives to Four Year Enrollment form with all the required signatures by July 15 for the upcoming academic school year.
- The student has completed the college application process and has been accepted to a Maryland institution of higher learning.

The student is enrolled for a maximum of 15 semester hours (three credit system) or 18 semester hours (four credit system) of college credit each college semester. Summer courses count as one semester. Note: Additional corresponding lab credits may cause a student to exceed this limit.

Each college course counts as one semester of a high school class. Therefore two college courses are required to fulfill a full year's high school graduation credit requirement. Only college courses taken to satisfy a graduation requirement may be transcribed to the high school transcript. College semesterised courses will be transcribed as a .5 weighted credit. All other dual-enrollment year-long courses taken in the comprehensive high school will be transcribed as stated within this Program of Studies. See below for approved courses. Dual enrolled students must be enrolled in school in a full-time status (a minimum of four classes including a mathematics class). A waiver for this enrollment requirement must be approved by the school principal.

- Full-time status must be maintained for the duration of the school year in order to be considered for Valedictorian or Salutatorian honors.
- Appeals pertaining to this option may be sought in accordance with SMCPs policy.
- College tuition, fees and transportation to the college campus are the responsibility of the parent(s)/guardian(s).

College Courses Approved To Meet High School Graduation Requirements:

For graduation requirements in English, mathematics, science and social studies, the following courses from the College of Southern Maryland (CSM) will be accepted if a student is approved (in advance) for dual enrollment.

Other accredited college courses not listed below may be counted as elective credit. Courses from other colleges will be considered on a case-by-case basis.

English

English in grades 9 and 10 must be taken at a SMCPs high school to fulfill graduation requirements.

The Grade 12 English requirement can be met by taking two semesters of an English course at CSM as follows:

ENG 1010 – Composition and Rhetoric and ENG 1020 – Composition and Literature (appears on SMCPs transcript as CSM ENG 1010 and CSM ENG 1020 respectively)

If a student has either taken, received AP credit for, or placed out of ENG 1010 or ENG 1020, the student should take the next most appropriate course (listed in order of SMCPs Preference):

ENG 2010 English Literature I (SMCPs: CSM ENG 2010)
ENG 2020 English Literature II (SMCPs: CSM ENG 2020)
ENG 2200 American Literature I (SMCPs: CSM ENG 2200)
ENG 2210 American Literature II (SMCPs: CSM ENG 2210)
ENG 2320 World Literature I (SMCPs: CSM ENG 2320)
ENG 2330 World Literature II (SMCPs: CSM ENG 2330)
ENG 2250 Women Writers (SMCPs: CSM ENG 2250)
ENG 2260 Ethnic American Literature (SMCPs: CSM ENG 2260)
ENG 2040 Introduction to Drama (SMCPs: CSM ENG 2040)
ENG 2070 Introduction to Poetry (SMCPs: CSM ENG 2070)

Foreign Language

If a student has either taken, received AP credit for, or placed out of SPA 1010, SPA 1020, FRE 1010, or FRE 1020, the student should take the next most appropriate course (listed in order of SMCPs Preference):

SPA 1010 Elementary Spanish I
SPA 1020 Elementary Spanish II
SPA 2010 Intermediate Spanish I
SPA 2020 Intermediate Spanish II
SPA 2050 Advanced Conversation and Composition III
FRE 1010 Introduction to French I
FRE 1020 Introduction to French II
FRE 2010 Composition and Conversation I
FRE 2020 Composition and Conversation II

Mathematics

Three high school mathematics courses to include Algebra 1, Geometry, and Algebra 2 must be taken at an SMCPs school to fulfill the graduation requirements prior to consideration of additional mathematics courses at CSM.

If a student has completed through Algebra 2, the mathematics graduation requirement can be completed by taking two semesters of the appropriate math courses (listed in order of SMCPs Preference):

MTH 1100 College Mathematics (SMCPs: CSM MTH 1100)
MTH 1130 College Analytic Trigonometry (SMCPs: CSM MTH 1130)
MTH 1150 Precalculus Algebra & Trigonometry (SMCPs: CSM MTH 1150)
MTH 1200 Calculus 1 and Analytic Geometry (SMCPs: CSM MTH 1200)
MTH 1210 Calculus 2 (SMCPs: CSM MTH 1210)

MTH 2200 Calculus 3 (SMCPS: CSM MTH 2200)
MTH 2300 Introduction to Statistics (SMCPS: CSM MTH 2300)

Science (Must Include a Lab)

Coursework for all levels of Earth/Space Science, Biology, Chemistry, and Physics must be completed at an SMCPS high school to fulfill graduation requirements prior to consideration of additional elective science courses at the college level. Science courses taken at the college level may receive elective high school credit if it fulfills a graduation requirement.

Social Studies

History, American Government, and Modern World History must be completed at an SMCPS high school to fulfill graduation requirements prior to consideration of additional social studies courses at the college level. Social Studies courses taken at the college level may receive elective high school credit.

Early College Admission

Students seeking Early College Admission withdraw from high school and attend an accredited college full time in lieu of their senior year of high school. Courses to be completed during their senior year of high school are satisfied through the completion of approved courses taken at college. These courses are transferred back to the high school transcript to satisfy graduation requirements.

A student may receive a Maryland High School Diploma through early college admission, provided that:

- The student is accepted for early admission to an accredited Maryland college prior to high school graduation and had a 2.5 grade point average through the junior year.
- All Maryland high school assessments and Student Service Learning requirements have been met.
- The student has completed the Application for Alternatives to Four Year Enrollment form with all the required signatures by July 15 for the upcoming academic school year.
- The student's program for the full year of college must be approved by the Director of Curriculum and Instruction if the program is included toward the issuance of a high school diploma.
- At the conclusion of a full year of study, a written request for a Maryland High School Diploma is submitted to the Director of Curriculum and Instruction, together with a transcript from the college showing that the student has successfully completed a year of college work.
- Upon receipt of the student's college transcript, the student will be re-enrolled in SMCPS and the college credits that satisfy high school graduation requirements will be added to the high school transcript.
- The student is not eligible for Valedictorian or Salutatorian honors.
- The student may not participate in high school sports, clubs, or sponsored events, apart from the graduation ceremony.
- Students receiving Social Security survivor benefits will disqualify themselves from the continuance of those benefits should they enroll in the Early College Admission Program in that they will be withdrawn as a high school student.
- College tuition, fees and transportation to the college campus are the responsibility of the parent.
- Appeals pertaining to the option may be sought in accordance with SMCPS policy.

Steps for Requesting Early College Admission:

1. Apply to a four year accredited college and be accepted prior to July 15th of the junior year of high school.
2. Complete the Alternatives to Four Year Enrollment Form
3. Seek approval from the Director of Curriculum and Instruction for Early College Admission.

Early Admission to Approved Vocational, Technical, or Other Post-Secondary School

Students seeking Early Admission to an approved vocational, technical or other post-secondary school withdraw from high school and attend an approved vocational, technical or other post-secondary school full time in lieu of the senior year of high school.

A student may receive a Maryland High School Diploma through participation in an early admission program of an approved vocational, technical, or post-secondary school provided that:

- The student is accepted for early admission to an approved vocational, technical or other post-secondary school prior to high school graduation.
- All Maryland high school assessment and Student Service Learning requirements have been met.
- The student has completed the Application for Alternatives to Four Year Enrollment form with all the required signatures by July 15 for the upcoming academic school year.
- The student's program for the full year of study must be approved by the Director of Curriculum and Instruction if the program is included toward the issuance of a High School Diploma.
- At the conclusion of a full year of study, a written request for awarding of a High School Diploma is submitted to the Director of Curriculum and Instruction. A transcript or equivalent letter must accompany this request.

Appeals pertaining to this option may be sought in accordance with SMCPS policy.

Early Graduation

A student who graduates early from high school completes the requirements for a Maryland High School Diploma in three years.

A student may apply for early graduation, at the beginning of the junior year, provided that: All requirements for a Maryland High School Diploma can be met in three years. These requirements include all credits, Maryland high school assessments, and Student Service Learning requirements. Parent/guardian permission is required.

Approval from the school principal and superintendent of schools is also required. Appeals pertaining to this option may be sought in accordance with SMCPS policy.

Credit By Examination

Per the Maryland State Department of Education (MSDE), the State Board of Education made a credit-by-exam option available to students who have already completed **all** requirements for the Maryland High School Diploma except for a credit in English 12. To avail themselves of this opportunity, students first **must** have already met all Maryland State Assessment requirements and student service learning requirements.

MSDE has identified exams that would allow students to earn a substitute credit in English 12 in order to accelerate the student's graduation from high school. If a student elects to pursue this option, the student/parent assumes the cost for the test; the student is responsible for providing the score report(s) to the school counselor for verification.

In order for a student to waive English 12 and obtain the credit, mastery of the skills necessary to earn credit will be determined by the following: New SAT Evidence-Based Reading and Writing Section (EBSR); SAT Essay; and SAT Literature Subject Test. Students must score a minimum of 480 on the EBSR section, a 3 on each dimension of the essay (Reading, Analysis, and Writing), and 560 on the Literature Subject Test.

[Application for Alternatives to Four Year Enrollment Form – Link](#)

THE ACADEMIES

The Academy of Visual and Performing Arts (AVPA) supports our population of talented youth who excel in the Arts. Students participating in the AVPA will have a choice of one of three areas of focus: music, theatre, or visual arts.

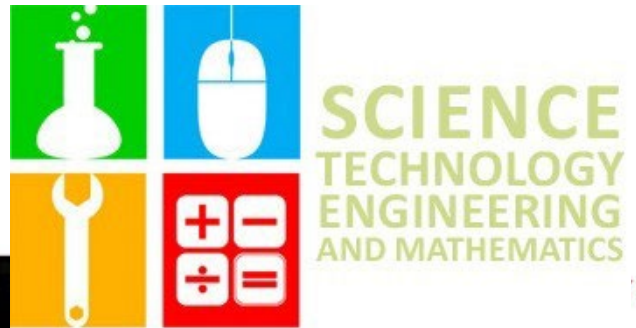
LEONARDTOWN HIGH SCHOOL
ACADEMY OF



Global and International Studies

The Academy of Global and International Studies (GIS) provides a rigorous, engaging education where students study specific curriculum related to world cultures, current affairs, history, literature and languages.

The STEM Academy (Science, Technology, Engineering and Mathematics) within St. Mary's County Public Schools is a rigorous and unique program of study emphasizing the core areas of mathematics and science with an infusion of technology and engineering.



Chopticon High School
"Preparing Students for College and Careers"

The Academy of Finance helps students develop

professional skills, receive specialized instruction in business finance and management, and gain an awareness of the marketable skills needed to be successful in the field.

At Fairlead Academy, a guided pathway to graduation, students navigate the challenges of high school by improving organizational, academic, and interpersonal skills. Through positive relationships, 21st century technology, and a small learning environment, students graduate with confidence and motivation to achieve college and career success.



FAIRLEAD
ACADEMY

Academy of Finance

The Academy of Finance (AOF) is offered at Chopticon High School. The Academy offers unique courses in finance to give students extraordinary knowledge and skills, as well as career exploration in numerous financial pathways. The rigorous curriculum includes dedicated classes founded upon the application of content, integrated technologies, and extra-curricular programs. Admission to the program is through an application process based on students' past academic performance.

Since there are much greater demands placed on students with the Academy of Finance, it is appropriate to establish a grading system that is commensurate with the nature of effort required. Therefore, AOF courses with an asterisk (*) will be weighted using a half-weight system (A=4.5, B=3.5, C=2.5, D=1, F=0).

Courses highlighted in **blue** indicate Academy requirements.

Example of Academy of Finance Four Year Plan

	Grade 9	Grade 10	Grade 11	Grade 12
English	*AOF English Pre-AP 9	English 10 Pre-AP	AP Language and Composition OR CSM Dual Enrollment English 1010/1020	AP English Literature OR Dual Enrollment English 1020/Elective
Math	Geometry OR Algebra 1	Algebra 2 OR Geometry	Precalculus OR Algebra 2	Calculus OR Precalculus
Science	Biology	Chemistry	AP Science OR Science	AP Science OR Science (optional)
Social Studies	US History	AP Government	AP World History OR Modern World History	AP Economics
World Language	World Language Level 1 OR Level 2	Optional if World Language taken in Grade 8	AOF Internship (summer)	
Academy of Finance	Foundations of Computer Science	Principles of Applied Finance/Personal Finance	Accounting	Economics of Business
Academy of Finance		AP Computer Science Principles *recommended	AP Seminar AOF Section	AP Research AOF Section *Recommended
Elective	Health/PE	Fine Arts Credit	AP Computer Science Principles *recommended	AP Computer Science A *recommended

Academy Requirements:

Students must complete the required shaded courses for the Academy of Finance. One credit is earned through a summer internship between the junior and senior year.

Cumulative Grade Point Requirements:

Students must maintain at least 3.0 cumulative grade point average on a 4.0 scale to graduate with Academy distinction.

Advanced Course Requirements:

Students must complete a minimum of 12 credits in advanced courses at the Pre-Advanced Placement, Advanced Placement, or Honors level.

General High School Requirements:

Students must complete the High School Assessments (as applicable), fulfill the Student Service-Learning requirement, and the career portfolio requirement.

Recommended Student Organizations:

Students are encouraged to become members of the Future Business Leaders of America Chapter at Chopticon High School. Future Business Leaders of America – Phi Beta Lambda (FBLA-PBL) is the oldest and largest national organization for students preparing for careers in business-related fields. FBLA-PBL provides students with “real-world” professional experiences for college and career success.

Academy of Finance English 9 – Pre-AP – 011193

The Academy of Finance Pre-AP English 9 course introduces students to the AoF cohort and its rigors prior to the more intensive study of business principles beginning in tenth grade. This course will tailor specific research and argumentative based tasks to texts paired with business administration study.

- CREDIT: 1 (half-weighted)
 - TYPE: Pre-AP
 - GRADE: 9
 - PREREQUISITE: Admission to the Academy of Finance
-

Principles of Finance/Applied Finance – 170443

This yearlong course introduces students to the financial world. Students develop financial literacy as they learn about the function of finance in society. Students study income and wealth, examine financial institutions, and study key investment- related terms and concepts. Students also research how innovations have changed the financial services field. Finally, students explore careers that exist in finance today. During the second semester, students study applied finance. The applied finance content delves into the financial concepts introduced in the first semester. Students learn to identify the legal forms of business organization and continue to develop an understanding of profit. Students learn about various financial analysis strategies and the methods by which businesses raise capital. Students also have the chance to explore, in depth, topics of high interest in the field of finance, as well as the type of careers that exist in finance today. This course has a dual enrollment option through CSM.

- CREDIT: 1
- TYPE: Academic
- GRADE: 10
- PREREQUISITE: Admission to Academy of Finance.

Principles of Accounting 1/Managerial Accounting – 170473

This yearlong course provides students with an understanding of the accounting process and how it facilitates decision making by providing data and information to internal and external stakeholders. Students learn that accounting is an integral part of all business activities. Students learn how to apply technology to accounting by creating formulas and inputting data into spreadsheets. Students also examine career opportunities and the professional certificates and designations earned by individuals in the accounting profession. During the second semester students study managerial accounting. Students are introduced to the fundamentals of management accounting, including manufacturing and cost accounting, budgeting, accounting for managerial decision making, and financial statement analysis. Students learn how to use accounting information for internal decision making, planning and control. Regardless of the career path they choose, this course gives students the financial acumen necessary to make informed personal and business decisions.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11
 - PREREQUISITE: Admission to Academy of Finance or approval of the instructor required.
-
-

Economics of Business – 170453

This yearlong course introduces students to the key concepts of economics as they pertain to business. The course discusses the American economy and the factors that influence the success of businesses and products. It describes forms of business ownership, discusses the relationship of labor and business, and provides a broad overview of the global economy. Students also examine careers in business, both as employees and as business owners. During the second semester students study ethics in business. The ethics in business content focuses on the significance of ethics to stakeholders, examines who bears responsibility of monitoring ethics, and explores ethical situations common in organizations. Students examine how ethics affect various business disciplines and consider the impact of organizational culture. Students also explore ethics as social responsibility, the evolution of ethics in international business, and how the free market and ethics can coexist. This course has a dual enrollment option through CSM.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Admission to Academy of Finance.
-

Financial Planning/Financial Services – 170463

This yearlong course provides students with an overview of the job of a financial planner. Students learn to consider how all aspects of financial planning might affect a potential client and about the importance of financial planning to help people reach their life goals. The course includes lessons on saving, borrowing, credit insurance, and investments. Students also examine careers in financial planning. During the second semester students study financial services. Students receive an overview of banks and other financial service companies. Students are introduced to the origins of money and banking and examine the early history of banking in the United States. Students study the financial services industry and the types of companies within the industry. Students learn about the services offered by such companies and analyze the ways in which these companies earn profits. Finally, students examine careers in financial services.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Admission to Academy of Finance. AOF Team approval required for registration.
-

Academy of Finance Internship – 170483

Students bridge the gap between the classroom and the workforce through a first-hand internship experience in the financial world. Students will prepare resumes and be interviewed for positions in banks, brokerage houses, accounting firms, and other business opportunities. The internship occurs between the summer of grades 11 and 12 and requires 100 hours of work and a research presentation component.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Admission to the Academy of Finance
-

Advanced Placement Seminar Course: AP Capstone – 023463

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
 - PREREQUISITE: None
-

Advanced Placement Research Course: AP Capstone – 023473

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000- 5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
 - PREREQUISITE: Successful completion of AP Seminar Course
-

Academy of Visual and Performing Arts (AVPA)

The Academy of Visual and Performing Arts meets the needs of our highly able arts-inspired youth who exhibit desire and motivation to pursue higher levels of achievement and learning in the Arts. This program will provide an Arts education inclusive of intense rigor, advanced instruction, connectivity, and professional artistic experiences. The program will include programs of study in music, theatre, and the visual arts. Admission to the program is through an application and audition process.

Since there are much greater demands placed on students with the Academy of Visual and Performing Arts, it is appropriate to establish a grading system that is commensurate with the nature of effort required. Therefore, AVPA courses with an asterisk (*) will be weighted using a half-weight system (A=4.5, B=3.5, C=2.5, D=1, F=0). **Students must complete the required shaded courses in their respective discipline for AVPA.**

Example of AVPA Four Year Educational Plan

	Grade 9	Grade 10	Grade 11	Grade 12
English	Freshman English (Pre-AP Recommended)	Pre-AP English 10 AVPA	AP Language & Composition OR American Literature (CM)	AP Literature & Composition OR British Literature (CM)
Math	Math	Math	Math	Math
Science	Science	Science	Science	Technology Credit - (Foundations of Technology OR Foundations of Computer Science)
Social Studies	US History AVPA*	Social Studies	Social Studies	PE\Health
World Language	Language	Language	Language	---
Music	Primary Ensemble	Primary Ensemble	Primary Ensemble	Primary Ensemble
	Vocal Ensemble (Instr.) OR Piano (Vocal)	Vocal Ensemble 2 (Instr.) OR Theatre 1 (Vocal) OR Piano	Solo & Ensemble 1	Solo & Ensemble 2 and AP Music Theory
Visual Arts	AVPA Pre-AP Visual Arts*	Art 2	AP Art History	AP Drawing or AP 2D Art or AP 3D Art
	Digital Photography	Sculpture	Art 3 or AP Drawing	AP Art Study Period Visual Art Elective - based on teacher recommendation
Theatre	Theatre 1	Theatre 2	Theatre 3	Theatre 4
	AVPA Elective based on teacher recommendation	Vocal Ensemble or Theatre Troupe or Theatre Elective	Theatre Troupe, or Advanced Studies in Technical Theatre	Theatre Troupe, Advanced Studies in Technical Theatre, Piano, Solo and Ensemble, or Art I

Cumulative Grade Point Average Requirement:

Students must maintain at least a 3.0 cumulative grade point average on a 4.0 scale for each semester to maintain Academy graduation status.

Advanced Course Requirements:

Students must complete at least 12 credits of their high school program in advanced courses at the Pre-AP, Advanced Placement, or Honors level.

Additional Program Requirements:

Students who enroll in the Academy of Visual and Performing Arts are required to participate in an Arts Seminar class to meet outside of the normal school day. They are also encouraged to take a minimum of one Advanced Placement class outside of the Advanced Placement classes offered in the Fine Arts. It is also recommended that students are affiliated with an honor society within the Fine Arts or National Honor Society.

General High School Requirements:

Students must complete the University Sequence requirements, High School Assessments (as applicable), fulfill the Student Service Learning requirement, and the career portfolio requirement.

[Academy of Visual and Performing Arts Pre-AP U.S. History – 023363](#)

This course focuses on Pre-AP strategies and curriculum through the lens of United States History. A challenging course designed for 9th grade students who show interest and ability in above grade level study, the AVPA U.S. History course will focus on examining historical time periods through the lens of the arts. Students will begin an intensive research project which sets key skills necessary for upper-level study. Focus will be on grammar, writing, and analysis of literature, along with skill development in the areas of research, composition, and synthesis. Foundational skill building in presentations and collaboration will also continue, in order to build up to senior year Capstone.

- CREDIT: 1 (half-weighted)
- TYPE: Pre-AP
- GRADE: 9
- PREREQUISITE: Admission to the Academy of Visual and Performing Arts

[Academy of Visual and Performing Arts Pre-AP Visual Arts – 069243](#)

The Pre-AP Visual Arts course reiterates key themes, underlying unit foundations, and instructional shifts evident in advanced study. The framework is structured around skills associated with ideation, experimentation, creation, revision, reflection, and analysis—the processes and activities that artists engage in while producing their work.

- CREDIT: 1 (half-weighted)
- TYPE: Pre-AP
- GRADE: 9
- PREREQUISITE: Admission to the Academy of Visual and Performing Arts

Academy of Visual and Performing Arts Capstone and Performance/Gallery – 069563

Students bridge the gap between the classroom and the real world through project-based learning that demonstrates mastery of their artistic skills. Students will develop an artistic program, either a recital or gallery, and complete research to demonstrate a deeper, foundational understanding of the arts. This course begins in 11th grade and continues through 12th grade. Students do not have “seat” time for this course, but are expected to work throughout the summer and alongside their mentor to synthesize information and key ideas from their Visual and Performing Arts coursework.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 12
 - PREREQUISITE: Admission to the Academy of Visual and Performing Arts
-

Academy of Global and International Studies (GIS)

The Academy of Global and International Studies is offered at Leonardtown High School. The program is designed to provide a rigorous, engaging educational pathway focused on an advanced study of world cultures, contemporary issues, history, and world languages. Additional credits for high school graduation, Advanced Placement courses, and the AP Capstone coursework are part of the program requirements. Admission to the program is through an application process based on students' past academic performance and dedication to advanced learning.

Since there are much greater demands placed on students with the Academy of Global and International Studies, it is appropriate to establish a grading system that is commensurate with the nature of effort required. Therefore, GIS courses with an asterisk (*) will be weighted using a half-weight system (A=4.5, B=3.5, C=2.5, D=1, F=0).

Example of Global and International Studies Four Year Educational Plan

	Grade 9	Grade 10	Grade 11	Grade 12
English	English 9 (GIS) Pre-AP*	English 10 (GIS) Pre-AP*	AP Language and Composition	AP English Literature and Composition
Math	Geometry (Honors) or Algebra 2 (Honors)	Algebra 2 or Precalculus	Precalculus or Calculus	Calculus or high-level Math course
Science	Biology (Honors)	Chemistry (Honors) or Physics	Science (AP or Honors)	Science Elective (AP or CM)
Social Studies	See GIS below	AP US / Comparative Gov. and Politics (GIS)	AP World History	AP US History
World Language	World Language	World Language	World Language	World Language
GIS	AP Human Geography	AP Seminar (AP Capstone)	AP Research (AP Capstone)	GIS Contemporary Issues: American Foreign Policy*
Other	PE/Health or Fine Arts	Foundations of Technology OR Foundations of Computer Science	Fine Arts or PE/Health	Elective

Academy Requirements:

Students must complete the required shaded courses for GIS. See additional World Language requirements below.

Cumulative Grade Point Average Requirement:

Students must maintain at least a 3.0 cumulative grade point average on a 4.0 scale to graduate with GIS Academy distinction.

Advanced Course Requirements:

Students must complete at least 12 credits of their high school program in advanced courses at the Pre-AP, Advanced Placement, or Honors level.

Advanced Placement Requirements:

Students must complete the Advanced Placement courses identified in the table above.

General High School Requirements:

Students must complete the High School Assessments, as applicable; fulfill the Student Service-Learning requirement; and meet the University Sequence requirements.

Special Note Regarding the World Language Requirement:

Students must successfully complete through Level 3 of a World Language and obtain four World Language credits in total in order to meet program requirements. Level 1 credit may be earned in the eighth grade with a passing grade in a World Language. However, the grade from middle school does not factor into the grade point average (GPA), quality points, or the class rank.

English 9 GIS Pre-AP – 011173*

This course focuses on Pre-AP strategies and curriculum. A challenging course designed for 9th grade students who show interest and ability in above grade level English, the GIS English course examines World Literature from BCE oral traditions to more contemporary works of literature. Focus will be on grammar, writing, and analysis of literature, along with skill development in the areas of research, composition, and vocabulary.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 9
 - PREREQUISITE: Admission to Global and International Studies required.
-

English 10 GIS Pre-AP – 012263*

This course focuses on Pre-AP strategies and curriculum. A challenging course designed for 10th grade students who show interest and ability in above grade level English. Literary study focuses on American Literature. This course provides advanced instruction in English grammar, writing, and literature with in-depth study of research, composition, and vocabulary development. This course will prepare students for the High School Assessment in English.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 10
 - PREREQUISITE: Successful completion of English 9 GIS Pre-AP.
-

Advanced Placement World History (GIS) – 022263

This AP World History course is designed to develop a greater understanding of the evolution of different types of human societies. The study will focus upon the time period from approximately 6000 B.C.E. to the present. Students will examine a truly global history by identifying global patterns and processes that have affected human history throughout time through a combination of factual knowledge and appropriate analytical skills. The course will stress six themes: the impact of interaction, change and continuity, the impact of technology and demography, social structure and gender, cultural and intellectual developments, and politics. Study skills, time management, note taking, essay writing, independent research, and test taking are emphasized to support students taking an advanced placement course in the ninth grade. The summer assignment must be completed prior to the first class. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit .

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11
 - PREREQUISITE: Admission to Global and International Studies required.
-

Advanced Placement Human Geography – 029253

Advanced Placement Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will make use of spatial concepts and landscape analysis to examine human social organization and its environmental consequences. While studying methods and tools geographers use, this course allows students to learn about world population issues, border disputes, and international conflicts. Students examine economic theories, models, religions and languages. Students will study urban development, industrialization, and city planning.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 9-12
 - PREREQUISITE: None
-

Advanced Placement United States/Comparative Government and Politics (GIS) – 023443

The course is designed to give students a critical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political scene. The following topics are included in this course of study; constitutional underpinnings of American government, political beliefs and behaviors, political parties and interest groups, institutions and policy processes of national government, and civil rights and civil liberties. Comparative Government and Politics introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. The course aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political and economic changes. Comparison assists both in identifying problems and in analyzing policy making. This course will be substituted for Government (Certificate of Merit course) and will prepare students for the High School Assessment in Government. This course also includes student service-learning.

- CREDIT: 2
 - TYPE: Advanced Placement
 - GRADE: 10
 - PREREQUISITE: Admission to Global and International Studies required.
-

Advanced Placement Seminar Course: AP Capstone – 023463

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
-
-

Advanced Placement Research Course: AP Capstone – 023473

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: Successful completion of AP Seminar Course.

Advanced Placement US History – 023433

The course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the issues in American history. Students will learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship. Topics included in this course begin with the discovery and settlement of the New World, 1492-1650, and conclude with a study of America since 1974. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 12
- PREREQUISITE: Admission to Global and International Studies required.

Science, Technology, Engineering and Mathematics (STEM)

The Science, Technology, Engineering, and Mathematics (STEM) Academy is offered at Great Mills High School. The STEM Academy offers unique courses in science, technology, engineering, and mathematics to give students extraordinary knowledge and skills, as well as career exploration in numerous science and engineering pathways. The curriculum includes dedicated research classes founded upon the application of content, integrated technologies, and extensive problem-solving experiences. Advanced Placement courses are incorporated. Admission to the program is through an application process based on students' past academic performance, dedication to advanced learning, and desire to pursue STEM-related careers.

Since there are much greater demands placed on students with the STEM Academy, it is appropriate to establish a grading system that is commensurate with the nature of effort required. Therefore, STEM courses with an asterisk (*) will be weighted using a half-weight system (A=4.5, B=3.5, C=2.5, D=1, F=0).

Example of STEM Four Year Educational Plan

	Grade 9	Grade 10	Grade 11	Grade 12
English	Freshman English Pre-AP	World Literature Pre-AP	AP Language and Composition	AP English Literature and Composition OR British Literature
Math	STEM Algebra 2 Honors *	STEM PreCalculus Honors *	AP Calculus	AP Statistics
Science	STEM Chemistry Honors *	STEM Biology Honors* STEM AP Physics Honors	AP Science	AP Science
Social Studies	US History	Government OR AP Government	AP World History OR Modern World History	AP Social Studies elective or Global Diplomacy
World Language	World Language	World Language	World Language	World Language or AP World Language
STEM		STEM Engineering*	STEM AP Seminar	STEM AP Research
Other	PE or Fine Arts	PE or Fine Arts	Elective	Elective
Computer Science	AP Computer Science Principles	AP Computer Science A		*STEM Internship (Summer)

Cumulative Grade Point Average Requirement:

Students must maintain at least a 3.0 cumulative grade point average on a 4.0 scale for each semester to graduate with STEM Academy distinction.

Advanced Course Requirements:

Students must complete at least 12 credits of their high school program in advanced courses at the Pre-AP, Advanced Placement, or Honors level.

Advanced Placement Requirements:

Students must complete, or be in the process of completing, at least 4 Advanced Placement courses in mathematics, science and/or technology, one of which must be mathematics and one in science. (This requirement may be substituted with advanced college courses which are approved through the dual enrollment or Charlotte Hall fellows programs.)

Computer Science Recommendations:

To satisfy the AP Science requirement for STEM, suggested courses would be AP Computer Science Principles or AP Computer Science A or both.

General High School Requirements:

Students must complete the High School Assessments (as applicable), fulfill the Student Service-Learning requirement, and meet the University Sequence requirements.

Special Note Regarding the World Language Requirements:

Students must successfully complete through Level 3 of a world language in order to meet program requirements. Level 1 credit may be earned in the eighth grade with a passing grade in a world language. However, the grade from middle school does not factor into the grade point average (GPA), quality points, or the class rank.

STEM Algebra 2 (Honors) – 032163*

This course is for ninth grade students who are enrolled in the STEM academy and have completed Algebra 1 and Geometry. This is a rigorous course, which incorporates topics in a hands-on, real-world discovery approach. The STEM Algebra 2 course exposes students to the ideas and applications of mathematical modeling, completes acquisition of basic skills in algebraic manipulation, and introduces a shift in perspective which is characteristic of the study of higher mathematics. To this end, equations, functions, and their graphs are studied. Students work with equations and inequalities, radical and absolute expressions, linear relations and functions, systems of equations and inequalities, coordinate geometry, matrix algebra, sequences and series, quadratic functions, polynomial functions, exponential and logarithmic functions, rational expressions, and conic sections. Students in the STEM course undertake advanced study in functions. Applications are more complex, and the material is explored in greater depth. Thorough mastery and understanding of techniques and concepts, as well as greater facility in using symbolic language, is expected. The use of a TI-84 Plus graphing calculator will be an integral part of the course.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 9
 - PREREQUISITE: Admission to the STEM Academy. Concurrent enrollment in Geometry Honors only.
-

STEM Chemistry (Honors) – 043433*

This project-based course is designed to challenge highly able students who have been accepted into the STEM Academy. Science, technology, engineering, and mathematics concepts will be fully integrated in this course. This course is aligned to the new Maryland State Science Standards and has 3 primary areas of study: Matter and its Interactions, Motion and Stability (Forces and Interactions), and Energy. This course will also contain disciplinary core ideas for Earth/Space Science. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas in alignment with the Maryland State Science Standards. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary science, especially AP level coursework.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 9
 - PREREQUISITE: Admission to the STEM Academy required.
-

STEM Biology (Honors) – 043443*

This project-based course is designed to challenge highly able students who have been accepted into the STEM Academy. Science, technology, engineering, and mathematics concepts will be fully integrated in this course. This course is aligned to the new Maryland State Science Standards and has 4 primary areas of study: From Molecules to Organisms (Structures and Processes), Ecosystems: (Interactions, Energy, and Dynamics), Heredity (Inheritance and Variation of Traits), and Biological Evolution (Unity and Diversity). This course will also contain disciplinary core ideas for Earth/Space Science. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas in alignment with the Maryland State Science Standards. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary science, especially AP level coursework. Students who object to dissection will be given alternative activities.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 10
 - PREREQUISITE: Admission to the STEM Academy required.
-

STEM Engineering (Honors) – 177413*

This project-based course is designed to challenge highly able students who have been accepted into the STEM Academy. When funded, the course provides students the opportunity to engage in authentic design challenges that require application of knowledge in mathematics and science and use of cutting edge technologies. These challenges allow students to compete against, meet, and learn from students from around the country and around the world. When not funded, these design challenges are simulated to create an experience as authentic as possible. Students are involved in four major areas of study: Principles of Design, Engineering Resources, Engineering Design Process, and Project Management. A capstone experience of the course is the opportunity to sit for a Solidworks CSWE Professional Certification Exam. This course satisfies the technology education credit required for graduation.

- CREDIT: 1 (half-weighted)
 - TYPE: Honors
 - GRADE: 10
 - PREREQUISITE: Admission to the STEM Academy required.
-

STEM AP Physics 1 – 043453

This first year college level physics course is designed to challenge highly able students who have been accepted into the STEM Academy. Science, technology, engineering, and mathematics concepts are integrated into this course. Students learn about and apply the concepts of vectors, motion-linear and rotational, and forces to explain the physical world. The concepts of electricity and magnetism are studied and related to their role in nature and technology. Wave motion and its relationship to the understanding of various physical phenomena are studied. This laboratory-oriented course includes high-level expectations in scientific observation, investigation, experimental design, interpretation of data, problem solving, critical thinking, analysis of scientific literature, and use of technology. Students sit for the AP Physics 1 exam for the opportunity to earn college credit at the completion of the course. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 10
 - PREREQUISITE: Admission to the STEM Academy required.
-

STEM Precalculus (Honors) – 032183*

This course is for tenth grade students who are enrolled in the STEM academy and have completed Algebra 2 and Geometry. Students will develop skills to identify and sketch graphs of trigonometric functions and transformations of these graphs. Students will demonstrate the ability to interpret, use, and apply mathematical concepts for a wide variety of functional relationships including trigonometric, circular, composite, inverse, exponential, and logarithmic. Algebra skills remain a key tool for analysis throughout the course, especially in the unit involving trigonometric identities. Students will also undertake the study of advanced topics in algebra and a comparative look at functions and their graphs. Materials covered will include trigonometry, law of sines and law of cosines, functions and their graphs, quadratic functions, exponential and logarithmic functions, and topics in analytical geometry. Students will explore enriched topics with more formal sophisticated applications, a formal study of limits, and an introduction to differential calculus. STEM Precalculus explores beyond the material covered and focuses on a more in-depth discovery in trigonometry and advanced algebra topics. Students are expected to make deeper connections; applications are more complex and model real life experiences. Graphing techniques are emphasized and mastered through hands-on experiences, then applied and extended using a TI-84 Plus graphing calculator, Geometer's Sketchpad, and Fathom software programs.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 10
 - PREREQUISITE: Admission to the STEM Academy, and a minimum of 3.0 average in Algebra 2 and Geometry required.
-

STEM Research (Honors) – 046523

This course will prepare students for the STEM Internship during the summer between their junior and senior year. Students will learn about various types of research with historic examples. Students will learn about ethics, integrity, and accountability in research. Expectations for student research will be explained with practical application of skills involved. These skills will include topics such as time management, organization, interpersonal and communication skills, safety, record keeping, problem finding, problem solving, critical thinking, integrative thinking, analytical thinking, informational research, experimental design, technical writing, oral presentations, and presentation technology. In addition, students will be supported in identifying and applying for their STEM internship. Students who elect a STEM 12 science research option in lieu of the Internship are required to identify a mentor and submit a research proposal for pre approval.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 11
 - PREREQUISITE: Admission to the STEM Academy required.
-

STEM Internship (Honors) – 046513

The STEM Internship course is taken in the student's senior year, following the completion of a 100-hour supervised summer Internship or Research Project. Supervisors will include the STEM Research Teacher, the STEM Coordinator, and a mentor. All projects must involve a science, technology, engineering, or mathematics application and make use of appropriate investigative techniques. Exemplary research skills will be expected with complete records and data collected in a formal Log Book. Students continue the summer Internship or Research Project learning experience through the development of a reflection essay, scientific case study, and formal Capstone presentation for the public. Students also present their learning throughout the STEM Academy experience at the STEM Showcase during the spring.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 12
 - PREREQUISITE: Admission to the STEM Academy required.
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Advanced Placement Seminar Course: AP Capstone – 023463

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
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Advanced Placement Research Course: AP Capstone – 023473

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000- 5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Successful completion of AP Seminar Course.
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Fairlead Academy

Fairlead Academy I is located in Great Mills, Maryland, and provides an instructional program designed to transition students to high school. The Ninth grade instructional program is organized into 90-minute blocks of English 9 and Algebra with Seminar, 45 minutes of Science and Social Studies, and 45 minutes of technology or fine arts. Instruction is differentiated to meet students' particular areas of need and interest. Tenth grade students take their core classes at Fairlead I and travel to their home high school or the JAFCTC for elective courses or completer programs. Admission to the program is through an application process based on students' past academic performance and desire to pursue an alternative program for the first and second year of high school.

Fairlead Academy II is located in Leonardtown, Maryland, and is available to 11th and 12th grade students to fulfill their graduation requirements. Students continue to take electives or completer programs at their home high school or the JAFCTC.

Example of Fairlead Academy Four Year Educational Plan

	Grade 9	Grade 10	Grade 11	Grade 12
English	English 9/90	World Literature	English 11: Bridge to College and Career Readiness	English 12: Transition to College and Career Readiness
Math	Core Algebra 1 with Seminar	Intermediate Algebra or Geometry	Geometry or College Algebra with Trigonometry	Algebra 2 or Practical Math
Science	Earth/Space Science	Biology	Environmental Science	
Social Studies	US History	Government	Modern World History	
Electives	Technology Credit or Theatre	Technology Credit or Theatre	PE/Health	
Career Pathway		Dr. James A. Forrest Career & Technology Center	Dr. James A. Forrest Career & Technology Center	Dr. James A. Forrest Career & Technology Center

Academy Requirements:

Students apply to attend Fairlead Academy I in 8th grade. Admission to the program is based on students' past academic performance, attendance, discipline, standardized testing, and other factors that may cause students to have trouble overcoming challenges in a comprehensive high school program. Due to the size of each program, students will take elective courses at their home high school or the Dr. James A. Forrest Career and Technology Center starting in 10th grade. Ninth grade students are typically at Fairlead Academy I for the entire school day. Fairlead II utilizes similar criteria and is available to 11th & 12th grade students who may or may not have attended Fairlead Academy I.

General High School Requirements:

Students must complete the High School Assessments (as applicable), fulfill the Student Service-Learning requirement, and complete a Career Portfolio.

Special Notes:

Fairlead Academy is a program within St. Mary's County Public Schools. Students continue to earn their diplomas from their home high school. Fairlead Academy I & II are both programs of choice. Students who attend Fairlead Academy I do not automatically attend Fairlead Academy II. Student disciplinary records are a consideration for attendance. Students cannot be assigned to Fairlead Academy from an expulsion conference and cannot have an extensive disciplinary history. Student IEPs are reviewed prior to admission to the program to ensure Fairlead is the program that would be the most appropriate placement. All Fairlead students are encouraged to participate in extracurricular activities at their home high schools. Fairlead students often take upper level math and science classes in their senior year. Students attend their home high school for these classes.

THE DR. JAMES A. FORREST CAREER AND TECHNOLOGY CENTER

The Dr. James A. Forrest Career and Technology Center (JFCTC) offers a wide variety of career specific programs that enable students to gain technical and academic skills. The JFCTC will offer elective courses as well as two and three year programs. These programs offer students a “head-start” for employment or continuing education in a variety of career fields. Students attending the JFCTC will spend part of the day at the home high school and part of the day at the JFCTC. Student participation in SkillsUSA is strongly encouraged because of the focus on leadership skill development.

A completer of the Career and Technology Education program sequence must complete at least four credits in a career specialization. Students who complete the Career and Technology Education program sequence may also meet University Sequence requirements.

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- **Arts, Media, and Communication**
 - *Graphic Communications (PrintED)*
 - *TV/Video Production*
 - **Construction and Development**
 - *Carpentry*
 - *Electrical Wiring*
 - *HVAC*
 - *Computer Aided Drafting and Design (CADD)*
 - *Welding*
 - **Consumer Services, Hospitality and Tourism**
 - *Culinary Arts*
 - *Hospitality and Tourism*
 - **Environmental, Agricultural and Natural Resources**
 - *Curriculum for Agricultural Science Education (CASE)*
 - *Natural Resources*
 - **Career Research and Development**
 - *Career Research & Development*
 - **Health and Biosciences**
 - *Academy of Health Professions (AoPH)*
 - *Academy of Health Professions (Medical Assistant)*
 - *Dental Assisting*
 - **Human Resource Services**
 - *Teacher Academy of Maryland (TAM)*
 - *Criminal Justice and Corrections*
 - **Information Technology**
 - *IT Networking Academy (CISCO)*
 - **Manufacturing, Engineering and Technology**
 - *Production Engineering*
 - *Engineering Technology*
 - **Transportation Technologies**
 - *Automotive Refinishing and Repair*
 - *Aviation Technology*
 - *Automotive Technician (NATEF)*
 - *Diesel Technology (NATEF)*
 - **Tech Center Elective Courses**

Example of Career and Technology Education Four Year Educational Plan at the Forrest Center

	Grade 9	Grade 10	Grade 11	Grade 12
English	Freshman English	World Literature	Bridge to College and Career Readiness	Transition to College and Career Readiness
Math	Core Algebra 1	Geometry	College Algebra with Trigonometry	Algebra 2
Science	Earth/Space Science	Biology	Environmental Science, Chemistry or Physics	Elective
Social Studies	United States History	Government	Modern World History	Elective
CTE	Technology Credit	Elective Begin First-Year of a Three-Year Program at the Forrest Center*	Second-Year of Three-Year Program or First-Year of Two-Year Program at the Forrest Center*	Second or Third-Year of Programs at the Forrest Center*
Other	PE/Health or Fine Arts			
Other	PE/Health or Fine Arts			

Example of Dual Completer Four Year Educational Plan at the Forrest Center

	Grade 9	Grade 10	Grade 11	Grade 12
English	Freshman English	World Literature	American Literature (CM)	British Literature (CM)
Math	Algebra 1	Geometry	Algebra 2	Precalculus
Other	Earth/Space Science	Biology	Environmental Science, Chemistry or Physics	Fine Arts
Social Studies	United States History (CM)	American Government (CM)	Modern World History	Elective
World Language	World Language	World Language	Second Year of Three-Year Program or First Year of Two-Year Program at the Forrest Center*	Second or Third-Year of Programs at the Forrest Center*
CTE/Other	Technology Credit (CM)	PE/Health or Fine Arts or Begin Three-Year Forrest Center CTE Program*		
CTE/Other	PE/Health or Fine Arts			

* Forrest Center programs require multiple periods. Please see the Forrest Center website for the most current scheduling information.

Notes: Some of the JFCTC programs have specific entrance requirements. These should be carefully reviewed when planning a course of studies. Admission process is as follows:

1. Students complete an application to the JFCTC selecting a first, second, and sometimes a third choice.
2. Students from the high schools are expected to visit the JFCTC for a tour to ensure their interest and understanding of the program's requirements.
3. Applications are scored and ranked based on attendance, GPA, credits, appropriate grade level, courses taken, discipline, and completion of prerequisites.
4. The Dr. James A. Forrest Career and Technology Center Administration Admission Committee reviews applications. Based on registration scores, students are accepted into their first, or if necessary, alternate choice, until classes have reached capacity.

Students enrolled in a program at the JFCTC must obtain special permission from the home school principal and JFCTC principal in order to drop a program.

*Students who have disabilities, special needs, or other situations which may hinder success in school, may request a Vocational Evaluation from the JFCTC. This may provide students with a career direction, help select specific courses, and better define a possible career pathway.

Arts, Media, and Communication - Graphic Communication

Completer Program: Graphic Communications
CIP Number: 1003500

Credits Needed for Completion: 5
Completer Code: 1F

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Graphic Communications 1 – 177903

In the first year, students will be introduced to the graphic communications industry, exploring career options, and industry trends. They will study graphic design and digital layout, typography, digital photography, and production techniques standard in the graphic communications industry. Students will work with a variety of equipment and techniques, including digital printing, bindery operations, and sign manufacturing.

Students are introduced to a variety of industry-standard programs from the Adobe Creative Suite, such as InDesign, Illustrator, and Photoshop. Principles of design and color theory are emphasized. Reading, writing, and mathematics related to graphic communications are an integral part of this class. Students are instructed through a combination of demonstrations, guest speakers, self-study, projects, and individual hands-on experiences. Basic computer skills are required.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
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Required Course: Graphic Communications 2 (CM) – 177933

The second year prepares students for work-related skills and advancement into graphic design, digital imaging, sign making, and print production for gainful employment and/or entry into post-secondary education in the graphic communications industry. To facilitate this, students will complete a comprehensive project based on career aspirations in conjunction with business partners in the community. Advanced knowledge and skill in the graphic design and printing industry will be enhanced in a laboratory setting that duplicates the typical workplace and offers school/work based learning opportunities. Job shadowing opportunities are available during the second year of study. Students will acquire necessary technical skills by completing real-world projects for the school system and the community.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Graphic Communications 1
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Arts, Media, and Communication – TV/Video Production

Completer Program: TV/Video Production
CIP Number: 1002020

Credits Needed for Completion: 5
Completer Code: 1H

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: TV/Video Production 1 – 177913

During this course, students will explore the history of television and mass communication. Using the content from the Cybercollege program on television and video production, students will study the technology to broadcast audio and video images throughout the world. This will include: cable, satellite, specialized antennas, and fiber optic/copper cable systems. All career areas from pre-production, production, and post-production will be explored. Scheduling, technical management, script development as well as a variety of production formats - news, documentaries, interviews, education, comedy, games, etc. will be studied. Field trips, guest speakers, and multimedia experiences will be part of the course.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
-

Required Course: TV/Video Production 2 (CM) – 177923

During this course, students will apply their knowledge and skills in the three phases of programming: pre-production, production, post-production. A detailed review and application of the 15 steps for television production will be accomplished. Students will be required to plan and create a wide variety of authentic video productions from identification of the purpose, analyzing the audience, determining production value, schedules, personnel, locations, wardrobe and set requirements. Instruction will include obtaining permits, legal issues, video inserts, photos, and graphic design needs. As part of the local cable company contract with St. Mary's County Public Schools, a Public, Educational & Governmental (PEG) access station is operated from the Dr. James A. Forrest Career and Technology Center. This will allow students to work with actual school system productions as well as assisting with productions for community groups as part of the free public access requirements. Students will focus on related career pathways. Students will be engaged with "state of the art" technology for this industry.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: TV/Video Production 1
-

Construction and Development - Carpentry

Completer Program: Carpentry
CIP Number: 4602014

Credits Needed for Completion: 5
Completer Code: 3C

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Carpentry 1 – 176003

The first year of Carpentry addresses the National Center for Construction Education and Research (NCCER) CORE curriculum. Basic safety, construction mathematics, hand tools, power tools, blueprints, basic rigging, communication skills, and employability skills will be studied. In addition, students study fabrication, materials specifications, estimating, site preparation, fasteners, foundations, flooring, and framing.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
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Required Course: Carpentry 2 (CM) – 176133

The second year of Carpentry involves more comprehensive and advanced projects. The course includes intensive experience with construction skills with signification in refining design and construction techniques. Roofing, siding, windows, and exterior doors will be studied. Students will also learn finishing techniques and applications. Students may have the opportunity to work with local employers as an intern. Students will also have the opportunity to achieve the National Center for Construction Education and Research (NCCER) certification.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Carpentry 1
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Construction and Development - Electrical Wiring

Completer Program: Electrical Wiring
CIP Number: 4603024

Credits Needed for Completion: 5
Completer Code: 3N

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Electrical Wiring 1 – 176203

During this yearlong course, students are given an opportunity to acquire basic knowledge of electrical theory, and general and electrical safety. They will be introduced to hand and specialty tools of the trade and simple circuits used in domestic electrical systems.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Algebra 1 preferred
-

Required Course: Electrical Wiring 2 (CM) – 176333

This course is a continuation of Residential Wiring 1, with the study of more advanced electrical theory, circuit diagnosis, repair, blueprint reading, estimating layout, installation of domestic electrical circuits, and D.C. and A.C. motors. Students will also be given information concerning employment preparation and will have the opportunity to achieve National Center for Construction Education and Research (NCCER) certification.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Electrical Wiring 1
-

Construction and Development – HVAC

Completer Program: HVAC
CIP Number: 475200

Credits Needed for Completion: 5
Completer Code: 3J

This program is open to eleventh grade students.

Required Course: Heating, Ventilating, and Air Conditioning 1 – 178513

This course of study includes general construction practices and procedures related to the heating, ventilation and air conditioning industry. Specific skills that will be covered include: tools of the trade, copper and plastic piping practices, soldering and brazing, ferrous metal piping practices, and basic electricity. This course also includes an introduction to heating and cooling. Instruction in construction related mathematics is an integral part of this course.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
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Required Course: Heating, Ventilating, and Air Conditioning 2 – 178523

This course of study includes mastery of general construction procedures relative to heating ventilation and air conditioning. Content areas will include: air distribution systems, chimneys, vents and flues, maintenance skills for service technicians, alternating current, basic electronics, and electric heating. This course will also include project management, as well as site supervisor responsibilities and procedures.

- CREDIT: 3
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: HVAC Level 1
-

Construction and Development – Computer Aided Drafting and Design (CADD)

Completer Program: Computer Aided Drafting and Design (CADD)
CIP Number: 4801014

Credits Needed for Completion: 5
Completer Code: 3D

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Computer Aided Drafting and Design 1 – 178003

This course is essential for students considering mechanical, structural, industrial, civil, or electrical engineering. Competencies in architecture include floor plans, wall sections, and elevations. Students will develop skills in technical drafting, solid modeling, assemblies, animation and architecture. The software applications used in the course include Autocad, SolidWorks, Rhino, and Chief Architect. This class is articulated with the College of Southern Maryland where students could pursue an associate's degree in CADD or Engineering Technology.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Algebra 1 or an equivalent mathematics course
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Required Course: Computer Aided Drafting and Design 2 (CM) – 178133

Students will continue to expand their knowledge and practical application of skills learned during the first year. Additional exposure to computer aided drafting and design (CADD) will develop the state-of-the-art skills necessary to enter engineering-related occupations in industry or to pursue advanced training in college or other post-secondary schools. As a Certiport Authorized Test Center and provider of the Autodesk Certified User industry certification, students may choose to earn certification for AutoCAD, ReYit Architecture, AutoCAD Civil 3D, Inventor, 3ds Max, and Maya. Certification will also be offered for SolidWorks.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Computer Aided Drafting and Design 1
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Construction and Development – Welding

Completer Program: Welding
CIP Number: 4805084

Credits Needed for Completion: 5
Completer Code: 3Q

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Welding 1 – 177203

Based on the AWS (American Welding Society) standards, students will receive instruction in blueprint reading, math, metallurgy, and applicable science required in the field of welding. Students will safely receive instruction in oxyacetylene cutting, welding, and torch brazing (OAC, OAW, and TB), ARC Welding (SMAW), MIG Welding (SMAW), and Plasma Cutting (PAC). They will receive instruction in the safe use of hand and power tools associated with the welding industry. Using Auto Sketch, the students will be taught drafting and design standards of the welding industry. Students will learn the drafting and design standards of welding via competencies. Students will fabricate and practice good welding standards and verify their progress through destructive and non-destructive testing.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
-

Required Course: Welding 2 (CM) – 177303

Students will fabricate weld samples, complete resumes and applications for apprenticeships, employment, and post-secondary education. Students will receive instruction in TIG Welding (GTAW), Pipe Welding, and semi-automatic robotic oxy-acetylene cutting. Students will learn to weld using all welding processes and metals--both ferrous and non-ferrous. This is a regimented concentrated AWS course of study that prepares students for success on the AWS Certification Test (D1.1). Students will have the opportunity to take the AWS certification test--which licenses them to weld nationally. This testing will be completed at the Dr. James A. Forrest Career and Technology Center under the supervision of the classroom instructor and Steamfitters Union 602 partners.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Welding 1
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Consumer Services, Hospitality and Tourism – Culinary Arts

Completer Program: Culinary Arts
CIP Number: 2004014

Credits Needed for Completion: 5
Completer Code: 5C

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Culinary Arts 1 – 176403

This course provides students with the theory and practice training in all aspects of entry level food preparation and service. Emphasis is placed on safety, sanitation, tools, utensils, equipment operation, recipe use, and basic methodology in a variety of culinary kitchen operations. Chef coats and black and white checkered pants are required and will be ordered during the first week of school.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Algebra 1 or concurrent enrollment preferred
-

Required Course: Culinary Arts 2 (CM) – 176503

During this course, an in-depth study of culinary operations management, food production, garnishing, record-keeping, purchasing, and continental cuisine will prepare the student for immediate employment or continued education in the culinary field. Chef coats and black and white pants are required.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Culinary Arts 1
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Consumer Services, Hospitality and Tourism – Hospitality and Tourism

Completer Program: Hospitality and Tourism
CIP Number: 5009540

Credits Needed for Completion: 5
Completer Code: 5J

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Hospitality and Tourism 1 – 176513

This course will introduce students to this broad industry which includes hotel and motel management, resort management, food and beverage industry, and special event planning. Students will explore this wide spectrum of specialized customer service skills that include: marketing concepts, hotel and motel tasks and management, quality service delivery, competition based pricing, and travel agencies.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
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Required Course: Hospitality and Tourism 2 (CM) – 176523

The course will provide opportunities for students to apply the numerous and diverse skills obtained in the Level 1 course. Students will focus on major event management reflective of the broad scope of this industry. Students will facilitate key events for the school system in collaboration with the culinary arts program. Students will actually perform industry accepted practices associated with customer satisfaction, domestic and international travel, product promotion, marketing, sales, suppliers, sales organizations, distribution systems, safety and security, hospitality services. There will be field trips and guest speakers from the diverse sectors of this industry.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Hospitality and Tourism 1
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Environmental, Agricultural and Natural Resources – Curriculum for Agricultural Science Educations - (CASE)

Completer Program: CASE
CIP Number: 010050

Credits Needed for Completion: 7
Completer Code: 4D

Required Course: Introduction to Agriculture, Food, and Natural Resources (AFNR) – 178613

The major purpose of the Introduction to (AFNR) course is to introduce students to the world of agriculture, the pathways they may pursue, and the science, mathematics, reading, and writing components they will use throughout the CASE™ curriculum. Woven throughout the course are activities to develop and improve employability skills of students through practical applications. Students will explore career and post-secondary opportunities in each area of the course.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
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Required Course: Principles of Agricultural Science – Animal (ASA) – 178633

Student experiences will involve the study of animal anatomy, physiology, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers and industry personnel, face in their respective careers. Students will investigate, experiment, and learn about documentation of a project, solving problems, and communicating their solutions to their peers and members of the professional community. Field Trips are required.

COURSE NOTE: One embedded math credit upon completion of the final CASE course listed above. This credit fulfills the math enrollment requirement for CTE completers.

- CREDIT: 2
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: AFNR
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Required Course: Food and Safety – 178643

Food Science and Safety is a specialization course in the CASE Program of Study. Students will further enhance critical thinking and teamwork skills as they expand on content knowledge from previous CASE courses. Students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. Students will investigate areas of food science including food safety, food chemistry, food processing, food product development, and marketing. Research and Experimental Design will be highlighted as students develop and conduct industry appropriate investigations and is the capstone of the course designed to culminate students' experiences in agriculture, based on the pathway of study they pursued. Students will maintain a research level Laboratory Notebook throughout the course documenting their experiences in the laboratory and in community unpaid workplace learning experiences. Course Note: One embedded math credit upon completion of the final CASE course listed above. This credit fulfills the math enrollment requirement for CTE completers.

- CREDITS: 3
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: ASA
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Environmental, Agricultural and Natural Resources – Natural Resources

Completer Program: Natural Resources Management
CIP Number: 0301024

Credits Needed for Completion: 5
Completer Code: 4C

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Natural Resources Management 1 – 175213

This specialized field experience course is designed to explore a wide range of environmental career fields including fish and wildlife management, land-use planning, water resource management, and forestry management. Students will experience a blend of classroom instruction with numerous field and laboratory experiences in order to apply what has been learned as theory. A wide variety of field sampling methods, unique lab equipment, and industry-based technology will be used in this course.

COURSE NOTE: For CTE completers this course satisfies one Science credit.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Biology preferred
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Required Course: Natural Resources Management 2 (CM) – 175203

Students will learn and apply advanced techniques of natural resources monitoring (e.g. water quality, wildlife populations), restoration, management, and analysis. Learning and applications will be a direct result of students participating in a number of authentic projects in collaboration with professionals from federal, state, and local agencies and academic institutions. In collaboration with a mentor, the students will complete a yearlong independent capstone project. The successful student will be prepared for post-secondary education or entry level employment in their chosen natural resources management field.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Natural Resources Management
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Career Research and Development

Completer Program: Career Research and Development
CIP Number: 8600000

Credits Needed for Completion: 4
Completer Code: 2J

Required Course: Career Research and Development 1 – 171123

The overall goals of this course are to teach students the process of self-awareness, career exploration, and setting academic and career-related goals. Students will demonstrate an understanding of how accurate, current, and unbiased career information is necessary for successful career planning and management using Maryland's career clusters and pathways. In addition, students will be introduced to basic concepts of financial literacy to help them manage their personal finances. Course content will integrate the development of the student's competency in business writing as well as the Skills for Success (i.e., communication, learning, interpersonal, technology, and critical thinking). Students will also be required to prepare for and participate in an interview process. *Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11
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Required Course: Career Research and Development 2 – 171133

Students will continue building and strengthening their career portfolio to demonstrate proficiencies in workplace readiness, personal financial management, personal growth and development, and employment experiences. Students will use the portfolio as part of the interviewing process. The portfolio will serve as part of the student's end-of-program assessment/culminating project. Students will benefit from joining one of the career technology student organizations to assist in refining and developing their leadership and workplace readiness skills.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Career Research and Development 1
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Required Course: Career Research and Development Work-Based Learning – 171283

The work-based learning experience takes place at the work site, includes a minimum of 270 hours, and may be paid or unpaid. This experience is directed by the Work-Based Learning (WBL) agreement and plan developed by the student, WBL coordinator, and employer. The WBL plan identifies the appropriate competencies, duties and tasks in academic, technical, and work readiness areas that apply directly to students' goals for a specific work-related placement. The goal of the WBL experience is to expose students to authentic employment opportunities that link to students' career interests. WBL placements have the potential to prepare students for employment that leads to a family-supporting wage. The work site placement is secured, based on students' interests, and employer demand. The WBL coordinator is responsible for monitoring students' placements, documenting students' progress, and accounting for students' completion of their plan and portfolio.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Concurrent enrollment in Career Research and Development
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Health and Biosciences – Academy of Health Professions

Completer Program: Academy of Health Professions
CIP Number: 5100500

Credits Needed for Completion: 7
Completer Code: 4A

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Academy of Health Professions: Introduction to Health Professions – 177713

Students explore and prepare to work in a variety of health occupational areas using project and problem-based learning, clinical experiences, and classroom/lab instruction. This course is designed to provide the student with an overview of the therapeutic, diagnostic, environmental, and information systems of the healthcare industry. Students will learn about ethical and legal responsibilities, as well as the history and economics of health care. They will engage in processes and procedures that are used in the delivery of essential health care services including the use of medical terminology. They will also investigate the body's basic responses to external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy processes. Basic bedside procedures that are performed in a variety of health care careers are also emphasized. Career exploration is addressed during the second semester when students visit different sites.

COURSE NOTE: Students are required to have a background screening and drug test in order to do clinical hours at any MedStar facility (as of November 2016)

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
 - PREREQUISITE: Grade 9 or 10 Mathematics and Science (Biology Preferred) with a C or better
-

Required Course: Academy of Health Professions 2: Human Anatomy & Physiology (CM) – 043083

This course provides students with an introduction to human anatomy and physiology. Topics include the structure and function of human systems, basic chemistry, cell structure and function, tissues, and the skeletal, muscular, nervous, cardiovascular, respiratory, urinary, digestive, endocrine, and reproductive systems. This is a College of Southern Maryland course offered at the Dr. James A. Forrest Career and Technology Center. Students have the option of taking a CSM departmental exam for which a fee is required, to earn 4 college credits. COURSE NOTE: This course fulfills a core high school science credit. COURSE NOTE: Students are required to have a background screening and drug test in order to do clinical hours at any MedStar facility (as of November 2016)

- CREDIT: 2
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Academy of Health Professions 1, with a C or better in order to participate in patient care during Human Anatomy and Physiology
-

Required Course: Academy of Health Professions: Capstone Course (CM) – 177813

Students continue to study care of patients in a specific area of health care that they are interested in pursuing. This experience is designed to support the student's clinical experience and / or internship. Students are also eligible to obtain a certificate in Nurse Assisting from the Maryland State Board of Nursing or a National Pharmacy Technician Certificate upon full completion of requirements. Students are prepared for actual experience in the clinical setting with a focus on the human disease process. They will be conducting a guided research project using a mentor as part of their capstone activities. By the end of the second year, students generally feel confident in their career choice in health care and as a result, there is much emphasis on continued education. COURSE NOTE: Students are required to have a background screening and drug test in order to do clinical hours at any MedStar facility (as of November 2016)

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Academy of Health Professions 2
-

Health and Biosciences – Academy of Health Professions (Medical Assistant)

Completer Program: Academy of Health Professions
(Medical Assistant)
CIP Number: 5100500

Credits Needed for Completion: 5
Completer Code: 4A

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Academy of Health Professions: Introduction to Health Professions – 177713

Students explore and prepare to work in a variety of health occupational areas using project and problem-based learning, clinical experiences, and classroom/lab instruction. This course is designed to provide the student with an overview of the therapeutic, diagnostic, environmental, and information systems of the healthcare industry. Students will learn about ethical and legal responsibilities, as well as the history and economics of health care. They will engage in processes and procedures that are used in the delivery of essential health care services including the use of medical terminology. They will also investigate the body's basic responses to external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy processes. Basic bedside procedures that are performed in a variety of health care careers are also emphasized. Career exploration is addressed during the second semester when students visit different sites. COURSE NOTE: Students are required to have a background screening and drug test in order to do clinical hours at any MedStar facility (as of November 2016).

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Grade 9 or 10 Mathematics and Science (Biology Preferred) with a C or better
-

Required Course: Academy of Health Professions: Specialty and Capstone Course (CM) – 177833

Students continue to study the care of patients in a specific area of health care. This experience is designed to support the student's clinical experience and / or internship. Students are prepared for actual experience in the clinical setting with a focus on the human disease process. Specialty course options include eligibility to obtain a certificate in Certified Clinical Medical Assistant. They will be conducting a guided research project using a mentor as part of their capstone activities. By the end of the second year, students generally feel confident in their career choice in health care and as a result, there is much emphasis on continued education.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Academy of Health Professions: Introduction to Health Professions
-

Health and Biosciences – Dental Assisting

Completer Program: Dental Assisting
CIP Number: 5106010

Credits Needed for Completion: 5
Completer Code: 4G

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Dental Assisting 1 – 177723

This course will introduce students to the diverse dental assisting careers in a rapidly changing profession. Students will develop knowledge and skills with regards to medical records, sterilization and safety in a dental laboratory setting, equipment preparation and maintenance, patient preparation, topical anesthetics, and the arrangement of dental instruments and materials during a variety of procedures. In addition, students will begin an exploration of x-ray processing and oral diagnostic studies.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Biology preferred
-

Required Course: Dental Assisting 2 (CM) – 177733

This course will continue skill development with the topics addressed in the Level 1 course and expand to include: detailed oral examination and evaluation processes, laboratory procedures, oral hygiene techniques, patient instruction, developing and mounting X-rays, and preventive dentistry treatments. Students will gain valuable knowledge through guest speakers and clinical experiences in local dental offices.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Dental Assisting 1
-

Human Resource Services – Teacher Academy of Maryland

Completer Program: Teacher Academy of Maryland
CIP Number: 130150

Credits Needed for Completion: 5
Completer Code: TBA

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

***Teacher Academy of Maryland I (TAM I):**

Required Course: Human Growth and Development Through Adolescence (CM) – 025603

Semester 1:

This course focuses on human development from birth through adolescence. Emphasis is placed on physical, cognitive, and psychological 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 to adolescence in a variety of settings to help students further understand theories in human development. Students will begin to develop the components of a working portfolio to be assembled upon completion of internship.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-11

***Required Course: Teaching as a Profession (CM) – 179513**

Semester 2:

This course 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.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-11
- PREREQUISITE: Human Growth and Development Through Adolescence (CM)

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Teacher Academy of Maryland II (TAM 2):

Required Course: Foundations of Curriculum and Instruction (CM) – 179523

SEMESTER 1:

This course 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.

- CREDIT: 1.5
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Teacher Academy of Maryland I (TAM 1)
-

Required Course: Education Academy Internship (CM) – 179533

SEMESTER 2:

The internship 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.

- CREDIT: 1.5
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Foundations of Curriculum and Instruction (CM)
-

Human Resource Services – Criminal Justice

Completer Program: Criminal Justice
CIP Number: 4301994

Credits Needed for Completion: 5
Completer Code: 5B

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Criminal Justice 1 – 172633

The Criminal Justice Program is a two-year course that provides students an insight into the criminal justice system, criminal law, legal procedures, and the career possibilities available. Students will be exposed to a variety of careers and gain insight into the skills and talents required for employment in the various legal areas. The curriculum consists of a preparatory education with an in-depth study of law, law enforcement, crime scene investigation courts, and the correctional system in the United States. Students are introduced to criminal justice in an interdisciplinary approach that involves integration of the arts education, business, English, world language, mathematics, physical education, and science.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
-

Required Course: Criminal Justice 2 (CM) – 172643

The second year will continue study in the numerous career pathways available in law enforcement. A strong focus on career exploration and site visits in criminal justice environments will be offered.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Criminal Justice 1
-

Information Technology – IT Networking Academy

Completer Program: IT Networking Academy
CIP Number: 5212044

Credits Needed for Completion: 7
Completer Code: 3E

Required Course: IT Networking Academy 1 – 177953

The first year course is designed to provide students with technical skills to meet the increasing demand for entry-level professionals in the Information Technology field. The curriculum covers the fundamentals of computer hardware and software, as well as advanced concepts such as security, networking, printers, mobile devices and laptops. Students will develop critical thinking and complex problem solving skills while gaining the working knowledge of how computers operate and how to assemble computers. This course will provide a hands-on learning experience with an emphasis on practical activities to help students develop working technical skills and learn the responsibilities of a professional technician. Updated, relevant curriculum and labs are delivered in the Cisco NetSpace™ which enrolls students in the Cisco Networking Academy®, providing completion in the IT Essentials course. During the second half of the year, students will be introduced to the Cisco Networking Academy® CCNA Routing and Switching curriculum which is designed for students who plan to pursue more specialized technical skills. Introduction to Networks will introduce the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the continuing curriculum. After completion of the course, students are eligible to take the CompTIA A+ exams (801 + 802).

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
 - PREREQUISITE: Algebra 1 Preferred
-

Required Course: IT Networking Academy 2 (CM) – 177963

The second year course continues with the Cisco Networking Academy® CCNA Routing and Switching curriculum. It begins with network application and moves through interactive media and practical experience through a series of hands-on and simulated activities. Students will progress from basic networking to more complex enterprise and theoretical networking models. Students will develop skills to configure routers and switches, resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANS, and inter-VLAN routing in both IPv4 and IPv6 networks. Completion of this program will provide students with a certificate of completion in both CCNA Introduction to Networks and Routing and Switching Essentials, providing preparation for the CCENT exam. At the end of this program, students will be able to build LANS, WANS, MANS, perform configurations on routers and switches, and implement IP addressing schemes. They will be able to describe enhanced switching technologies such as VLANS, configure and troubleshoot small networks, and describe the operations of Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) for IPv4 and IPv6. In addition, instruction and training are provided in the proper care, maintenance, and use of all software, tools and equipment, and all local, state, and federal safety regulations.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11
 - PREREQUISITE: IT Networking 1
-

Required Course: Cyber Security – 177983

This course will offer students the fundamental principles of identifying risk and implementing security controls. The curriculum is designed to equip learners with the knowledge and skills needed to be secure IT Professionals. This content includes the essentials of network security, compliance and operational security; threats and vulnerabilities; application, data, and host security; access control; and cryptography. As well as comprehensive material, students will learn through hands-on experiences and case activities. This is a valuable course for those who want to learn about security and who desire to enter the field of security and provide the foundation that will help prepare for the CompTIA Security+ certification exam.

- CREDIT: 2
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: IT Networking Academy 2
-

Manufacturing, Engineering, and Technology – Production Engineering

Completer Program: Production Engineering
CIP Number: 1506130

Credits Needed for Completion: 5
Completer Code: 3V

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Production Engineering 1 – 170303

This course offers students the opportunity to explore the major content areas defined by key manufacturing organizations and industries. Students will investigate numerous competencies or tasks related to the following critical areas in manufacturing machining techniques and processes, design, quality control, automation/robotics, materials handling, manufacturing processes, electricity/electronics, mechanical systems, and fluid systems. During this course, students will be involved in classroom instruction, laboratory applications, field trip events, guest speakers, and dynamic software applications as part of their instruction.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Algebra 1 or an equivalent Mathematics course
-

Required Course: Production Engineering 2 (CM) – 170313

During the second year of this program, students will again be challenged with more rigorous applications of the foundation skills identified in Course 1. Students will organize full production companies and engage in comprehensive product research, marketing, design, production planning, production implementation, quality control, and full automation using a Computer Integrated Manufacturing (CIM) cell. This approach will reflect actual industry methods. Students will assume both management and labor roles to ensure a comprehensive investigation of all career pathways in production, product engineering, and quality control. Several small scale production activities will lead to a capstone event showcasing the full range of knowledge and skills developed by all students in this two year program. In addition, during the second semester, students may seek internships with a local manufacturing business.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Production Engineering 1
-

Manufacturing, Engineering, and Technology – Engineering Technology

Completer Program: Engineering
CIP Number: 1511011

Credits Needed for Completion: 5
Completer Code: 3I

This program is open to tenth and eleventh grade students, but priority is given to those applying to start this program in eleventh grade.

Required Course: Engineering 1 – 177403

This course is designed for students who are interested in using their knowledge of mathematics, technology and sciences to benefit mankind. This course will introduce them to the work of engineering. Students will become familiar with and utilize the engineering design process to solve real-world, technical problems. Experiences with a wide variety of tools, machines, materials, and unique processes will enable students to gain a broad base of knowledge and skills. Computer Aided Drafting and 3-D modeling will be infused in many of the projects throughout the year. A strong emphasis on career exploration will also be part of this course.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-11
 - PREREQUISITE: Algebra 1 preferred
-

Required Course: Engineering 2 (CM) – 177533

Year two of the course will continue to expand the students' knowledge and practical application of skills learned during the first year of engineering. Class projects will focus on multiple fields of engineering, including: electrical, civil, mechanical and chemical engineering. Students will expand their knowledge of computer aided drafting, 3D modeling and prototyping, as well as team-focused challenges. Students will also be immersed in researching engineering-related occupations and post- secondary opportunities.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Engineering 1
-

Transportation Technologies – Automotive Refinishing and Repair

Completer Program: Automotive Refinishing and Repair
CIP Number: 4706034

Credits Needed for Completion: 7
Completer Code: 3A

Required Course: Automotive Refinishing and Repair Technology 1 – 175513

This basic course will introduce students to a rapidly changing industry due to vehicle design changes resulting from changing market demands. Students will explore a wide range of tools, machines, materials, and processes used to repair damaged vehicles. Instruction will focus on personal and environmental safety while working in an automotive laboratory. There will also be a strong emphasis on developing linear measurement knowledge and skills to ensure accuracy with repairs and begin the process for Automotive Service Excellence (ASE) certification.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Automotive Refinishing and Repair Technology 2 – 175503

This course will begin with a focus on repair estimates, metal fabrication, welding processes, metal preparation, finishing techniques, cleaning methods, paint evaluation, and paint mixing. Students will be challenged to apply personal and environmental safety as part of their Automotive Service Excellence (ASE) instruction and certification. Specialized tools, machines, and materials will be used to repair actual vehicles to meet industry specifications.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 11
 - PREREQUISITE: Automotive Refinishing and Repair Technology 1
-

Required Course: Automotive Refinishing and Repair Technology 3 (CM) – 175603

Students will begin to investigate specific industry pathways and during the second semester prepare for internships within the local industry. Complete job evaluation, planning, task organization, and estimation will be accomplished. Students will work closely with industry representatives from local repair facilities as well as insurance businesses. There will be field trips, guest speakers, and job shadowing as part of this advanced level course.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Automotive Refinishing and Repair Technology 2
-

Transportation Technologies – Aviation Technology

Completer Program: Aviation Technology
CIP Number: 4706080

Credits Needed for Completion: 7
Completer Code: 3S

Required Course: Aviation Technology 1 – 179013

This course will serve as the foundation experience for students who are interested in a career in the aviation maintenance industry. Students will explore the basic theory of flight and the related science concepts of lift, drag, thrust, and gravity. Students will focus on specific industry tools, machines, materials, and processes found in the typical aviation repair facility. Personal and environmental safety will be another key focus for this introductory course. Aviation modeling will also be used to help students understand the basic forces affecting flight. Students will begin an exploration of airframe components and techniques used to build and maintain aircraft superstructures.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
 - PREREQUISITE: Algebra 1 with grade of C or better
-

Required Course: Aviation Technology 2 – 177553

This course will introduce students to the general aviation requirements to begin the instruction necessary to pursue an aviation airframe technician certificate and rating. This course will begin the focused work in applied physics and mathematics as it relates to flight theory and airframe applications on small aircraft. Students will study the following technical areas during this introductory course: basic electricity, aircraft drawing/design, weight and balance, fluid lines/fittings, aircraft materials, ground operations, servicing schedules, cleaning/corrosion control, maintenance forms and records, maintenance publications, mechanic privileges and limitations as specified by the Federal Aviation Administration (FAA), and basic physics and mathematics related to flight and aircraft design.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 11
 - PREREQUISITE: Aviation Technology 1
-

Required Course: Aviation Technology 3 (CM) – 177563

This course will continue instruction as required by the Federal Aviation Administration (FAA) for airframe content requirements. Elements of the general curriculum will be applied as new knowledge and skills are introduced in the airframe studies. Students will investigate through classroom instruction, field trips, and laboratory applications the following areas: airframe structures, airframe systems and components, airframe finishes and corrosion prevention, aviation avionics systems, aviation fire prevention techniques, airframe inspection requirements, landing gear systems, and communication and navigation systems. Students will understand the Unmanned Aircraft Systems (UAS) capabilities and limitations of the technology to include hardware and software. Understand the environment in which UAS technology will be applied, to include both the physical and political environment. Understand the capabilities and limitations of human remote pilots and use that understanding to become a responsible member of the aviation community. Explore the concept of safety and the role of managing risk and organizational decision-making to improve unmanned aviation safety. Complete requirements to obtain a Small Unmanned Aircraft Systems Safety Certification.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Aviation Technology 2
-

Transportation Technologies – Diesel Technology

Completer Program: Diesel Technology
CIP Number: 4706550

Credits Needed for Completion: 7
Completer Code: 3R

Required Course: Diesel Technology 1 – 175423

This course introduces the students to heavy duty diesel powered vehicles and equipment. The students will study personal tool and equipment safety, environmental issues, Heavy-Duty Brake Systems Part I, Heavy-Duty Electrical/Electronic Systems Part I, and Preventative Maintenance Inspection Part I. The students will also enhance mathematical and scientific concepts related to heavy duty vehicles and equipment. The students use a wide variety of vehicles and equipment to develop skills and perform diagnostics. This course utilizes the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE) standards. The course prepares the student for the ASE Heavy- Duty Truck Brakes Part I (T-4), Heavy-Duty Electrical/Electronic Systems Part I (T-6) and Preventative Maintenance Inspection Part I (T-8) exams.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Diesel Technology 2 – 175443

This course continues the study of heavy duty diesel powered vehicles and equipment. The students will study personal tool and equipment safety, environmental issues, Heavy-Duty Brake Systems Part II, Heavy-Duty Electrical/Electronic Systems Part II, Heavy-Duty Drive Trains and Preventative Maintenance Inspection Part II. The students will also enhance mathematical and scientific concepts related to heavy duty vehicles and equipment. The students use a variety of vehicles and equipment to develop skills and perform diagnostics. This course utilizes the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE) standards and prepares the student for the ASE Heavy-Duty Truck Brakes Part II (T-4), Heavy-Duty Electrical/Electronic Systems Part II (T-6), Heavy-Duty Drive Trains (T-3) and Preventative Maintenance Inspection Part II (T-8) exams.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 11
 - PREREQUISITE: Diesel Technology 1
-

Required Course: Diesel Technology 3 (CM) – 175453

This course continues the study of heavy duty diesel powered vehicles and equipment. The students will study personal tool and equipment safety, environmental issues, Heavy-Duty Diesel Engines, Heavy-Duty Electrical/Electronic Systems Part III, Heavy-Duty Suspension and Steering Systems, and Preventative Maintenance Inspection Part III. The students will also enhance their knowledge of mathematical and scientific concepts related to heavy duty vehicles and equipment. Students will use a variety of vehicles and equipment to develop skills and perform diagnostics. This course utilizes the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE) standards. The course also prepares students for the ASE Diesel Engines (T-2), Heavy-Duty Electrical/Electronic Systems Part III (T-6), Heavy-Duty Suspension and Steering Systems (T-5), and Preventative Maintenance Inspection Part III (T-8) exams.

COURSE NOTE: For CTE completers with three math credits, this course satisfies enrollment in the fourth required math class.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Diesel Technology 2
-

Engineering, Sciences, and Technology – Automotive Technician

- Completer Program: Automotive Technology
CIP Number: 4706450
 - Credits Needed for Completion: 7
 - Completer Code: 3B
-

Required Course: Automotive Technology 1 – 175313

The first year of this ASE/NATEF certified program will provide the students with the knowledge and skills needed to obtain an entry level position in the field of automotive servicing. Students will learn about the different automotive careers available and the importance of ASE certification. All students will complete the S/P2 Safety and Pollution Prevention training at the beginning of the year. The students will receive training in the following areas: oil and filter service, wheel and tire service, disc and drum brake service, the theory of electricity, and basic electrical/electronic circuit testing. Students will be encouraged to join SkillsUSA.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Automotive Technology 2 – 175303

This ASE/NATEF certified course will build on electrical/electronic circuit testing through the theory and testing of the following areas: starting and charging systems, electronic ignition system, electronic fuel injection, and emission control systems. The competencies covered will also include the operations of the internal combustion engine as well as basic engine diagnosis and repair. Students will be encouraged to join SkillsUSA and participate in the competitions.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 11
 - PREREQUISITE: Automotive Technology 1
-

Required Course: Automotive Technology 3 (CM) – 175433

This ASE/NATEF certified course will build on electrical/electronic circuit testing through the theory and testing of the following areas: anti-lock braking systems, traction control systems, and various electrical/electronic body control systems. Competencies covered will also include the theory and servicing of the steering and suspension systems, wheel alignment, brake hydraulic systems as well as the basic servicing of the HVAC system, automatic transmission, and manual transmission and drivetrain. Before the completion of this course, students are required to take the ASE junior certification exam for Engine Performance, Electrical/Electronic Systems, Braking Systems, Steering and Suspension Systems, and Maintenance and Light Repair. Students will be encouraged to join SkillsUSA and participate in the competitions.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Automotive Technology 2
-

Technical Center Elective Courses

When taken outside of a program completion sequence, the following courses can be taken as electives.

Tech Connect – 175123

This course seeks to develop “technological literacy” through problem-solving activities that challenge students to apply mathematics and science concepts to real-world engineering problems. Students will work independently and collaboratively as part of an engineering team. The focus on all activities will be a better understanding of the nine core technologies, (i.e., mechanical, electrical, electronic, structural, fluid, optical, thermal, biotechnical, material). A wide variety of technical, craft, and engineering careers will be explored. This course is offered in a unique laboratory setting at the Dr. James A. Forrest Career and Technology Center. The course serves students who have been selected per recommendations by middle school principal, counselors, and teachers for placement during the ninth grade year. COURSE NOTE: This course satisfies the technology education credit required for graduation.

- Credit: 2
 - TYPE: Academic
 - GRADE: 9
-

Radio/Audio Production – 178223

This course introduces students to podcasting, Internet radio, sound effects and radio theater. Students will experience hands-on learning in radio announcing, scriptwriting, voice acting, sound effects and audio mixing. A variety of industry standard programs and equipment will be used to create projects. No prior experience is required. This course may be taken for one or both semesters. COURSE NOTE: This course satisfies the Fine Arts education credit required for graduation.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-12
-

General Welding – 177193

Students will explore the world of welding through diverse techniques in the welding field by cutting, shaping, forming, and welding metals together to create metal sculpture projects such as water fountains, gardens, and other artistic sculptures. They will learn to safely use oxygen acetylene cutting, welding and torch brazing (OAC, OAW, and TB), ARC Welding (SMAW), MIG Welding (GMAW) and TIG Welding (GTAW) to fabricate their own design in various ferrous and non-ferrous metals such as steel, copper, and stainless steel. Students will also learn how to safely use various hand and electric power tools used in the welding industry.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-12
-

Independent Study in Career and Technology Education – 170093

Independent Study in Career and Technology Education is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a Dr. James A. Forrest Career and Technology Center faculty member. Students must complete a minimum of 66 hours of supervised activities for each 1/2 unit of credit and submit a minimum of two projects as determined by the student and the instructor. (A maximum of nine units of elective credit may be earned through independent study and/or work study programs.) COURSE NOTE: This unit(s) may not count as a required course.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: A minimum of 2.0 GPA and approval of the teacher, the principal, and the supervisor of instruction.
-

Academy of Health Professions 2: Human Anatomy & Physiology (CM) – 043083

This course provides students with an introduction to human anatomy and physiology. Topics include the structure and function of human systems, basic chemistry, cell structure and function, tissues, and the skeletal, muscular, nervous, cardiovascular, respiratory, urinary, digestive, endocrine, and reproductive systems. This is a College of Southern Maryland course offered at the Dr. James A. Forrest Career and Technology Center. Students have the option of taking a CSM departmental exam for which a fee is required, to earn 4 college credits.

COURSE NOTE: This course fulfills a core high school science credit. COURSE NOTE: Students are required to have a background screening and drug test in order to do clinical hours at any MedStar facility (as of November 2016).

- CREDIT: 2
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Academy of Health Professions 1, with a C or better in order to participate in patient care during Human Anatomy and Physiology
-

Directed Study in Career and Technology Education (CM) – 177603

This course is designed for students pursuing third year programs at the Dr. James A. Forrest Center and Technology Center. This third year program will consist of individualized instruction designed to broaden the scope of competencies appropriate to the skill areas as well as improving work habits and work attitudes. In order to enroll, students must have the approval of the instructor, the Dr. James A. Forrest Career and Technology Center career counselor and principal.

- CREDIT: 1 per class period assigned
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Program completion (2 year or 3 year program).
-

CTE Completer Pathway Fire and Rescue

Completer Program: Fire and Rescue/EMS
CIP Number: 4302500

Credits Needed for Completion: 5
Completer Code: 5I

Required Course: Fire and Rescue/Emergency Medical Services – 177823

This Fire and Rescue Program is considered a Dual Enrollment Program where high school students are accepted into the University of Maryland: Maryland Fire and Rescue Institute (MFRI) by means of an application (Tech Center application) and an interview process conducted by the Local Fire Board. Once accepted into the yearlong institute, the students have opportunities to earn both state and/or national certifications as well as earn college credits through passing grades on MFRI exams. This program is designed to offer fire, rescue, and emergency medical services training by ways of formal training and classroom instruction. Students will be exposed to all aspects of fire and EMS training including: live fire exercises, rescue incidents, medical emergencies, and vehicle extrication. This high-quality instruction, curriculum, and training will be delivered via instructors provided by the Maryland Fire and Rescue Institute (MFRI) at a Local Volunteer Fire Department to be determined. COURSE NOTE: This course will be offered on the site of a local Volunteer Fire Department, TBD. COURSE NOTE: Students will be interviewed by the Fire Board Panel for acceptance into the program.

- CREDIT: 5
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: Students must be age 16 by September 1st, eligible to become or already a member of a local fire department or rescue squad; available for some weekend commitments; and parental permission is required. Students will be required to wear uniforms and personal protective clothing daily and obtain a physical from a physician deeming the cadet eligible for participation in the program.
-

CTE COMPLETER PATHWAYS COMPREHENSIVE HIGH SCHOOL

Career and Technology Education offers sequenced courses available at each of the St. Mary's County Public high schools. These completer pathways blend academic, technical, and employability skills together resulting in concentrated instruction that demonstrates the strong relationship between classroom lessons and workplace demands. Each completer pathway consists of four credits that must be completed to earn a Maryland high school diploma. The learning is rich, relevant, and hands on.

A completer of the Career and Technology Education program sequence must complete at least four additional credits in a career specialization. Students who complete the Career and Technology Education program sequence may also meet University Sequence requirements.

Programs

- Arts, Media, and Communication
 - Interactive Media Production
- Business Management and Finance
 - Business Administration and Management
 - Accounting
 - Business Administrative Services
- Fire and Rescue
 - Fire and Rescue/Emergency Medical Services
- Human Resource Services
 - Early Childhood Education/Child Care
- Information Technology
 - Computer Science
- Manufacturing, Engineering and Technology
 - Advanced Technology/Pre-Engineering
- Career Research and Development
 - Career Research & Development

Arts, Media and Communication – Interactive Media Production

Completer Program: Interactive Media and Production
CIP Number: 100150

Credits Needed for Completion: 4
Completer Code: 2H

***Required Course: Principles of Arts, Media, and Communication (CM) – 178403**

This course provides students with 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. Competencies will include understanding corporate/business communication and technical writing required in the field, demonstrating media literacy skills, designing and using multimedia technology in basic project development, and utilizing team and problem-solving skills (project design and development). *Can be taken as an Elective

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10
 - PREREQUISITE: Computer Applications in Financial and Data Management or concurrent enrollment.
-

Required Course: Interactive Web Media 1 (CM) – 178363

Interactive Media will focus on concepts of color theory, the history of design, and basic graphics/animation. Students will learn skills and techniques required to use specialized software to create and manipulate art with computers and to edit digital images. Using a popular desktop publishing software, students will learn color, composition, layout design, digital photography, animation, typography of computer images, publication, advertising, statistical charts, and graphs. Students will be introduced to basic principles for the design, use, and application of computer graphic systems. This course may require students to complete a work-based learning experience. Upon successful completion of the course, students will be equipped with the necessary entry-level skill sets needed to pursue employment in the information technology profession, enroll in an information technology program at a post-secondary school, and sit for the Adobe certification examination.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11
 - PREREQUISITE: Principles of Arts, Media, and Communication (CM)
-

*Grade 9 and 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Required Course: Interactive Web Media 2 (CM) – 178373

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 in the production process. Competencies will include explaining the trends in copyright laws and legal issues in the use and development of media communication; selecting, implementing, and evaluating project management techniques and tools; using Adobe CS to create drawings and graphics; designing, coding, building, testing, and troubleshooting basic custom programs for multimedia applications; creating web applications with advanced interactive components; and creating an IMP Portfolio.

- CREDIT: 2
- TYPE: Certificate of Merit
- GRADE: 12
- PREREQUISITE: Interactive Web Media 1 (CM)

Business Management and Finance – Business Administration and Management

Completer Program: Business Administration
CIP Number: 5202014

Credits Needed for Completion: 4
Completer Code: 2G

Required Course: Principles of Business, Administration, and Management – 171113

The Principles of Business, Administration, and Management course provides students with knowledge of the types of businesses, as well as various applications, laws, and theories of business. Along with a brief historical perspective, business terminology and principles will be emphasized. Students will learn to analyze the functions of business through planning, organizing, and evaluating. Students will be expected to think analytically; improve written and oral communication skills; enhance listening and questioning skills; learn and practice the art of conversation; improve public speaking skills; broaden awareness of career options; practice using teamwork to make decisions and solve problems; and learn why people skills, human resource skills, communications skills, and networking skills can help them succeed in their careers. Upon successful completion of this course, the students will understand the business world and be more prepared to meet their career goals and objectives.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Computer Applications in Financial and Data Management – 172133

This introductory computer course will refine and develop data entry skills, teach students to manage resources and information. Students will use MS Office software to develop application skills in spreadsheets, databases, presentations, and electronic communications and to prepare financial documents. Students will also develop the knowledge and practice they need to make informed financial decisions. Students will be taught to analyze the various financial resources of a business and the risk management process (insurance). The financial management standards taught in this course are consistent with the Maryland Council on Economic Education components. Upon successful completion of the four pathway courses, the students may be eligible to sit for one or more industry certifications. *Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Business Administration 1 (CM) – 172503

This project-based course introduces the students to the intermediate skills needed to be successful in the business world or a post-secondary education experience. Students will develop an understanding of the roles a manager must perform and the skills needed to be a manager, the skills needed to be an entrepreneur, the role of ethics and social responsibility in the workplace, and the laws that affect businesses. Participation in FBLA is an integral component of the coursework. By participating in local, state, and national events, students gain authentic real-world experience competing as potential employees in the business world. *Can be taken as an Elective

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11
 - PREREQUISITE: Principles of Business, Administration, and Management. Approval of instructor needed as an elective
-

Required Course: Business Administration 2 (CM) – 172093

This course continues to develop the skills needed to perform in the business world. This course requires students to take charge and become self-regulated as they work on meaningful, real-world applications. The skills acquired in the level one course will be applied to a variety of challenging activities. The activities will focus on entrepreneurship, management and administration, careers in management, and the implementation of a school-wide activity. The curriculum activities will require students to apply communication, decision-making, organizational, leadership, creative thinking, problem solving, and technology skills. Students will be required to read and report on weekly business issues. Students will also write business reports, letters, and memos as they work through the various business activities. Throughout the course, the students will be required to participate in the following experiences: mentoring, an independent study, and career to work.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Business Administration 1 or approval of the instructor required.
-

Business Management and Finance – Accounting

Completer Program: Accounting (CHS only)
CIP Number: 5203024

Credits Needed for Completion: 4
Completer Code: 2A

Required Course: Computer Applications in Financial and Data Management – 172133

This introductory computer course will refine and develop data entry skills, teach students to manage resources and information. Students will use MS Office software to develop application skills in spreadsheets, databases, presentations, and electronic communications and to prepare financial documents. Students will also develop the knowledge and practice they need to make informed financial decisions. Students will be taught to analyze the various financial resources of a business and the risk management process (insurance). The financial management standards taught in this course are consistent with the Maryland Council on Economic Education components. Upon successful completion of the course, the students may be eligible to sit for one or more industry certifications.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Principles of Business, Administration, and Management – 171113

The Principles of Business, Administration, and Management course provides students with knowledge of the types of businesses, as well as various applications, laws, and theories of business. Along with a brief historical perspective, business terminology and principles will be emphasized. Students will learn to analyze the functions of business through planning, organizing, and evaluating. Students will be expected to think analytically; improve written and oral communication skills; enhance listening and questioning skills; learn and practice the art of conversation; improve public speaking skills; broaden awareness of career options; practice using teamwork to make decisions and solve problems; and learn why people skills, human resource skills, communications skills, and networking skills can help them succeed in their careers. Upon successful completion of this course, the students will understand the business world and be more prepared to meet their career goals and objectives.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Principles of Accounting 1/Managerial Accounting (CM) – 170473

This yearlong course provides students with an understanding of the accounting process and how it facilitates decision making by providing data and information to internal and external stakeholders. Students learn that accounting is an integral part of all business activities. Students learn how to apply technology to accounting by creating formulas and inputting data into spreadsheets. Students also examine career opportunities and the professional certificates and designations earned by individuals in the accounting profession. During the second semester students study managerial accounting. Students are introduced to the fundamentals of management accounting, including manufacturing and cost accounting, budgeting, accounting for managerial decision making, and financial statement analysis. Students learn how to use accounting information for internal decision making, planning and control. Regardless of the career path they choose, this course gives students the financial acumen necessary to make informed personal and business decisions.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11
 - PREREQUISITE: Principles of Business, Administration, and Management. Approval of instructor needed as an elective
-

Required Course: Principles of Accounting 2 (CM) – 171933

This course provides students with the accounting knowledge that will prepare them for post high school levels of education and entry-level positions in the workforce. Focus will be on accounting procedures necessary to address long and short-term asset investments and liabilities. Career pathways for accounting will be examined and the use of accounting knowledge in a variety of career clusters is also expected. Awareness of ethical issues and application of ethical decision-making models will be reinforced throughout the course. This course will employ industry standard accounting software. Students will be encouraged to participate in work study, mentorship, internship, and job shadow opportunities. Upon successful completion of the program, students will be encouraged to take the CLEP-Financial Accounting exam offered by Educational Testing Service (ETS).

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: A minimum of a 2.0 average in Principles of Accounting 1/Managerial Accounting.
-

Business Management and Finance – Business Administrative Services

Completer Program: Administrative Services
Credentialing
CIP Number: 5204510

Credits Needed for Completion: 4
Completer Code: 2K

Required Course: Computer Applications in Financial and Data Management – 172133

This introductory computer course will refine and develop data entry skills, teach students to manage resources and information. Students will use MS Office software to develop application skills in spreadsheets, databases, presentations, and electronic communications and to prepare financial documents. Students will also develop the knowledge and practice they need to make informed financial decisions. Students will be taught to analyze the various financial resources of a business and the risk management process (insurance). The financial management standards taught in this course are consistent with the Maryland Council on Economic Education components. Upon successful completion of the four pathway courses, the students may be eligible to sit for one or more industry certifications.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Principles of Business, Administration, and Management – 171113

The Principles of Business, Administration, and Management course provides students with knowledge of the types of businesses, as well as various applications, laws, and theories of business. Along with a brief historical perspective, business terminology and principles will be emphasized. Students will learn to analyze the functions of business through planning, organizing, and evaluating. Students will be expected to think analytically; improve written and oral communication skills; enhance listening and questioning skills; learn and practice the art of conversation; improve public speaking skills; broaden awareness of career options; practice using teamwork to make decisions and solve problems; and learn why people skills, human resource skills, communications skills, and networking skills can help them succeed in their careers. Upon successful completion of this course, the students will understand the business world and be more prepared to meet their career goals and objectives.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
-

Required Course: Advanced Microsoft Office Specialist Training (CM) – 172233

The students will develop advanced skills using Microsoft Office 2007 (Word, PowerPoint, Access, Excel, and Outlook) and Adobe InDesign software applications. Students will be expected to think analytically, manipulate information, and use the computer as a productivity tool through integrated application programs. Upon successful completion of the four pathway courses, the students may be eligible to sit for one or more industry certifications.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11
 - PREREQUISITE: Minimum of 2.0 GPA in Computer Applications in Financial and Data Management
-

Required Course: Office Systems and Project Management Training (CM) – 172333

During this yearlong course, the students will develop managerial and technical skills for business support operations through applied learning. Problem-solving skill development is incorporated throughout the course to meet the recommendations made through Maryland Skills for Success. Additionally, students will use the features of MS Project to develop the basic competencies (complete/develop plans, assign resources to tasks, track progress, manage budgets, and analyze workloads) needed to successfully pursue a program of study in Project Management at a post-secondary school. Upon successful completion of the course, the students may be eligible to sit for the Project Management Professional (PMP) certification exam.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Advanced Microsoft Office Specialist Training
-

CTE Completer Pathway Fire and Rescue

Completer Program: Fire and Rescue/EMS
CIP Number: 4302500

Credits Needed for Completion: 5
Completer Code: 5I

Required Course: Fire and Rescue/Emergency Medical Services – 177823

This Fire and Rescue Program is considered a Dual Enrollment Program where high school students are accepted into the University of Maryland: Maryland Fire and Rescue Institute (MFRI) by means of an application (Tech Center application) and an interview process conducted by the Local Fire Board. Once accepted into the yearlong institute, the students have opportunities to earn both state and/or national certifications as well as earn college credits through passing grades on MFRI exams. This program is designed to offer fire, rescue, and emergency medical services training by ways of formal training and classroom instruction. Students will be exposed to all aspects of fire and EMS training including: live fire exercises, rescue incidents, medical emergencies, and vehicle extrication. This high-quality instruction, curriculum, and training will be delivered via instructors provided by the Maryland Fire and Rescue Institute (MFRI) at a Local Volunteer Fire Department to be determined. COURSE NOTE: This course will be offered on the site of a local Volunteer Fire Department, TBD. COURSE NOTE: Students will be interviewed by the Fire Board Panel for acceptance into the program.

- CREDIT: 5
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: Students must be age 16 by September 1st, eligible to become or already a member of a local fire department or rescue squad; available for some weekend commitments; and parental permission is required. Students will be required to wear uniforms and personal protective clothing daily and obtain a physical from a physician deeming the cadet eligible for participation in the program.
-

Human Resource Services – Early Childhood Education/Child Care

Completer Program: Child Development
CIP Number: 2002014

Credits Needed for Completion: 4
Completer Code: 5E

Required Course: Child Development 1 – 179003

This course provides students with basic theories and principles concerning pregnancy, prenatal development, prenatal care, childbirth, and an in-depth study of the physical, emotional, social, and intellectual needs and development of the child beginning at birth and progressing to age 12. Observations will be required in addition to regular classroom instruction and may include field trips to local libraries, day care centers, and elementary schools. Students prepare themselves for careers working with young children as well as parenting responsibilities. Successful completion of this course and Child Development 2 may meet the Maryland requirement for preschool teachers in a licensed child care facility. These courses may articulate with the College of Southern Maryland classes EDU 1012 and 1013, if grade, attendance and competencies are met.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11
-

Required Course: Child Development 2 (Includes an Internship) (CM) – 179033

This course provides students with theories and principles for understanding the developmental stages of children from birth through age 12. Instruction includes development of observation skills, classroom management, program planning and curriculum; and participation in a preschool or day care facility, along with other child care training activities. Students obtain marketable skills for child development careers and prepare for parenting responsibilities. Students are required to have a current medical report. Successful completion of this course combined with Child Development 1 may meet the Maryland requirement for preschool teacher in a licensed child care facility and may articulate to College of Southern Maryland classes EDU 1012 and 1013, if grade, attendance, and competencies are met.

- CREDIT: 3
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Child Development 1. Medical Examination prior to Internship Experience
-

Information Technology – Computer Science

Completer Program: Computer Science
CIP Number: 110250

Credits Needed for Completion: 4
Completer Code: 2B

***Required Course: Foundations of Computer Science (CM) – 172043**

This course is designed to introduce students to the field of computer science and computational practices through an exploration of engaging and accessible topics. Units use a variety of tools and platforms around the topics: human computer interaction, problem solving, web design, programming, computing and data analysis, and robotics. Ethical and social issues in computing, and careers in computer science are woven throughout the units. Emphasis is placed on how computing enables innovation in a variety of fields and the impacts that those innovations have on society. The goal is to develop in students the computational thinking practices of algorithm development, problem solving, and programming within the context of problems that are relevant. If this course is taken to satisfy the computer science pathway, it cannot be used to satisfy the technology graduation requirement. *Can be taken as an Elective.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 9-12
-

***Computer Science - CyberSecurity - 177993**

This course prepares students with crucial skills for responsible citizenship in a digital world. Research into the past and a study of current events highlight the growing need for cybersecurity in business, defense, and everyday life. Students will learn foundational cybersecurity topics including: ethics, cryptography, software and physical security, networking, and web security. Basic programming (HTML, SQL, and JavaScript) will be used throughout the course to solve problems and complete projects. Students will participate in a variety of online cybersecurity challenges and competitions.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - Grades: 9-12
 - PREREQUISITE: Foundations of Computer Science
-

*Grade 9 and 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Required Course: Advanced Placement Computer Science Principles - 172063

AP Computer Science Principles incorporates active, inquiry-based learning with a focus on computational thinking practices (connected computing, creating computational artifacts, abstracting, analyzing problems, communication and collaborating). The overarching theme of the course is data: the nature and variety of data on the internet; algorithmic methods for processing and managing data; and ways in which data can be analyzed, visualized, and interpreted to increase human understanding and solve challenging real-world problems.

Programming concepts are taught using Python. The components of the Advanced Placement assessment for Computer Science Principles includes two performance tasks completed during the course and multiple choice written exam. The performance tasks are administered by the teacher and the student submits digital artifacts.

*Can be taken as an Elective COURSE NOTE: This course will meet the requirement of enrollment in a fourth year of a mathematics or math-related course. However, this course will not meet the fourth year math requirement of Algebra 2 or non-trivial Algebra students for students who are enrolled in the University of Maryland completer sequence. This course satisfies the technology education credit required for graduation.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 9-12
-

Required Course: Advanced Placement Computer Science A – 178953

Advanced Placement Computer Science A is both a course for potential computer science majors and a foundation course for students planning to study in other technical fields such as Engineering, Physics, Chemistry, and Geology. It involves the study of the object-oriented paradigm using the Java programming language. Concepts such as classes, objects, inheritance, polymorphism, and reusability will be covered, as well as input and output, flow of control features, data structures, searching and sorting algorithms, and program design and analysis. The course is designed to challenge students to be active learners and critical thinkers.

Students are provided time for hands-on learning. During this time, their programs can be individually evaluated, and their progress can be informally tracked. Assistance can be provided and students can talk about their programs and ask specific questions about any problems they may have. The students will be able to gain a clearer understanding of certain ethical issues in information technology. Students will gain an understanding of how ethical theory can be applied to a discussion and analysis of those issues. In critically examining a cluster of information technology issues within the framework of ethical theory, students can develop a rational, coherent, consistent, and systematic approach to addressing moral issues in information technology. *Can be taken as an Elective.

COURSE NOTE: This course will meet the requirement of enrollment in a fourth year of a mathematics or math-related course. However, this course will not meet the fourth year math requirement of Algebra 2 or non-trivial Algebra students for students who are enrolled in the University of Maryland completer sequence.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
 - PREREQUISITE: Advanced Placement Computer Science Principles or Algebra
-

Career Research and Development

Completer Program: Career Research and Development
CIP Number: 8600000

Credits Needed for Completion: 4
Completer Code: 2J

Required Course: Career Research and Development 1 – 171123

The overall goals of this course are to teach students the process of self-awareness, career exploration, and setting academic and career-related goals. Students will demonstrate an understanding of how accurate, current, and unbiased career information is necessary for successful career planning and management using Maryland's career clusters and pathways. In addition, students will be introduced to basic concepts of financial literacy to help them manage their personal finances. Course content will integrate the development of the student's competency in business writing as well as the Skills for Success (i.e., communication, learning, interpersonal, technology, and critical thinking). Students will also be required to prepare for and participate in an interview process. *Can be taken as an Elective

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11
-

Required Course: Career Research and Development 2 – 171133

Students will continue building and strengthening their career portfolio to demonstrate proficiencies in workplace readiness, personal financial management, personal growth and development, and employment experiences. Students will use the portfolio as part of the interviewing process. The portfolio will serve as part of the student's end-of-program assessment/culminating project. Students will benefit from joining one of the career technology student organizations to assist in refining and developing their leadership and workplace readiness skills.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Career Research and Development 1
-

Required Course: Career Research and Development Work-Based Learning – 171283

The work-based learning experience takes place at the work site, includes a minimum of 270 hours, and may be paid or unpaid. This experience is directed by the Work-Based Learning (WBL) agreement and plan developed by the student, WBL coordinator, and employer. The WBL plan identifies the appropriate competencies, duties and tasks in academic, technical, and work readiness areas that apply directly to students' goals for a specific work-related placement. The goal of the WBL experience is to expose students to authentic employment opportunities that link to students' career interests. WBL placements have the potential to prepare students for employment that leads to a family-supporting wage. The work site placement is secured, based on students' interests, and employer demand. The WBL coordinator is responsible for monitoring students' placements, documenting students' progress, and accounting for students' completion of their plan and portfolio.

- CREDIT: 2
- TYPE: Academic
- GRADE: 12
- PREREQUISITE: Concurrent enrollment in Career Research and Development 2

Technology Education

Technology Education - consists of 1 credit that includes the application of knowledge, tools, and skills to solve practical problems and extend human capabilities. One Technology Credit is a graduation requirement. Every student must take one of the three courses below.

Foundations of Technology – 171143

This course seeks to develop technological literacy through problem solving activities that challenge students to apply mathematics and science concepts to real-world engineering problems. The course focuses on the nine core technologies, (i.e., mechanical, electrical, electronic, structural, fluid, optical, thermal, biotechnical, material). Students work independently and collaboratively as part of an engineering team. A wide variety of technical, craft, and engineering careers will be explored. This course satisfies the technology education credit required for graduation.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

***Foundations of Computer Science (CM) – 172043**

This course is designed to introduce students to the field of computer science and computational practices through an exploration of engaging and accessible topics. Units use a variety of tools and platforms around the topics: human computer interaction, problem solving, web design, programming, computing and data analysis, and robotics. Ethical and social issues in computing, and careers in computer science are woven throughout the units. Emphasis is placed on how computing enables innovation in a variety of fields and the impacts that those innovations have on society. The goal is to develop in students the computational thinking practices of algorithm development, problem solving, and programming within the context of problems that are relevant. If this course is taken to satisfy the computer science pathway, it cannot be used to satisfy the technology graduation requirement.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 9-12
-

*Grade 9 and 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Advanced Placement Computer Science Principles - 172063

AP Computer Science Principles incorporates active, inquiry-based learning with a focus on computational thinking practices (connected computing, creating computational artifacts, abstracting, analyzing problems, communication and collaborating). The overarching theme of the course is data: the nature and variety of data on the internet; algorithmic methods for processing and managing data; and ways in which data can be analyzed, visualized, and interpreted to increase human understanding and solve challenging real-world problems.

Programming concepts are taught using Python. The components of the Advanced Placement assessment for Computer Science Principles includes two performance tasks completed during the course and multiple choice written exam. The performance tasks are administered by the teacher and the student submits digital artifacts.

*Can be taken as an Elective COURSE NOTE: This course will meet the requirement of enrollment in a fourth year of a mathematics or math-related course. However, this course will not meet the fourth year math requirement of Algebra 2 or non-trivial Algebra students for students who are enrolled in the University of Maryland complete sequence. This course satisfies the technology education credit required for graduation.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 9-12
-

Advanced Technology

The following courses may be taken either as part of the graduation requirement option or as an elective.

*Pre-Engineering 1 (CM) – 132203

This course will challenge students to investigate a wide variety of technological systems that include one or more of the “core technologies.” A special emphasis will be placed on activities such as, but not limited to: research and experimentation, designing, construction, prototype development, product testing, data analysis, and technical writing. This course is designed for students interested in careers in engineering, science, mathematics, technology, or industrial trades. Career exploration in these fields will be accomplished through field trips, job shadowing, internet research, and guest speakers. This course may be used as one of two credits necessary for completion of an Advanced Technology Education sequence.

*Can be taken as an Elective

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Foundations of Technology
-

Pre-Engineering 2 (CM) – 134333

This course continues the study of advanced technology systems through problem-solving and engineering activities. This advanced level course will allow students to pursue individual interests in a wide variety of technological innovations. Students will be challenged to complete a rigorous independent research project. Career exploration will continue to be part of the required course work. This course may be used as one of two credits necessary for completion of an Advanced Technology Education sequence.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Pre-Engineering 1
-

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

CTE ELECTIVES

The following courses are CTE Electives not listed in the course descriptions. Courses that can be taken as an elective within the Pathways are marked as such.

Electives

Business Law – 172223

This course explores the foundations of business law, while introducing personal law topics that interest students. The textbook combines the content with interactive technology and video to maintain student interest and support active learning. The course content includes: contracts, criminal law, consumer protection, wills and estates, marriage and divorce, property law, agency, employment contracts, unions, commercial paper, and credit obligations. Some of the instructional strategies will include: opportunities to analyze, discuss, and research cases; hot debates to promote discussions on important legal issues; discussion of law related video clips; staging of mock crimes and trials; using technology to complete assignments and gather information; participation in games that teach chapter concepts; panel discussions with community leaders and other guest speakers; field trips to related businesses; and opportunities to work in groups, pairs, and individually on special projects.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: Government
-

Financial Literacy – 171153

The role of the student as a citizen, consumer, and active participant in the business world will be the focus. Students explore many areas of financial planning that will enhance their financial security. Students learn how to prepare a financial plan that includes investing, saving, borrowing, and budgeting. Using credit, obtaining insurance, and purchasing securities will be included. In addition, students learn about risk management and laws that will protect them as consumers.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

***Personal Living (CM) – 121103**

This course is designed to help students understand the many challenges facing them as young adults during and after high school. Students will explore all facets of daily living, including, but not limited to: personal style, personality, careers, food and nutrition, personal health, parenting, child development, personal finances, consumerism, decision-making, family roles and relationships, multiculturalism, and self-awareness. This course seeks to improve decision-making skills in all aspects of personal living. This curriculum will include an integration of Family Economics and Financial Education. Students will complete a variety of simulations on spending, saving, and investing.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
-

Food and Nutrition Science – 124433

This course provides an introduction to the food service and hospitality industry and examines the nutritional needs of the individual. Students develop and demonstrate skills in safe and sanitary food handling and preparation techniques. Students learn to prepare a variety of foods. They develop a broad understanding of the variety of career options available in the foodservice and hospitality industry, and have the opportunity to earn the ServSafe Credential. Students will participate in an in-class clinical or work-based learning experience that includes field trips, job shadowing, and service learning. Students will take the National Restaurant Association Educational Foundation end-of-course exam.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
-

Engineering Leadership – 177543

During this course, students will plan and implement engineering and technology related activities/projects. Students will become involved in all aspects of the national Technology Student Association (TSA) as part of regional, state, and national competitions. Students will develop and refine technical skills as well as leadership abilities. Engineering activities will focus on the nine core technologies. Several partnerships with local engineering organizations will be part of student career exploration and job shadowing.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Foundations of Technology and/or approval of the instructor
-

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Media

Educational Media Technology – 181303

This course is a practicum in which students gain experience in information literacy, library procedures, storage, retrieval and distribution of information and materials, equipment operation, processing and production of materials, and clerical tasks. Opportunities are provided for students to interact with and assist student and adult patrons in a respectful workplace environment. This course offers opportunities for students to develop and use higher order thinking and organizational skills which are applicable to a variety of career paths. Students may register for a second or third year of this course. Second and third year students will expand upon workplace and research skills learned in the first year. They may be called upon to act as trainers or facilitators for first-year students. Emphasis is placed on specific workplace projects (i.e. Internet applications, replacement and minor repair of equipment and computers, selected data entry and collection building tasks, and organization of physical space. All students will be evaluated on information projects, work habits, and research, organizational, and workplace skills. Students successfully completing this course will gain knowledge and skills which will be valuable in all curricular areas as well as the workplace.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: A minimum of a 2.5 cumulative grade point average and/or approval of the library media specialist required.
-

ENGLISH

The English curriculum is designed to provide students with courses which will better enable them to meet their individual needs and interests in language arts. At each grade level, courses are designed to accommodate students' varying cognitive levels and learning styles. Students are provided with instruction which will assist them in mastering the skills of reading, writing, language, listening, and speaking. A more intense study is offered in the Pre-AP, Honors and Advanced Placement English programs in order to capitalize on students' interests, abilities, and career plans. This curriculum design will ensure that all students are equipped with the skills which will enable them to meet their optimum levels of achievement and be successful in continued study and their chosen careers.

Students must meet the MSDE grade 10 graduation requirement and be College and Career Ready (CCR) by the end of grade 11. ELA coursework may be determined by whether or not students have met these two benchmarks.

Students must successfully complete course work (four credits in English) in order to meet the English requirement for graduation from high school.

Freshman English – 011123

This course is aligned to the Maryland College and Career Readiness Standards (MCCRS) for grade 9, and students are exposed to a wide range of literary genres as well as an array of complex expository works of nonfiction. Students analyze the elements of short story, drama, poetry, autobiography, biography, mythology, epic, and nonfiction, and read independently both in and out of class. They compose narrative, literary analysis, argumentative and expository writings. Each unit of literary study involves increasingly complex texts, with an emphasis placed on the development of written and oral communication as well as research. Grammar instruction includes a study of language at the word, sentence, phrase, and clause level. Students develop vocabulary skills through a variety of methods

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: None
-

Freshman English Pre-AP/Honors – 011143

This course is designed to provide a pathway to AP English Composition and Literature courses for 9th grade students who have demonstrated advanced ability in reading and writing and are motivated to complete above grade level work in English. Course content and assignments will align to advanced instruction in literary analysis, writing, and language that is aligned to the Maryland College and Career Readiness Standards (MCCRS). Literary study will focus on the canon of Western classical literature and literary non-fiction. Course work will include in-depth study and application of research, composition, vocabulary, and language concepts.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 9
 - PREREQUISITE: Recommendation of data review team
-

English 9/90 – 011163

This course is designed to assist students' transition from middle school reading/language arts to high school English. This course helps students acquire the skills and concepts necessary to progress from their entry level to a tenth grade reading level. It is designed to provide decoding/encoding, fluency, comprehension, and writing instruction according to assessed student needs. This course meets for a 90 minute period and students earn one English credit and one elective credit for Academic Literacy. This course may not be offered at all high schools.

- CREDIT: 2
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Recommendation of data review team
-

Academic Literacy A – 010103

This elective reading intervention course is designed to help students improve their reading in the areas of decoding and fluency. Decoding emphasis will be on basic sound units. The course materials and instructional sequence is based upon the latest research in reading instruction.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: 2.0 average and approval of department chairperson, and principal required.
-

Academic Literacy B – 010113

This elective course is designed to help students improve their reading in the areas of decoding, comprehension, and fluency. Decoding emphasis will be on multisyllabic words. The course materials and instructional sequence is based upon the latest research in reading instruction.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Approval of the instructor required.
-

Independent Study English – 012093

Independent Study English is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a member of the English department. Students must complete a minimum of 132 hours of supervised activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.) COURSE NOTE: This unit(s) may not count as a required course.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: 2.0 grade point average and approval of department chairperson, principal, supervisor of instruction, and Director of Curriculum and Instruction required.

World Literature – 012233

This course is aligned to the Maryland College and Career Readiness Standards (MCCRS) for grade 10, and students examine a diverse array of literature and complex expository works of nonfiction from various eras and world cultures. Students will read independently both in and out of class, analyzing the meaning of texts through the close examination of sentences, paragraphs, and larger structures. Students read increasingly complex texts, building their vocabulary knowledge and expanding their understanding of texts through the completion of frequent research activities. Students compose narrative, literary analysis, argumentative and expository writings. Grammar instruction emphasizes sentence formation, usage, and mechanics. Students will express themselves in multiple writing and speaking formats, from investigative reports and literary analyses to summations and research projects.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
 - PREREQUISITE: Successful completion of Freshman English and/or recommendation of 9th grade ELA teacher.
-

World Literature Pre-AP/Honors – 012243

This course is designed to support the pathway to AP English Composition and Literature courses for 10th grade students who have demonstrated advanced ability in reading and writing and are motivated to complete above grade level work in English. Course content and assignments will align to advanced instruction in literary analysis, writing, and language that is aligned to the Maryland College and Career Readiness Standards (MCCRS). Literary study will emphasize developing an understanding of commonalities and differences among human cultures as represented in literature, media, and nonfiction from around the world. Course work will include in-depth study and application of research, composition, vocabulary, and language concepts. Summer reading must be completed prior to the first class.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 10
 - PREREQUISITE: Successful completion of Freshman English Pre-AP/Honors and/or recommendation of 9th grade ELA teacher.
-

English 11: Bridge to College and Career Readiness – 013323

This course is aligned to the Maryland College and Career Readiness Standards (MCCRS) for grade 11, and students read independently both in and out of class to critically analyze and evaluate relationships among American literature, history, and culture; the content and instruction centers around more real-world reading and writing. The purpose of the course is to support students in successfully attaining college and career readiness by the end of grade 11 and to meet MSDE graduation requirements through the completion of an embedded bridge project. This course is most appropriate for students who have not met the required graduation requirement and/or are unsure of or do not plan to engage in post-secondary academic pursuits beyond high school. At the end of the course, students will be re-assessed to determine college and career readiness.

- CREDIT: 1
- TYPE: Academic
- GRADE: 11
- PREREQUISITE: Has not met MSDE graduation requirement at the end of grade 10

American Literature (CM) – 013333

This course is aligned to the Maryland College and Career Readiness Standards (MCCRS) for grade 11, and students read independently both in and out of class to critically analyze and evaluate relationships among American literature, history, and culture. Analysis of literary themes, movements and genres in American literature is the content focus for the course. Students compose narrative, literary analysis, argumentative and expository writings, producing high- quality drafts under tight deadlines, becoming equally proficient at editing and revising their written work. Students will make arguments and present analyses that are logical, well-reasoned, and supported by evidence and display equal skill at conducting and presenting research orally and in writing. This course is recommended for students who do not wish to pursue college-level AP classes but have a commitment to academic pursuits.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11 or 12
 - PREREQUISITE: Successful completion of previous English course and/or recommendation of English teacher.
-

Advanced Placement Language and Composition – 013533

This course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Students become skilled readers of prose written in a variety of rhetorical contexts and skilled writers who compose for a variety of purposes. Students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. Both their reading and their writing should make students aware of interactions among a writer's purposes, reader expectations, and an author's propositional content, as well as the genre conventions and the resources of language that contribute to effectiveness in writing. The content of the course will prepare students for the AP Language and Composition exam, which students are expected to take in the spring.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11 or 12
 - PREREQUISITES: Demonstration of advanced ability on coursework and assessments in previous English courses (preferably Honors/Pre-AP) and recommendation of the English 10 teacher.
-

Advanced Placement English Literature and Composition – 015433

This course engages students in the careful reading and critical analysis of literature. Through close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. Students will consider a work's structure, style, themes, and literary elements. This course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. Although critical analysis makes up the bulk of student writing for the course, students also engage in writing for a variety of purposes with the goal being to increase students' ability to convey their ideas clearly, cogently, and with stylistic maturity. The content of the course will prepare students for the AP English Literature and Composition exam, which students are expected to take in the spring.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous English courses (prefer- ably Honors /Pre-AP 10th Grade English and/or AP Language and Composition) and approval of the English 11 teacher.
-

English 12: Transition to College and Career Readiness – 014423

This transition course focuses on real-world application of reading, writing, speaking and listening skills. In order to prepare students for the transition to college and career at the end of grade 12, the course will emphasize the practical application of communications rather than emphasize language arts skills as applied to scholarly and literary materials. This course is most appropriate for students who do not have a qualifying CCR score by the end of grade 11 and may be unsure of or do not plan to engage in post-secondary academic pursuits beyond high school. Additional transition modules are embedded in the course content, and students will take Accuplacer as a reassessment of college and career readiness.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Does not have a qualifying CCR score by the end of grade 11
-

British Literature (CM) – 014433

This course is aligned to the Maryland College and Career Readiness Standards (MCCRS) for grade 11-12, and students read independently both in and out of class to critically analyze a body of complex British literature and literary non-fiction, finding commonalities in texts from the same or different eras. Analysis of literary themes, movements and genres in British literature is the content focus for the course. Students compose narrative, literary analysis, argumentative and expository writings, producing high-quality drafts under tight deadlines, becoming equally proficient at editing and revising their written work. They will demonstrate their listening skills by synthesizing the comments and claims of others and exercising teamwork when functioning in groups. Students will make arguments that are logical, well-reasoned, and supported by evidence and display equal skill at conducting and presenting research orally and in writing. This course is recommended for students who do not wish to pursue college-level AP classes but have a commitment to academic pursuits. Additional CCR Modules may be required for students who did not meet CCR assessment requirements on SAT/ACT, Accuplacer, or AP assessment.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Successful completion of previous English course and/or recommendation of English teacher.
-

Introduction to Composition and Rhetoric – 017433 (1st Semester); 017533 (2nd Semester)

The focus for this course is the refinement of students' writing and language skills in preparation for advanced placement or college-level classes. During the first semester, students will work on developing their critical reading and comprehension skills by analyzing rhetoric in a wide-range of texts. Students will also build their foundational writing skills at the sentence and paragraph levels to prepare for college-level writing. During the second semester, students will apply their understanding of rhetoric and composition by planning, organizing and developing a variety of college-level compositions. Students will also refine their research and documentation skills. The curriculum and textbook are those used for transitional and entry level English courses at the College of Southern Maryland. Students who successfully complete the first semester, as determined by class performance and College of Southern Maryland requirements, will be provided with the opportunity to register for three (3) credits with the College of Southern Maryland at a reduced rate for their parallel course (ENG-1010, Composition and Rhetoric). NOTE: Students who scored a 3+ on the Advanced Placement Language and Composition Assessment are not eligible for this course.

- CREDIT: 1, weighted
 - TYPE: Certificate of Merit
 - GRADE: 11-12 (.5 for 2nd semester of college-level work)
 - PREREQUISITE: Successful completion of previous English course and recommendation of English teacher
-

College English (Honors) – 017533 (First Semester); 017733 (Second Semester)

This dual-enrollment course is designed for students who have demonstrated readiness for completing college-level work. During the first semester, students will apply their understanding of rhetoric and composition by planning, organizing and developing a variety of college-level compositions. Students will also refine their research and documentation skills. During the second semester, students will build on the planning, organizing, and critical analysis skills learned in ENG-1010, Composition and Rhetoric. Students use literature, such as short fiction, poetry, and drama as the basis of their critical analysis and to extend, deepen, and illuminate students' own experiences and connections with the larger world and contemporary issues. Students further master the conventions of written Standard American English, information literacy skills, and research and documentation techniques including conducting online and print research and documenting sources. The curriculum and textbook are those used for English courses at the College of Southern Maryland (CSM). Students will be provided with the opportunity to register for three (3) dual enrollment credits per semester with the College of Southern Maryland at a reduced rate for their parallel courses (ENG1010 and ENG1020).

NOTE: Students who took and earned college credit for Introduction to Composition and Rhetoric (017433) in their junior year do not qualify for enrollment in this course. This course may not be offered at all high schools.

- CREDIT: 1, weighted (.5 per semester)
 - TYPE: Honors
 - GRADE: 12
 - PREREQUISITE: Qualifying College and Career Readiness assessment score
-

English 12 Digital Composition – 017633

The purpose of this course is to introduce innovative and effective technological compositions that invite the creative interplay of written, visual, and sound communications. The course will offer students the opportunity to explore and create composed and composited storytelling in digital media; projects will span a wide range of writing styles and genres, but the primary focus will be on nonfiction narrative expressed through social media, podcast, video, animation, composite multi-media and transmedia, and networked website creation. To this end, students will work on the development of texts with attention paid to the rhetorical modes and communicative platforms that specific media encourage. Students will also learn how to use audio and video editing software as well as basic html, website editing, and animation software. The course will foster the perception that written persuasion must work to establish a creative interplay with visual images, video, sound, web 2.0 technologies, and social media, all of which have such a pervasive influence in contemporary social persuasion. Additional CCR Modules may be required for students who did not meet CCR assessment requirements on Accuplacer or AP. This course may not be offered at all high schools.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
-

English Electives

Journalism – 016523

This elective course introduces students to the news media and provides theoretical and practical knowledge of some aspects of journalism. Both print and broadcast media may be covered, with consideration given to objectivity in current press coverage of news events. Emphasis is placed on journalistic writing style and grammar. Students learn to evaluate the methods of presenting current events to the general public.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Recommendation by previous year's English instructor and approval of the Journalism instructor required.
-

Mythology – 016921, 016922, 016931, 016932

Students will read and analyze mythology from all around the world. Students will identify themes presented in all mythologies and the ways in which these themes could have spread. Students will differentiate types of myths and identify the elements and purpose of an epic poem. Students will need strong reading, writing and analytical skills. Additional CCR Modules may be required for students who did not meet CCR assessment requirements on SAT/ACT, Accuplacer or AP. Semester 1: Classic/Western Mythology; Semester 2: World Mythology

- CREDIT: .5 per Semester
 - TYPE: Academic
 - GRADE: 11-12 (Grade 11 as an elective credit only)
-

Newspaper – 016723

Students in this elective course produce the school newspaper. The production includes writing, editing, layout, photography, and selling advertisements necessary for financing the newspaper.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Previous or concurrent enrollment in Journalism and/or approval of the newspaper adviser required.
-

PSAT/SAT Preparation – 018523

This course is designed for college-bound students who are interested in improving their reading rate, comprehension, vocabulary, mathematics, writing, and test-taking skills. Emphasis will be placed on strategies for using these skills and on techniques for improving performance on the PSAT/SAT.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Completion or concurrent enrollment in Algebra 1 or Geometry required.
-

Publications – 016623

This is a class for experienced student writers and editors. The course focuses on creative writing in a variety of genres and layout, design, and production of a school literary magazine. The students also produce original material for publication outside of class and study writing as a profession.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Previous or concurrent enrollment in Journalism, Newspaper, or Yearbook or approval of the Publications instructor required.
-

Special Studies in Literature: Contemporary Literature – 017823

This elective course will focus on modern and contemporary stories, plays, poems, and novels which represent various ethnic and cultural groups. The course will present issues in contemporary fiction as well as in-depth survey and analysis of multicultural perspectives through literature. By focusing on contemporary literature, students can identify and analyze the conflicts and challenges facing modern society. Opportunities will be provided to integrate content with psychology and anthropology. This course may not be offered at all high schools.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: A minimum of a 3.0 average in English 10 or English 11 or approval of the previous English instructor required.
-

Yearbook – 016823

The students in this elective course are responsible for the production of the yearbook. Prior to its publication, they are required to familiarize themselves with the necessary planning and production procedures and to apply these procedures to the layout, photography, and copy. Students also learn the business side of producing a yearbook, including staff organization and advertising.

COURSE NOTE: Previous or concurrent enrollment in Journalism and/or approval of the yearbook adviser recommended.

- CREDIT: 1
- TYPE: Academic
- GRADE: 10-12

English for Speakers of Other Languages

The English for Speakers of Other Languages (ESOL) program is available to English language learners. The program is open only to students who have been born in a foreign country, speak a language other than English as their primary language, and/or have immediate family members who speak a language other than English living in their home. In addition, students must qualify through their scores on an English proficiency test that assesses oral, reading, and writing abilities. Instructions are provided in English.

English for Speakers of Other Languages 1 – 012013

This class provides instruction to students who need assistance in learning to speak, read, and write in English. Students will meet daily and work on the various skills needed to achieve proficiency in English. The ESOL class does not replace English 9, English 10, English 11, and/or English 12 (regular course, certificate of merit, honors, and /or Advanced Placement level). COURSE NOTE: Course may only be taken for two years for credit but may be taken each year in high school.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Qualifying scores on an English proficiency test required.
-

English for Speakers of Other Languages 2 – 012023

This class provides instruction to students who need assistance in learning to speak, read, and write in English. Students will meet daily and work on the various skills needed to achieve proficiency in English. The ESOL class does not replace English 9, English 10, English 11, and/or English 12 (regular course, certificate of merit, honors, and /or Advanced Placement level).

COURSE NOTE: Course may only be taken for two years for credit but may be taken each year in high school.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Qualifying scores on an English proficiency test required.
-

FINE ARTS

The fine arts program is designed to meet the needs of students who have varying degrees of interest and capability in visual arts, music, and theatre. Students must earn a minimum of one credit in fine arts as a requirement for graduation. Some courses have a performance component, and students will be required to perform in public. Students who plan to pursue their interest in fine arts should follow the suggested sequence for the fine arts specialization in the Communication, Media, and Arts cluster.

In all fine arts courses, students will gain knowledge of techniques and personal skill development in expression, historical and cultural background, and aesthetic awareness. Students enrolled in an instrumental music course should own or have access to an instrument. Students enrolled in fine arts courses may be required to pay certain fees to maintain the materials and equipment entrusted to them. Students enrolled in classes which have performing components are required to attend all rehearsals as well as school programs and concerts.

Art

Art Appreciation – 068203

This course is an introduction to visual art in a chronological and geographical visual history from 30,000 BCE to Postmodernism. Students will examine art from a cultural-studies approach; examining the ways that art reflects the time, place, and culture in which it was produced. Cultural cues affect artists' motivations for creating art, the materials and media they select, and the themes of their work. Students will gain an understanding of the elements of art and principles of design as applied to the visual arts: painting, sculpture, weaving, printmaking, ceramics, metal work, and architecture. Media, stylistic differences, art movements, and production techniques will also be addressed. Students will be assessed on knowledge of basic concepts. This course will be principally textbook and lecture based.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

Commercial Art 2 - 065213

This is an advanced course in the study of commercial art careers, such as advertising design, commercial illustration, publication design and graphic design. Students continue the study of the principles of design to create projects that they would be tasked within the potential career fields such as lettering, posters, and layout. Students will continue their study of the software and hardware used to create commercial art such as Adobe Illustrator and the printing processes. The course will culminate in students having a portfolio of digital and traditional art that reflects their skills that can be used to apply for college or a job.

- Credit: 1
 - Type: Academic
 - Grade: 11-12
 - Prerequisite: Successful completion of Commercial Art 1 and approval of the instructor required
-

Painting - 065103

This is an advanced course in painting for students participating in the Academy of Visual and Performing Arts. Students will explore the technical aspects, artistic aspects, and medias of painting. This course will allow students to expand their painting repertoire and aesthetic responsiveness, while learning techniques to advance their work and build a greater understanding of the more complex medias surrounding paint. Students will explore the history of the painting mediums, learning about its technological developments, important innovations in the field, and its significance within diverse cultural frameworks. Students will explore the significance of painting within the larger context of the art world, and learn about the critical and varied application it has to the modern working world. Class time will enable students to work on independent and cooperative explorations. Students will prepare a portfolio of work to exhibit and at the completion of the course. The course stresses the development of a body of work.

- Credit: 1
- Type: Academic
- Grades: 10-12
- Prerequisite: Participation in the Academy of Visual and Performing Arts

Radio/Audio Production – 178223

This course introduces students to podcasting, Internet radio, sound effects and radio theater. Students will experience hands-on learning in radio announcing, scriptwriting, voice acting, sound effects and audio mixing. A variety of industry standard programs and equipment will be used to create projects. No prior experience is required. This course may be taken for one or both semesters. COURSE NOTE: This course satisfies the Fine Arts education credit required for graduation.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
-

Music

Band 1 – 087123

This course is designed to help individual players who have not had extensive previous musical experience. Students are ready to participate in the marching band, but are not ready to participate in Band 2. Fundamentals are stressed, and ensemble experience is provided when instrumentation permits.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Band 2 (Advanced) – 087133

This course is designed for students who have had previous instrumental experiences and are ready to participate in the concert band. Performance materials reflect a variety of musical styles, historical contexts, and theoretical pursuits and are designed to build technical facility.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Audition and approval of the instructor required.
-

***Band 2 (Advanced) (CM) – 088123**

This course is designed for students who have had previous instrumental experiences and are ready to participate in the concert band. Performance materials reflect a variety of musical styles, historical contexts, and theoretical pursuits and are designed to build technical facility.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Chamber Orchestra – 088143

This course is designed for students who play string instruments found in a traditional orchestra. Performance materials reflect a variety of musical styles, historical contexts, and theoretical pursuits and are designed to build technical facility.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Audition and approval of the instructor required.
-

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

***Chamber Orchestra (CM) – 088333**

This course is designed for students who play string instruments found in a traditional orchestra. Performance materials reflect a variety of musical styles, historical contexts, and theoretical pursuits and are designed to build technical facility.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Chamber Singers (Advanced) – 085123

This course is designed to provide the training and experience for advanced vocal students who have had school and/or community choral experiences. This course provides small ensemble experience for students interested in performing choral music which includes multiple parts. The course includes greater emphasis on period study. Most of the music is a cappella. Emphasis is placed on quality public performance.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Audition and approval of the instructor required.
-

***Chamber Singers (Advanced) (CM) – 086233**

This course is designed to provide the training and experience for advanced vocal students who have had school and/or community choral experiences. This course provides small ensemble experience for students interested in performing choral music which includes multiple parts. The course includes greater emphasis on period study. Most of the music is a cappella. Emphasis is placed on quality public performance.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Chorus 1 – 085103

This course is a preparatory course for Chorus 2/Chamber Singers and is designed to teach vocal techniques, music history, basic music theory, and music reading skills. Students work occasionally on an individual basis with the instructor. Students perform for and listen to each other to help the overall quality of the performing chorus.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Chorus 2 – 085113

Students will be auditioned for this performing group. The focus will be to enhance students' vocal techniques, understanding of music theory, and music reading skills. Various styles of music will be studied. The course is geared toward the attainment of quality performances.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Audition and approval of the instructor required.
-

***Chorus 2 (CM) – 086123**

Students will be auditioned for this performing group. The focus will be to enhance students' vocal techniques, understanding of music theory, and music reading skills. Various styles of music will be studied. The course is geared toward the attainment of quality performances.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Class Voice – 089433

This course is designed for students who want to improve their solo voice. It includes basic vocal techniques, music history, basic music theory, music reading skills, and a variety of vocal literature. Students will work with the instructor on both an individual and small group basis.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

Guitar 1 - 082203

This year-long one credit course is designed for students with no previous guitar experience. Students will receive guidance and direction in solving problems related to playing the guitar at a beginning level and will learn many of the different styles, skills, and techniques required to become a successful guitarist. Areas of concentration include: correct posture, note reading, aural skills, finger style, flat-picking, singing songs, rhythmic patterns, chord study, finger-picking styles, musical forms, improvisation, and performing experiences.

- Credit: 1
 - Type: Academic
 - Grade: 9-12
 - Prerequisite: Approval of the instructor required
-

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Guitar 2 - 082213

This year-long one credit course is designed for students with some guitar experience. Students will receive guidance and direction in solving problems related to playing the guitar at an intermediate level and will continue to learn many of the different styles, skills, and techniques required to become a successful guitarist. Areas of concentration include: playing from standard notation reading pitch, rhythm, meter, articulation, dynamics and other elements of music; playing from lead sheets using chord symbols; reading rhythms with note values including whole notes through sixteenth notes and their corresponding rests; playing in simple triple, duple and quadruple meters; reading key signatures; playing movable barre chords; extended ranges to eighth fret; perform p-i-m-a arpeggiated studies; strum intermediate-level syncopated rhythms; play flat picking and finger picking techniques; playing swing rhythms; and playing power chords.

- Credit: 1
 - Type: Academic
 - Grade: 9-12
 - Prerequisite: Approval of the instructor required
-

Independent Study Music – 082093

Independent Study Music is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a member of the music department. Students must complete a minimum of 132 hours of supervised engineering activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.)

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: 2.0 cumulative grade point average and approval of department chairperson, principal, supervisor of instruction, and Director of Curriculum and Instruction required.
-

Jazz Band – 087133

This course is designed for more advanced instrumentalists who are members of one of the band programs. Music of the 1920s through current jazz is discussed and performed. Performances are given each semester.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Audition and approval of the instructor required.
-

***Jazz Band (CM) – 089133**

This course is designed for more advanced instrumentalists who are members of one of the band programs. Music of the 1920s through current jazz is discussed and performed. Performances are given each semester.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Marching Band – 088113

This course is designed for students who have had some previous instrumental experiences and are ready to participate in the marching band. Performance materials reflect a variety of musical styles and are designed to build technical facility, while marching. Students participate in local and regional competitions.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Audition and approval of the instructor required.
-

Tenor/Bass Choir – 083103

This course is designed for the development of the male voice. It includes basic vocal techniques, music history, basic music theory, and music reading skills. Students work occasionally on an individual basis with the instructor. Many styles of music are studied and performed.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Approval of the instructor required.
-

Music Appreciation – 080203

This course is an introduction to music in chronological and geographical music history from prehistoric times to modern day. Students will examine music from a cultural-studies approach; examining the ways that western music reflects the time, place, and culture in which it was produced. Students will gain an understanding of the elements of music theory that are used during the compositional process. Additionally, students will study the lives and compositional techniques of famous composers representing the different eras of music. Students will be assessed on knowledge based concepts. This course will be principally textbook and lecture based.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Piano Class – 082103

This course is designed to teach students skills necessary to play the piano. Music reading skills, technical skill development, basic music theory, and historical perspectives are stressed. Performing opportunities are provided at least twice during the school year.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Approval of the instructor required.

Solo and Ensemble Class – 088503

The class is for instrumental students wishing to challenge themselves to higher levels of music performance. Music literature will be selected to advance the skill level of the students while advancing their knowledge of instrument repair and maintenance. Students will perform in a recital each semester. These recitals will include at least one solo and one ensemble performance by each student. Students will be expected to participate in the District IV Solo and Ensemble Festival and at the state level, if appropriate.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Approval of the instructor and concurrently enrolled in a performing ensemble required.

String Orchestra – 088133

This course is designed to assist individual players who have not had extensive previous orchestra experience. Fundamentals are stressed and ensemble experience is provided as instrumentation permits. Performance experience is provided.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Approval of the instructor required.

Theory 1 – 081123

This course is recommended for students who wish to improve their understanding of music fundamentals, tonal harmony, music history, and ear training. Part writing and composition are introduced in the second semester.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12

Treble Choir – 084103

This course is designed for the development of the female voice. It includes basic vocal techniques, music history, basic music theory, and music reading skills. Students work occasionally on an individual basis with the instructor. Many styles of music are studied and performed.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Approval of the instructor required.

Advanced Placement Music Theory – 089203

The goal of the Advanced Placement Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. Components of this course include the development of notation skills, knowledge of terminology, performance skills, aural skills, composition skills, and analytical skills. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Two years in a performing ensemble, Theory I, or equivalent competency, and approval of the instructor required.
-

Theatre

Independent Study Theatre Arts – 017093

Independent Study Theatre Arts is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a theatre arts instructor. Students must complete a minimum of 132 hours of supervised activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school. COURSE NOTE: This unit(s) may not count as a required course.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: 2.0 cumulative grade point average and approval of department chairperson, principal, supervisor of instruction, and Director of Curriculum and Instruction required.

Theatre Arts 1 – 017523

This course consists of a basic introduction to the performance, technical, and academic aspects of drama. This includes a survey of major plays and theatre history. It develops students' appreciation of the theatre through a variety of projects, performances, and activities.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12

Advanced Studies in Technical Theatre – 017503

In this course, students are instructed in the theoretical base and the practical application of the various areas of theatre technology. The goal is to develop a cadre of qualified stage crew members who can manage the auditorium, thus meeting both school and community needs.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Previous participation in the theatre through the after school activity and/or Theatre 1 and approval of the instructor required.
-

Theatre Arts 2 – 017623

This course introduces theatre criticism and builds on the performance skills acquired in Theatre Arts 1. Students are expected to work collaboratively and independently on projects. A more in-depth study of plays, character development, and technical areas is stressed.

- CREDIT: 1
- TYPE: Academic
- GRADE: 10-12
- PREREQUISITE: Theatre Arts 1

Theatre Arts 3 (CM) – 017723

This course introduces directing and continues to build on the skills developed in Theatre Arts 2. Advanced level work is done in acting, directing, and stagecraft with an emphasis on production. Students continue their study of classic plays and auditioning skills. At this level, students are expected to begin to develop a specialty area. Emphasis is placed on public performance as well as theatrical design, theory, and practice.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITE: Theatre Arts 2

Theatre Arts 4 (CM) – 017833

This course is designed for advanced experiences in theatre. Instruction is planned collaboratively with students to produce and direct a play for public performance. Emphasis is placed on quality performance and the collaborative design and production process of directing. Students continue to develop skills needed in their areas of interest.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 12
 - PREREQUISITE: Theatre Arts 3
-

***Performance Troupe – Advanced (CM) - 069703**

This Broadway-style class is designed to provide excellence in training for advanced performing arts students who have had previous school and/or community theatre experiences. The course will challenge students who desire to fine-tune their performing arts skills in a variety of singing, acting and dancing opportunities. Performers will advance their skill level through research, analysis and department of various performance techniques in a small ensemble experience. The studies will include at least two major performances over the course of the academic year.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-12
- PREREQUISITE: Audition required

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Visual Arts

Crafts 1 – 066203

Students will discover the importance of design elements and principles through a variety of media. The elements to be explored are color, line, texture, shape, form, and balance. Each element will be emphasized through crafts. Students will be introduced to each craft's history and aesthetic qualities.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

Independent Study Visual Arts – 062093

Independent Study Visual Arts is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a member of the Visual Arts Department. Students must complete a minimum of 132 hours of supervised activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.)

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: 2.0 cumulative grade point average and approval of department chairperson, principal, supervisor of instruction, and Director of Curriculum and Instruction required.
-

Visual Arts 1 – 061103

This course is designed to enable students to acquire and use the basic elements and principles of art. Through the use of the various media, students will work with line, color, texture, shape, and form. Students will also learn to create unity, movement, variety, proportion, balance, rhythm, and emphasis.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

Commercial Arts – 065203

During this course, students study the principles of design basic to advertising design, such as lettering, posters, layout, and printing processes, and applied design, such as ceramics, jewelry, metal, textiles, and wood.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Visual Arts 1
-

Crafts 2 – 066003

This course expands on the use of the elements and principles of design, which include color, line, texture, shape,

form, and balance, in creating projects in a variety of media. Each element will be emphasized through crafts. Students will continue their study of the history of crafts and the unique aesthetic value of each craft.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Crafts 1
-

Photography 1 – 069013

Students will explore photography as an artistic medium both in the initial composing of the visual image during shooting as well as in processing. Processing of the print may be in the form of traditional developing and/or digital manipulation. Students will learn to use a 35mm camera and/or digital camera to influence the final image by manipulating camera settings. In digital photography, students will gain an understanding of digital photography, current computer technology, and digital developing. They will gain an understanding of photographic principles such as the reaction of light on film and photographic paper and how various techniques can be creatively employed to achieve a variety of effects. In traditional photography, students will learn to process negatives and print black and white photographs. After learning and experimenting with processes, students will be given assignments to solve visual problems. Critiques will be held to discuss and share ways in which individuals have approached and solved these problems. Students will explore the medium through the effective use of the elements and principles of art.

During the course students will be expected to complete written assignments on the history of photography and formal art criticisms of well-known photographs. Students will need to have a basic background in computer operating systems for digital photography.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Visual Arts 1 and approval of the instructor required.
-

Photography 2 – 069023

This is an advanced course in digital and film single lens reflex photography. Students will explore the technical, artistic, and commercial aspects of photography. This course will allow students to expand their photographic aptitude and aesthetic responsiveness while learning techniques to advance their work and build a greater understanding of the more complex functions of the single reflex camera. Students will explore the history of the photographic medium, learning about its scientific and technological developments, important innovations in the field, and its significance within diverse cultural frameworks. Students will explore the significance of photography within the larger context of the art world, and learn about the critical and varied application it has to the modern working world. Class time will enable students to work on independent and cooperative explorations. Students will prepare a portfolio of work to exhibit and at the completion of the course. The course stresses the development of a cohesive body of work, with the final goal a series of project based photographs.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: Photography 1
-

Sculpture – 067203

During this course, students will explore the fundamentals of ceramics and sculpture using varied media. Emphasis will be placed upon the principles of art.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Crafts 1 or Art 1
-

Visual Arts 2 – 062203

This course expands upon the basic elements and principles to a more technical level. Students will also experience additional media, such as antique crayon, tissue paper, painting, watercolor, and sculpture.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Visual Arts 1
-

Advanced Placement Art History – 069553

The Advanced Placement Art History course makes it possible for highly motivated high school students to do college level work. Students will gain an understanding and enjoyment of architecture, sculpture, painting, and other art forms within historical and cultural contexts. Students will examine major forms of artistic expression from the past and the present from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to analyze what they see. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Completion of at least two high school visual arts and/or social studies courses and approval of the instructor required.
-

Advanced Placement Studio Art – Drawing Portfolio – 069253

The Advanced Placement Studio Art course makes it possible for highly motivated high school students to do college level work. Students submit a portfolio of work for evaluation at the end of the school year. The drawing portfolio represents a composite of various introductory college drawing courses. Students prepare their portfolios through organized AP instruction. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Completion of at least two high school visual arts courses, including Visual Arts 2, and approval of the instructor required.
-

Advanced Placement Studio Art – Three-Dimensional Design Portfolio – 069453

The Advanced Placement Studio Art course makes it possible for highly motivated high school students to do college level work. The portfolio is intended to address a broad interpretation of three-dimensional design issues. Students will demonstrate proficiency in three-dimensional design using a variety of sculptural issues in depth and space. These may include mass, volume, form, plane, light, and texture. Such elements and concepts can be articulated through additive, subtractive, and/or fabrication processes. Student portfolios may include traditional sculpture, architectural models, apparel, ceramics, fiber arts, or metal works. Students submit a portfolio of work for evaluation at the end of the school year. Students prepare their portfolios through AP instruction. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Completion of at least two high school visual arts courses, including Visual Arts 2, and approval of the instructor required.
-

Advanced Placement Studio Art – Two-Dimensional Design Portfolio – 069353

The Advanced Placement Studio Art course makes it possible for highly motivated high school students to do college level work. The portfolio is intended to address a very broad interpretation of two-dimensional design issues. Students will demonstrate proficiency in two-dimensional design using a variety of art forms. These may include, but are not limited to graphic design typography, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking. Students submit a portfolio of work for evaluation at the end of the school year. Students prepare their portfolios through organized AP instruction. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Completion of at least two high school visual arts courses, including Visual Arts 2, and approval of the instructor required.
-

Visual Arts 3 (CM) – 063333

This course is designed for students who plan to enter art-centered professions. Individualized instruction based on students' specific interests allows them to develop their visual arts skills. In addition to individual contracts, students work on required projects.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Visual Arts 2
-

Visual Arts 4 (CM) – 064433

This course provides additional art experiences for highly advanced students. During the course, students continue developing individualized art activities, projects, and portfolios.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 12
- PREREQUISITE: Visual Arts 3

JUNIOR RESERVE OFFICER TRAINING CORPS (ROTC)

The Junior Reserve Officer Training Corps Program (JROTC) is a program which helps today's high school students become tomorrow's citizens. The JROTC program ensures that the requirements of public law are met and provides guidance concerning effective operation of the unit in accordance with military standards. The JROTC also provides uniforms and curriculum materials. Required activities may be held after school and on weekends. Instructors are retired officers and noncommissioned officers who are members of the school faculty.

Enrollment in JROTC does not require students to complete any military obligation and is not a recruiting program. Enrollment in JROTC is not a guarantee of one's eligibility to enter the military after graduation. It is the intent of the program to provide students with the tools for success after high school, regardless of a student's career path. Benefits available for students wishing to pursue further military avenues are:

- *Qualified cadets who complete two years of the program may compete for JROTC College Scholarships.*
- *Qualified cadets are eligible for application to military academies.*
- *Cadets who complete the JROTC program are entitled to enlist at higher pay grades than normal enlisted.*

JROTC – CHS

Air Force Junior Reserve Officer Training Corps 1 – 179903

AFJROTC I is the beginning level course. It is a full-year course that earns one elective credit towards graduation. AFJROTC 1 is open to all students in all grade levels. During AFJROTC 1, students will study Aerospace science studies the heritage of flight beginning with the early legends of flight and continuing with the contributions of flight through World War I. The development of air power including the advances made in aviation and the role of air power through World War II; the importance of flight in the post-World War II, Korea, and Vietnam eras; and contemporary aviation, focusing on humanitarian airlifts, missions in support of national objectives, and Desert Shield/Desert Storm are studied. Leadership education studies customs and courtesies, including United States flag etiquette, the hand salute, respect for authority, and allegiance to our country. Students gain an appreciation of the need for discipline in military activities and instruction on the proper wear and care of the uniform. Study habits, time management, suicide prevention, smoking prevention, gangs and youth violence prevention, ethics, drug and alcohol abuse prevention, and first aid are covered. During the Health and Wellness portion of the course, cadets will work together to develop their physical fitness to prepare to take the United States Presidential Physical Fitness Exam. Before participating in the JROTC Physical Fitness program, all cadets are required to complete the AFJROTC Physical Fitness Program Cadet Participation Consent Form with Health Screening Questionnaire.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
-

Air Force Junior Reserve Officer Training Corps 2 – 179913

Aerospace science studies the atmospheric environment, human requirements of flight, and the basic principles of flight physiology, including contribution of aerospace medicine and human engineering. Protective equipment and simulators are examined, along with surviving and living in space. The principles of aircraft including aerodynamics forces and their relationship to atmospheric properties, and the examination of the structure of the aircraft, its central mechanisms, and its flight characteristics are studied. Principles of navigation introduces students to aircraft instruments, including both flight and navigational procedures. Leadership education focuses on listening skills, Non-verbal communication, speaking before a group, understanding individual and group behaviors, and basic leadership concepts. Students are placed in positions of responsibility that directly contribute to running the cadet corps. During the Health and Wellness portion of the course, cadets will work together to develop their physical fitness to prepare to take the United States Presidential Fitness Exam. Before participating in the JROTC Physical Fitness program, all cadets are required to complete the AFJROTC Physical Fitness Program Cadet Participation Consent Form with Health Screening Questionnaire.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Air Force Junior Reserve Officer Training Corps 1
-

Air Force Junior Reserve Officer Training Corps 3 – 179923

Aerospace science studies the space environment, space programs, space technology, and manned spacecraft. Areas of concentration include the solar system, international space exploration, and manned space flight from Mercury to the present. Leadership education focuses on personnel counseling and the fundamentals of financial, personal, and stress management. Students are given the experience of holding leadership positions in the cadet organization. Leadership Education focuses on Life Skills and Career Opportunities. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st century. Students will learn how to avoid the credit trap. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates. The Holland Interest Inventory and other self-assessments will help them to reveal their attitudes, aptitudes, and personal skills. During the Health and Wellness portion of the course, cadets will work together to develop their physical fitness to prepare to take the United States Presidential Physical Fitness Exam. Before participating in the JROTC Physical Fitness program, all cadets are required to complete the AFJROTC Physical Fitness Program Cadet Participation Consent Form with Health Screening Questionnaire.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Air Force Junior Reserve Officer Training Corps 2
-

Air Force Junior Reserve Officer Training Corps 4 – 179933

The fourth year curriculum, determined by the instructor, is based upon the needs of the students. Options include management of the cadet corps, portions of other Aerospace Science curriculum, portions of Leadership education, and the study of aerospace careers. Leadership education places emphasis on the fundamentals of management and contains many leadership topics that will benefit students as well as provide them with some of the necessary skills needed to put into practice what they have learned during their time in AFJROTC. All areas are designed to equip cadets with the qualities needed to serve in leadership positions within the corps.

Throughout the text are many ethical dilemmas, case studies, and role play activities built into the lessons. These activities are based on real life experiences and will allow cadets the opportunity to practice what they learn by getting involved in discussions and expressing their opinions. During the Health and Wellness portion of the course, cadets will work together to develop their physical fitness to prepare to take the United States Presidential Physical Fitness Exam. Before participating in the JROTC Physical Fitness program, all cadets are required to complete the AFJROTC Physical Fitness Program Cadet Participation Consent Form with Health Screening Questionnaire.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Air Force Junior Reserve Officer Training Corps 3
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JROTC – GMHS

Navy Junior Reserve Officer Training Corps 1 – 178903

Students are introduced to the meaning of citizenship, the elements of leadership, and the historically significant role of sea power in the United States. Course content includes the Navy's mission and organization, maritime geography, sea power, Naval history through 1815, navigation, basic seamanship, oceanography, health education, first aid, and drugs, alcohol, and tobacco abuse prevention.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-11

Navy Junior Reserve Officer Training Corps 2 – 178913

The course further develops the traits of citizenship and leadership, introduces the technical areas of Naval science, and explores the vital importance of the world oceans to the continued well-being of the United States. Course content includes leadership theory, career planning, Naval history 1815 through 1930, Naval ships and shipboard evolutions, weapons, navigation fundamentals, small boat seamanship, meteorology, weather, survival training, and orienteering.

- CREDIT: 1
- TYPE: Academic
- GRADE: 10-12
- PREREQUISITE: Navy Junior Reserve Officer Training Corps 1

Navy Junior Reserve Officer Training Corps 3 – 178923

Military leadership, teamwork, order and discipline, and fundamentals of United States democracy are studied. Course content includes leadership and discipline, military justice, astronomy, international law and the sea, Naval history 1930 through the nuclear age, intelligence and national security, challenges of research, electricity, and electronics.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: Navy Junior Reserve Officer Training Corps 2
-

Navy Junior Reserve Officer Training Corps 4 – 178933

The course is focused on practical leadership and includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Students become aware of the techniques used to create motivation, develop goals and activities for a work group, and the proper way to set a leadership example. Cadets will apply these principles with other cadets in the areas of military drill and inspections, athletic events, and in other school activities.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: Navy Junior Reserve Officer Training Corps 3
-

JROTC – LHS

Army Junior Reserve Officer Training Corps 1 – 179953

The course includes classroom instruction and laboratory instruction in the history, customs, traditions, and purposes of Army ROTC. Basic leadership skills, including leadership principles, values, and attributes are stressed. Students receive instruction on the proper wear and care of the uniform. Study habits, test taking techniques, reading, comprehension strategies, communication skills, conflict management, and writing skills are covered. Financial planning is introduced. Physical fitness, diet, nutrition, healthy lifestyles, substance abuse prevention, and basic first aid are covered. Also included in the course is an overview of geography, study of the United States Constitution, responsibilities of United States citizens, and the federal justice system.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-11
-

Army Junior Reserve Officer Training Corps 2 – 179963

The course includes classroom instruction and laboratory instruction expanding on the content and skills taught in Army JROTC 1. Equal opportunity and sexual harassment are introduced. Instructions on leadership styles and theories, as well as the basic principles of management are covered. Students complete self-assessments to determine their learning style and skill levels. Students learn to develop lesson plans for instruction. Community projects to assist in drug prevention efforts are held. Dietary guidelines, map reading skills, history of the United States Constitution and the role of political parties in the election process are taught.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Army Junior Reserve Officer Training Corps 1
-

Army Junior Reserve Officer Training Corps 3 – 179973

This course includes classroom and laboratory instruction to expand and refine the concepts and principles introduced and developed during the level 1 and 2 courses. Students will be involved with highly focused military protocol and content areas that include: citizenship, specific leadership strategies, presentation skills, conflict management, career planning, social responsibility, financial planning and money management, and citizenship in American history. Students will experience appropriate command and leadership roles as part of this course.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11-12
 - PREREQUISITE: Army Junior Reserve Officer Training Corps 2
-

Army Junior Reserve Officer Training Corps 4 – 179983

This course includes classroom and laboratory instruction to refine the command and leadership qualities for young cadets. Students will be placed in primary leadership roles with significant responsibility consistent with Army requirements. Content areas include: citizenship in action, service to the nation, leadership theory and application, qualities for success, financial planning and applications for fiscal responsibility, and teaching skills. This course will enable students to focus on high quality command and decision situations as leaders in a military environment.

- CREDIT: 1
- TYPE: Academic
- GRADE: 12 PREREQUISITE: Army Junior Reserve Officer Training Corps 3

MATHEMATICS

The mathematics program is designed to provide students with a level of mathematics competency sufficient for entry into either the world of work or higher education. Mathematical reasoning, problem solving, communication, connections, and the intentional use of different representations, tools, and technology are major components in all mathematics courses.

Students must meet the MSDE high school assessment graduation requirement and be College and Career Ready (CCR) by the end of grade 11. Math coursework may be determined by whether or not students have met these two requirements.

Beginning with students entering the 9th grade class of 2014—2015 school year, each student must enroll in a mathematics course in each year of high school that the student attends. After completing the required courses of Algebra 1 and Geometry, students may choose from a set of rigorous courses such as College Algebra, Algebra 2, Precalculus, Financial Math, Advanced Placement Statistics, and/or Advanced Placement Calculus. The selection of the appropriate mathematics course for each student should be based on individual needs and educational goals.

SMCPS Possible Math Course Pathways*

		Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
College & Career Pathway	Core 8	Core Algebra 1	Intermediate Algebra	Geometry	College Algebra	
College & Career Pathway	Core 8	Core Algebra 1	Geometry	College Algebra or Algebra 2	Algebra 2 or Precalculus	
Accelerated Pathway Option 1	Core Algebra 1	Geometry	Algebra 2	Precalculus	AP Calculus or AP Statistics	
Accelerated Pathway Option 2	Core Algebra 1	Geometry Algebra 2 (concurrently)	Precalculus	AP Calculus AB	AP Calculus BC	

Algebraic Foundations – 030133, 163313

Algebraic Foundations is designed to be the first part of a two part Algebra 1 experience. The fundamental purpose of the course is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, organized into units, deepen and extend understanding of linear relationships. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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 Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
-

Algebra 1 Seminar – 031173

Algebra 1 Seminar is an elective course for students concurrently enrolled in Core Algebra 1 or Algebra 1. The course provides students with additional instructional time to master content, engage in applications-based problem solving tasks, and develop behaviors as defined by the Standards for Mathematical Practice. The expectation is that students would use Seminar to improve study skills and build foundations for future mathematics.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITES: Concurrent enrollment in Core Algebra 1 and Algebra 1 only
-

Algebra 1 Comprehensive – 031163

The 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 Standards for Mathematical Practice are embedded into the curriculum and, together with the 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 Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended. COURSE NOTE: This course meets for a 90 minute period and students earn one mathematics credit and one elective credit.

- CREDIT: 2 (1 Mathematics credit and 1 elective credit)
 - TYPE: Academic
 - GRADE: 9
-

Core Algebra 1 – 031143

The 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 Standards for Mathematical Practice are embedded into the curriculum and, together with the 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 Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
-

Algebra 1 – 031123

Algebra 1 is designed to be the second part of a two part Algebra 1 experience. The fundamental purpose of the course is to formalize and extend the mathematics that students learned in Algebraic Foundations. The critical areas, organized into units, will include a review of systems of linear equations and inequalities, transformations of linear functions, and quadratic and exponential expressions, equations, and relationships as a means to assist students in distinguishing between linear and nonlinear relationships. Problem solving skill plays a major role in the course, and students will learn how to apply data collected from real world situations. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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 Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Algebraic Foundations
-

Intermediate Algebra – 031643

This course is intended as a bridge course for students who need additional algebra preparation to satisfy the prerequisites of Geometry CM. At the conclusion of this course, students will demonstrate the competencies listed for Algebra 1. They will have additional exposure to methods of graphing, statistical methods, and appropriate technologies for interpreting data and communicating results as well as performing arithmetic operations on polynomial expressions, solving equations, inequalities, and systems of equations and using properties of rational and irrational numbers to develop an understanding of quadratic functions. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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 use of the graphing calculator will be an integral part of the course. The Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9, 10
 - PREREQUISITE: Recommendation of Algebra 1 instructor required.
-

Intermediate Algebra (CM) – 031633

This course is intended as a bridge course for students who need additional algebra preparation to satisfy the prerequisites of Geometry CM. At the conclusion of this course, students will demonstrate the competencies listed for Algebra 1. They will have additional exposure to methods of graphing, statistical methods, and appropriate technologies for interpreting data and communicating results as well as performing arithmetic operations on polynomial expressions, solving equations, inequalities, and systems of equations and using properties of rational and irrational numbers to develop an understanding of quadratic functions. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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 use of the graphing calculator will be an integral part of the course. The Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11, 12
 - PREREQUISITE: Recommendation of Algebra 1 instructor required.
-

Core Geometry – 032223, 163413

This course extends the study of topics introduced in Algebra 1. At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply the properties of geometric figures by using inductive and deductive reasoning geometric definitions, postulates, and the proofs of theorems. This study includes parallel and perpendicular lines, angle relationships, and triangle congruence and similarity. Additional topics include the development of transformational, Euclidean, and coordinate geometry with extensive real world application. Course requirements are rigorous with an emphasis on mathematical reasoning and communication. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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. As an integral component of the course, technology facilitates investigation and deepens understanding. A Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Algebra 1
-

Geometry (CM) – 032233

This course extends the study of topics introduced in Algebra 1. At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply the properties of geometric figures by using inductive and deductive reasoning geometric definitions, postulates, and the proofs of theorems. This study includes parallel and perpendicular lines, angle relationships, and triangle congruencies and similarities. Additional topics include the development of transformational, Euclidean, and coordinate geometry with extensive real world application. Course requirements are rigorous with an emphasis on mathematical reasoning and communication. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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. As an integral component of the course, technology facilitates investigation and deepens understanding. A Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11, 12
 - PREREQUISITE: A minimum of a 2.0 average in Algebra 1 or equivalent competency required.
-

Geometry (Honors) – 032243

This course extends the study of topics introduced in Algebra 1. At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply the properties of geometric figures by using inductive and deductive reasoning geometric definitions, postulates, and the proofs of theorems. This study includes parallel and perpendicular lines, angle relationships, and triangle congruence and similarity. Additional topics include the development of transformational, Euclidean, and coordinate geometry with extensive real world application. Course requirements are rigorous with an emphasis on mathematical reasoning and communication. The Standards for Mathematical Practice are embedded into the curriculum and, together with the 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. As an integral component of the course, technology facilitates investigation and deepens understanding. A Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended. As an honors course, this class includes enhancements, more sophisticated applications, and a thorough treatment of right triangle trigonometry.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in Algebra 1 (Honors) or equivalent competency required.
-

College Algebra With Trigonometry (CM) – 031233

This course, collaboratively developed with the College of Southern Maryland and the St. Mary's County Public Schools, is designed to prepare students for entry into a college level, credit bearing mathematics course. In addition to college level learning strategies, topics include linear, quadratic, radical, rational, exponential, logarithmic and trigonometric functions, as well as applications of algebraic functions.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: 2 credits in mathematics including one credit in Algebra and one credit in Geometry.
-

Algebra 2 (CM) – 032133

At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply polynomial expressions and equations, graph linear and quadratic equations, linear inequalities, and linear systems. They will be introduced to the conic sections and polar coordinates. They will also factor algebraic expressions; calculate with rational, radical, absolute value, and exponential expressions; and will solve quadratic equations by a variety of methods. They will apply appropriate technologies and statistical methods, including matrices and determinants, for interpreting data and communicating results. The use of a graphing calculator will be an integral part of the course. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent capability is recommended. Students passing this course with an A or a B will receive a prerequisite waiver with the College of Southern Maryland (CSM), and be eligible for placement in MTH 1100 or higher at CSM.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11, 12
- PREREQUISITE: A minimum of a 2.0 average in Algebra 1 or equivalent competency required.

Algebra 2 (Honors) – 032143

At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply polynomial expressions and equations, graph linear and quadratic equations, linear inequalities, and linear systems. They will be introduced to the conic sections and polar coordinates. They will also factor algebraic expressions; calculate with rational, radical, absolute value, and exponential expressions; and will solve quadratic equations by a variety of methods. They will apply appropriate technologies and statistical methods, including matrices and determinants, for interpreting data and communicating results. The use of a graphing calculator will be an integral part of the course. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent capability is recommended. Students passing this course with an A or a B will receive a prerequisite waiver with the College of Southern Maryland (CSM), and be eligible for placement in MTH 1100 or higher at CSM. This honors course includes enhancements, more detailed applications, and greater acceleration. Exponential and logarithmic functions, sequences and series, coordinate geometry, matrix algebra, and the conic sections will be added and/or enriched. Students passing this course with an A or a B will receive a prerequisite waiver with the College of Southern Maryland (CSM), and be eligible for placement in MTH 1100 or higher at CSM.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 9-10
 - PREREQUISITE: A minimum of a 2.0 average in Geometry or equivalent competency required.
-

Accelerated Algebra 2 and Precalculus (Honors) – 032171 (Sem 1), 031472 (Sem 2)

This course is available for any student who has successfully completed Algebra 1 and Geometry with at least a B. Offered in a 90-minute block, students will cover all of Algebra 2 Honors during the first semester and PreCalculus Honors in the second semester, earning 2 credits. After this course, students will enroll in Calculus CM or AP Calculus AB.

- CREDIT: 2
 - TYPE: Honors
 - GRADE: 9-12 or w/special permission
 - PREREQUISITE: Successful completion of Algebra 1 and Geometry (H) with at least a B
-

Algebra 3 (CM) – 032213

This course is designed to improve higher order algebra skills. The skills learned in this course will prepare students for college placement examinations. The topics to be studied include logarithms, rational functions with emphasis on graphing and domain/range, conics, basic data analysis, sequences and series, trigonometric ratios, functions, identities, and graphs.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Algebra 2
-

Precalculus (CM) – 031433

At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply mathematical concepts from a wide variety of functional relationships including trigonometric, circular, composite, inverse, exponential, and logarithmic. They will apply the fundamental concepts of trigonometry and make connections with analytic geometry. They will also isolate roots of algebraic expressions, investigate parametric equations, and solve absolute value, logarithmic and exponential expressions. They will apply appropriate technologies and statistical methods for studying measures of central tendency, measures of dispersion, and correlation of data. The use of a graphics calculator will be an integral part of the course. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11, 12
 - PREREQUISITE: A minimum of a 2.0 average in Algebra 2 and Geometry CM required.
-

Precalculus (Honors) – 031443

This course is for students who have successfully completed Geometry and Algebra 2. The course outline is the same as 031433 Precalculus, but with enrichment topics, more sophisticated applications, a formal study of limits, and an introduction to differential calculus. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent or greater capability is recommended.

- CREDIT: 1
 - TYPE: Honors
 - GRADE: 10-12
 - PREREQUISITE: A minimum of a 2.0 average in Algebra 2 (Honors) or equivalent with approval of the instructor required.
-

Calculus (CM) – 031533

At the conclusion of the course, the students will demonstrate the ability to interpret, use, and apply the basic tenets of differential and integral calculus. They will have reviewed the fundamental concepts of trigonometry and the connections with analytic geometry. They will apply the derivatives and integrals of algebraic and trigonometric functions in complex problem-solving situations. They will have been introduced to the differentiation and integration of transcendental functions and some advanced methods of integration. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent or greater capability is recommended.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: A minimum of a C or better in PreCalculus (CM or H)
-

Advanced Placement Calculus AB – 031733

This course will review the properties of algebraic, trigonometric, exponential, and logarithmic functions. Other topics will include limits, continuity, differentiation, applications of derivatives, antiderivatives, techniques of integration, the definite integral, and applications of integration. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent or greater capability is recommended. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Precalculus
-

Advanced Placement Calculus BC – 031833

This course is designed to emphasize a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Technology will be used regularly to reinforce the relationships among the multiple representations of functions, to confirm written work, and to implement experimentation, and to assist in interpreting results. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent or greater capability is recommended. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Advanced Placement Calculus AB
-

Advanced Placement Statistics – 030933

At the conclusion of the course, the students will demonstrate an understanding of collecting, analyzing, and drawing conclusions for data. They will have proficiency in exploring data to observe patterns and variations. They will know how to plan a statistical study through deciding what and how to measure, and by anticipating patterns. They will produce models and simulations, and use confirming models for statistical inferences. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent or greater capability is recommended. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Algebra 1, Algebra 2, and Geometry or equivalent, and recommendation of previous instructor required.
-

Practical Mathematics – 030353, 160353

At the conclusion of the course, the students will demonstrate an understanding of mathematics as a meaningful tool in daily living. This course is intended to provide students with the skills necessary to be financially literate consumers and citizens. The content includes units on earning income, wages and payroll deductions, insurance, banking, credit and loans, housing, transportation, taxes, budgeting, investments, and retirement. In addition, the course will include units to help support those students pursuing Union exams while revisiting and refreshing arithmetic, geometry and algebra skills.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
 - PREREQUISITE: 2 credits in mathematics including one credit in Geometry or equivalent required.
-

Data Analysis Plus (CM) – 030373

Data Analysis is a 4th year math course that builds on concepts from Algebra 1, Geometry and Algebra 2. Students learn to become critical consumers of real-world quantitative data, knowledgeable problem solvers who use logical reasoning, and mathematical thinkers who can use their quantitative skills to solve authentic problems. This course prepares students to take entry level Statistics in college. Students expand their understanding through further mathematical experiences including the analysis of information using statistical methods and probability, modeling change and mathematical relationships, and spatial and geometric modeling for mathematical reasoning. This course will introduce students to four major conceptual themes: observing and exploring data; planning a statistically valid investigation; anticipating patterns and using probability and simulations for predicting outcomes; and confirming or rejecting models through statistical inference. The Texas Instruments TI-84 Silver Edition or a calculator/app with equivalent capability is recommended.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Passing grades in Algebra 1, Geometry and Algebra 2.
-

Financial Mathematics (CM) – 032563

This yearlong course will present students with practical, application-based finance problems and utilize advanced quantitative analysis techniques to solve them. As examples, students will learn how to file their taxes, how to prepare monthly and yearly budgets, compare and contrast cell phone contracts (analysis of alternatives), identify and predict trends (forecasting methods), understand loans and retirement savings (the effects of compound interest), risk vs. reward (business plan and investment portfolio formulation), evaluate refinancing options (break even and return on investment analyses), learn how to shop around for the best credit cards, the time value of money, and more. Students will become equipped with knowledge to make better financial decisions in their personal and professional lives.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11 -12
 - PREREQUISITE: Algebra 2 or approval of the instructor required.
-

Independent Study Mathematics – 032093

Independent Study Mathematics is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a member of the mathematics department. Students must complete a minimum of 132 hours of supervised activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.) COURSE NOTE: This unit(s) may not count as a required course.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: 2.0 cumulative grade point average and approval of the department chairperson, principal, supervisor of instruction, and Director of Curriculum and Instruction.

PHYSICAL EDUCATION / HEALTH

Physical education programs provide students with the opportunity to learn skills necessary to perform a variety of physical activities, develop and maintain physical fitness through participation in regular physical activities, know the implications of and benefits from involvement in physical activities, and value physical activity and its contribution to a healthful lifestyle. Students must earn a minimum of 0.5 credit in physical education as a requirement for graduation.

Health education programs provide students with an understanding of health promotion and disease prevention concepts and the opportunity to identify and practice health-enhancing behaviors. Students will demonstrate the ability to use goal-setting and decision-making skills to address issues related to personal, family, and community health. Students must earn a minimum of 0.5 credit in health education as a requirement for graduation.

Health Education – 070301, 070302

This course integrates physical education and health education concepts with an emphasis being placed on the decision-making process. Physical activities promote health-related fitness and personal skills development. This is the only course that satisfies the health education requirement for graduation (0.5 credit total). It is recommended that students complete this course in grade 9. COURSE NOTE: If you take this course, you must also take Physical Education.

- CREDIT: 0.5 per semester
- TYPE: Academic
- GRADE: 9-10

Physical Education – 070101, 070102

This course integrates physical education and health education concepts with an emphasis being placed on the decision-making process. Physical activities promote health-related fitness and personal skills development. This is the only course that satisfies the physical education requirement for graduation (0.5 credit total). It is recommended that students complete this course in grade 9. COURSE NOTE: If you take this course, you must also take Health Education.

- CREDIT: 0.5 per semester
 - TYPE: Academic
 - GRADE: 9-10
-

Adapted Physical Education – 071303

This course is designed to meet the unique physical education needs of individuals with disabilities through an individualized program of developmental activities, exercises, games, rhythms, and sports. An emphasis is placed on developing personal wellness and physical conditioning.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Approval of the Individualized Education Program Team required.
-

Personal Health Management – 071403

Students will focus on their ability to increase skills in the areas of personal needs, appropriate health and safety practices, managing routines, and participation in transition planning with adult service providers. Emphasis is on increasing personal independence in the home, school, and community. This course is only for students who will receive a Maryland High School Certificate.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Approval of the Individualized Education Program Team required.
-

Personal Fitness – 072001, 072002

This course is designed to assist students in developing all core components of fitness to improve overall personal health and wellness. This course will introduce a variety of current workout and nutrition trends to assist students in the development of Cardiovascular Endurance, Strength, and Flexibility, and overall body composition. Students will recognize and monitor physical improvement through a variety of assessment measures. This course is designed for students wishing to develop and maintain an improved level of personal fitness and overall health and well-being.

- CREDIT: 0.5 per semester
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Approval of the instructor required.
-

Athletic Coaching and Officiating – 071513

This course is designed to provide students with the opportunity to develop the knowledge and skills associated with effective coaching and officiating. Students will study coaching theory, safety, physical conditioning, skill progression, and dealing with equipment and facility issues. Game rules and officiating techniques will be applied to game-like situations.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Approval of the instructor required.
-

Athletic Conditioning 1 – 071203

This course is designed to help students improve their muscular strength, flexibility, cardiovascular endurance, muscular endurance, speed, and agility. Students will identify personal goals relative to the sport(s) they are interested in. Following an individualized assessment, students will adhere to a physical conditioning plan designed to meet their personal needs.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Approval of the coach and physical education department chairperson required.
-

Personal Wellness – 071523

This course offers students a structured program that addresses personal weight and wellness concerns. Students will develop a personal weight management plan that addresses diet and physical exercise. Students will follow a personalized exercise plan and diet developed to achieve their personal goals. Body weight and measurements will be monitored and recorded on a weekly basis in a manner that respects individual privacy.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Approval of the instructor required.
-

Special Studies in Physical Education – 072193

This course is designed to meet the special interests of students. Jogging/running, weight training, lifetime sports, the study of weight control as related to nutrition and fitness, and the physiology of a healthy body are possible focus areas for special study.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Approval of the instructor required.
-

Sports Psychology - 070603

This course offers students a structured program that addresses principles and concepts critical to understanding the psychological and behavioral aspects of sports and exercise. An emphasis will be given to the study of motivation, commitment, goal setting, relaxation, visualization, anxiety, confidence, leadership, coping and recovery from injury, roles on a team, collegiate athletics, and professional sports in America.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Successful completion of PE 9/10
-

Team Sports – 070201, 070202

This course is designed to move students toward higher levels of individual physical performance. Some

advanced techniques and strategies are included with emphasis on participation. This course focuses on individual, lifetime, and selected team sports.

- CREDIT: 0.5 per semester
 - TYPE: Academic
 - GRADE: 10-12
-

Team Sports 2 - 070213

Team Sports 2 is a yearlong course that can be chosen as an elective towards graduation requirements after Team Sports 1 has been taken. The material covered in this class will advance upon the sports and units taught in Team Sports 1. Team Sports 2 will also include a more competitive approach to sports play and rule adherence, all while encouraging sportsmanship and a broader knowledge of the sport rules and components for competing in the sports outside of the high school setting. Upon the completion of Team Sports 2, students will have attained the knowledge and skills to participate in advance competitions like College Intramurals or be better prepared to try out for high school sports teams.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Successful completion of PE 9/10
-

Wellness Walking – 071601, 071602

This course is designed to meet the needs of students who are interested in becoming fit and healthy but are not interested in participating in traditional sports or athletic programs. Students will walk their way to personal fitness by designing and implementing a personalized walking routine as well as focusing on healthy nutritional food choices to encourage weight management, cardiovascular health, and disease prevention. On-campus trails, the running track, and exercise rooms will be used throughout the course. Students will utilize technology such as heart rate monitors and pedometers and record their progress on a regular basis.

- CREDIT: 0.5 per semester
 - TYPE: Academic
 - GRADE: 10-12
 - PREREQUISITE: Successful completion of the Physical Education requirement for graduation.
-

YogaFit – 071801, 071802

This course fuses the best of ancient yoga practice with the core stabilizing and regenerative dynamics of Pilates and the creative flow of a variety of energizing dance moves. The course focuses on controlled physical movements that stretch and strengthen major muscle groups. Correct breathing technique is emphasized throughout workouts to help increase lung capacity, and enhance stamina and endurance. The breath activates the abdominal and pelvic floor muscles helping to protect and strengthen the lower back, tone the abdomen, and assist with core stability.

- CREDIT: 0.5 per semester
- TYPE: Academic
- GRADE: 10-12
- PREREQUISITE: Successful completion of the Physical Education requirement for graduation.

Athletic Conditioning 2 – 071701, 071702

This advanced course builds on the fundamentals learned in Athletic Conditioning 1 and focuses on performance at a higher level. The course is designed to help students further improve their muscular strength, flexibility, cardiovascular endurance, muscular endurance, speed, and agility. Students will identify personal goals relative to the sport(s) they are interested in. Following an individualized physical fitness assessment, students will adhere to a physical conditioning plan designed to meet their personal goals. Students will record and evaluate their progress on a continual basis and modify their goals and program accordingly. Students will continue to demonstrate correct form, technique, and safety procedures for a variety of conditioning exercises, and participate in more challenging exercises such as plyometrics.

- CREDIT: 0.5 per semester
- TYPE: Academic
- GRADE: 11-12
- PREREQUISITE: Successful completion of Athletic Conditioning 1

Family Life and Human Development – 027303

This course is designed to assist students in understanding the basis of human sexual behavior and family relationships, responsibilities of marriage and parenthood, and the values underlying these concepts in American society. The work in this course includes the use of approved audiovisual materials. COURSE NOTE: This course does not count toward the four year social studies credit requirement for graduation. CREDIT: 1 TYPE: Academic GRADE: 11-12 PREREQUISITE: Parental approval required. FAMILY LIFE AND HUMAN DEVELOPMENT - 027301, 027302 This course is designed to assist students in understanding the basis of human sexual behavior and family relationships, responsibilities of marriage and parenthood, and the values underlying these concepts in American society. The work in this course includes the use of approved audio visual materials. COURSE NOTE: *This is a semester course only to be taken in special circumstances as approved by the Director of Curriculum and Instruction and/or their designee. * This course does not count toward the three year social studies credit or the PE/Health requirement for graduation.

- CREDIT: 0.5
- TYPE: Academic
- GRADE: 11-12
- PREREQUISITE: Both Director of Curriculum and Instruction and parental approval required.

SCIENCE

The high school science program is designed to develop science literacy for all students and to provide a firm foundation for students who wish to pursue science and/or engineering at higher levels, or as careers. The science curriculum integrates the practices of science and engineering with important ideas from each of the major disciplines of science. The crosscutting concepts, or big ideas of science, provide an organizational framework so that students develop deep and lasting understanding of science. Laboratory experiences are integral within all SMCPs science courses. Disciplinary literacy is emphasized throughout the program, and environmental literacy is integrated into each of the core science courses. For high school graduation, each student must earn a minimum of three credits in science courses that are aligned to the Maryland State Science Standards. In selecting courses to meet the three-credit requirement, students should seek a broad array of learning experiences that include experiences in each of the major disciplines of science (Earth, Life, and Physical science). Recommended course sequences for students entering high school beginning in 2019-20 are shown in the following diagram.

Recommended Science Course Sequences				
	Option 1	Option 2	Option 3	
Grade 8	Grade 8 Science	Grade 8 Science	Grade 8 Science	
Grade 9	Honors Biology	Honors Biology	Earth/Space Science	
Grade 10	Honors Chemistry or Honors Physics	AP Physics 1	Biology	
Grade 11	Honors Physics or Honors Chemistry	AP Sciences	Chemistry, Physics, or Environmental Science	
Grade 12	AP Sciences or Science Electives (Optional)	AP Sciences or Science Electives (Optional)	AP Science or Science Electives (Optional)	

Additionally, students must fulfill state requirements for assessment in science at the high school level. The Maryland Integrated Science Assessment (MISA) will be administered at the conclusion of 10th grade for students in the Honors track. Students in the Academic Track will take the MISA at the conclusion of 11th grade. Please note that a variety of course levels, including Advanced Placement, are offered within each science discipline. Students and their families are encouraged to review the course descriptions carefully when selecting courses. All students are encouraged to follow a rigorous course of study in science throughout all four years of high school.

Earth/Space Science – 041123, 164113

This course is aligned to the Maryland State Science Standards and has 3 primary areas of study: Earth's Place in the Universe; Earth's Systems; and Human Activity on Earth. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). Students will learn skills and content that will help prepare them for future coursework in secondary science.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9
- PREREQUISITE: Recommendation from 8th grade science teacher for course placement.

Biology 1 (Honors) – 042243

This course is aligned to the Maryland State Science Standards and has 4 primary areas of study: From Molecules to Organisms (Structures and Processes), Ecosystems: (Interactions, Energy, and Dynamics), Heredity (Inheritance and Variation of Traits), and Biological Evolution (Unity and Diversity). Disciplinary core ideas for Earth/Space Science will be integrated into this course. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary science, especially AP level coursework.

- CREDIT: 1
- TYPE: Honors
- GRADE: 9-10
- PREREQUISITE: Concurrent enrollment in Geometry or Algebra 2 and/or recommendation from 8th grade science teacher for course placement.

Independent Study Science – 042093

Independent Study Science is designed for advanced students who wish to pursue individualized course work during or beyond the school day. Students must complete a minimum of 132 hours of supervised activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. All projects must include lab- based experimental design and be presented or published in a public venue such as Science Fair, on a public website, or at a seminar. Approval must be obtained through the Independent Study approval process. All work is supervised by a member of the science department. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.)

COURSE NOTE: This unit may not count as a required course.

- CREDIT: 1
- TYPE: Academic
- GRADE: 11-12
- PREREQUISITE: Biology, 2.0 cumulative grade point average, and the approval of the department chairperson, principal, supervisor of science, and Director of Curriculum and Instruction required.

Biology 1 – 042223, 164213

This course is aligned to the Maryland State Science Standards and has 4 primary areas of study: From Molecules to Organisms (Structures and Processes), Ecosystems: (Interactions, Energy, and Dynamics), Heredity (Inheritance and Variation of Traits), and Biological Evolution (Unity and Diversity). Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous science coursework. This course may not be scheduled in all high schools.

- CREDIT: 1
- TYPE: Academic
- GRADE: 10-12
- PREREQUISITE: Earth/Space Science and/or recommendation from 9th grade science instructor for course placement.

Chemistry 1 – 043323

This course is aligned to the Maryland State Science Standards and has 3 primary areas of study: Matter and its Interactions, Motion and Stability (Forces and Interactions), and Energy. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous science coursework. This course may not be scheduled in all high schools.

- CREDIT: 1
- TYPE: Academic
- GRADE: 11
- PREREQUISITE: Earth/Space Science, Biology 1, and/or concurrent enrollment in Geometry or Algebra 2.

Chemistry 1 (CM) – 043333

This course is aligned to the Maryland State Science Standards and has 3 primary areas of study: Matter and its Interactions, Motion and Stability (Forces and Interactions), and Energy. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). Students will learn skills and content that will help prepare them for future coursework in secondary science.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11
 - PREREQUISITE: Earth/Space Science, Biology 1, and/or concurrent enrollment in Geometry or Algebra 2.
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Chemistry 1 (Honors) – 043343

This course is aligned to the Maryland State Science Standards and has 3 primary areas of study: Matter and its Interactions, Motion and Stability (Forces and Interactions), and Energy. Disciplinary core ideas for Earth/Space Science will be integrated into this course. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary science, especially AP level coursework.

- CREDIT: 1
- TYPE: Honors
- GRADE: 10-11
- PREREQUISITE: Concurrent enrollment in Geometry or recommendation from Biology teacher.

Environmental Science – 046423

This course is aligned to the Maryland State Science Standards and has four primary areas of study: Matter and its Interactions, Motion and Stability, Energy, and Waves. Each area of study will be presented from the aspect of how they apply to Earth's environment. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA).

- CREDIT: 1
- TYPE: Academic
- GRADE: 11-12
- PREREQUISITE: Biology 1

Environmental Science (CM) – 046433

This course is aligned to the Maryland State Science Standards and has four primary areas of study: Matter and its Interactions, Motion and Stability, Energy, and Waves. Each area of study will be presented from the aspect of how they apply to Earth's environment. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA).

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 11-12
 - PREREQUISITE: Biology 1 (CM) or teacher recommendation.
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Astronomy (CM) – 043061, 043062

In this semester-long course, students learn the structure of the solar system and universe, as well as the natural laws that govern both. Topics include solar system formation, planetary and celestial mechanics, and stellar evolution. This laboratory-oriented course includes high-level expectations in scientific observation, investigation, experimental design, interpretation of data, problem-solving, critical thinking, analysis of scientific literature, and use of various technologies.

- CREDIT: 0.5 per semester
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITE: Minimum of two science credits.

Biology 2 (CM) – 047333

This course extends the concepts of Biology I in the areas of Human Anatomy and Physiology, Microbiology, and the applied science of Forensics. Human Anatomy and Physiology will be taught during the first and second marking periods. Topics of study will include the Skeletal, Muscular, Integumentary, Circulatory, Respiratory, Digestive, Excretory, and Nervous, Endocrine, and Reproductive systems. Forensics will be taught during the third marking period and include various types of collected evidence and lab analysis. Microbiology will be taught in the fourth marking period and include topics like Virology, Bacteriology, Infectious Diseases, and Human Immunity. This laboratory-oriented course emphasizes scientific observation, investigation, experimental design, interpretation of data, problem-solving, critical thinking, analysis of scientific literature, and use of technology. Students who object to dissection will be given alternative activities.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITES: Credit in Biology 1 and one other science class

Advanced Placement Biology – 047353

This course is designed to develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The primary emphasis is on developing a deeper understanding of biological concepts and their application to real-world situations. The following ideas are essential to the understanding of AP Biology: a grasp of science as a process of inquiry; recognition of unifying themes that integrate the major topics of biology; and the application of biological knowledge and critical thinking to environmental and social concerns. Topics of study within this course include: molecules and cells, heredity and evolution, and organisms and populations. Students who object to dissection will be given alternative activities. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 2
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: A minimum of 3.0 average in Biology and Chemistry, and/or approval from current science instructor.

Chemistry 2 (CM) – 043353

This course extends the concepts of Chemistry 1, incorporating more depth in the areas of chemistry such as

organic chemistry, nuclear chemistry, electrochemistry, chemical kinetics, and thermodynamics. This laboratory-oriented course emphasizes scientific observation, investigation, experimental design, interpretation of data, problem-solving, critical thinking, analysis of scientific literature, and use of technology. An extended project involving experimental design is required.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITE: Chemistry I.

Advanced Placement Chemistry – 043363

This course will allow students to attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. It will contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing with clarity and logic. Emphasis will be placed on chemical calculations and the mathematical formulation of principles and the kind of laboratory work done. Topics that are included within the course are: structure of matter, states of matter, reactions, descriptive chemistry, and laboratory. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 2
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: A minimum of 3.0 average in Honors Chemistry, and/or approval from current science instructor.

Advanced Placement Environmental Science – 043093

This course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Themes include science as a process, energy conversions that underlie all ecological processes, the interconnected systems of Earth, how humans alter natural systems, the cultural and social contexts of environmental problems, and the importance of developing practices that will achieve sustainable systems. It will contribute to the development of the students' abilities to think clearly and to express their ideas orally and in writing with clarity and logic. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 2
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: A minimum of 3.0 average in Biology and either Chemistry or Earth/Space Science, and/or approval from current science instructor.
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Geology (CM) – 043071, 043072

In this semester-long course, students learn the dynamics of the Earth's surface and subsurface and the forces involved in shaping and reshaping them. Topics include geochemistry, rocks, plate tectonics, weathering, erosion, and geological time. This laboratory oriented course includes high-level expectations in scientific observation, investigation, experimental design, interpretation of data, problem-solving, critical thinking, analysis of scientific literature, and use of various technologies.

- CREDIT: 0.5 per semester
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITE: Minimum of two science credits.

Academy of Health Professions 2: Human Anatomy and Physiology (CM) – 043083

This course provides students with an introduction to human anatomy and physiology. Topics include the structure and function of human systems, basic chemistry, cell structure and function, tissues, and the skeletal, muscular, nervous, cardiovascular, respiratory, urinary, digestive, endocrine, and reproductive systems. This is a College of Southern Maryland course offered at the Dr. James A. Forrest Career and Technology Center. Students have the option of taking a CSM departmental exam for which a fee is required, to earn 4 college credits. COURSE NOTE: This course fulfills a core high school science credit. COURSE NOTE: Students are required to have a background screening and drug test in order to do clinical hours at any MedStar facility (as of November 2016)

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITE: Academy of Health Professions 1, with a C or better in order to participate in patient care during Human Anatomy and Physiology

Introduction to Bioethics (CM) – 042263 (LHS ONLY)

This elective course is designed to engage students interested in careers in medicine or the biological sciences, as well as other students who are interested in learning about and discussing topical issues in the biological science fields. This course will involve critical thinking, close reading, and research-based writing investigating fundamental topics in these fields. This course will begin by providing a basic introduction to ethical theory, and students will be introduced to the study of practical ethics. Throughout the year, students will examine the topics of clinical ethics, research ethics, and environmental ethics in an in-depth manner. Students will investigate fundamental topics encompassed in clinical ethics and the practice of medicine and be able to apply ethical theories in their understanding of each issue.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11-12
- PREREQUISITE: A minimum of 3.0 average in Biology.

Physics 1 (CM) – 044330

This course is aligned to the Maryland State Science Standards and has 4 primary areas of study: Matter and its Interactions, Motion and Stability (Forces and Interactions), Energy, and Waves and Their Applications in Technologies for Information Transfer. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). Students will learn skills and content that will help prepare them for future coursework in secondary science.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11
- PREREQUISITE: Earth/Space Science, Biology 1, and/or concurrent enrollment in Geometry or Algebra 2.

Physics (Honors) – 044433

This course is aligned to the Maryland State Science Standards and has 4 primary areas of study: Matter and its Interactions, Motion and Stability (Forces and Interactions), Energy, and Waves and Their Applications in Technologies for Information Transfer. Disciplinary core ideas for Earth/Space Science will be integrated into this course. Students will utilize various science and engineering practices and crosscutting concepts to help them master the disciplinary core ideas and better understand real world phenomena. Content from this course will appear on the Maryland Integrated Science Assessment (MISA). This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary science, especially AP level coursework.

- CREDIT: 1
- TYPE: Honors
- GRADE: 10-11
- PREREQUISITE: Honors Biology and Geometry

Advanced Placement Physics 1 – 045453

AP Physics 1 is the equivalent of a first-semester college course in algebra-based physics, but it is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The full year also allows time for inclusion of physics content specified by state standards. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electric circuits. This course is the replacement course for AP Physics B.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 10-12
- PREREQUISITE: A minimum of 3.0 average in Geometry, concurrent enrollment in or completion of Algebra 2, and required approval from current science instructor.

Advanced Placement Physics 2 – 045553

AP Physics 2 is the equivalent of a second-semester college course in algebra-based physics, but it is designed to be taught over a full academic year to enable AP students to develop deep understanding of the content and to focus on applying their knowledge through inquiry labs. The full year also allows time for inclusion of physics content specified by your state standards. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. This course is the second part of a replacement course for AP Physics B.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: AP Physics 1

Advanced Placement Physics C – 044463

This course integrates the concepts of calculus as appropriate in formulating physical principles and in applying them to physical problems. The sequence is more intensive and analytic than AP Physics 2. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. During the first semester, students will use calculus to analyze physics concepts related to Newtonian mechanics. The use of calculus in problem solving and in derivations increases as the course progresses. During the second semester, students will use calculus to analyze physics concepts related to electricity and magnetism. Calculus is used in formulating principles and in solving problems. Technology will be used regularly to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. The Texas Instruments TI-84 Silver Edition or a calculator with equivalent or greater capability is recommended. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 2
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: A 3.0 average in Precalculus, completion of Physics 1 or 3.0 in AP Chemistry, and/or approval from current science instructor.

SOCIAL STUDIES

The social studies program is designed to provide students with a description of the development and organization of human society through the acquisition of knowledge and the use of critical thinking skills. Instruction embraces the concepts of human freedom, human dignity, citizenship, and interdependence; discusses them openly; and relates them to history and contemporary affairs. Through this process, students will become more informed, will learn to more fully use analytical skills, and will become more empathetic toward other human beings.

Three units of credit in social studies are required for graduation. The prescribed social studies course sequence includes United States History, American Government, and Modern World History.

United States History – 023323

This course presents a comprehensive study of United States History from 1877 to the present. Students examine major themes and concepts, with a strong emphasis on disciplinary-literacy and interpretation of primary and secondary source documents, and on the application of knowledge through argument and informative writing using multiple sources. Students will be exposed to many seminal documents in American History, and will be expected to closely read and analyze complex text. Students will learn skills and content that will help prepare them for future coursework in secondary social studies. Furthermore, this course embeds student service-learning into the course. This course fulfills the United States History graduation requirement.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9

United States History (Honors) – 023353

This course presents a comprehensive study of United States History from 1877 to the present. Students will learn major concepts and themes in United States History, with a strong emphasis on the reading and interpretation of primary and secondary source documents, and on the application of knowledge through argument and informative writing using multiple sources. Students will be exposed to many seminal documents in American History, and will be expected to closely read and analyze complex text. Honors United States History is an enriched course with more challenging expectations than United States History. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary social studies, especially AP level coursework. Furthermore, this course embeds student service-learning into the course. This course fulfills the United States History graduation requirement.

- CREDIT: 1
- TYPE: Honors
- GRADE: 9
- PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Social Studies and English courses, and/or recommendation of the Social Studies teacher.

Advanced Placement Human Geography – 029253

Advanced Placement Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students will make use of

spatial concepts and landscape analysis to examine human social organization and its environmental consequences. While studying methods and tools geographers use, this course allows students to learn about world population issues, border disputes, and international conflicts. Students examine economic theories, models, religions and languages. Students will study urban development, industrialization, and city planning.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 9-12
- PREREQUISITE: None

Independent Study Social Studies – 022093

Independent Study Social Studies is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a member of the social studies department. Students must complete a minimum of 132 hours of supervised activities for each 1 unit of credit and submit a minimum of two projects as determined by the student and the instructor. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.) COURSE NOTE: This unit of credit may not count as required course.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Approval of the Social Studies instructor and school administrator/designee required.

Independent Study Student Service Learning – 555593

Independent Study Student Service-Learning is designed to give students the opportunity to assist others in their community. Students must complete a minimum of 150 hours of supervised engineering activities for each 1 unit of credit. Students and members of the school staff will determine acceptable Student Service-Learning activities and will maintain a record of the service. COURSE NOTE: This unit may be used to fulfill the Student Service-Learning requirement.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: Approval of the Social Studies instructor and school administrator/designee required.
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Introduction to Global and International Studies (Honors) – 026243

This course will serve as a supplement to the AP World History class offered to first year GIS students. Building on the scope of the AP World History course, Introduction to Global and International Studies offers increased opportunities to investigate significant historical processes, alternative strategies to understanding content, and additional time to work with the instructor. Beyond providing a greater opportunity to master the content, this course will introduce instructional strategies that are data-proven to better prepare students for the rigors of AP level classwork. These strategies are particularly geared toward improving exam scores through practice exams and anchor papers as well as fostering college- level writing skills.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9

Multicultural Heritage – 022523

This course is designed to assist students in understanding and valuing the diverse cultures present in the United States. Students will demonstrate attainment of a positive self-concept and empathy toward others in order to improve interaction among individuals and groups in our democratic society. Students will demonstrate the application of knowledge and skills through historical perspectives, case studies, role-playing, conflict resolution, problem-solving techniques, and simulation activities. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12

School Student Service-Learning – 555693

The School Student Service-Learning course is designed to give students the opportunity to assist others within the community. This course will focus on reasons to be involved in student service as well as present ideas for procuring service positions. Student preparation, service, and reflection will be provided during the class period and will be extended beyond the school day. Students and members of the school staff will determine acceptable school student service activities and will maintain a record of the service. Students must complete a minimum of 75 hours of student service activities in this course. COURSE NOTE: This unit may be used to fulfill the Student Service-Learning requirement.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Approval of the Social Studies instructor and school administrator/designee required.

Global Diplomacy 10 (Honors) – 022633

Global Diplomacy will include the study of the history, diversity, and commonalities of the peoples of the world and will develop an awareness of the reality of human interdependence and the need for global cooperation. Students will examine historical and current attempts and international diplomatic efforts to solve problems. Students will demonstrate attainment of understandings and attitudes permeating the globe through the use of case studies, role playing, conflict resolution, problem-solving techniques, and simulation activities. The following topics are included in the course of study: world geography and its impact on global relationships, current global issues and their foundations, previous and current attempts at global diplomacy, regional studies with a current emphasis on multicultural perspectives, background and structure of the United Nations, and Model United Nations simulations. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary social studies. Final opportunities are provided for students to complete their student service-learning requirements. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Honors
- GRADE: 10
- PREREQUISITE: Successful in previous Social Studies course(s) and/or recommendation of the Social Studies teacher.

American Government – 021123

This course presents a comprehensive study of national, state, and local government. Additional topics of study include law, economics, financial literacy, and current issues. Students will learn and apply content and skills through reading complex primary and secondary source text for comprehension and interpretation, written and oral expression, study skills, problem solving, and critical thinking skills. Students will be expected to closely read and analyze many seminal documents in American history, important Supreme Court cases, laws and statutes, graphs and charts, as well as news articles and political cartoons. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies coursework. Students will learn skills and content that will help prepare them for future coursework in secondary social studies Furthermore, this course embeds student service-learning into the course and fulfills the Government graduation requirement and prepares students for the High School Assessment in Government. This course may not be scheduled in all high schools.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10
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Advanced Placement United States Government and Politics – 024533

The course is designed to give students a critical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political scene. The following topics are included in this course of study: constitutional underpinnings of American government, political beliefs and behaviors, political parties and interest groups, institutions and policy processes of national government, and civil rights and civil liberties. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit. This course may be substituted for Government (Certificate of Merit Course) and will prepare students for the High School Assessment in Government. This course also includes student service-learning.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 10
- PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) and /or recommendation of the Social Studies teacher.

Geography – 029203

This course stresses the study of the physical features of the world through the use of geographic skills. The study continues with the development of relationships between the earth's physical features and the cultures of various populations around the world. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 10-12
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Global Diplomacy 11 (CM) – 023633

Global Diplomacy will include the study of the history, diversity, and commonalities of the peoples of the world and will develop an awareness of the reality of human interdependence and the need for global cooperation. Students will examine historical and current attempts and international diplomatic efforts to solve problems. Students will demonstrate attainment of understandings and attitudes permeating the globe through the use of case studies, role playing, conflict resolution, problem-solving techniques, and simulation activities. The following topics are included in the course of study: world geography and its impact on global relationships, current global issues and their foundations, previous and current attempts at global diplomacy, regional studies with a current emphasis on multicultural perspectives, background and structure of the United Nations, and Model United Nations simulations. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Students will learn skills and content that will help prepare them for future coursework in secondary social studies. Final opportunities are provided for students to complete their student service-learning requirements. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11
- PREREQUISITE: Successful in previous Social Studies course(s) and/or recommendation of the Social Studies teacher.

Advanced Placement Economics – 024303

Advanced Placement Economics includes both Macro and Micro Economics. Macro Economics is designed to give students an understanding of the principles of economics that apply to an economic system as a whole. Emphasis is placed on the study of national income and price determination and develops familiarity with economic performance measures, economic growth, and international economics. Micro Economics provides an understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. The course emphasizes the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit. COURSE NOTE: This course does not count toward the social studies credit requirement for graduation.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 11-12
 - PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) and /or recommendation of the Social Studies teacher. It is preferred that students completed at least Algebra 1 to enroll in this course.
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Advanced Placement Microeconomics – 024323

This course provides a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) /or recommendation of the Social Studies teacher. It is preferred that students completed at least Algebra 1 to enroll in this course.

Advanced Placement Macroeconomics – 024333

This course provides a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) and /or recommendation of the Social Studies teacher. It is preferred that students completed at least Algebra 1 to enroll in this course.

Modern World History – 022223, 162213

Modern World History will examine major civilizations from Asia, Middle East, Africa, Europe, and the Americas with the emphasis on the era from 1450 A.D. to the present. Strong emphasis is placed on developing disciplinary-literacy skills while focusing on primary and secondary source documents, maps, and data, and on the application of knowledge through argument and informative writing using multiple sources. Students will be exposed to many seminal documents in world history, and will be expected to closely read and analyze complex text. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies coursework. Students will learn skills and content that will help prepare them for future coursework in secondary social studies. This course fulfills the Modern World History graduation requirement. This course may not be scheduled in all high schools.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 11
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Modern World History (CM) – 022233

Modern World History will examine major civilizations from Asia, Middle East, Africa, Europe, and the Americas with the emphasis on the era from 1450 A.D. to the present. Strong emphasis is placed on developing disciplinary-literacy skills while focusing on primary and secondary source documents, maps, and data, and on the application of knowledge through argument and informative writing using multiple sources. Students will be exposed to many seminal documents in world history, and will be expected to closely read and analyze complex text. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independence. Students will learn skills and content that will help prepare them for future coursework in secondary social studies. Students will learn skills and content that will help prepare them for future coursework in secondary social studies. This course fulfills the Modern World History graduation requirement.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 11
- PREREQUISITE: Successful completion in previous Social Studies course(s) and/or recommendation of the Social Studies teacher.

Advanced Placement World History – 022243

AP World History course is to develop a greater understanding of the evolution of different types of human societies. The study will focus upon the time period from approximately 6000 B.C.E. to the present. Students will examine a truly global history by identifying global patterns and processes that have affected human history throughout time through a combination of factual knowledge and appropriate analytical skills. The course will stress six themes: the impact of interaction, change and continuity, the impact of technology and demography, social structure and gender, cultural and intellectual developments, and politics. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11
- PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) and/or recommendation of the Social Studies teacher.

Psychology – 025303

This course is a study of the complexities of human behavior and the problems of adjustment to the environment. Individual and group applications of psychological principles are examined to provide a further understanding of human behavior. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Academic
- GRADE: 11-12

Advanced Placement Psychology – 025503

The core curriculum introduces the methods of inquiry and evaluation used by psychologists. The course contains information relating to issues that all individuals encounter, not only in themselves, but in their relationships with friends and families; its study leads to an appreciation of a tolerance for individual differences. All students should acquire insight into the complex determinants of behavior and prepare to be intelligent consumers of psychological services. Topics in the course may include but are not limited to: scientific methods of psychology, growth and development, learning, personality, mental health and behavioral disorders, and social psychology. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) and/or recommendation of the Social Studies teacher.

Contemporary Issues 12 – 024423

Contemporary Issues will provide the students the opportunity to study and examine some of the major issues facing the United States and the world today for the twenty-first century. The course will emphasize government and economic systems, regional cooperation, and world interdependence. Through this process, students will develop the understanding and skills, which are necessary for citizens to influence the American political and economic system and global community. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies coursework. Final opportunities are provided for students to complete their student service- learning requirements. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 12
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Contemporary Issues 12 (CM) – 024433

Contemporary Issues will provide the students the opportunity to examine, analyze, and evaluate some of the major issues facing the United States and the world today for the twenty-first century. The course will emphasize government and economic systems, regional cooperation, and world interdependence. Through this process, students will develop the understanding and skills, which are necessary for citizens to influence the American political and economic system, and global community. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Final opportunities are provided for students to complete their student service-learning requirements. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 12
- PREREQUISITE: Successful in previous Social Studies course(s) and/or recommendation of the Social Studies teacher.

Global Diplomacy 12 – 022643

Global Diplomacy will include the study of the history, diversity, and commonalities of the peoples of the world and will develop an awareness of the reality of human interdependence and the need for global cooperation. Students will examine historical and current attempts and international diplomatic efforts to solve problems. Students will demonstrate attainment of understandings and attitudes permeating the globe through the use of case studies, role playing, conflict resolution, problem-solving techniques, and simulation activities. The following topics are included in this course of study: world geography and its impact on global relationships, current global issues and their foundations, previous and current attempts at global diplomacy, regional studies with an emphasis on multicultural perspectives, background and structure of the United Nations. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies coursework. Final opportunities are provided for students to complete their student service-learning requirements. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
 - Type: Academic
 - GRADE: 12
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Global Diplomacy 12 (CM) – 024633

Global Diplomacy will include the study of the history, diversity, and commonalities of the peoples of the world and will develop an awareness of the reality of human interdependence and the need for global cooperation. Students will examine historical and current attempts and international diplomatic efforts to solve problems. Students will demonstrate attainment of understandings and attitudes permeating the globe through the use of case studies, role playing, conflict resolution, problem-solving techniques, and simulation activities. The following topics are included in this course of study: world geography and its impact on global relationships, current global issues and their foundations, previous and current attempts at global diplomacy, regional studies with an emphasis on multicultural perspectives, background and structure of the United Nations, and Model United Nations simulations. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. Final opportunities are provided for students to complete their student service-learning requirements. COURSE NOTE: This course does not count toward the three-year social studies credit requirement for graduation.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 12
- PREREQUISITE: Successful in previous Social Studies course(s) and/or recommendation of the Social Studies teacher.

Advanced Placement United States History – 023433

The course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the issues in American history. Students will learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship. Topics included in this course begin with the discovery and settlement of the New World, 1492-1650, and conclude with a study of America since 1974. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 12
 - PREREQUISITE: Demonstration of advanced ability on coursework and assessments in previous Certificate of Merit/Honors/Advanced Placement Social Studies course(s) and/or recommendation of the Social Studies teacher.
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American Government Seminar Review - 021163

This course is designed to assist students who passed the American government course, but need assistance with passing the American Government High School Assessment and/or completing H.S.A Bridge Projects. The four content standards assessed on the Government High School Assessment will be emphasized: Political Science, Peoples of the Nations and World, Geography and Economics.

COURSE NOTE: The 1.0 credit is awarded when the student successfully passes the Government High School Assessment and/or successfully meets the H.S.A. Bridge requirements. The course does not count toward the three credits of social studies required for high school graduation.

- CREDIT: 1.0
 - TYPE: Academic
 - GRADE: 10-12
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WORLD LANGUAGE

The modern World Language curriculum is designed to prepare students to function successfully in the country where the language originates and/or to meet the requirements for college entrance. Emphasis is placed on proficiency in listening, speaking, reading, and writing the language. The outcome of studying a classical language is to increase students' language power. Etymology and vocabulary are emphasized. College admission is usually aided if students complete at least three years of the same language.

Students who complete and pass a credited World Language course in middle school will receive high school credit for these courses, but the grades will not be used in calculation of grade point averages, quality points, or rank in class.

American Sign Language 1 – 050103

Students will learn the basic vocabulary and grammatical structures of American Sign Language to conduct basic conversations with fluency. Students will explore the deaf culture in order to gain sensitivity to the culture of the deaf community and its influence.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12

American Sign Language 2 – 050203

Students will continue learning content related vocabulary; more conversational dialogues using the advanced grammatical uses of American Sign Language; see how sign movements can be modified to change meaning; how and when facial expressions occur; and how body, head, and eye movements are used in phrasing and agreement. Students will continue to explore the deaf culture in order to gain sensitivity to the culture of the deaf community and its influence.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: A minimum of a 2.0 average in American Sign Language 1

***American Sign Language 3 (CM) – 050303**

This course is a continuation of skills learned in American Sign Language (ASL) 2. Its focus is on conversational competence to increase ASL fluency and accuracy in both receptive and expressive skills when signing. Students will continue to demonstrate signing skills using complex ASL grammatical features and vocabulary, short stories, narratives, and dialogues. Supplemental readings will be provided to increase awareness of the deaf culture within the community.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-12
- PREREQUISITE: American Sign Language 2

Chinese 1 – 055123

Students begin to speak and understand Mandarin Chinese through repetition and variation, stressing proper pronunciation and intonation. The vocabulary acquired deals with realistic life-like situations. Students learn how to write Chinese using pinyin as well as simplified Chinese characters. Chinese culture is introduced through simple reading selections. As conversational skills are developed and strengthened, grammatical structures are introduced and emphasized. Students learn about China and its people.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12

Chinese 2 – 055233

Students improve fluency and comprehension of the Mandarin Chinese language and increase knowledge of proper pronunciation and intonation. Students increase their knowledge of how to write Chinese using pinyin as well as simplified Chinese characters. Students read more coherently and fluently in Chinese. Students participate in frequent structured conversations about daily life and business, and continue their study of Chinese culture.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: A minimum of a 2.0 average in Chinese 1

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

***Chinese 3 (CM) – 055323**

Students improve their oral, reading, and writing competency, with emphasis placed on improving vocabulary. Reading selections increase in difficulty and include simplified excerpts from Chinese classics, as well as short stories and articles. Students continue to learn about Chinese culture and civilization. Grammar and composition also continue to be emphasized.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Chinese 2
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***Chinese 4 (CM) – 055423**

Chinese 4, primarily conducted in Chinese, furthers the communication skills acquired in Chinese 3, with the aim of language proficiency. Chinese 4 engages students in extensive oral expressions, using authentic audio/video recordings as well as native Chinese speakers to improve comprehension and conversation. Selections from authentic materials and Chinese literature are read for reading comprehension. Discussion, projects, compositions, and other writings demonstrate understanding of the culture and the complexities of the language and vocabulary.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Chinese 3
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***Chinese 5 (CM) – 055523**

Chinese 5, conducted in Chinese, furthers the communication skills acquired in Chinese 4, with the aim of language proficiency. Chinese 5 engages students in extensive oral expressions, using authentic audio/video recordings as well as native Chinese speakers to improve comprehension and conversation. Selections from authentic materials and Chinese literature are read for reading comprehension. Discussion, projects, compositions, and other writings demonstrate understanding of the culture and the complexities of the language and vocabulary.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Successful completion of Chinese 4
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*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

French 1 – 050123

In this course, students begin to speak and understand French through repetition and variation, stressing proper French pronunciation and intonation. The vocabulary acquired deals with realistic, lifelike situations. Students are introduced to French civilization through simple reading selections. As conversational skills are strengthened and increased, grammatical structures are introduced and emphasized. Students learn more about the Francophone world.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in English and approval of English and/or World Language instructor required.
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French 2 – 050133

Students improve fluency and comprehension, learn solid grammatical structures, and learn to read more coherently and intelligently in French. Students participate in frequent structured conversations and continue to learn about the Francophone world. Reading activities and expanded writing skills are developed.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in French 1
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***French 3 (CM) – 050233**

Students improve their oral, reading, and writing competency, with emphasis placed on reading. Reading selections increase in difficulty and include simplified excerpts from French classics. Students continue to learn about French culture and civilization. Grammar and composition also continue to be emphasized.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: French 2
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*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

***French 4 (CM) – 050333**

Students increase their knowledge of grammatical structure, writing, and formal and informal vocabulary through frequent usage. Stress is placed on advanced conversation, independent reading, and original composition. The course includes excerpts from literature, journals, and periodicals.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: French 3
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Advanced Placement French Language – 050553

Students who enroll in AP French Language should already have a good command of French grammar and vocabulary and have competence in listening, reading, speaking, and writing. The course will emphasize the use of language for active communication and help students develop the following:

- the ability to understand spoken French in various contexts;
- a French vocabulary sufficiently ample for reading newspaper and magazine articles, literary texts, and other non-technical writings without dependence on a dictionary; and
- the ability to express themselves coherently, resourcefully, and with reasonable fluency and accuracy in both written and spoken French.

Course content can reflect intellectual interests shared by the students and teacher (the arts, current events, literature, sports, etc.). Materials will include audio recordings, films, newspapers, and magazines. The course seeks to develop language skills (reading, writing, listening, and speaking) that can be used in various activities and disciplines rather than to cover any specific body of subject matter. Extensive training in the organization and writing of compositions will be emphasized. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
 - PREREQUISITE: A minimum of a 3.0 average in French 4 or approval of the instructor required.
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*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

German 1 – 053123

In this course, students begin to speak and understand German through repetition and variation, stressing proper pronunciation and intonation. The vocabulary acquired deals with realistic, lifelike situations. Students are introduced to German civilization through simple reading selections. As conversational skills are strengthened and increased, grammatical structures are introduced and emphasized. Students learn more about Germany and the people.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: A minimum of a 2.0 average in English and approval of English and/or World Language instructor required.

German 2 – 053233

Students improve fluency and comprehension, learn solid grammatical structures, and learn to read more coherently and intelligently in German. Students participate in frequent structured conversations and continue to learn about Germany. Reading activities and expanded writing skills are developed.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: A minimum of a 2.0 average in German 1

***German 3 (CM) – 053333**

Students improve their oral, reading, and writing competency, with emphasis placed on reading. Reading selections increase in difficulty and include simplified excerpts from German classics. Students continue to learn about German culture and civilization. Grammar and composition also continue to be emphasized.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-12
- PREREQUISITE: German 2

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

***German 4 (CM) – 053433**

Vocabulary enrichment in German continues through the use of informational articles related to walks of life such as artists, musicians, and scientists. German literature is carefully read and discussed through excerpts from short stories, plays, and novels by some of the great masters. Original composition is practiced. A short story or play is written by the students. Grammatical structures are strengthened through frequent usage.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: German 3
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Italian 1 - 056123

In this course, students begin to speak and understand Italian through repetition and variation, stressing proper Italian pronunciation and intonation. The vocabulary acquired deals with realistic, life-like situations. Students are introduced to Italian civilization through simple reading selections. As conversational skills are strengthened and increased, grammatical structures are introduced and emphasized. This course will be offered as a pilot at LHS for the 2019-2020 school year.

- CREDIT: 1
 - TYPE: Academic
 - GRADES: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in English and approval of English and/or World Language instructor.
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Independent Study World Language – 052093

Independent Study World Language is designed for advanced students who wish to pursue individualized course work beyond the school day. All work is supervised by a member of the World Language department. Students must complete a minimum of 66 hours of supervised activities for each 0.5 unit of credit and submit a minimum of two projects as determined by the student and instructor. (A maximum of six units of elective credit may be earned through independent study and/or work study programs while in high school.) COURSE NOTE: This unit(s) may not count as a required course.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: 2.0 cumulative grade point average and approval of department chairperson, principal, supervisor of instruction, and Director of Curriculum and Instruction required.
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*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Latin 1 – 052123

Students are introduced to the basic grammar and vocabulary of the language of ancient Rome. Students are also taught how to find the Latin roots of English derivatives and different Latin phrases that can be used in modern life. Grading is based on the written word rather than the spoken. Students read myths and passages on daily life, history and culture.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in English and approval of English and/or World Language instructor required.
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Latin 2 – 052233

Students learn more grammatical constructions, vocabulary, and derivatives. The stories for translations gradually become more difficult, and Roman authors are introduced. Grading is based on translations between English and Latin.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in Latin 1
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***Latin 3 (CM) – 052333**

Students study the subjunctive mood and other grammatical constructions. Authentic Roman texts are read with more in- depth study and analysis. Emphasis on vocabulary and derivatives continue. Grading is based on the written word rather than the spoken.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Latin 2
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*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

***Latin 4 (CM) – 052433**

Students read from authentic texts from various Roman authors. There may be some study and analysis of Medieval Latin and songs. Grading is based on translation between English and Latin. The famous Roman authors Cicero, Virgil, and Ovid. There may be some study and analysis of Medieval Latin and songs. Grading is based on the written word rather than the spoken.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-12
- PREREQUISITE: Latin 3

Advanced Placement Latin Literature – 052653

AP Latin Literature is intended for students who wish to intensify their studies of Latin through the translation of works by the original authors. Students who enroll should already have an intermediate knowledge of Latin grammar and vocabulary and a background in Roman culture, politics and government.

An AP Latin Literature course covers the equivalent of a college Latin course, encompassing not only translation but also analysis and interpretation. Students taking such a course will have the following objectives:

- The ability to read and comprehend written Latin
- The acquisition of vocabulary, some of which may be author-specific
- The application and interpretation of literary devices within a work
- The exploration of the events and people surrounding an author and influencing their work
- The application of Latin grammar learned in earlier levels

Course content will be determined by which of the AP Latin Literature tests is offered for any given school year; e.g., Virgil (2010-2011) or Virgil/Caesar (2011-2012). All projects and essays will be adapted to fit the exam content as necessary.

This course will seek to provide a deeper knowledge of the people, culture, and events surrounding any particular work in addition to expanding the students' understanding of Latin grammar and vocabulary. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-12
- PREREQUISITE: A minimum of a 3.0 in Latin 3 or approval of instructor required.

*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Spanish 1 – 051123

Students begin to speak and understand Spanish, with simple and practical conversation as a goal. There is an introduction to pronunciation, vocabulary, and grammatical structures. Cultural and geographical points of interest of Spanish-speaking areas of the world are highlighted through various authentic texts incorporated as a part of the instructional program.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in English and approval of English and/or World Language instructor.
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Spanish 2 – 051133

Students improve their fluency and comprehension through practice in conversation. They master new vocabulary and grammatical structures. Cultural and geographical points of interest continue to be discussed. Students begin reading authentic texts which are paired with discussion and written assignments. All communicative skills will be practiced with the goal of achieving a higher proficiency level in Spanish.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9-12
 - PREREQUISITE: A minimum of a 2.0 average in Spanish 1
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Spanish 3 – 051243

Students receive a general grammar review with an increase in vocabulary and the reading of authentic texts. Conversation periods and some composition work are involved. The Spanish-speaking countries and their cultures are discussed as well as contemporary issues affecting these countries. Students continue with more advanced work on grammar and structure. Authentic text and videos will be used to facilitate higher proficiency levels in Spanish.

- CREDIT: 1
 - TYPE: Academic
 - GRADE: 9
 - PREREQUISITE: Spanish 2
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***Spanish 3 (CM) – 051233**

Students receive a general grammar review with an increase in vocabulary and the reading of authentic texts. Conversation periods and some composition work are involved. The Spanish-speaking countries and their cultures are discussed as well as contemporary issues affecting these countries. Students continue with more advanced work on grammar and structure. Authentic text and videos will be used to facilitate higher proficiency levels in Spanish.

- CREDIT: 1
- TYPE: Certificate of Merit
- GRADE: 10-12
- PREREQUISITE: Spanish 2

***Spanish 4 (CM) – 051333**

Students increase their knowledge of grammatical structure, writing, and formal and informal vocabulary through frequent usage. Stress is placed on advanced conversation, independent reading, and original composition. The course includes excerpts from literature, journals, and periodicals.

- CREDIT: 1
 - TYPE: Certificate of Merit
 - GRADE: 10-12
 - PREREQUISITE: Spanish 3
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*Grade 10 students will not qualify for Certificate of Merit (CM) but may qualify for the [Maryland Scholars Certificate](#) (see page 23)

Advanced Placement Spanish Language and Culture – 051453

AP Spanish Language is intended for students who wish to develop their proficiency in all four language skills: listening, speaking, reading, and writing. Students who enroll should already have a basic knowledge of the language and culture of Spanish-speaking peoples and should have attained a reasonable proficiency in listening comprehension, speaking, reading, and writing. An AP Spanish Language course covers the equivalent of a third-year college course in advanced Spanish writing and conversation. It encompasses aural/oral skills, reading comprehension, grammar, and composition. Students taking such a course, emphasizing the use of Spanish for active communication, have the following objectives:

- the ability to comprehend formal and informal spoken Spanish;
- the acquisition of vocabulary and a grasp of structure to allow the easy, accurate reading of authentic text in Spanish;
- the ability to compose expository passages; and
- the ability to express ideas orally with accuracy and fluency.

Course content might best reflect intellectual interests shared by the students and teacher (the arts, history, current events, literature, culture, sports, etc.). Materials will include recordings, films, newspapers, and magazines. The course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than to the mastery of any specific subject matter. Extensive training in the organization and writing of compositions will be an integral part of the AP Spanish Language course. Students should be aware that not all colleges grant credit for qualifying grades on the Advanced Placement examination, although over 400 institutions do grant credit.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 10-12
- PREREQUISITE: A minimum of a 3.0 average in Spanish 4 or approval of the instructor required.

Advanced Placement Spanish Literature and Culture - 051463

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students continue to develop proficiencies across the full range of the modes of communication (interpersonal, presentational, and interpretive), honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, and literary criticism).

- CREDIT: 1
 - TYPE: Advanced Placement
 - GRADE: 10-12
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Spanish for Heritage Learners - 051533

This world language course is specifically designed for heritage learners of Spanish. That is, students from homes where Spanish is spoken or students who have had strong exposure to Spanish in informal contexts. This course accommodates students who demonstrate different levels of proficiency in the various language skills and focuses on the development of communicative competence in reading, writing, speaking, and listening. Students will develop an understanding of Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States. They will also develop an awareness of Hispanic cultures, including language variation, customs, geography, history, and current events.

- CREDIT: 1
- TYPE: Academic
- GRADE: 9-12
- PREREQUISITE: Recommendation of Instructor

ADVANCED PLACEMENT CAPSTONE

AP Capstone™ is a College Board sequence of two courses, focusing students on independent research, collaborative teamwork, and communication skills. Although this sequence is offered as part of many of our Academy programs it is also offered to any high school student at any of our SMCPs high schools. These skills are imperative as students transition to college and are valued across all career paths. The AP Capstone program fosters curious, independent, and collaborative students and focuses their arguments and rhetoric to be logical, organized and evidence-based. AP Capstone is comprised of two AP courses — AP Seminar and AP Research—and is designed to appeal to students across all academic disciplines. Students have the opportunity, through successful completion of both AP Capstone courses, and passing scores on the related AP assessments, to earn an AP Capstone Diploma.

Advanced Placement Seminar Course: AP Capstone – 023463

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 10-12

*Advanced Placement Research Course: AP Capstone – 023473

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 11-12
- PREREQUISITE: Successful completion of AP Seminar Course.

ADVANCED PLACEMENT COMPUTER SCIENCE

Required Course: Advanced Placement Computer Science Principles – 172063

AP Computer Science Principles incorporates active, inquiry-based learning with a focus on computational thinking practices (connected computing, creating computational artifacts, abstracting, analyzing problems, communication and collaborating). The overarching theme of the course is data: the nature and variety of data on the internet; algorithmic methods for processing and managing data; and ways in which data can be analyzed, visualized, and interpreted to increase human understanding and solve challenging real-world problems.

Programming concepts are taught using Python. The components of the Advanced Placement assessment for Computer Science Principles includes two performance tasks completed during the course and multiple choice written exam. The performance tasks are administered by the teacher and the student submits digital artifacts.

*Can be taken as an Elective COURSE NOTE: This course will meet the requirement of enrollment in a fourth year of a mathematics or math-related course. However, this course will not meet the fourth year math requirement of Algebra 2 or non-trivial Algebra students for students who are enrolled in the University of Maryland complete sequence. This course satisfies the technology education credit required for graduation.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 9-12

Required Course: Advanced Placement Computer Science A – 178953

Advanced Placement Computer Science A is both a course for potential computer science majors and a foundation course for students planning to study in other technical fields such as Engineering, Physics, Chemistry, and Geology. It involves the study of the object-oriented paradigm using the Java programming language. Concepts such as classes, objects, inheritance, polymorphism, and reusability will be covered, as well as input and output, flow of control features, data structures, searching and sorting algorithms, and program design and analysis. The course is designed to challenge students to be active learners and critical thinkers. Students are provided time for hands-on learning. During this time, their programs can be individually evaluated, and their progress can be informally tracked. Assistance can be provided and students can talk about their programs and ask specific questions about any problems they may have. The students will be able to gain a clearer understanding of certain ethical issues in information technology. Students will gain an understanding of how ethical theory can be applied to a discussion and analysis of those issues. In critically examining a cluster of information technology issues within the framework of ethical theory, students can develop a rational, coherent, consistent, and systematic approach to addressing moral issues in information technology. *Can be taken as an Elective.

COURSE NOTE: This course will meet the requirement of enrollment in a fourth year of a mathematics or math-related course. However, this course will not meet the fourth year math requirement of Algebra 2 or non-trivial Algebra students for students who are enrolled in the University of Maryland complete sequence.

- CREDIT: 1
- TYPE: Advanced Placement
- GRADE: 10-12
- PREREQUISITE: Advanced Placement Computer Science Principles or Algebra

GENERAL ELECTIVES

Study Skills - 166113

This course is designed to support students in using supplementary aids to improve both academics and organizational skills. Students will have the opportunity to receive reading and/or math interventions or organizational skills training. Students requiring reading and/or math interventions will receive research-based interventions in order to build the skills necessary to access the grade-level curriculum. Students requiring organizational skills will receive support in such areas as short and long-term planning, developing and implementing individual goals, time-management, and test-taking strategies. The student-specific goals and objectives are reflected in the student's Individual Education Program (IEP). Students receiving 504 services will have the opportunity to participate in Study Skills upon the determination by the 504 teams that the student requires research-based interventions as well as executive functioning intervention/support. Class enrollment will not exceed 12 students. Please note that IEP carriers will have enrollment priority.

- CREDIT: 1
- TYPE: Academic
- GRADES: 09-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Freshman Seminar - 010913

This course is an advisory period focused on relationship building, meeting the social-emotional and career development needs of students and designed to promote a successful transition between middle and high school. Freshman Seminar provides students with opportunities for academic enrichment and assistance, as well as the chance to improve organizational and communication skills. Additionally, a portion of the course is dedicated to a discussion of college and career choices via the Naviance platform.

- CREDIT: 1
 - TYPE: Academic
 - GRADES: 09
-

CERTIFICATE CLASSES

The following courses are designed to provide students with disabilities with specialized instruction in English, math, social studies, science, and daily/community living. The courses are designed to meet the Individualized Education Program (IEP) for students working on the Maryland High School Certificate.

Reading for Daily Living – 016413

This course is designed to assist students in the continued acquisition of literacy skills that encompass symbol recognition, concepts of print, features of text, sight word recognition, phonemic awareness, interpretation of informational text, and independent reading. The emphasis is on the functional application of skills in order to maximize independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Writing for Daily Living – 016423

This course is designed to assist students in the continued acquisition and exploration of writing skills that encompass appropriate topic selection, using symbols and words to generate ideas and to share information and to achieve independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Mathematics for Daily Living – 030123

This course is designed to assist students in the continued acquisition of number concepts, money management, and measurement in the school and community based settings. The emphasis is on the functional application of skills in order to maximize independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
 - PREREQUISITE: Approval of the Individualized Education Program Team is required.
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Science for Daily Living – 040123

This course is designed to assist students in the continued acquisition of scientific skills that encompass the relationship of organisms to other organisms in their environment. They will study scientific skills, processes and concepts of Biology using modified text and materials. The emphasis is on the functional application of skills in order to maximize independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Social Studies for Daily Living – 020123

This course is designed to assist students in the continued acquisition of skills that encompass history, economics, geography and government. The emphasis is on the functional application of skills in order to maximize independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Life Skills – 167113

This course is designed to assist students in developing the social skills needed for independent functioning within the school and community. Topics may include self-control, self-expression, decision-making, appropriate situational behavior, obeying rules, and maintaining relationships. The emphasis is on the functional application of skills in order to maximize independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Recreational Arts – 066103

This course is designed to assist students in exploring a range of arts and leisure activities that include visual arts, music appreciation, personal hobbies/interests and organized games. The emphasis is on assisting students with disabilities to refine and expand their social, communication, motor and problem-solving skills in individual and group activities.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
 - PREREQUISITE: Approval of the Individualized Education Program Team is required.
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Community Living – 022303

This course is designed to assist students with the application of academic, interpersonal, problem-solving and communication skills as they access the school and community settings. The emphasis is on the functional application of skills in the school and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Adapted Physical Education – 071403

This course is designed to meet the unique physical needs of individuals with disabilities through an individualized program of developmental activities, exercises, games, rhythms, and sports. The emphasis is on the development of personal wellness and physical conditioning.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Personal Health Management – 071303

This course is designed to assist students in increasing their skills in the areas of personal needs, appropriate health and safety practices, managing routines, and participation in transition planning with adult service providers. The emphasis is on increasing personal independence in the home, school, and community.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 9-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

Individual Products and Services – 070103 (Tech Center program)

This course is designed to provide students the opportunity to develop occupational skills and career awareness by presenting practical and authentic, hands-on experiences. Students develop universal workplace habits and self-awareness that promotes vocational independence through meaningful and relevant workplace training. Students receive specific training in, but not limited to, product assembly and distribution, office skills, building maintenance tasks, workplace safety and problem solving, self-regulation, technical reading and math skills, and job-seeking skills. Through this skill development, students also increase his/her maturity in cooperation, teamwork, communication, and decision-making.

COURSE NOTE: This course is only for students who will receive a Maryland High School Certificate.

- GRADES: 11-12
- PREREQUISITE: Approval of the Individualized Education Program Team is required.

GRADE LEVEL DESIGNATIONS

High school grade level assignments will be made according to the total number of credits the student has earned as follows:

- Grade 10 (Sophomore) 5 units of credit earned
- Grade 11 (Junior) 10 units of credit earned
- Grade 12 (Senior) 15 units of credit earned

STUDENT PLACEMENT

Students will be placed according to their career goals and academic preparation. All students are encouraged to take challenging courses to meet their career goals. Students will not be arbitrarily grouped and tracked into separate curriculums. Previous academic coursework, teacher recommendations, performance on Maryland State assessments and standardized test results may be considered in assisting the placement of students. Students and parent(s)/guardian(s) are encouraged to discuss their concerns with the school counselor.

GRADING SCALE

The high school marking period grading scale for St. Mary's County Public Schools is:

- A - 100%-90% Outstanding Progress
- B - 89%-80% Good Progress
- C - 79%-70% Acceptable Progress
- D - 69%-60% Little Progress
- F - 59%-0 Unsatisfactory Progress
- I - Incomplete

CLASS RANKINGS AND SELECTION OF VALEDICTORIAN AND SALUTATORIAN

Valedictorian and salutatorian will be determined by class rank using cumulative grade point averages. The valedictorian will be the student with the highest weighted grade point average. The salutatorian will be the student with the second highest weighted grade point average.

All co-valedictorians will be listed as first in the class rank, and all co-salutatorians will be listed as second in class rank. The next student will be listed as whatever number the person happens to be, considering the number of co-valedictorians and co-salutatorians (e.g., fifth in the class).

Both the valedictorian and salutatorian must be enrolled under a regular enrollment status in St. Mary's County Public Schools for the two consecutive semesters of the senior year preceding high school graduation. Students must maintain full-time equivalent enrollment status. Class rank shall be determined for students in grades 11 and 12.

Semester/final grades are used for the purpose of determining class rank. Class rank shall be calculated by dividing the quality points by the number of credits taken.

All courses that appear on the transcript that produced a letter grade of A, B, C, D, E, or F shall be included in the grade point average calculation. Grade point values for the purpose of the calculations will be A=4.0, B=3.0, C=2.0, D=1.0, E=0, and F=0. Weighted grade point values are used for advanced placement and college level English, mathematics, science, social studies, and world language courses taken at a college or university. No remedial or pre-high school, or high school level courses taken at a college or university, will be weighted. Weighted grade point values for the purpose of the calculations will be A=5.0, B=4.0, C=3.0, D=1.0, E=0, and F=0.

Weighted grade point values are also used for Science, Technology, Engineering, and Mathematics (STEM) and Global and International Studies (GIS) designated courses. Weighted grade point values for the purpose of the calculations will be A=4.5, B=3.5, C=2.5, D=1.0, E=0, and F=0.

No more than two independent studies may be counted in calculating class rank. The two credits with the highest grades will be used.

In computing class rank, a course may be counted only one time (except for those courses approved for repeated credit; see p. 150). If a course is repeated due to having failed in order to achieve a higher grade, the highest grade is the only grade that is to be used in computing class rank.

Courses being accepted for transfer credit, which are the same as those included on the list of weighted courses, are to be considered a weighted course. The final decision regarding whether a transfer course is to be considered a weighted course will be made by the Director of Curriculum and Instruction. No pluses or minuses will be attached to any letter grade. No partial points will be attached to the total.

The letter grade will be used for courses accepted for transfer credit regardless of the grading scale used in the previous school(s) unless the numerical grades are provided. In the event numerical grades are provided, the numerical grades will be converted to the grading scale used by St. Mary's County Public Schools.

Any course dropped after September 15 is to be assigned an F and included in the class rank. Exceptions for cause may be granted by the principal.

Class rank is inclusive of all final grades prior to graduation and is inclusive of summer school, alternative high school programs, credit by examination, college, and university courses.

Grade point average shall be calculated to the thousandths place and rounded to the hundredths place with .005 being rounded up. Foreign exchange students will not be included in class rankings.

Only grades earned in the high school academic years following grade 8 are used for calculating class rank. High school courses taken in middle school or earlier are not included.

Courses in subject areas not traditionally taught in St. Mary's County Public Schools, such as religion or driver education, are not included unless the course objectives meet the objectives of an approved course taught in St. Mary's County Public Schools.

GUIDELINES FOR INDEPENDENT STUDY

Independent study is a program to provide for student-initiated learning. Students wishing to apply for an independent study course must have a minimum of a 2.0 cumulative grade point average and a satisfactory discipline record. Acceptance into the program requires the approval of teachers, parent(s)/guardian(s), department chairperson, principal, supervisor, and Director of Curriculum and Instruction. The following guidelines must be followed:

A student may initiate an independent study course during the first marking period and during the fourth marking period for the summer. Students should obtain the necessary approval as early as possible in order to avoid disappointment and misunderstanding.

- A minimum of two completed projects and 66 clock hours are required for each 0.5 unit of independent study course credit awarded. Projects must receive prior approval from designated staff. An independent study course to fulfill the student service-learning graduation requirement requires 75 clock hours.
- Courses required for graduation and extracurricular activities, other than Model General Assembly, Model United Nations, and Model Congress, will not be accepted for independent study. Projects involving a student's employment will also not be approved.
- Clock hours must be documented for each independent study course. It is recommended that a minimum of one-fourth of the independent study course clock hours be spent with the teacher sponsoring the study.
- Students generally may register for one unit of credit each year for an independent study course or an independent study student service-learning.
- Grades will be recorded by the sponsoring teacher upon the successful completion of the independent study course. A grade of D or F will be recorded if a student fails to complete the independent study course satisfactorily. Students who receive a D, F, or "I" (incomplete) as an independent study course grade will not be permitted to participate in additional independent study courses
- Assignment of nine-week grades will depend on the initial beginning date and progress recorded on projects. It is the teacher's responsibility, as appropriate, to assign a letter grade or an incomplete.
- An "I" (incomplete) should not prevent students from being listed on the honor roll or merit roll.
- Students may withdraw the request for independent study credit, without penalty, up to six weeks before the marking period ends.
- Students may have three weeks beyond the end of the course to complete the program satisfactorily.
- No more than two independent study credits may be counted in the calculation for class rank. The two credits with the highest grades will be used. Additional independent study credits earned by a student will not count in the calculation.
- A maximum of six units of elective credit may be earned through independent study and/or work study program while in high school.
- Any expenses incurred as a result of the independent study activity will be the responsibility of the student.

Application for Independent Study Course

COURSES APPROVED FOR FINE ARTS CREDIT

The following courses in the High School Program of Studies are approved for Fine Arts credit:

017503 Advanced Studies in Technical Theatre (10-12)	089133 Jazz Band (CM) (9-12)
068203 Art Appreciation (9-12)	088113 Marching Band (9-12)
087123 Band 1 (9-12)	080203 Music Appreciation (9-12)
087133 Band 2 (Advanced) (9)	065103 Painting (10-12)
088123 Band 2 (Advanced) (CM) (10-12)	069703 Performance Troupe Advanced (CM) (10-12)
088143 Chamber Orchestra (9)	069013 Photography 1 (10-12)
088333 Chamber Orchestra (CM) (10-12)	069023 Photography 2 (11-12)
085123 Chamber Singers (Advanced) (9)	082103 Piano Class (9-12)
086233 Chamber Singers (Advanced) (CM) (9-12)	178223 Radio / Audio Production (10-12)
085103 Chorus 1 (9-12)	067203 Sculpture (10-12)
085113 Chorus 2 (9)	088503 Solo and Ensemble Class (9-12)
086123 Chorus 2 (CM) (10-12)	088133 String Orchestra (9-12)
089433 Class Voice (9-12)	083103 Tenor/Bass Choir (9-12)
065203 Commercial Art (10-12)	017523 Theatre Arts 1 (9-12)
065213 Commercial Art 2 (11-12)	017623 Theatre Arts 2 (10-12)
066203 Crafts 1 (9-12)	017723 Theatre Arts 3 (CM) (11-12)
066003 Crafts 2 (9-12)	017833 Theatre Arts 4 (CM) (12)
082203 Guitar 1 (9-12)	081123 Theory 1 (9-12)
082213 Guitar 2 (9-12)	084103 Treble Choir (9-12)
082093 Independent Study Music (9-12)	061103 Visual Arts 1 (9-12)
017093 Independent Study Theatre Arts (9-12)	062203 Visual Arts 2 (10-12)
062093 Independent Study Visual Arts (9-12)	063333 Visual Arts 3 (CM) (11-12)
087133 Jazz Band (9)	064433 Visual Arts 4 (CM) (12)

COURSES APPROVED FOR REPEATED CREDIT

The following courses in the High School Program of Studies can be repeated for credit:

071303 Adapted Physical Education	089433 Class Voice
017503 Advanced Studies in Technical Theatre	065203 Commercial Art
069553 AP Art History (11-12)	022303 Community Living
089203 AP Music Theory (11-12)	181303 Educational Media Technology
069353 AP Studio Art Two Dimensional (11-12)	012013, 012023 English Speakers Other Languages
069253 AP Studio Art Drawing Portfolio (11-12)	022633, 023633, 024633 Global Diplomacy
069453 AP Studio Art Three Dimensional (11-12)	170093 Independent Study Career & Technology Ed
071203 Athletic Conditioning 1	177593 Independent Study Engineering
087123 Band 1	012093 Independent Study English
088123 Band 2 (Advanced)	032093 Independent Study Mathematics
088333 Chamber Orchestra	082093 Independent Study Music
086233 Chamber Singers (Advanced)	042093 Independent Study Science
085103 Chorus 1	022093 Independent Study Social Studies
086123 Chorus 2	

555593 Independent Study Student Service-Learning	016623 Publications
017093 Independent Study Theatre Arts	178223 Radio/Audio Productions
062093 Independent Study Visual Arts	016413 Reading for Daily Living
170103 Individualized Product and Services Technology	066103 Recreational Arts
052093 Independent Study World Language	176813 Robotics
089133 Jazz Band	555693 School Student Service-Learning
030123 Mathematics for Daily Living	067203 Sculpture
088113 Marching Band	088503 Solo and Ensemble Class
016723 Newspaper	072193 Special Studies in Physical Education
070503 Outdoor Adventure and Lifetime Sports 1	088133 String Orchestra
070513 Outdoor Adventure and Lifetime Sports 2	166113 Study Skills
072003 Personal Fitness	070203 Team Sports
071403 Personal Health Management	083103 Tenor/Bass Choir
069013 Photography 1	165103 Transition Seminar
069023 Photography 2	084103 Treble Choir
082103 Piano Class	016423 Writing for Daily Living
	016823 Yearbook

EARN COLLEGE CREDIT NOW

Students who successfully complete high school courses articulated with the College of Southern Maryland will be eligible to receive the college credits as soon as they apply to the college. Generally a minimum final grade of B is required. To receive the college credit, a student should:

- Complete a College of Southern Maryland admissions application (no fee required)
- Complete a tech prep application
- Request that the high school send an official copy of the high school transcript upon completion of the articulated courses
- Apply within two years of high school graduation
- Forward above materials to: Admissions Office, College of Southern Maryland, 8730 Mitchell Road, P.O. Box 910, La Plata, Maryland 20646-0910 Do you need more information? Contact your high school guidance counselor or call the college Admissions Office at 1-301-884-8131, extension 7530, or 1-800-933-9177, extension 7530.

Click this link to view the:

[St. Mary's County Public Schools Course Articulation Guide and Articulation Guide for CTE](#)



Note: For more information, please visit our website at <http://www.smcps.org> Please direct inquiries about this document to: Department of Curriculum and Instruction 23160 Moakley Street Leonardtown, MD 20650 301-475-5511, Ext. 32249

The St. Mary's County Public School System does not discriminate on the basis of race, color, sex, age, marital status or sexual orientation, national origin, religion or disability in matters affecting employment or in providing access to programs. Questions pertaining to this policy may be addressed to the Director of Human Resources at:

