# Charles County Public Schools



# High School Program of Studies





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# **Mission Statements**

The mission of Charles County Public Schools is to provide an opportunity for all school-aged children to receive an academically challenging, quality education that builds character, equips for leadership, and prepares for life, in an environment that is safe and conducive to learning.

The Charles County public school system does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, age or disability in its programs, activities or employment practices. For inquiries, please contact Kathy Kiessling, Title IX/ADA/Section 504 Coordinator (students) or Nikial M. Majors, Title IX/ADA/Section 504 Coordinator (employees/ adults), at Charles County Public Schools, Jesse L. Starkey Administration Building, P.O. Box 2770, La Plata, MD 20646; 301-932-6610/301-870-3814. For special accommodations call 301-934-7230 or TDD 1-800-735-2258 two weeks prior to the event.

CCPS provides nondiscriminatory equal access to school facilities in accordance with its Use of Facilities rules to designated youth groups (including, but not limited to, the Boy Scouts).

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# CHARLES COUNTY REQUIREMENTS FOR A MARYLAND **HIGH SCHOOL DIPLOMA**

To be awarded a diploma, a student shall be enrolled in Charles County Public Schools (CCPS) and have earned a minimum of 23 credits that include the following:

Subject Area	Specific Credit Requirement				
English	4 credits				
(See pages 54-57)	4 Credits				
Mathematics	4 credits				
(See pages 70-73)	2 in Algebra				
(See pages 70-73)	1 in Geometry				
	1 additional course with Algebra I as the				
	prerequisite.				
	COMAR 13.A.03.02.03				
	Each student shall enroll in a mathematics course in each year of high school that the student attends, up to a maximum of 4 years of attendance, unless in the 5th or 6th year a mathematics course is needed to meet a graduation requirement. A student must earn four math credits, including one with instruction in algebra aligned with the Maryland Comprehensive Assessment for algebra or one or more credits in subsequent mathematics courses for which Algebra I is a prerequisite, and one with instruction in geometry aligned				
Science	with the content standards for geometry.  3 credits	Students in PLTW programs/North			
(See pages 76-79)	1 Earth science, 1 Life science, and	Point Academy of Health			
(Gee pages 70 70)	1 Physical science	Professionals-CNA, Biotechnology,			
	Recommended sequence:	and Engineering programs ONLY			
	Earth Systems	3 credits			
	Biology	1 Earth science, 1 Life science, and			
	Chemistry or Physics	1 Physical science			
		Recommended sequence:			
		Biology			
		Chemistry			
		Honors Earth Systems or			
0 110 1	10 111	AP Environmental Science			
Social Studies	3 credits				
(See pages 79-83)	Recommended sequence: U.S. History				
	LSN Government				
	World History				
Fine Arts	1 credit				
(See pages 60-69)	roreare				
Physical Education	½ credit Fitness for Life				
(See pages 73-76)	/2 0.00 1				
Health	1 credit				
(See pages 69)	Recommended sequence:				
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	½ credit in 9 <sup>th</sup> grade				
	½ credit in 11th grade				
Technology Education	1 credit				
(See page 53)					
Financial Literacy	½ credit				
(See page 60)					
Graduation Pathways (choose one)	2 credits of the same World Language				
	and any remaining credits in electives OR				
	3-5 credits through the completion of state education program <u>and</u> any remaining cre				

# THE MARYLAND HIGH SCHOOL ASSESSMENTS (MHSAs)

Maryland State Department of Education, Division of Curriculum, Assessment, & Accountability

Course	Assessment	Requirement
Algebra I	MCAP Algebra I	Participate only and pass Algebra I course
English II	MCAP English II	Participate only and pass English II course
Biology	MCAP LS MISA	Participate only and pass Biology course MCAP will count as 20% of student's final grade
LSN Government	HSA Government	Participate only and pass LSN Government course MCAP will count as 20% of student's final grade

# STUDENT SERVICE LEARNING (SSL)

Student Service Learning (SSL) service is a Maryland State Department of Education (MSDE) graduation requirement. This program requires all students to prepare, implement, and reflect upon a project that addresses a need or concern in their schools or community. All projects must meet the MSDE criteria for a quality service-learning experience. In Charles County, components of this program are embedded in grades 6, 7, and 8. Students who have not completed service learning by the end of their 10th grade year must contact the service-learning coordinator at their school for information on how to complete the graduation requirement.

# **DIPLOMAS**

The Maryland State Board of Education awards diplomas to all students who have met the requirements for graduation. Students in Charles County completing the CCPS Scholars Course of Study, the Maryland Scholars Course of Study, and/or meeting Certificate of Merit requirements receive additional recognition at graduation. View page 9 for options.

# MARYLAND HIGH SCHOOL CERTIFICATE

The Maryland State Board of Education awards the Maryland High School Certificate to special education students whose Individualized Educational Program (IEP) was developed based on functional living and independent/career skills.

# **ENROLLMENT**

The student shall satisfactory complete four years of approved study beyond 8th grade unless on an approved option.

# HIGH SCHOOL REQUIREMENTS MET IN MIDDLE SCHOOL

Algebra I, Geometry, Technology Education, and World Language courses completed in middle school can be used to meet high school graduation requirements and are awarded high school credit. High school credits earned in middle school are not calculated in high school GPA or Rank. Courses not successfully completed must be re-taken in high school. There will be no summer school option.

# REQUIREMENTS FOR CHARLES COUNTY ACADEMIC AWARDS OF DISTINCTION

# **CLASS RANKING**

Seniors attending Charles County Public Schools (CCPS) are ranked based on the weighted cumulative Grade Point Average (GPA) achieved in all coursework taken in high school. Class rank is recorded on the high school transcript and is acknowledged in academic awards. Only full-time diploma-bound students are included in the ranking. A full-time student is one who is enrolled in a CCPS high school for four or more periods during the school day. **Students participating in Early Graduation are not ranked.** 

To determine rank, credits transferred in from outside the CCPS system are weighted according to the CCPS weighted scale.

The cumulative GPA is the average of all final grades earned in high school, rounded to the hundred-thousandths place.

### **CERTIFICATE OF MERIT**

In addition to the high school diploma, students may be awarded a Charles County Certificate of Merit. This recognition is based on a student's weighted cumulative GPA of 3.2 or higher with no failing final grades during the high school years.

# CHARLES COUNTY PUBLIC SCHOOLS SCHOLARS COURSE OF STUDY

In addition to pursuing the high school diploma, students may wish to participate in the CCPS Scholars Course of Study. Within the 23 credits required for graduation, students enrolled in high school for 4 years must:

# (a) Earn 18 advanced credits which must include:

- · 4 English (Honors, Advanced Placement)
- 3 Lab Sciences (Honors, Advanced Placement)
- 3 Social Studies (Honors, Advanced Placement)
- 4 Mathematics—taken in grades 9 through 12 (at least 3 must be Honors or Advanced Placement)
- 3 World Languages—at least two in the same language (Credit can be awarded based on successful completion of designated high school level World Language courses taken during middle school.)
- 1 additional advanced course (Honors, Advanced Placement)

# (b) Achieve a cumulative Grade Point Average of 3.5 (weighted)

Students who complete the academically rigorous CCPS Scholars Course of Study are formally recognized in the following ways:

- Statement on report card and final transcript;
- (2) Medallion at graduation ceremony; and
- (3) Recognition in graduation program and senior awards night.

More information about the CCPS Scholars Course of Study is available through school counseling offices.

# MARYLAND SCHOLARS

The Maryland State Department of Education has partnered with the Maryland Business Roundtable for Education to acknowledge students who have completed a course of study that is beyond the basic requirements for graduation. Students are designated as Maryland Scholars by completing the following requirements:

- · 4 credits of English
- 4 credits of Math (Algebra I, Geometry, Algebra II)
- 3 credits of Lab Science (Biology, Chemistry, Physics (preferred))
- 3 credits of Social Science (U.S. History, World History, Government)
- 2 credits of the same World Language

Students must attain a 3.0 weighted cumulative GPA to qualify.

#### ACADEMIC LETTER

Students may be awarded an Academic Letter when they have a weighted GPA of 3.5 or higher with no D or F grades for three consecutive quarters during the same school year. See individual school handbooks for more details.

# RELATED INFORMATION

# ADVANCED PLACEMENT PROGRAM/COURSES

The College Board's Advanced Placement (AP) Program enables students to pursue college-level studies while still in high school. Advanced Placement courses provide challenging learning opportunities that parallel the expectations of collegelevel courses. These courses prepare students to take the Advanced Placement examinations administered annually. Students may earn college credit by performing at an exemplary level on these end-of-course examinations. A fee is associated with these exams. Further information may be obtained from the high school counseling department. Charles County Public Schools offers the following Advanced Placement Courses:

Comparative Government and Politics World History Physics 2 **English Language and Composition** Calculus AB Physics C **English Literature and Composition** Calculus BC Latin

Pre-Calculus **European History** French Language and Culture Human Geography Spanish Language and Culture **Statistics** Computer Science A Macroeconomics Art History

Microeconomics Computer Science Principles Music Theory Biology Psychology Studio Art & Design: Drawing

African American History Chemistry Studio Art & Design: 2-D United States Government and Politics **Environmental Science** Studio Art & Design: 3-D

United States History Physics 1

For more information on the Advanced Placement Program, visit the College Board website at www.collegeboard.com/apstudents. For specific course and exam information at your high school, see your school counselor.

# EXTRACURRICULAR ACTIVITIES AND ATHLETICS ELIGIBILITY REQUIREMENTS

Please click on this link https://www.ccboe.com/index.php/athletics

# NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA) – Divisions I and II

Students interested in competing in athletics during their initial year of college must meet the eligibility requirements set by the NCAA. These requirements include specific high school coursework, along with a minimum Grade Point Average and ACT/SAT score. To obtain the latest requirements, parents, and students should contact their athletic director, school counselor, or the NCAA directly by calling (877) 262-1492 or by consulting the NCAA website. High school athletes wishing to compete in college must also register with the NCAA and can do so online by following links on this same site.

Click on the link below to search for Charles County Public Schools' list of NCAA approved courses. You can search by the high school's six-digit NCAA High School Code or six-digit CEEB/ACT Code (code on page 91). You may also search by city/state and high school name.

https://web1.ncaa.org/hsportal/exec/hsAction?hsActionSubmit=searchHighSchool

# For additional information, contact the NCAA online at

https://web3.ncaa.org/ecwr3/

# **GRADING SCALE**

Semester and final grades will be computed by averaging numerical grades. Quarterly grades will be calculated by deriving a quarterly arithmetic average, then translating that average into a letter grade using the scale listed below:

- A Superior (90 100%)
- B Above Average (80 89%)
- C Average (70 79%)
- D Below Average (60 69%)
- F Failure (0 59%)

# **PROMOTION STATUS**

- 10th Grade Minimum of 6 credits and completed one year of high school
- 11th Grade Minimum of 12 credits and completed two years of high school
- 12th Grade Minimum of 16 credits and the completion of at least three years of high school

# REGULAR CUMULATIVE GRADE POINT AVERAGE (GPA)

(A=4.0, B=3.0, C=2.0, D=1.0, and F=0.0)

# WEIGHTED CUMULATIVE GRADE POINT AVERAGE (GPA)

Weighted classes are identified in the course description with the Code "W" (0.5) or "W\*" (1.0).

Advanced Placement grades are weighted by adding 1 point (1.0) for each grade (A=5.0, B=4.0, C=3.0, D=1.0, and F=0.0) in a year-long class and .5 for each semester AP course. No weighted points are given for a D or failing grade.

Designated Honors courses are weighted by adding one-half point (.5) for each grade (A=4.5, B=3.5, C=2.5, D=1.0, and F=0.0) in a year-long course and .25 in a semester Honors course. No weighted points are given for a D or failing grade.

All Project Lead the Way Specialization and PLTW Capstone Courses will be weighted by adding 1 point (1.0) for each grade (A=5.0, B=4.0, C=3.0, D=1.0, and F=0.0). No weighted points are given for a D or failing grade.

Transfer credits are converted to the CCPS weighting system and no weighted points are given for a D or failing grades.

# **SUMMER SCHOOL**

Students who fail core subjects should consider taking classes in the summer school program. A maximum of two make-up credits may be taken in summer school. For a student to be eligible to take a course for make-up in summer school, a student must be enrolled until March 1 for a year-long course; a student must be enrolled for at least nine weeks for a semester course. Specific information about class offerings and summer school location, along with additional requirements, will be available from the high school counseling department in June.





# Science, Technology, Engineering, and Mathematics Opportunities

STEM education is an approach to teaching and learning that integrates the content and skills of science, technology, engineering, and mathematics. Courses and activities are developed to prepare students to compete in the global marketplace. The skills and learning attained by participating in STEM courses and activities are transferable to all areas of the educational experience. All students are encouraged to explore STEM activities, coursework, postsecondary study, and careers.

Curricular Opportunities  Additional information available in this booklet and availability of opportunities varies from school to school	Extracurricular Opportunities  Additional information available at individual schools and availability of opportunities varies from school to school
Computer Science/Computer Technology	Computer Bowl
<ul> <li>AP Computer Science A</li> <li>AP Computer Science Principles</li> <li>Computer Internship</li> </ul>	Cyber Security Team
Computer Science Capstone	Destination Imagination Team
<ul><li>Exploring Computer Science</li><li>Introduction to Computer Programming</li></ul>	Environmental Engineering Club
Web Design and Development	Envirothon Team
<ul> <li>Engineering and Technology Education</li> <li>Foundations of Technology</li> <li>Computer Assisted Drafting and Design</li> </ul>	For Inspiration and Recognition of Science and Technology (FIRST) Robotics Team
<ul><li>(CADD)</li><li>Advanced Design Applications</li></ul>	Girls Who Code
Engineering Design	High School Math Team
Mathematics Courses (See pages 70-73)	It's Academic
Project Lead The Way (PLTW) Biomedical Sciences  • Principles of the Biomedical Sciences	MESA (Mathematics, Engineering, and Science Achievement)
<ul><li>Human Body Systems</li><li>Medical Interventions</li></ul>	National Society of High School Scholars
Biomedical Innovations	National Technical Honor Society
Project Lead The Way (PLTW) Pathway To Engineering	Personal Finance Challenge
<ul> <li>Introduction to Engineering Design</li> </ul>	Skills USA Team
<ul> <li>Principles of Engineering</li> <li>Digital Electronics</li> <li>Computer Integrated Manufacturing</li> </ul>	Technology Club
Aerospace Engineering	Unmanned Aerial Vehicle (UAV) Club
<ul> <li>Civil Engineering &amp; Architecture</li> <li>Engineering Design and Development (EDD)</li> </ul>	VEX Robotics
Science Courses (See pages 76-79)	

# ALTERNATIVES AND OPTIONS FOR COMPLETION OF HIGH SCHOOL

# ALTERNATIVES TO THE FULL-TIME FOUR-YEAR ENROLLMENT REQUIREMENT

CCPS recognizes that four-year enrollment in a public high school may not serve the best interests of all students, and the following alternative programs are available:

- <u>Early Graduation:</u> Qualified students who have met Student Service Learning (SSL) and Maryland High School Assessments (MHSAs) have the opportunity to graduate at the end of their junior year. Students must apply and 7 credits by the end of their 9<sup>th</sup> grade year. Students must register and complete English III in summer school for original credit prior to junior year. Students participating in Early Graduation are not ranked. Will not be considered senior status until after successfully completing the first semester of their junior year. Students must have 3 credits of math by the end of 10<sup>th</sup> grade.

  <u>Early Graduation</u>
- <u>Full-time College Waiver:</u> Qualified students who have met all other graduation requirements have the opportunity to attend college full-time during their senior year, completing the high school English IV requirement by taking and passing two semesters of approved college-level English courses. Students may participate in commencement activities (prom, senior trip, and pictures). Students may NOT participate in extracurricular and athletic activities, academic contests, and student rank at their high school. Students must contact appropriate school personnel for senior activity information.
  - Full-time College Waiver or see your school counselor for a physical copy.
- <u>Virtual Academy:</u> An educational program offered through CCPS that provides a hybrid of face-to-face instruction
  and online high school courses. Credit is awarded upon satisfactory completion of subject requirements. Students
  who enroll in Virtual Academy are self-motivated independent learners who have basic computer skills. Virtual
  Academy accepts students in grades 9-12 and who are referred by the school principal.

   <u>Virtual Academy</u>

Each of these alternatives requires interested students to follow specific procedures established by Charles County Public Schools. The guidelines, forms, and timelines for application are available from high school counseling departments.

# **DUAL CREDIT**

Credit that is awarded for high school graduation requirement and college credit.

# **DUAL ENROLLMENT**

Qualified juniors and seniors have the opportunity to earn college credit free of charge at the College of Southern MD (CSM) while also attending high school. Students must select approved college-level courses from CCPS. Students must be approved to participate in the Dual Enrollment program by CCPS and meet the requirements to participate in the Dual Enrollment Program at CSM. Course offered at home high school and college. Credits will be transcribed as .5 additional weight.

**Dual Enrollment Application** or see your school counselor for a copy.

#### **EARLY COLLEGE**

Charles County Public Schools is proud to partner with The College of Southern Maryland to offer CCPS high school students and their families the CSM Early College Program. Open to qualified rising seniors and juniors, this tuition-free program is an opportunity to experience being a full-time college student, save money, and earn college credits. Students take college classes on the CSM La Plata Campus their junior and/or senior year, while simultaneously fulfilling their high school graduation requirements. Participating students will earn their high school diploma while learning a Transfer Certificate consisting of 34 or 60 credits at CSM. Aligning with the Blueprint for Maryland's Future, this program is open to rising juniors and/or seniors. Students must have 3 credits of math by the end of 10<sup>th</sup> grade.

Early College Program

# **INDEPENDENT STUDY**

In extreme cases, students may exhaust all options in a given subject area. An additional course may be needed which requires a higher level of study or research, thus necessitating the need for a high level of self-directed learning. These courses must not be offered in any CCPS school or affiliated institution of higher learning. Arrangements for Independent Study are made on an individual basis to address a particular academic need. Independent Study is a contractual arrangement with approval of the principal for a grade and credit in a designated course. Students taking Independent Study must be self-motivated, independent individuals who learn with minimal supervision.

# 2024-2025 COURSES MEETING FINE ARTS, TECHNOLOGY EDUCATION, AND ADVANCED TECHNOLOGY EDUCATION CREDIT

# **FINE ARTS (FA)**

- Acting
- · Advanced Acting I, II
- Advanced Art
- Advanced Placement Art History
- Advanced Placement Music Theory
- Advanced Placement Studio Art & Design: Drawing
- Advanced Placement Studio Art & Design: 2-D
- Advanced Placement Studio Art & Design: 3-D
- Architecture and Interior Design
- Art I. II
- · Ceramics I, II, III
- Chamber Choir I, II, III, IV
- · Class Piano I, II, III, IV
- Concert Band I, II, III, IV
- Concert Choir I, II, III, IV
- Dance I, II, III
- Digital Media I, II, III
- Drawing/Design
- Fashion Design
- Guitar I, II, III, IV
- Intro to Theatre
- Jazz Ensemble I, II, III, IV
- Men's Chorus I, II, III, IV
- Music Theory
- Orchestra I, II, III, IV
- Painting I, II, III
- Photography I, II, III
- Sculpture
- Show Choir I, II, III, IV
- Stage Production I, II, III
- · Symphonic Band I, II, III, IV
- Symphonic Orchestra I, II, III, IV
- Women's Chorus I, II, III, IV

#### **TECHNOLOGY EDUCATION (TE)**

- Advanced Placement Computer Science Principles
- Computer Assisted Drafting and Design (CADD)
- Exploring Computer Science
- Foundations of Technology (FoT)
- Introduction to Engineering
- Introduction to Engineering Design (IED)

# <u>UNIVERSITY SYSTEM OF MARYLAND: MINIMUM QUALIFICATIONS FOR REGULAR</u> ADMISSIONS

The following high school course work requirements apply to students seeking admission to four-year public colleges and universities in Maryland:

#### **SUBJECT**

- English 4 credits
- Social Science/History 3 credits
- Mathematics 4 credits (Students must complete Algebra I, Geometry, and Algebra II. Students who complete Algebra II prior to their final year must complete the four-year mathematics requirement by taking a course or courses that utilize non-trivial algebra.)
- Biological and Physical Sciences (two must be lab sciences) 3 credits
- World Languages (other than English) 2 credits of the same language

Each institution shall publish its own decision criteria, which may be more rigorous than the system-wide requirements listed above. Additionally, individual schools may choose to accept Advanced Technology coursework in lieu of the World Language requirement.

All students are encouraged to exceed the minimum entrance requirements by taking honors or Advanced Placement (AP) courses, as well as additional academic electives including a fourth year of all core subjects and a third year of World Language.

# ARTICULATED/TRANSCRIPTED COURSES AND PROGRAMS

The following Charles County high school courses are articulated (may be eligible for college credits) with the College of Southern Maryland, University of Maryland, Towson University, Stevenson University, or other post-secondary institutions.

- · Academy of Health Professions
- Advanced Algebra with Trigonometry
- Advanced Business Management
- Advanced Computer Applications, Integration, and Development
- Automotive Technology
- CASE: Natural Resources
- Collision Repair
- Composition and Rhetoric
- Computer Internship
- Criminal Justice
- Culinary Arts
- Cyber Security
- Drafting and Design Technology
- Early Childhood Education and Childcare
- Engineering Concepts
- Graphic Communications
- Introduction to Advanced Math
- Interactive Media Productions (IMP)
- IT Networking (CISCO)
- Manufacturing Technology
- Maryland Fire and Rescue Institute (MFRI)
- Pre-Calculus
- Project Lead The Way (PLTW) Biomedical Science
- Project Lead The Way (PLTW) Engineering
- Prostart- Food and Beverage Management
- Teacher Academy of Maryland

For more information on which schools offer these programs, please visit their schools' website.

#### PILOT PROGRAMS

Individual high schools may offer approved pilot courses in addition to those listed in the Program of Studies. Please see your counselor and course selection sheet for more information.

# HIGH SCHOOL COURSE WITHDRAWAL PROCEDURES

# PROCEDURES AND GUIDELINES FOR SCHEDULE CHANGES

At the beginning of each school year, students are permitted to submit a written request for a schedule change on a Schedule Change Request Form. This request must be made within the first ten days of school and include the following: a parent signature, a reason for the desired change, the course that the student wishes to drop, and the course the student wishes to add. A Schedule Change Request Form will be reviewed only if the request includes one or more of the following reasons:

- A scheduling error
- A course needed for graduation
- An inappropriate academic placement
  - Failure to read or complete the summer assignments does not constitute as an inappropriate academic
    - https://www.ccboe.com/fs/resource-manager/view/663b6eff-5cac-4607-aa32-07dd06cc016c
- A recommendation by administration

Schedule Change Request Forms submitted within the first ten days of school will be reviewed. Once the review is completed, the school counselor will notify parents of approval or denial. If a Schedule Change Request is approved and a student withdraws from a course before the first interim for semester courses and the first quarter for a full-year course, no notation is made on the record. If a student is approved to withdraw after the period listed above, a notation will be made on the student's transcript with the grade earned to date of withdrawal. No withdrawals from courses will be approved after the first grading period in a semester course or after the first semester in a year-long course.

# SCHEDULE CHANGE APPEAL PROCESS

An appeal can be made in writing to the appropriate school level administrator. Signatures of the student and parent/guardian are required. Once a decision is made on the appeal, the school level administrator will notify the parent/guardian. Written appeals to a principal's decision should be sent to the Office of School Administration and Leadership.

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# **COURSE OFFERINGS**



# **ACADEMIC SUPPORT**

Please note that not all courses are available at each school due to staffing/student enrollment

**SEMINAR I** 

143064 ½ credit Grades 9, 10, 11, 12

**SEMINAR II** 

Prerequisite: Concurrent enrollment in an AP course

This elective course is designed to prepare students for success in pursuing advanced level courses. Through a variety of instructional strategies, students develop skills in higher-order thinking, writing across the curriculum, and reading across the curriculum to access challenging course material. The seminar elective class provides support through guidance, and experiences beyond those available in their AP course, for success on the AP exam and to be effective readers and writers in college and in their careers.

**AVID I** 

142014 1 credit Grades 9, 10

AVID II 142024

1 credit Grades 10, 11

AVID III 142034

1 credit Grades 11, 12

AVID IV

142044 1 credit Grade 12

Prerequisite: Interview and application process

These courses are college preparatory classes designed to prepare students for success in pursuing advanced level courses leading to acceptance to and success in a four-year college or university. The AVID elective classes help students succeed in a rigorous curriculum and complete a college preparatory path. Through a variety of instructional strategies, students develop skills in higher-level thinking, writing across the curriculum, and reading across the curriculum to access challenging course material. The AVID elective classes provide support through student development and use of focused note taking, binder organization, reflective learning strategies, team building, time management, tutorials, Socratic seminars, public-speaking and test-taking skills, and essay writing. Students also participate in college, career, and cultural exploration activities.

LITERACY I

019998 1 credit Grade 9

Prerequisite: Meets established criteria for enrollment, taken concurrently with English I

**LITERACY II** 

019999 1 credit Grade 9

Prerequisite: Meets established criteria for enrollment, taken concurrently with English I

**LITERACY III** 

019996 1 credit Grade 10

Prerequisite: Literacy I, taken concurrently with English I or II

LITERACY IV

019997 1 credit Grade 10

Prerequisite: Literacy II or recommendation from Literacy I, taken concurrently with English I or II

LITERACY V

019995 1 credit Grade 11

Prerequisite: Literacy IV, recommendation from Literacy III or teacher placement based on student data, taken

concurrently with English III

**LITERACY VI** 

019994 1 credit Grade 12

Prerequisite: Literacy V, or teacher placement based on student data, taken concurrently with English IV

These courses are designed to extend instruction for students who require additional instructional support. The focus of instruction will be to assist students in developing comprehension strategies to become independent readers across content areas. Students will be recommended and selected for these courses as determined by the data from the Fountas & Pinnell Benchmark Assessment.

PREP PLUS I

140014 1 credit Grade 9

Prerequisite: Recommendation of the Individualized Education Program (IEP) Committee

**PREP PLUS II** 

140024 1 credit Grade 10

Prerequisite: Recommendation of the Individualized Education Program (IEP) Committee

**PREP PLUS III** 

140034 1 credit Grades 11, 12

Prerequisite: Recommendation of the Individualized Education Program (IEP) Committee

PREP PLUS IV

140044 1 credit Grades 11, 12

Prerequisite: Recommendation of the Individualized Education Program (IEP) Committee

Students selected for these courses are provided additional time and support. These courses will emphasize content and organizational and study skills that enable students to move toward independence with their learning.

# **SKILLS FOR SUCCESS**

140114 1 credit Grades 9, 10, 11, 12

This course is designed to provide students with explicit instruction in the areas of interpersonal communication, social skills and self-advocacy to promote access and inclusion in classroom and community settings. The course is available for students with an Individualized Education Program (IEP).

#### STRATEGIES FOR PERSONAL MANAGEMENT

02984V or W 1 credit Grades 9, 10, 11, 12

This course is designed to assist students in development of decision-making and problem-solving strategies using economics, career, and social issues as a focus. The course is available to students with an Individualized Education Program (IEP).

**SUPPLEMENTAL READING I** 

018514 1 credit Grades 9, 10, 11, 12

SUPPLEMENTAL READING II

018524 1 credit Grades 9, 10, 11, 12

**SUPPLEMENTAL READING III** 

018534 1 credit Grades 9, 10, 11, 12

SUPPLEMENTAL READING IV

018544 1 credit Grades 9, 10, 11, 12

Prerequisite: Meets established criteria for enrollment, taken concurrently with English

These courses are designed to provide acceleration in reading skills for students whose scores on baseline screening indicate the need for such assistance. Students will be recommended and selected for these courses as determined by the data from the Fountas & Pinnell Benchmark Assessment.

# A.C.H.I.E.V.E

The A.C.H.I.E.V.E. Program is a regional program in Charles County that provides instruction in both academic and adaptive skills. Scaffolded instruction in grade-level content is provided utilizing alternate academic achievement standards and the alternate state assessments. Students participating in the alternate academic achievement standards and/or assessments are progressing toward a Maryland Certificate of Program Completion. Eligibility is determined through the Individualized Education Program (IEP) process.

# **CAREER/VOCATIONAL**

LS0064 Grades 9, 10, 11, 12 LS0065 Grades 9, 10, 11, 12

These courses will provide students with appropriate skills necessary to demonstrate positive work attitudes and behaviors, to include self-determination and self-advocacy skills. Throughout the four years of high school, students will participate in a variety of work-based learning opportunities within the school building, as determined by a student's IEP. Students in 11<sup>th</sup> and 12<sup>th</sup> grade may participate in work-based learning opportunities outside of the school building. An emphasis will be placed on transition planning to the adult world and providing students with access to community service providers.

#### **COMMUNITY**

LS0074 Grades 9, 10, 11, 12 LS0075 Grades 9, 10, 11, 12

These courses will provide students with the individual skills necessary to access community resources with the highest level of independence possible. Instruction will target safety in the community, accessing general community activities, and travel training on public transportation. The level of community access will be determined by individual student needs, as dictated by his or her IEP.

# **ENGLISH**

LS0014 Grades 9, 10, 11, 12 LS0015 Grades 9, 10, 11, 12

These courses are designed to provide students with instruction in English/Language Arts, foundational reading and writing skills, and functional literacy which will prepare them for meaningful outcomes in post-secondary education, career, or community participation. Scaffolded instruction in grade-level content and concepts will be provided via the Dynamic Learning Maps (DLM) Essential Elements. Instruction in foundational skills and functional literacy will be driven by individual student needs and IEPs.

#### **MATHEMATICS**

LS0034 Grades 9, 10, 11, 12 LS0035 Grades 9, 10, 11, 12

These courses are designed to provide students with instruction in curriculum-based, foundational, and functional mathematics skills which will prepare them for meaningful outcomes in post-secondary education, career, or community participation. Scaffolded instruction in grade-level content and concepts will be provided via the Dynamic Learning Maps (DLM) Essential Elements. Instruction in foundational skills and functional mathematics will be driven by individual student needs and IEPs.

#### RECREATION/LEISURE

LS0054 Grades 9, 10, 11, 12 LS0055 Grades 9, 10, 11, 12

These courses will provide students instruction that will teach them the skills necessary for participation in a variety of recreational, leisure, and extra-curricular activities for leisure, hobbies, and physical fitness. Instruction will focus on increasing independent interactions with peers as well as reducing a student's dependence on adult support. Activities to support this instruction will occur inside and outside the school environment, as appropriate.

#### SCIENCE/HEALTH

LS0044 Grades 9, 10, 11, 12 LS0045 Grades 9, 10, 11, 12

These courses will provide students instruction, which focuses on independent personal care, appropriate health and safety practices, self-advocacy skills, simplified science instruction relating to the human body, nutrition, and the environment. Students will access modified learning outcomes based on the Next Generation Science Standards.

LS0024 LS0025 Grades 9, 10, 11, 12 Grades 9, 10, 11, 12

These courses will provide students instruction to enable them to interact within the community as responsible consumers and citizens, to the greatest level of independence possible. A focus will be placed on the acquisition of self-advocacy skills.



# **BUSINESS EDUCATION**

The goals of Business Education are to provide:

- 1. Opportunities for all students to acquire business knowledge, skills, and attitudes needed to function effectively in any career
- 2. A sequence of foundation and advanced courses to support continuing education in business administration, management, finance, and marketing
- 3. A continuous program of planned learning experiences designed to help students develop
  - An understanding of the business environment for personal and financial success
  - Critical thinking skills to enhance decision-making
  - Effective spoken/written communication skills

# **ADVANCED BUSINESS MANAGEMENT**

175194 1 credit Grades 11, 12 Codes: CTC, CC

Prerequisite: Principles of Business Management & Entrepreneurship, and completion or concurrently enrolled in Principles of Accounting and Finance

This course provides students with the knowledge that will prepare them for post-high school levels of education and entry-level positions in the work force. Focus will be on the role of business in society; the changing nature of contemporary business practices; major management concepts, theories; the processes of management (functional, operational, and human relations); business law and ethics; and business communications. Career pathways will be examined and the use of business management knowledge in a variety of career clusters is also explored. Awareness of ethical issues and application of ethical decision-making models will be reinforced throughout the course. Students will understand the business world and be more prepared to meet their career goals and objectives. All students will take the A\*S\*K certification exam.

# ADVANCED COMPUTER APPLICATIONS, INTEGRATION, AND DEVELOPMENT

C17332 1 credit Grades 10, 11, 12 Code: CC

Prerequisite: Computer Applications and Concepts

This course will teach advanced word processing and spreadsheet skills and also include an introduction to databases.

#### **BUSINESS LAW**

178002 1 credit Grades 10, 11, 12

This course explores a variety of legal topics ranging from a review of our court system and criminal law to consumer and contract law. Emphasis is placed on laws and regulations related to business activities. This course is especially recommended for students seeking a career in business administration or legal professions.

# **BUSINESS MANAGEMENT AND FINANCE (CAPSTONE)**

175094 1 credit Grade 12

Prerequisite: Principles of Business Management & Entrepreneurship, Principles of Accounting and Finance, and completion or concurrently enrolled in Advanced Business Management

This course sequence allows students to build on knowledge and skills gained from previous courses with a forum for analyzing, synthesizing, and implementing the skills and knowledge. It offers an opportunity to think critically about a subject of profound interest while demonstrating that they have mastered a content area and they can apply what they have learned to create a tangible product or service. Students are required to present a Capstone project to include skills such as complex problem solving, evaluation and synthesis of research, writing, communication, organization, time management, and presentation skills.

#### **COMPUTER APPLICATIONS AND CONCEPTS**

173310 1 credit Grades 9, 10, 11, 12

This course develops professional level skills necessary to use computers as tools to increase productivity in a variety of subject areas and careers. Instruction will include units on word processing skills, spreadsheets and charting, presentation graphics, and keyboarding.

# **ENTREPRENEURSHIP AND E-COMMERCE**

178005 1 credit Grades 10, 11, 12

This course provides students the opportunity to learn what it is like to be an entrepreneur. Students will be guided through the steps of starting and managing their own business. Students will research a variety of influences related to starting a business venture and develop a business plan to open a new business of their own choosing. Students will also explore the global use of the Internet as a business tool, evaluate elements of web-page design, and apply Internet marketing strategies to their business venture.

#### PRINCIPLES OF ACCOUNTING AND FINANCE

178001 1 credit Grades 10, 11, 12 Code: CTP

This course involves analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis is placed on understanding the complete accounting cycle and preparing financial statements for different types of business. Coverage also includes recognizing and defining basic accounting principles, concepts, and terminology using Generally Accepted Accounting Principles (GAAP) as they apply to assets, liabilities, and owner's equity.

# PRINCIPLES OF BUSINESS MANAGEMENT AND ENTREPRENEURSHIP

175084 1 credit Grades 9, 10, 11, 12 Code: CTP

This course explores the various types of businesses, as well as the major functional areas of business and interrelationships among them. Students will learn to analyze the functions of business through evaluating, planning, organizing, and controlling. Leadership styles, employee rights and responsibilities, and career opportunities will also be taught. Technology will be used to gain an understanding of the operation of a contemporary business and the role of computers in the information gathering, dissemination, and decision-making processes.

#### SPORTS AND ENTERTAINMENT MARKETING

178006 1 credit Grades 10, 11, 12

This course provides organized learning experiences in marketing, management, sales, and merchandising. This course teaches core content applicable to all sport/event/recreation marketers, as well as content unique to each industry. Students will be given opportunities to practice the use of technological business tools in performing activities involving the functions and processes of marketing. This course requires students to think critically about the issues of leadership, character, security, consumer needs, and community service. Reading, writing, and project completion are integral components of this course.



# **CAREER & TECHNICAL EDUCATION COMPLETER PROGRAMS**

Maryland State Department of Education, in partnership with statewide industry advisory groups, identified ten Career Clusters that represent core business functions across broad industry areas in Maryland. The completion of a Career Technical Program (CTP) sequence of courses within one of these clusters is one option for graduation completion. CTP Completer sequences are college and career preparation that may include certification, licensure, apprenticeship, college credit and/or work-based learning experience. Students must successfully complete each course in the selected sequence to fulfill graduation requirements through the completer option. Completer program availability varies by each high school.

Career Cluster		Career Cluster	
Completer Program	SCHOOL	Completer Program	SCHOOL
Course sequence	Credits	Course sequence	Credits
Arts, Media, and Communication		Business Management and Finance	
		Business Management and Finance	ALL
Graphic Communication	NPHS*	Principles of Business Management and	
Introduction to Graphic Communications	1.0	Entrepreneurship	1.0
Graphic Communications Digital File Prep/Output	1.0 1.0	Principles of Accounting and Finance	1.0 1.0
Digital Priet Production	1.0	Advanced Business Management	otal 3.0
Screen Printing	1.0		Jiai 3.0
Graphic Design	1.0	Career Research & Development (CRD)	ALL
Total	6.0	Career Research & Development	1.0
		Career Development, Preparation, & Transition	1.0
Interactive Media Production	RSEC*	Work-based Learning Tota	2.0 <b>I 4.0</b>
Principles of Arts, Media, and Communication	1.0	100	11 4.0
Interactive Media and Design I	1.0		
Interactive Media and Design II Interactive Media Portfolio Capstone	1.0 1.0		
Total	4.0		
Total	4.0		
Construction & Development		Consumer Services, Hospitality, and Tourisr	n
Heating, Ventilation, and Air Conditioning (HVAC)	RSEC*	ProStart-Food and Beverage Management	ALL
Foundations of Building & Construction Technology	1.0	Becoming a Food Service Professional (Level 1)	1.0
(NCCER Core)		Becoming a Food Service Professional (Level 2)	1.0
HVAC Level I	1.0	Practical Experience as a Food Service	2.0
HVAC Level II	2.0	Professional	. 40
Work-based Learning Total	1.0 <b>5.0</b>	Tota	il 4.0
Total	5.0	Cosmetology	NPHS*
Construction Design and Management	NPHS*	Principles and Practice of Cosmetology	2.0
Computer Assisted Drafting and Design (CADD)	1.0	Advanced Cosmetology-Theory and Application	4.0
Revit: 3-D Architectural Drafting	1.0	Mastery of Cosmetology	4.0
Introduction to Construction Design and Management Principles of Construction Design	1.0 1.0	Tota	l 10.0
Advanced Design and 3D Modeling	1.0	Culinary Arts	NPHS*
Advanced Design and 3D modeling  Advanced Construction Management	1.0	Culinary Basics- Foundations of Professional	1.0
Advanced Construction Applications and Certification	2.0	Cooking	
Total	8.0	Professional Cooking	2.0
		Advanced Professional Cooking/Baking	3.0
Electrical Construction	NPHS*	Tota	l 6.0
Foundations of Building and Construction	1.0	Barbering	RSEC*
Technology (NCCER Core)	0.0	Principles and Practices of Barbering	1.0
Electrical Construction 1  Electrical Construction 2	2.0 3.0	Advanced Barbering and Application	2.0
Total	3.0 <b>6.0</b>	Barbering Capstone	3.0
Total	0.0	Tota	l 6.0
Welding Technology	NPHS*	Environmental, Agricultural, and Natural Res	source
Foundations of Building and Construction	1.0	Systems	
Technology (NCCER Core)		Cystolia	
Welding I	2.0	CASE: Natural Resources & Agriculture	MHS*
Welding II	3.0	Introduction to Agriculture, Food, and Natural	1.0
Total	6.0	Resources (AFNR)	
		Natural Resources and Ecology	1.0
		Environmental Science Issues	1.0
		Agricultural Research and Development <b>Total</b>	1.0 <b>4.0</b>
		Iotai	4.0

Career Cluster		Career Cluster	
Completer Program	SCHOOL	Completer Program	SCHOOL
Course sequence	Credits	Course sequence	Credits
Health and Biosciences		Human Resource Services	
PLTW Biomedical Sciences		Maryland Fire and Rescue Institute	ALL
LHS, LPHS, MHS, SCHS,	TSHS, WHS	Fire Emergency Medical Training I	2.0
Principles of the Biomedical Sciences	1.0	Fire Emergency Medical Training II	2.0
Human Body Systems	1.0	Total	4.0
Medical Interventions	1.0		
Biomedical Innovations	1.0	Teacher Academy of Maryland (TAM)	ALL
Total	4.0	Human Growth & Development	1.0
		Teaching as a Profession	1.0
Academy of Health Professions – Pharmacy Technician	RSEC*	Foundations of Curriculum & Instruction	1.0
Foundations of Medical and Health Science	1.0	Education Academy Internship	1.0
Structures & Functions of the Human Body	1.0	Total	4.0
Pharmacy Technician Medical Specialty	1.0		
Allied Health Internship	2.0	Criminal Justice	NPHS*
Tot	tal 5.0	Introduction to Criminal Justice	2.0
Academy of Health Professions - Physical Pohabilitation	RSEC*	Advanced Topics in Criminal Justice	2.0
Academy of Health Professions – Physical Rehabilitation		Contemporary Issues in Criminal Justice, Law	2.0
Foundations of Medical and Health Science	1.0	and Society	
Structures & Functions of the Human Body	1.0	Criminal Justice Work-Based Learning	1.0
Physical Rehabilitation Medical Specialty	1.0	Total	8.0
Allied Health Internship	2.0		
Tot	tal 5.0	Child Development Professions	NPHS*
Academy of Health Professions – Certified Nursing Assistant	NPHS*	Child Growth and Development (Birth	1.0
Structure and Functions of the Human Body	1.0	Through Adolescence)	
Foundations of Medical and Health Science	1.0	Learning Environment for Preschoolers	1.0
Introductory Skills Lab and Clinical Experience	1.0	Child Development Associate Portfolio	2.0
Advanced Skills Lab	1.0	and	
Certified Nursing Assistant Clinical Internship	1.0	Internship	4.0
Specialized Clinical Internship	1.0	Child Development Associate Internship	
To		Total	8.0
	0.0		LHS, NPHS
Biotechnology	NPHS*	AFJROTC I	1.0
Standard Operating Procedures Proficiencies	1.0	AFJROTC II	1.0
Molecular Biotechnology	1.0	AFJROTC III	1.0
Special Topics in Biotechnology	2.0	AFJROTC IV*	1.0
Research in Biotechnology	1.0	Total	4.0
Tot	tal 5.0		
Information Technology (IT)			MHS, TSHS
Computer Science	ALL	Leadership Education Training (LET) 1	1.0
Introduction to Computer Programming	1.0	Leadership Education Training (LET) 2	1.0
AP Computer Science Principles	1.0	Leadership Education Training (LET) 3	
AP Computer Science A	1.0		1.0
Total		Leadership Education Training (LET) 4*	1.0
	0.0	Total	4.0
Cisco Networking Academy	NPHS*		
Cisco-IT Essentials	1.0		PHS, WHS
Cisco-CCT: Introduction to Networking with Linux	2.0	NJROTC I	1.0
Cisco-CCNA: Switching, Routing, and Wireless	2.0	NJROTC II	1.0
Essentials		NJROTC III	
Cisco-Enterprise Networking, Security, and	2.0		1.0
Automation		NJROTC IV*	1.0
Cisco-Cyber Operations	2.0	Total	4.0
To	tal 9.0		
		Marine Corps Junior ROTC (MCJROTC)	SCHS
Cisco Cyber Security	NPHS*	MCJROTC I	1.0
Cybersecurity Essentials	1.0	MCJROTC II	1.0
Introduction to Networks	2.0	MCJROTC III	
CCNA Cisco Capstone	2.0	MO 10 070 N ::	1.0
CCNA Security	2.0	MCJROTC IV*	1.0
Tot	tal 7.0	Total	4.0
		* = this course is not required for completion of this complete sequence	eter program
		1	

Career Cluster Completer Program	SCHOO		SCHOOL
Course sequence	Credits	Course sequence	Credits
Transportation Technologies		Manufacturing, Engineering & Technology	
Automotive Technology	NPHS*, RSEC*	Project Lead The Way (PLTW) Pre-Engineering	
Electrical Systems	1.0	LHS, LPHS, MHS, SCHS, TSH	IS, WHS
Automotive HVAC	0.5	Introduction to Engineering Design (IED)	TE
Transmissions (Automatic & Manual)	0.5	Principles of Engineering	1.0
Brakes	1.0	Specialization Course	1.0
Suspension & Steering	1.0	Engineering Design & Development	1.0
Engine Performance	1.0	Total	3.0
Engine Repair	1.0	*Must be one of the following sources. Civil Engineering and	
Total	6.0	*Must be one of the following courses: Civil Engineering and Architecture, Computer Integrated Manufacturing, Aerospace	
Autobody/Collision Repair Technician	NPHS*	Engineering, or DE	
Safety Procedures	1.0	**IED is required for students completing this sequence and fu	ufilla tha
Estimating and Blueprinting	1.0	1.0 credit of TE requirement for graduation but does not count	
Non-Structural Analysis and Damage Repair	1.0	credit total of this PLTW sequence.	toward trie
Painting and Refinishing	1.0	Great total of this I ETVV sequence.	
Structural Analysis and Damage Repair	1.0	Drafting and Design Technology	NPHS*
Quality Control and Job Placement	1.0	Introduction to Construction Development/Drafting	1.0
	Total 6.0	Principle of Drafting and Construction Design	2.0
Apprenticeship Maryland Program (AMP	')	Advanced Design and 3D Modeling	2.0
Apprenticeship Maryland Program	. ALL	Advanced Drafting and Construction Capstone	1.0
Apprenticeship I	1.0	Total	6.0
Apprenticeship II	1.0		
Apprenticeship III	1.0		
Apprenticeship IV	1.0		
	Total 4.0		

ALL = All CCPS High Schools

LHS = Lackey High School

LPHS = La Plata High School

SCHS = St. Charles High School

TSHS = Thomas Stone High School WHS = Westlake High School

RSEC\* = Robert D. Stethem Educational Center – Application Process

NPHS\* = North Point High School – Application Process MHS\* = McDonough High School – Application Process

**Bold** denotes concentrator course

Information on other completer programs offered at North Point High School for Science, Technology, and Industry is published in the Guide to Career Majors available on the school website at: http://www.ccboe.com/schools/northpoint/images/pdfs/GCMajors.pdf

Information on the completer programs offered at the Robert D. Stethem Educational Center is on page 35 and available on the school website at:

http://www.ccboe.com/schools/stethem/

Information on the CASE program offered at Maurice J. McDonough High School is available on the school website at: https://www.ccboe.com/schools/mcdonough/index.php/login/cte-case-program

# <u>CAREER CLUSTER – APPRENTICESHIP MARYLAND PROGRAM (AMP)</u> <u>APPRENTICESHIP MARYLAND PROGRAM (AMP)</u>

Apprenticeship Maryland is a youth apprenticeship program for students, ages 16 and up, that is designed for students that want to gain experience in the workplace with plans to continue in that industry after graduation. This program was developed in partnership with the Maryland State Department of Education (MSDE) and the Maryland Department of Labor (MDoL) to provide students a unique opportunity to "earn and learn."

The program focuses on career pathways in Science, Technology, Engineering, and Mathematics (STEM) occupations. The STEM-related occupations include those in:

- Information Technology
- Health and Biomedical Sciences
- Manufacturing
- Construction and Design
- Banking and Finance

Participating students start the program in the summer or fall of their junior or senior year. Students must complete at least 450 hours of work-based training under the supervision of an eligible employer and at least one year of related instruction.

Required Courses: All four (4) of the following courses are required to achieve Completer Status, along with completion of the 450 hours.

# **APPRENTICESHIP I**

174641 1 credit Grades 11, 12 Code: CTP

Students are required to complete one credit of related classroom instruction to support the apprenticeship experience. The related instruction is specialized based on the apprenticeship that will be completed. Students integrate information learned during this course into the work-based learning apprenticeship experience. The related classroom instruction can be offered prior to or concurrently with the work-based learning experience.

#### **APPRENTICESHIP II**

174642 1 credit Grades 11, 12 Code: CTC

# Prerequisite: Concurrently enrolled in Apprenticeship I

Students are required to complete 450 hours of paid (at least minimum wage) work-based learning at the worksite by the completion of the apprenticeship program. During this course, students will complete approximately 150 hours towards the required 450 hours required of the program. This apprenticeship experience is guided by a formal work-based learning (WBL) agreement and student work plan. The student work plan identifies the appropriate competencies, duties, tasks and outcomes in academic, technical and workplace readiness areas that apply to the student's goals for the work-related placement. The work-based learning experience can be offered after or concurrently with the related classroom instruction. Parents/Guardians are responsible for arranging transportation for their child.

# **APPRENTICESHIP III**

174643 1 credit Grades 11, 12 Codes: CTP, W

# Prerequisite: Concurrently enrolled in Apprenticeship II

Students are required to complete 450 hours of paid (at least minimum wage) work-based learning at the worksite by the completion of the apprenticeship program. During this course, students will complete approximately 150 hours towards the required 450 hours required of the program. This apprenticeship experience is guided by a formal work-based learning (WBL) agreement and student work plan. The student work plan identifies the appropriate competencies, duties, tasks and outcomes in academic, technical and workplace readiness areas that apply to the student's goals for the work-related placement. The work-based learning experience can be offered after or concurrently with the related classroom instruction. Parents/Guardians are responsible for arranging transportation for their child.

#### **APPRENTICESHIP IV**

174644 1 credit Grades 11, 12 Codes: CTP, W

# Prerequisite: Concurrently enrolled in Apprenticeship III

Students are required to complete 450 hours of paid (at least minimum wage) work-based learning at the worksite by the completion of the apprenticeship program. During this course, students will complete approximately 150 hours towards the required 450 hours required of the program. This apprenticeship experience is guided by a formal work-based learning (WBL) agreement and student work plan. The student work plan identifies the appropriate competencies, duties, tasks and outcomes in academic, technical and workplace readiness areas that apply to the student's goals for the work-related placement. The work-based learning experience can be offered after or concurrently with the related classroom instruction. Parents/Guardians are responsible for arranging transportation for their child.

# **CAREER CLUSTER – HEALTH AND BIOSCIENCES**

# **BIOMEDICAL SCIENCES (PROJECT LEAD THE WAY)**

The challenging and relevant four (4) course PLTW Biomedical Science sequence allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health. Students engage in activities like investigating the death of a fictional person to learn content in the context of real-world cases. They examine the structures and interactions of human body systems and explore the prevention, diagnosis, and treatment of disease; all while working collaboratively to understand and design solutions to the most pressing health challenges of today and the future. Each course in the Biomedical Science sequence builds on the skills and knowledge students gain in the preceding courses.

Required Courses: All four (4) of the following courses are required to achieve Completer Status.

# PRINCIPLES OF THE BIOMEDICAL SCIENCES

130840 1 credit Grades 9, 10 Code: CTP

Prerequisite: Concurrent enrollment in Honors Biology and completion or concurrent enrollment in Algebra I In the introductory course of the PLTW Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

# **HUMAN BODY SYSTEMS (HONORS)**

130850 1 credit Grades 10, 11 Codes: CTP, W Prerequisite: Principles of the Biomedical Sciences and concurrent enrollment in Chemistry

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

#### **MEDICAL INTERVENTIONS (HONORS)**

130860 1 credit Grades 11, 12 Codes: CTC, W

13086E 1 credit Grades 11, 12

Prerequisite: Completed or concurrently enrolled in Human Body Systems

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

# **BIOMEDICAL INNOVATIONS (CAPSTONE)**

130870 1 credit Grade 12 Codes: CTP, CC, W\*

Prerequisite: Medical Interventions

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21<sup>st</sup> century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.

# CAREER CLUSTER - BUSINESS MANAGEMENT & FINANCE

# **BUSINESS MANAGEMENT**

The Business Management program prepares students for a career in business administration and management. A student who completes this program will be able to develop and manage a business plan for a small business. Students will apply accounting, marketing, and management concepts to realistic business scenarios. Students will be prepared to work as a management trainee, manage a small business, or continue their education in business administration after graduation.

Required Courses: All three (3) of the following courses are required to achieve Completer Status. See State Approved Career and Technical Education Completer Programs Chart for details.

#### PRINCIPLES OF BUSINESS MANAGEMENT AND ENTREPRENEURSHIP

175084 1 credit Grades 9, 10, 11, 12 Code: CTP

This course explores the various types of businesses as well as the major functional areas of business and interrelationships

among them. Students will learn to analyze the functions of business through evaluating, planning, organizing, and controlling. Leadership styles, employee rights and responsibilities, and career opportunities will also be taught. Technology will be used to gain an understanding of the operation of a contemporary business and the role of computers in the information gathering, dissemination, and decision-making processes.

#### PRINCIPLES OF ACCOUNTING AND FINANCE

178001 1 credit Grades 10, 11, 12 Code: CTP

This course involves analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis is placed on understanding the complete accounting cycle and preparing financial statements for different types of business. Coverage also includes recognizing and defining basic accounting principles, concepts, and terminology using Generally Accepted Accounting Principles (GAAP) as they apply to assets, liabilities, and owner's equity.

#### ADVANCED BUSINESS MANAGEMENT

175194 1 credit Grades 11, 12 Codes: CTC, CC

Prerequisite: Principles of Business Management & Entrepreneurship, and completion or concurrently enrolled in Principles of Accounting and Finance

This course provides students with the knowledge that will prepare them for post-high school levels of education and entry-level positions in the work force. Focus will be on the role of business in society; the changing nature of contemporary business practices; major management concepts, theories, and theorists; the processes of management (functional, operational, and human relations); business law and ethics; and business communications. Career pathways will be examined and the use of business management knowledge in a variety of career clusters is also explored. Awareness of ethical issues and application of ethical decision-making models will be reinforced throughout the course. Students will understand the business world and be more prepared to meet their career goals and objectives.

# CAREER RESEARCH AND DEVELOPMENT

Career Research and Development is a program that consists of two (2) in-school courses, a portfolio development project, and a work-based learning experience. Through both classroom instruction and work-based learning, Career Research and Development provides students with the academic, technical, and job skills necessary for further education and employment in a career field of their interest.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

# **CAREER RESEARCH AND DEVELOPMENT - COURSE I**

174444 1 credit Grade 11 Code: CTP

This course requires students to research careers and explore educational program choices. Students will be introduced to basic concepts of personal financial literacy and gain an understanding of successful career planning using career clusters and pathways. Students will also be required to develop a portfolio and participate in the interview process. To successfully complete this program, students must complete a minimum of 135 hours in a work-based learning experience.

# CAREER DEVELOPMENT, PREPARATION, AND TRANSITION - COURSE II

174454 1 credit/class instruction Grade 12 Code: CTP 2 credits/work-based learning Grade 12 Code: CTC

Prerequisite: Career Research and Development Course I, students must be enrolled in both CRD II courses concurrently

This program includes a one-credit course and a two-credit work-based learning experience of ten hours per week of employment and training. Coursework includes career selection, job searches, workplace readiness, employer expectation, personal financial literacy, and problem resolution. Students continue building their career portfolio and will use the portfolio in the interview process. Students are expected to attain job placement to attain a minimum of 135 hours of work-based learning experience.

# CAREER CLUSTER – ENVIRONMENTAL, AGRICULTURAL, AND NATURAL RESOURCES SYSTEMS

# <u>CURRICULUM FOR AGRICULTURE SCIENCE EDUCATION (CASE): NATURAL RESOURCES & AGRICULTURE</u>

This course utilizes the Agriculture, Food, and Natural Resource (AFNR) standards to create pathways relevant in today's workforce. All courses are also aligned with Science, English, and Mathematics standards. The Natural Resources Pathway begins with the Introduction to Agriculture, Food, and Natural Resource course. Students then progress to the foundation level course, Natural Resources and Ecology followed by the specialization course, Environmental Science Issues. The pathway culminates with the capstone course, Agricultural Research and Development.

# INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES (AFNR)

177014 1 credit Grade 10 Code: CTP

This course introduces students to the range of agricultural opportunities and the pathways of study they may pursue. Science, mathematics, reading, and writing components are woven in the context of agriculture. Experiences will involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning.

#### NATURAL RESOURCES AND ECOLOGY (HONORS)

177024 1 credit Grade 11 Codes: CTP, W

Prerequisite: Introduction to Agriculture, Food, and Natural Resources and concurrently enrolled in Environmental Science Issues

This course is a foundation course within the CASE sequence of courses. The course provides students a variety of experiences in the fields of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Study of the natural world, including biomes, land, air, water, energy, use and care, as well as a focus on issues surrounding man's interaction with the Earth, will be addressed in this course. Students will select an ecosystem to study throughout the course and apply principles of natural resources and ecology from each unit of study to that ecosystem.

#### **ENVIRONMENTAL SCIENCE ISSUES (HONORS)**

177034 1 credit Grade 11 Codes: CTC, W

Prerequisite: Introduction to Agriculture, Food, and Natural Resources and concurrently enrolled in Natural Resource and Ecology

This course is a specialization-level course that enables students to research, analyze, and propose sustainable solutions to environmental issues. Students are immersed in inquiry-based exercises filled with activities, projects, and problems, which develop data acquisition and analysis techniques, critical thinking and evaluation abilities related to environmental issues, as well as independent research and problem solving.

#### AGRICULTURAL RESEARCH AND DEVELOPMENT

177044 1 credit Grade 12 Codes: CTP, W\*

Prerequisite: Natural Resource and Ecology and Environmental Science Issues

This capstone course is designed to culminate students' experiences in agriculture, based on the previously taken courses in the Natural Resources Pathway. Woven throughout the course are projects and problems based in practical applications and designed to develop and improve employability skills of students. Students will further enhance critical thinking and teamwork skills as they expand on content knowledge from previous CASE courses.

# CAREER CLUSTER - COMPUTER AND INFORMATION SCIENCES

The Computer Science program includes a sequence of four courses, starting with an overview of the Computing and Information Technology (IT) field and processing through a more in-depth study of Computer Science. Students will learn all aspects of Computer Science, including programming, networks, graphics, databases, cyber security, artificial intelligence, and other applications in IT.

Required Courses: All three (3) of the following courses are required to achieve Completer Status. See State Approved Career and Technical Education Program Chart for details.

# **INTRODUCTION TO COMPUTER PROGRAMMING (HONORS)**

179000 1 credit Grades 9, 10, 11, 12 Codes: W, CTP

Prerequisite: Completion or concurrent enrollment in Algebra I

The goal of this course is to prepare and provide students the skill sets for the AP Computer Science Principles and the AP Computer Science A courses. The emphasis is on solving real-world problems by means of computer programming using the following languages: Java, JavaScript, and Python. Topics will include object-oriented design techniques, classes, objects, data types, control statements (selection and iteration), and arrays. Emphasis will be placed on computer science skills, problem solving, algorithm design, and documentation.

#### ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

179060 1 credit Grades 10, 11, 12 Codes: TE, W\*, CTP

This course introduces foundational concepts of computer science and explores computing's impact on the world. It focuses on creative problem solving and real-world applications. The course teaches use of computational tools to analyze and develop computational artifacts and computational thinking practices including abstraction, collaborative problem solving, and communication. This course is designed to support student preparation of the one project required to be submitted to the College Board and prepares them for the end of the year exam. This course cannot be used as the TE requirement for graduation if taken as part of the Computer and Information Sciences pathway.

# ADVANCED PLACEMENT COMPUTER SCIENCE A

179030 1 credit Grades 10, 11, 12 Codes: W\*, CTC

17903E 1 credit Grades 10, 11, 12

Prerequisite: Introduction to Computer Programming or approval of instructor

This course is designed to prepare students for the AP Computer Science A examination. The course emphasizes content comparable to a first college course in programming for Computer Science majors. Using the Java programming language, the course introduces program design including static and object-oriented programming. It also introduces data structures, searching and sorting algorithms, and algorithm comparison.

# CAREER CLUSTER – HUMAN RESOURCE SERVICES

# MARYLAND FIRE AND RESCUE INSTITUTE

Students will have an opportunity to participate in a career and technology program related to fire prevention and control and emergency medical technology. The program includes classroom instruction as well as formal training at selected local fire companies. Students are required to complete a minimum of 393 hours of work-based learning and take the seven certification exams. This CTE pathway program is designed to allow students to complete all requirements and be certified in this area as well as have opportunities to earn college credit.

#### FIRE EMERGENCY MEDICAL TRAINING I

C17814 2 credits Grade 11 Codes: CC, CTP

Students will complete a minimum number of hours and level of understanding in the following topics: Emergency Medical Technician or Emergency Medical Responder, Fire Fighter I, Truck Company Fireground Operations, and Hazardous Materials Operations.

# **FIRE EMERGENCY MEDICAL TRAINING II**

C17824 2 credits Grade 12 Codes: CC, CTC

Prerequisite: Fire Emergency Medical Training I

Students will complete a minimum number of hours and level of understanding in the following topics: Fire Fighter II, Rescue Technician – Site Operations, and Rescue Technician – Vehicle and Machinery Extrication.

# PROSTART – FOOD AND BEVERAGE MANAGEMENT

The ProStart program introduces high school students to a wide variety of careers within the restaurant, food service, and hospitality industry. Students will study and practice professional food preparation, preparation of international cuisines, food safety and sanitation, customer service relations, accounting, cost control, marketing, and an introduction to aspects of lodging management. Students will build strong culinary, business, management, and workplace skills as a result of their participation in this program. The National Restaurant Association Education Foundation (NRAEF) designed the program's industry driven curriculum. To successfully complete the program, students must complete 400 internship/work-based learning hours over the course of the program.

Required Courses: All four (4) of these courses are required to achieve Completer Status.

# PROSTART FOODS AND NUTRITION SCIENCE

120514 1 credit Grades 9, 10, 11, 12

This course prepares students with skills in nutritious meal planning and preparation. Students explore current concepts of nutrition and the application to healthy lifestyle patterns. Topics include the relationship of nutrients to optimal health, weight management, exercise, nutritional labeling, and scientific principles of food production, preparation, and consumption.

# PROSTART BECOMING A FOOD SERVICE PROFESSIONAL (LEVEL 1)

Prerequisite: Prostart Foods and Nutrition Science or concurrent enrollment

131114 1 credit Grades 10, 11 Code: CTP

This course provides an introduction to the food service and hospitality industry. 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 food service and hospitality industry, and have the opportunity to earn the ServeSafe credential. Students can begin to accrue hours to meet the 400-hour work-based learning experience requirement. Of the 400 hours, 150 hours can be earned through in-class clinical experience. All students enrolled in the course must take the NRAEF end-of-course exam.

## PROSTART BECOMING A FOOD SERVICE PROFESSIONAL (LEVEL 2)

Prerequisite: Prostart Becoming a Food Service Professional (Level 1)

131124 1 credit Grades 11, 12 Code: CTP

Students enrolled in this course will continue to prepare a variety of foods. They will create menus and demonstrate various types of restaurant service. They will apply purchasing techniques and demonstrate an understanding of inventory monitoring and control. Students will have the opportunity for an authentic, mentored work-based learning experience. Students can continue to accrue hours to meet the 400-hour work-based learning experience requirement. Of the 400 hours, 150 hours can be earned through in-class clinical experience. All students enrolled in the course must take the NRAEF end-of-course exam.

# PRACTICAL EXPERIENCE AS A FOOD SERVICE PROFESSIONAL

Prerequisite: Prostart Becoming a Food Service Professional (Level 1), Prostart Becoming a Food Service Professional (Level 2), or concurrently enrolled

131125 2 credits Grade 12 Code: CTC

This course provides students the opportunity to further refine and apply skills that support all aspects of the hospitality industry. It will assist in preparing students for employment and advancement in the field of hospitality and food and beverage management. Students will complete an industry-mentored work-based learning experience. The remaining 250 hours of the 400 hours is completed through this course. Students are expected to attain work experience in the food and hospitality industry.

# **TEACHER ACADEMY OF MARYLAND**

The Teacher Academy of Maryland (TAM) program prepares high school students for post-secondary education and other careers in the education profession. TAM is a three year, four-course program for students planning to pursue a career in education. Upon successful completion of the four TAM courses, students will receive credits designed to matriculate to a Maryland post-secondary teacher education program. Students will take the Para-Pro exam in preparation for entry into the workforce in the field of education.

# **HUMAN GROWTH AND DEVELOPMENT THROUGH ADOLESCENCE**

120534 1 credit Grades 10, 11 Code: CTP

This course focuses on human development from birth through adolescence. Emphasis is placed on theories of physical, cognitive, social and emotional development, the effect of heredity and the environment, the role of caregivers and the family, health and the environment, safety concerns and contemporary issues. Students explore special challenges to growth and development. Students will have opportunities for guided observation of children from birth through adolescence

in a variety of settings to help students further understand theories of human development. Students will begin to develop components of a working portfolio to be assembled upon completion of the senior year internship.

#### **TEACHING AS A PROFESSION**

120544 1 credit Grades 10, 11 Code: CTP

Prerequisite: Completion or concurrent enrollment in Human Growth and Development through Adolescence

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 participate in guided observations and field experience 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 senior year internship.

#### FOUNDATIONS OF CURRICULUM AND INSTRUCTION

120564 1 credit Grade 12 Code: CTC

Prerequisite: Teaching as a Profession, concurrently enrolled in Education Academy Internship

This course explores curriculum delivery models in response to the developmental needs of 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 senior year internship.

#### **EDUCATION ACADEMY INTERNSHIP (HONORS)**

120574 1 credit Grade 12 Codes: CC, CTP, W

Prerequisite: Concurrently enrolled in Foundations of Curriculum and Instruction

This internship is the culminating course of the TAM 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. Students will complete their working portfolio and present it for critique. Students have the opportunity to earn certification by taking PRAXIS I or Parapro.

# **AIR FORCE JUNIOR ROTC (AFJROTC)**

Air Force Junior ROTC (AFJROTC) is offered at Henry E. Lackey High School and North Point High School for Science, Technology, and Industry. This program offers a four-year curriculum. The AFJROTC mission is to educate and train high school students in citizenship; promote community service; instill responsibility, character and self-discipline; and provide instruction in air and space fundamentals. The central goal is to build better citizens. The course is affiliated with the Air Force; however, there is no military obligation associated with this course.

AFJROTC is open to all students, but to remain in the course, students must meet the weekly uniform wear and personal appearance standards of the Air Force. Uniforms are provided at no expense to the student. A fee may be required for uniform accessories and maintenance.

Although it is not a course requirement, AFJROTC students may participate in some of the following AFJROTC extracurricular activities: Drill Team, Color Guard, Kitty Hawk Air Society, Rocket Club, parades, community service projects, Dining-In, Pass-In Review, drill competitions, awards banquets, and field trips.

Students who successfully complete a minimum of two years of AFJROTC and enlist in the military will enter the service at a higher pay grade (varies with each service).

# **AFJROTC I**

188021 1 credit Grades 9, 10, 11, 12 Code: CTP

This beginning level course is a full-year course that earns one elective credit towards graduation. AFJROTC I, is open to all students in all grade levels. During AFJROTC I, students will study The Heritage of Flight and The Development of Air Power, Air Force Customs and Courtesies, Flag Honors, Air Force Uniform and Personal Appearance Standards, Personal Development Skills, Attitude and Discipline, Study Habits, and Health Awareness.

# **AFJROTC II**

188022 1 credit Grades 10, 11, 12 Code: CTP

Prerequisite: AFJROTC I

This second level course is a full-year course that earns one elective credit towards graduation. During AFJROTC II, students will study The Aerospace Environment, Human Requirements of Flight, Principles of Aircraft Flight, Principles of

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Navigation, Effective Communications, Understanding Individual Behavior, Understanding Group Behavior, and Basic Leadership Concepts. Additionally, AFJROTC II students will be given responsibilities within the Cadet Group that will provide opportunities to demonstrate leadership skills and knowledge of Air Force Customs and Courtesies. All AFJROTC II students will be expected to improve their military drill skills, attitude, and self-discipline.

**AFJROTC III** 

188023 1 credit Grades 11, 12 Code: CTC

Prerequisite: AFJROTC II

During this third level course, students will study The Space Environment, Space Programs, Space Tech, Manned Spaceflight, Management Theories, Stress and Finance Management, Ethics, and Citizenship. AFJROTC III students are expected to apply leadership skills by holding key leadership positions within the Cadet Group. AFJROTC III students will continue to improve drill skills, military bearing, citizenship, and self-discipline.

**AFJROTC IV** 

188024 1 credit Grade 12

Prerequisite: AFJROTC III

This fourth level course is a full-year course that earns one elective credit. During AFJROTC IV, students will study Air Force Policy and Organization, Planning for the Future, Civilian Careers, Careers in Aviation, and Military Service Centers. AFJROTC IV Cadets will manage the Cadet staff, publish the Cadet Newsletter, assess individual cadet performance, and evaluate Flight activities demonstrating their leadership, drill, and citizenship skills.

**AIR FORCE DRILL AND CEREMONY I** 

189021 1 credit Grades 10, 11, 12

Prerequisite: AFJROTC I

AIR FORCE DRILL AND CEREMONY II

189022 1 credit Grades 11, 12

Prerequisite: Air Force Drill and Ceremony I
AIR FORCE DRILL AND CEREMONY III

189023 1 credit Grade 12

Prerequisite: Air Force Drill and Ceremony II

These elective JROTC courses are designed for students who are interested in participating in and performing in regulation and exhibition drill competition. Students will develop an understanding of leadership and peer instruction. They will have the opportunity to plan, organize, and execute drill team routines, drill meets, flag presentations, and other ceremonial events.

# **ARMY JUNIOR ROTC (AJROTC)**

Army Junior ROTC (AJROTC) is offered at Maurice J. McDonough High School and Thomas Stone High School. This program offers a four-year curriculum. The AJROTC mission is to educate and train high school students in citizenship; promote community service; and instill responsibility, character and self-discipline. This course is affiliated with the Army; however, there is no military obligation associated with this course.

The Army JROTC curriculum is divided into six units: Citizenship in Action; Leadership Theory and Application; Foundations for Success; Wellness, Fitness, and First Aid; Geography and Earth Science; and Citizenship in American History and Government.

AJROTC is open to all students, but to remain in the course, students must meet the weekly uniform wear and personal appearance standards of the U.S. Army. Uniforms are provided at no expense to the student. A fee may be required for uniform accessories and maintenance.

Although not a course requirement, AJROTC students may participate in the following AJROTC extra-curricular activities: Drill Team, Color Guard, Raider Team, and Rifle Team.

Students who successfully complete a minimum of two years of AJROTC and enlist in the military may enter the service at a higher pay grade (varies with each service).

#### **LEADERSHIP EDUCATION TRAINING (LET) 1**

188031 1 credit Grades 9, 10, 11, 12 Code: CTP

This course is an introduction to leadership training. Included are the following subjects: Introduction to JROTC and the

Army, Techniques of Communications/Methods, Leadership, Cadet Challenge Competition and Physical Conditioning, Leadership Lab/Management Skills (Drill), Citizenship, Career Opportunities, History of US Citizens, First Aid and Cardio-Pulmonary Resuscitation, Map Reading, Marksmanship and Firearms Safety, and US Army Customs and Courtesies. Additionally, one may want to participate in such extra-curricular activities as Drill Team, Color Guard, Raider Team, and Rifle Team. These activities include going on field trips to drill competitions, parades, and civic activities. During the summer period, selected cadets will attend an Army Summer Camp. During this camp, cadets will be on an Army post practicing those subjects studied during the school year.

#### **LEADERSHIP EDUCATION TRAINING (LET) 2**

188032 1 credit Grades 10, 11, 12 Code: CTP

Prerequisite: LET 1

The second year of leadership, education and training, stresses intermediate leadership development. The emphasis is placed on training the cadets in the techniques of being a leader in a small unit. The cadet is given many opportunities to take command of small groups of cadets in order to lead them in the accomplishment of a common goal. Cadets receive training in the following subjects during the second year of the program: Techniques of Communications/Methods, Leadership, Cadet Challenge Competition and Physical Conditioning, Leadership Lab/Management Skills (Drill), Citizenship, First Aid, Map Reading, Role of the US Armed Forces, Technology Awareness, Self-Image, and Marksmanship and Firearms Safety. During the summer period, selected cadets will attend an Army Summer Camp. During this camp, cadets will be on an Army post practicing those subjects studied during the school year.

#### **LEADERSHIP EDUCATION TRAINING (LET) 3**

188033 1 credit Grades 11, 12 Code: CTC

Prerequisite: LET 2

The third year is where students apply learned leadership skills. The cadet assumes greater responsibilities of leadership. The cadet positions are normally filled by cadets of this class and they will have an opportunity to practice the leadership theories taught in the preceding years. Instruction in the finer techniques of leadership, including delegation of authority and supervision of subordinates, highlight this year's instruction. The cadet staff officers under the supervision of the Executive Officer will perform all the cadet administration required to keep the Corps of Cadets functioning smoothly. In addition to the same courses taught in previous years, the third-year cadets get additional training in Human Relations, Staff Methods/Procedures, and The US Army Skill Qualification Test (SQT). During the summer period, selected cadets will attend an Army Summer Camp. During this camp, cadets will be on an Army post practicing those subjects studied during the school year.

#### **LEADERSHIP EDUCATION TRAINING (LET) 4**

188034 1 credit Grade 12

Prerequisite: LET 3

The fourth year Cadets take the leadership of the Corps of Cadets. They are responsible for the direction and guidance of the Corps of Cadets. They will exercise this leadership by assisting in the conduct of training for the LET 1 cadets. This course will include in addition to the standard subjects: American Military History, Touring Historic Battlefields, Ethics, the Military and You, Job-Finding Techniques, and Command and Staff Procedures. In addition to the subjects taught in class, the JROTC program has several field trips to military installations.

# **NAVAL JUNIOR ROTC (NJROTC)**

Naval Junior ROTC (NJROTC) is offered at La Plata High School and Westlake High School. This program offers a four-year curriculum. A student may begin this as a Naval Science I Cadet (entry level) at the freshman, sophomore, junior, or senior level.

The purpose of the NJROTC program is to instill in high school students the values of citizenship and service to the community; to develop a high degree of personal honor, self-reliance, individual discipline and leadership; to promote an understanding of the basic elements and requirements for national security; to promote habits of orderliness and precision; and to develop respect for constituted authority.

NJROTC is open to all students, but to remain in the course, students must meet the weekly uniform wear and personal appearance standards of the U.S. Navy. Uniforms are provided at no expense to the Cadet. It must be professionally maintained and returned at the end of the school year. A fee may be required for uniform accessories and maintenance. Extra-curricular activities that cadets can volunteer to participate in are: Armed Drill Team, Color Guard, Unarmed Drill Team, Air Rifle Team, parades, community service projects, drill competitions, Athletic Team, Academic Team, and field trips.

Students who successfully complete two years of NJROTC and enlist in the military will enter the service at a higher pay grade (varies with each service).

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NJROTC I

188011 1 credit Grades 9, 10, 11, 12 Code: CTP

This beginning level course is a full-year course that earns one elective credit towards graduation. NJROTC I, is open to all students in all grade levels. During NJROTC I, students will study The NJROTC Program, Introduction to Leadership, Military Drill and Ceremonies, Naval Ships: Missions and Organizations, The Nation, Navy and People in an American Democracy, Sea Power and Maritime Geography, Oceanography, Naval History Through 1915, The Early Years, Introduction to Navigation and Time, Basic Seamanship, and Health Education: First Aid, Drugs, Alcohol, and Tobacco.

**NJROTC II** 

188012 1 credit Grades 10, 11, 12 Code: CTP

Prerequisite: NJROTC I

The second level of NJROTC is a full-year course that earns one elective credit towards graduation. During NJROTC II, students will study Military Drill and Ceremonies, Leadership in NJROTC, Naval Orientation and Career Planning, Citizenship in the US and Other Countries, Naval History: 1815 Through World War I, Naval Ship Construction and Damage Control, Naval Weapons: Gunnery, Guided Missiles, Mines, Oceanography, Navigation Fundamentals and Rules of the Road, Small Boat Seamanship, and Survival Training and Orienteering. Second year students begin filling junior leadership positions in the operation and administration of the NJROTC unit.

**NJROTC III** 

188013 1 credit Grades 11, 12 Code: CTC

Prerequisite: NJROTC II

The third level of NJROTC is a full-year course that earns one elective credit towards graduation. During NJROTC III, students will study Military Drill and Ceremonies, Naval Leadership, Military Justice, Astronomy, International Law and the Sea, Sea Power and National Security, Naval History: World War II to Desert Storm, Meteorology and Weather, Naval Operations, Communications and Intelligence, Maneuvering Board, Challenges of the Future, and Electricity and Naval Electronics. Third year students are expected to fill cadet leadership positions in the operation and administration of the NJROTC unit.

NJROTC IV

188014 1 credit Grade 12

Prerequisite: NJROTC III

The fourth level NJROTC is a full-year course that earns one elective credit towards graduation. During NJROTC IV, students will study Military Drill and Ceremonies, Fundamentals of Leadership, The Responsibilities and Qualities of Leadership, and Achieving Effective Communications. Fourth year students are required to fill cadet leadership positions in the operation and administration of the NJROTC unit.

**NAVY DRILL AND CEREMONY I** 

189011 1 credit Grades 10, 11, 12

Prerequisite: NJROTC I

**NAVY DRILL AND CEREMONY II** 

189012 1 credit Grades 11, 12

Prerequisite: Navy Drill and Ceremony I

**NAVY DRILL AND CEREMONY III** 

189013 1 credit Grade 12

Prerequisite: Navy Drill and Ceremony II

These elective JROTC courses are designed for students who are interested in participating in and performing in regulation and exhibition drill competition. Students must meet CCPS extracurricular eligibility requirements and meet military appearance standards. Students will develop an understanding of leadership and peer instruction. They will have the opportunity to plan, organize and execute drill team routines, drill meets, flag presentations, and other ceremonial events.

#### MARINE CORPS JUNIOR ROTC (MCJROTC)

Marine Corps Junior ROTC (MCJROTC) is offered at St. Charles High School. This program offers a four-year curriculum. The MCJROTC mission is to educate and train high school students in citizenship, promote community service, and instill responsibility, character, and self-discipline. This course is affiliated with the Marine Corps; however, there is no military obligation associated with this course.

The Marine Corps JROTC curriculum is divided into several areas: leadership, citizenship, physical fitness, first aid and hygiene, marksmanship safety, general military subjects, career opportunities, and the history and role of the U.S. Marine Corps.

MCJROTC is open to all students, but to remain in the course, students must meet the weekly uniform wear and personal appearance standards of the U.S. Marine Corps. Uniforms are provided at no expense to the student. A fee may be required for uniform accessories and maintenance.

Although not a course requirement, MCJROTC students may participate in the following MCJROTC extra-curricular activities: Drill Team, Color Guard, and Rifle Team.

Students who successfully complete a minimum of two years of MCJROTC and enlist in the military may enter the service at a higher pay grade (varies with each service).

# **MCJROTC I**

188041 1 credit Grades 9, 10, 11, 12 Code: CTP

This first-year leadership course is an introduction to leadership training. Included are the following broad subjects: History and Customs of the Marine Corps, Leadership, Citizenship, Personal Growth and Responsibility, and General Military Subjects, including drill and marksmanship. Additionally, students may elect to participate in such extra-curricular activities as Drill Team, Color Guard, and Rifle Team. These activities include going on field trips to drill competitions, parades, and civic activities. During the summer, selected cadets will attend a Marine Corps Summer Camp. During this camp, cadets will be on a military post practicing those subjects studied during the school year.

# **MCJROTC II**

188042 1 credit Grades 10, 11, 12 Code: CTP

Prerequisite: MCJROTC I

The second year of leadership, education and training stresses intermediate leadership development. The emphasis is placed on training the cadets in the techniques of being a leader in a small unit. The cadet is given many opportunities to take command of small groups of cadets in order to lead them in the accomplishment of a common goal. In addition to a continued focus on concepts taught in the first year of the program, cadets receive training in the following subjects during the second year: The Role of NCOs/Officers, Marine Discipline, Forms and Systems of Government, and additional General Military Subjects. During the summer, selected cadets will attend a Marine Corps Summer Camp. During this camp, cadets will be on a military post practicing those subjects studied during the school year.

#### MCJROTC III

188043 1 credit Grades 11, 12 Code: CTC

Prerequisite: MCJROTC II

The third year of leadership training allows cadets to apply learned leadership skills. Cadets assume greater responsibilities of filling leadership positions, providing them an opportunity to practice the leadership theories taught in the preceding years. Instruction in the finer techniques of leadership, including delegation of authority and supervision of subordinates, highlight this year's instruction. The cadet staff officers will perform all the cadet administration required to keep the unit functioning smoothly. In addition to the courses taught in previous years, third year cadets receive additional training in Leadership Styles, Service Etiquette, Public Service, and General Military Subjects. During the summer, selected cadets will attend a Marine Corps Summer Camp. During this camp, cadets will be on a military post practicing those subjects studied during the school year.

# **MCJROTC IV**

188044 1 1 credit Grade 12 Prerequisites: MCJROTC III or approval of instructor

The fourth year of leadership training builds on the foundations developed in MCJROTC III and continues to introduce advanced leadership instruction with emphasis on motivation and discipline. This course will provide cadets with elevated opportunities to exercise leadership, citizenship, personal growth, appearance and responsibility, career awareness, and general military subjects. Basic instruction on military law and land navigation are also introduced. Physical fitness is enhanced to include planning and supervision. Minimum performance requirements for the course are based on successful completion of competencies according to the national Marine Corps JROTC curriculum.

# CAREER CLUSTER – MANUFACTURING, ENGINEERING AND TECHNOLOGY PATHWAY TO ENGINEERING (PROJECT LEAD THE WAY)

In the Project Lead the Way Engineering, students engage in open-ended problem solving, learn and apply the engineering design process, and use the same industry-leading technology and software as are used in the world's top companies. Students are immersed in design as they investigate topics such as sustainability, mechatronics, forces, structures, aerodynamics, digital electronics and circuit design, manufacturing, and the environment, which gives them an opportunity to learn about different engineering disciplines before beginning post-secondary education or careers.

Required Courses: All three (3) of the following courses and one (1) Specialization Course are required to achieve Completer Status.

#### INTRODUCTION TO ENGINEERING DESIGN

130740 1 credit Grades 9, 10 Codes: TE, CTP

Prerequisite: Completion or current enrollment in Algebra I

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software and use an engineering notebook to document their work.

# PRINCIPLES OF ENGINEERING (HONORS)

130730 1 credit Grades 9, 10, 11 Codes: CTP, W

Prerequisite: Introduction to Engineering Design and Algebra I

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

### **ENGINEERING DESIGN AND DEVELOPMENT (CAPSTONE)**

130780 1 credit Grades 11, 12 Codes: CC, CTP, W\*

Prerequisite: Principles of Engineering and Introduction to Engineering Design

The knowledge and skills students acquire throughout Project Lead the Way Engineering come together in Engineering Design and Development (EDD) as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Completing EDD allows students to apply the professional skills they have developed in a real-world situation.

Specialization Courses: At least one (1) of the courses below and all three (3) of the above courses must be taken to achieve Completer Status. Additional courses can be taken as electives if schedules permit.

# **AEROSPACE ENGINEERING**

130770 1 credit Grades 10, 11, 12 Codes: CTC, W\*

Prerequisite: Principles of Engineering and Introduction to Engineering Design

This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts of life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles.

# **CIVIL ENGINEERING AND ARCHITECTURE**

130751 1 credit Grades 10, 11, 12 Codes: CTC, W\*

Prerequisite: Principles of Engineering and Introduction to Engineering Design

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software.

#### **COMPUTER INTEGRATED MANUFACTURING**

130760 1 credit Grades 10, 11, 12 Codes: CTC, W\*

Prerequisite: Principles of Engineering and Introduction to Engineering Design

This course introduces students to the high tech, innovative nature of modern manufacturing. Manufactured items are part of everyday life and the course highlights opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.

#### **DIGITAL ELECTRONICS (HONORS)**

130750 1 credit Grades 10, 11, 12 Codes: CTC, W

13075E 1 credit Grades 10, 11, 12

Prerequisite: Principles of Engineering and Introduction to Engineering Design OR Introduction to Computer Programming

This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. From smart phones to appliances, digital circuits are all around us. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

# CAREER AND TECHNICAL EDUCATION PROGRAMS NORTH POINT HIGH SCHOOL



North Point High School for Science, Technology and Industry is a purposely designed comprehensive high school that integrates college and professional preparation for a broad range of students to promote post-high school success. North Point's Career Technology Education programs enable students to acquire stackable credentials including apprenticeship and internship experiences, as well as industry recognized certification and professional licensures. Students interested in the CTE pathways at North Point High School must apply in 8th grade. If accepted to the program, the student attends North Point High School full time.

# CAREER AND TECHNICAL EDUCATION COMPLETER PROGRAMS

# CAREER CLUSTER - TRANSPORTATION TECHNOLOGIES

# **AUTOMOTIVE TECHNOLOGY**

The Automotive Technology (Maintenance & Light repair) program emphasizes hands-on and theoretical experience using state-of-the-art diagnostic equipment and tools. The program incorporates the Automotive Service Excellence (ASE) program certification standards. The program prepares students for further education and careers in the automotive industry through industry certification and articulated credit at technical or community colleges. Students will supplement their study of automotive technology with courses such as CADD, Pre-Engineering and Principles of Business. Fees and uniform are required. Please Note: ASE requires an exit exam. A testing fee is required with eligibility to be reimbursed with passing scores.

Program fees are associated with this program and are set by outside agencies. Program fees may include but are not limited to uniforms, tools, equipment, and the certification process.

Required Courses: All seven (7) of these courses are required to achieve Completer Status.

# **BRAKES**

17042N 1 credit Grade 10 Codes: CTC, CERT

Brake units focus on hydraulic and mechanical principles of a brake system, major parts of an automotive brake system, basic functions of the major parts, comparison of drum and disc brakes, operation of parking brake, operation of power brakes, ABS, Antilock and traction control. Pascal's Law, Bernoulli's Principle, and Venturi Effect are taught. Students will learn to identify and safely use tools used in the automotive profession. Students will also take a mock ASE tests, to prepare for the ASE certification test. Certification test is required at the completion of the course.

# STEERING AND SUSPENSION

17043N 1 credit Grade 10 Codes: CTP, CERT

Suspension units focus on Identifying the major parts of suspension system, the basic functions of each suspension system component, the operations of four (4) common types of springs, comparing various types of suspension systems, and understanding automatic suspension leveling systems. Steering units focus on identifying the major parts of the steering system, the operating principles of steering systems, comparing differences between linkage steering and rack-and-pinion steering systems, and understanding four-wheel steering systems. Students will also take a mock ASE tests, to prepare for the ASE certification test. Certification testing is required at the completion of the course.

# **ENGINE PERFORMANCE**

17044N 1 credit Grade 11 Codes: CTP, CERT

#### Prerequisite: Brakes and Steering and Suspension

Engine Performance units focus on emissions systems, engine operation and performance; displacement, fuel system components and functions, and data stream reading Onboard Diagnostics (OBD II), turbo charging, drivability problems, trouble shooting and poor fuel economy. Students will also take a mock ASE tests, to prepare for the ASE certification test. Certification testing is required at the completion of the course.

# **ENGINE REPAIR**

17045N 1 credit Grade 11 Codes: CTP, CERT

# Prerequisite: Brakes and Steering and Suspension

Engine Repair units include engine rotation, valve trains, timing, small engines, Bernoulli's Principle, Venturi Effect, micrometer, material safety, engine teardown, abnormal engine noise, and evaluation of engine mechanical problems. Students will begin to work on customer's vehicles. Students will also take a mock ASE tests, to prepare for the ASE

certification test. Certification testing is required at the completion of the course.

#### **ELECTRICAL SYSTEMS**

17046N 1 credit Grade 12 Codes: CTP, CERT

Prerequisite: Engine Performance and Engine Repair

Units focus on introduction to electricity, magnetism and electrical circuits, introduction to batteries, emission controls, and hybrids. Students will extend the skills learned in the previous two years, including electricity, battery and alternator functions. Students will continue to work on customers' vehicles. They will also take mock ASE tests, to prepare for the ASE testing they may take after completing the course. Certification testing is required at the completion of the course.

#### **AUTOMOTIVE HVAC**

17047N ½ credit Grade 12 Codes: CTP, CERT

Prerequisite: Engine Performance and Engine Repair

Automotive HVAC units focus on principles of refrigeration, the high and low sides of an air conditioning system, and safety precautions for working on heating and air conditioning systems. Students will work on customer's vehicles. They will also take mock ASE tests, to prepare for the ASE testing they may take after completing the course. Certification testing is required at the completion of the course.

# TRANSMISSIONS (AUTOMATIC & MANUAL)

17048N ½ credit Grade 12 Codes: CTP, CERT

Prerequisite: Engine Performance and Engine Repair

Transmission units focus on identify and define the major parts of both a manual and automatic transmission, explain the fundamental operations of both types of transmission, and trace power flow through transmission gears. Students will work on customer's vehicles. Students will also take a mock ASE tests, to prepare for the ASE certification test. Certification testing is required at the completion of the course.

# **COLLISION REPAIR**

The Collision Repair program prepares students for a career in the auto finishing/ auto body repair field. It combines technical, academic and workplace skills in an integrated curriculum in accordance with all National Automotive Technicians Education Foundation (NATEF) and Inter-Industry Conference on Auto Collision Repair (I-CAR) directives. Please Note: NATEF/ASE requires an exit exam, which tests knowledge about automobiles learned over the 3 years in the course. This program is supplemented with courses in art, computers and business.

Required Courses: All six (6) of these courses are required to achieve Completer Status.

#### **SAFETY PROCEDURES**

17281N 1 credit Grade 10 Code: CTP

Topics of instruction include the following areas: safe use of hand tools, equipment, product safety and personal safety, proper chemical disposal, and federal-state-local regulations for safe disposal of chemicals. Students will learn the physical construction of the automobile.

#### **ESTIMATING AND BLUEPRINTING**

17282N 1 credit Grade 10 Codes: CTP, CERT

The course emphasizes the proper procedures for measuring, analyzing, and developing correct repair procedures for unibody and body-over-frame vehicles. Students develop repair plans and propose the repair plan implementation. The course also emphasizes the restoring of vehicles to their pre-accident condition using manufacturers and industry recommendations. Areas of instruction will include the following: common abbreviations used in estimating, flat-rate labor times and overlap labor times, procedure to write rough estimates, utilization of computerized estimating software, and the procedure to map and blueprint vehicles for repairs.

#### NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR

17283N 1 credit Grade 11 Code: CTP

Prerequisite: Safety Procedures and Estimating and Blueprinting

This course will address an introduction to welding, personal and environmental safety practices associated with clothing, respiratory protection, eye protection, entry level automotive service technology principles and practices, hand tools, power tools and equipment, proper ventilation, proper handling and storage of materials, measuring and mixing procedures, disposal of chemicals and materials in accordance with all governing agencies.

#### STRUCTURAL ANALYSIS AND DAMAGE REPAIR

17284N 1 credit Grade 11 Codes: CTC, CERT

# Prerequisite: Safety Procedures and Estimating and Blueprinting

This course emphasizes the proper procedures for measuring, analyzing, and developing correct repair procedures for unibody and body-over-frame vehicles. Students develop repair plans and discuss their implementation. This course emphasizes the restoring of vehicles to their pre-accident condition using manufacturers and industry recommendations. Students utilize I-CAR Live Curriculum and NATEF

Collision Repair program Standards and Task List.

#### **PAINTING AND REFRESHING**

17285N 1 credit Grade 12 Codes: CTC, CERT

Prerequisite: Non-Structural Analysis and Damage Repair and Structural Analysis and Damage Repair

Students will develop diagnostic, technical and academic skills through their participation in classroom instruction and hands-on applications. Units to include identification and correction of defects, surface preparation, paint mixing and matching, paint preparation and application, and final detailing.

# **QUALITY CONTROL AND JOB PLACEMENT**

17286N 1 credit Grade 12 Codes: CTP, CERT

Prerequisite: Non-Structural Analysis and Damage Repair and Structural Analysis and Damage Repair

This course provides the student with the knowledge and skills to pass the NATEF Painting & Refinishing NA3SA Exam and immediately enter the workforce or attend postsecondary education/training. Students will learn the business end of Collision Repair. Those who are successful in the program may be able to participate in work related internships.

# CAREER CLUSTER - CONSUMER SERVICES, HOSPITALITY & TOURISM

# COSMETOLOGY

Cosmetology is governed by the State Board of Cosmetology and prepares students to be licensed in the field of Cosmetology. The program prepares individuals to take the Maryland State Board of Cosmetology Licensure test. Students are instructed in the art and science of cosmetology as well as all aspects of the industry. Emphasis is placed on safety, sanitation, and hygiene as well as State Board of Cosmetologists' rules and regulations. Related areas of instruction include human relations; anatomy and physiology; mathematics and measurement; analysis, diagnosis and histology of hair, skin, and nails; chemistry which includes chemical textured hair services; fundamentals of electricity; product knowledge; customer relations; and employability skills. Salon management is an integral part of the classroom and clinical experience.

The 1,500-hour program includes classroom instruction, clinical experience, related mentored work-based learning experience and a senior capstone project. Regular attendance is critical as is competence in the areas of verbal aptitude, perception, motor coordination, finger, and manual dexterity. The exam must be completed prior to graduation to receive the 1500 hours. Upon successful completion of 1500 hours, the student will be required to take the Maryland State Board of Cosmetologists' examination. Additionally, students are required to take part in public service activities practiced outside the regular classroom.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

#### PRINCIPLES AND PRACTICE OF COSMETOLOGY

17074N 2 credit Grade 10 Code: CTC

The first-year cosmetology course will expose students to cosmetology history, professional image, communicating for success, infection control, properties of the hair and scalp, the principles of hair design, shampooing, conditioning, and applying rinse, hairstyling principles and practices, skin and associated disorders, and nails and associated disorders. Throughout the course, students are expected to take advantage of the opportunity to earn 500 hours towards the amount required for licensing. Hours will be earned in classroom as well as through work completed supporting the Drama Department's productions with technical hair and makeup design and application, and participation and preparation with the CTSO (SkillsUSA).

#### ADVANCED COSMETOLOGY THEORY AND APPLICATION

17075N 4 credit Grade 11 Code: CTC

Prerequisite: Principles and Practice of Cosmetology

Students will master manicuring, pedicuring, nail art, nail sculpturing, facials, massaging. Skills taught include permanent waving; hair cutting; removing unwanted hair, chemical hair relaxing and hair coloring. Students will build on and extend the skills gained in the first-year course, and work to have accumulated 1,000 hours by the end of the year. Hours will be earned in the classroom and laboratory settings as well as through work completed supporting the Drama Department's productions

with technical hair and makeup design and application, and participation and preparation with the CTSO (SkillsUSA). After a student accumulates 1,000 hours, the student is required to intern in a salon.

#### **MASTERY OF COSMETOLOGY**

17076N 4 credit Grade 12 Codes: CTC, CERT

Prerequisite: Advanced Cosmetology Theory and Application

This course centers on preparing for the state board exam for licensure. In addition to the two required state exams, students must complete a cosmetology portfolio, salon management research project, chemistry project, sculpture nail project, and a nail disease research report. Hours will be earned in the classroom and laboratory settings as well as through work completed supporting the Drama Department's productions with technical hair and makeup design and application, participation, and preparation with the CTSO (SkillsUSA), and professional salons. At the completion of 1,500 hours, students must take the Maryland Board of Cosmetology exams prior to graduation.

#### **CULINARY ARTS**

The Culinary Arts program partners with the American Culinary Federation (ACF) to prepare students for successful careers in the food and beverage industry. Students may earn industry certification and credit toward becoming a Certified Fundamental Cook (CFC) or a Safe Service Manager or a Food Handler. Culinary Arts students will develop a variety of skills relating to food service, including services by restaurants, catering and institutional food providers and other recreational and entertainment venues.

Classroom and on-the-job experiences include laboratory, theory, community, and shop work as they relate to planning, purchasing, preserving, preparing, presenting, and serving food. An emphasis on culinary nutrition will enable students to create successful menus as culinary professionals. Commercial kitchen management, food safety and sanitation, food preparation and presentation will be emphasized.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

# **CULINARY BASICS: FOUNDATIONS OF PROFESSIONAL COOKING**

17204N 1 credit Grade 10 Code: CTP

The students in the first-year program will learn about the origins of classical and modern cuisine and the standards of culinary professionalism. Additional topics taught include units on knife skills, safety and sanitation, tools and equipment, purchasing and receiving, basic baking techniques, soups and stocks as well as mother sauces, produce, food preparation and production, employability skills, and hands on catering.

#### **PROFESSIONAL COOKING**

17205N 2 credit Grade 11 Codes: CTP, CERT, W

In the second year of the program, students will review knife skills, safety and sanitation, weights, and measures, purchasing and receiving, cooking principles, culinary terms, and definitions. Students will have the opportunity to earn their OSHA-10 certification. They will extend their knowledge by completing advanced learning of soups and stocks as well as sauces. Additional units taught include Garde Manger, advanced bread and baking, food preparation and production, salads, appetizers, cakes and pastries, and preparation of group meals. Students will participate in the on-sight farm and develop Farm to Table menus. Catering will continue both on and off premises. Students will begin to develop their professional individual portfolios.

#### ADVANCED PROFESSIONAL COOKING AND BAKING

17206N 3 credit Grade 12 Codes: CTC, CERT, W

In the last year of the program, students will sit for their Serve Safe Certification. Additional units taught are meat and seafood fabrication, advanced bread, and baking, and expand on all previous units including the Farm to Table initiative and catering. The Capstone project will be participation in the Iron Chef Mystery Basket competition. Students may have the opportunity to compete in the SkillsUSA regional, state, and national competitions in a variety of culinary areas.

# <u>CAREER CLUSTER – CONSTRUCTION AND DEVELOPMENT</u> CONSTRUCTION DESIGN AND MANAGEMENT

The Construction Design and Management program is a seven course CTE Program of Study. Students will develop an understanding of the design and construction process. Each course uses a project-based learning approach to advance students' understanding of the design-build-maintain process. Advanced architectural drafting and design skills are developed through lab-based instruction using Autodesk software tools including AutoCAD and Revit Architecture. Throughout the program, students will develop a portfolio to demonstrate knowledge of each phase of the design and construction management process. Students will also can earn industry certifications: OSHA-10, AutoCAD and Revit.

Required Courses: All seven (7) of these courses are required to achieve Completer Status.

#### **COMPUTER ASSISTED DRAFTING AND DESIGN (CADD)**

137083 1 credit Grade 9 Code: CERT

This course provides the opportunity for students to understand basic, mechanical drawing concepts using computer-assisted design & drafting software. CADD is the foundation course for numerous technical & engineering career fields.

# INTRODUCTION TO CONSTRUCTION DESIGN AND MANAGEMENT

17061N 1 credit Grade 10 Code: CTP

This course provides an overview of the design and construction process as well as an introduction to the many career options within the field of construction. Students will be introduced to core concepts in design and construction including construction methods and materials, fundamental elements of design, and innovative technologies including Green Construction and Design. Students will be introduced to design software as they complete basic design projects, such as a bridge design, floor plans, and elevation plans. This course also includes career exploration activities and research regarding the construction industry.

#### **REVIT 3D ARCHITECTURAL DRAFTING**

137084 1 credit Grade 10 Code: CERT

This course will provide the opportunity for students to understand building information modeling concepts by adding to the course content previously taught in CADD. REVIT enables students to create a 3D architectural project models for numerous technical and engineering career fields.

#### PRINCIPLES OF CONSTRUCTION DESIGN

17062N 1 credit Grade 11 Code: CTP

Prerequisite: Introduction to Construction Design and Management

This course provides students with an in-depth understanding of the construction design process. Students will complete a series of increasingly complex construction design projects in which they incorporate all aspects of the construction process, including zoning and regulation requirements, construction methods and materials, energy conservation, surveying, and project planning. Students will use design software to generate topography site plans as well as detailed building plans. Portfolios are used to show the developmental stages of a design project. Students will work in teams to develop each aspect of a construction project including developing a proposal, site plans, and construction management documents.

#### **ADVANCE DESIGN AND 3D MODELING**

17063N 1 credit Grade 11 Codes: CTC, CERT

# Prerequisite: Introduction to Construction Design and Management

Students will work in teams to fully develop designs and a construction management plan for a pre-determined site. In this year-long project, students begin with the legal description and topography of the site and create a proposal for development. The construction design project must meet the client's needs, budget, and the site characteristics. Students will generate a series of plans to be included with the proposal for submission to an industry review panel for approval. Upon completion of the course, students will demonstrate advanced design/drafting skills and be prepared for the AutoCAD certification exam.

#### ADVANCED CONSTRUCTION MANAGEMENT

17065N 1 credit Grade 12 Code: CTP
Prerequisite: Principles of Construction Design and Advance Design and 3D Modeling

This course builds on an understanding of the construction design process to advanced knowledge and skill in construction management. In this course, students will be required to work in teams to complete a project from existing plans. The year-long project will focus on building codes and standards, coordination of the construction process, estimating, planning and scheduling, and site management. Students will complete a portfolio of their design and construction management projects for review by an industry panel.

# ADVANCED CONSTRUCTION APPLICATIONS AND CERTIFICATIONS

17064N 2 credits Grade 12 Code: CERT

Prerequisite: Principles of Construction Design and Advance Design and 3D Modeling

The first three courses, Introduction to Construction Design & Management, Principles of Construction Design, and Advanced Design & 3D Modeling prepare students to take exams for AutoCAD credentialing. As students' progress into the advanced courses and use BIM technology, they will also prepare for Revit Architecture certification. Students will complete their Capstone Project.

# **ELECTRICAL CONSTRUCTION**

The Electrical Construction program covers a wide variety of areas within the Electrical Industry, to include Electrical Safety, AC/DC Electrical Theory, use and application of the National Electrical Code, Conduit Bending, Blueprint Reading, NEC Calculations, proper use of Electrical Test Equipment, Residential and Commercial wiring, and Electrical Motor Controls. The program has a strong partnership with local industry groups including private electrical contractors, various apprenticeships, and industry unions. Students can earn advanced standing by completing this program. The National Center for Construction Education and Research (NCCER) provides standards, curriculum, and assessments for this program. Students need strong algebraic skills to be successful in Electrical Construction. Students will complete the NCCER Core and Electrical Level 1 certification exams as well as OSHA-10.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

# FOUDATIONS OF BUILDING AND CONSTRUCTION TECHNOLOGY

172017 1 credit Grade 10 Codes: CTP, CERT

Electrical Construction students will be involved in learning the basics for success in the electrical field which includes basic construction safety, construction math, hand and power tools, reading construction drawings, communication, employability skills, materials handling, and demonstrating switch control of lighting circuits. Students will prepare for and attempt NCCER construction core certification exams.

# **ELECTRICAL CONSTRUCTION 1**

17134 2 credits Grade 11 Codes: CTP, CERT

Prerequisite: Foundation of Building and Construction Technology

The electrical construction industry encompasses many fields. The junior year of this program provides foundational training in the many aspects of the electrical construction industry. Students will learn the skills and obtain knowledge necessary to work safely with the tools and materials of the trade. Students will concentrate on safety, application of mathematical skills, DC electrical theory, NEC standards, electrical conductor types and sizes, blueprint reading, residential wiring, and conduit bending. The course covers the construction, installation, and troubleshooting techniques of electrical systems. The student is taught to test, measure, and insure the proper functions of electrical measuring instruments. Real world application of electrical skills are incorporated as the students complete outside projects. Students will prepare for NCCER Electrical Level 1 certification exams and will attempt to gain certification.

# **ELECTRICAL CONSTRUCTION 2**

17135N 3 credits Grade 12 Codes: CTC, CERT

Prerequisite: Electrical Construction 1

All skills from Electrical Construction 1 are reviewed and taken to an advanced level. Topics taught include electrical service load calculations, electrical motor control, National Electrical Code, AC Theory, and transformers. Students will be introduced to programmable logic controllers, variable frequency drives, fire alarm systems, and optical fiber when possible. Students will also be involved in designing and installing the electrical system in a house project off site, when available. Real world application of electrical skills are incorporated as the students complete various outside projects. Opportunities to complete the IBEW/JATC aptitude test on site will be available.

#### WELDING

Students in the Welding Technology program learn to cut and weld steel, stainless steel and other metals using a variety of arc welding processes. Students will also learn oxy-fuel cutting, plasma-arc cutting and how to use various other cutting, power tools, hand tools, and welding machines.

Successful students will become proficient in one or more of the following welding processes: SMAW (Stick), GMAW (Mig), GTAW (Tig), FCAW (Flux-core). Students in this program may choose to supplement the welding curriculum with Engineering and Computer Aided Design (CAD) courses. Students will complete modules from the NCCER in the Core Curriculum for Construction Trades as well as Level 1 Welding.

Program completers will have several options for employment upon graduation, including apprenticeship opportunities with several unions. Non-union employment with local manufacturers, and four-year degree programs in Welding Engineering are other options.

Program fees are associated with this program and are set by outside agencies. Program fees may include but are not limited to uniforms, tools, equipment, and the certification process.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

#### FOUDATIONS OF BUILDING AND CONSTRUCTION TECHNOLOGY

172018 1 credit Grade 10 Codes: CTP, CERT

In the first year of Welding, students concentrate on learning basic welding safety and hand tools. They also review construction-related math. The use of hand tools and power tools used by welders is also introduced. Students learn the basics of blueprint reading as well. Basic rigging techniques and tools are also taught, as are employability and communication skills.

**WELDING 1** 

17147N 2 credits Grade 11 Codes: CTP, CERT

Prerequisite: Foundation of Building and Construction Technology

In the second-year course, welding safety is reviewed. Skills taught include: oxyfuel cutting, base metal preparation, weld quality, SMAW (shield metal arc welding), equipment and setup, electrodes and selection, beads and fillet weld, groove welds, joint fit-up and alignment, and open V-groove welds. Students will prepare for and attempt SMAW certification test (D1.1 and/or D1.5).

**WELDING 2** 

17148N 3 credits Grade 12 Codes: CTC, CERT

Prerequisite: Welding 1

Seniors concentrate on the following units: welding symbols; reading of welding detail drawings; SMAW stainless steel groove welds; air carbon arc cutting and gouging; plasma arc cutting; gas metal and flux core arch welding (GMAW, FCAW) equipment, filler metals, and plates; gas tungsten arch welding (GTAW) equipment, filler materials, plate and aluminum plate. Students will prepare for and attempt American Welding Society certification exams GMAW and FCAW (D1.1 and/or D1.5), along with state NCCER tests for Core and Welding Level I.

# <u>CAREER CLUSTER – ARTS, MEDIA, AND COMMUNICATION</u>

# **GRAPHIC COMMUNICATIONS**

The Graphics Communication program is designed to give students an overall understanding of the graphics and printing industries and their major operations while teaching academic and technical competencies that lead to nationally recognized certifications. Students may gain certification in Introduction to Graphic Communication, Digital File Preparation, Digital Print Production, Screen Printing and Graphic Design. Students may earn college credits through an articulation agreement with the College of Southern Maryland (CSM) and Bridgemont Community and Technical College. Students will complete projects to build their portfolios and are required to take certification exams. Certification testing fees are required with eligibility to be reimbursed with passing scores.

Program fees are associated with this program and are set by outside agencies. Program fees may include but are not limited to uniforms, tools, equipment, and the certification process.

Required Courses: All six (6) of these courses are required to achieve Completer Status.

# INTRODUCTION TO GRAPHIC COMMUNICATIONS

17166N 1 credit Grade 9 Codes: CTP, CERT

This course is designed to give the students a basic understanding of the printing and graphics industry, including the history of print, typography, an overview of flexography, gravure, screen printing, letterpress, with a focus on lithography.

**ADVANCED GRAPHIC COMMUNICATIONS** 

17267N 1 credit Grade 10 Codes: CTP, CERT

Prerequisite: Introductory to Graphic Communications

The students will learn how to take projects through the pre-press, press, and bindery stages of the lithographic process. Students will operate equipment and work with software equivalent to what is used in commercial printing plants around the area. This course is designed to prepare the students for the Introduction to Graphic Communications certification exam through the Print ED certification process. Students will be required to attempt certification.

**DIGITAL FILE PREP/OUTPUT** 

17268N 1 credit Grade 10 Codes: CTP, CERT

Prerequisite: Introductory to Graphic Communications

This course is designed to further the student's knowledge of the pre-press process. Students will learn how to produce print-worthy material in industry standard software for page layout, image editing, and image creation. The students will also be introduced to basic design principles, including color, spacing, alignment, and more advanced typography. In this course students will spend most of their time in the computer lab. This course is designed to prepare the students for the Digital File Preparation certification exam, through the Print ED certification process. Students will be required to attempt certification.

#### **DIGITAL PRINT PRODUCTION**

17272N 1 credit Grade 11 Codes: CTP, CERT

Prerequisite: Advanced Graphic Communications and Digital File Prep/Output

This course is the art of communication, stylizing, and problem-solving using type, space and image. The field also requires creativity and the knowledge of ever-changing technology. The competencies address copyright, ethics and intellectual property rights, creating a digital portfolio, typefaces, page layout, image capture, digital illustration, and design principles, and corporate branding. Students demonstrate an understanding of additive and subtractive color, design a logo, create an illustration, and pitch an advertising concept.

#### **SCREEN PRINTING**

17273N 1 credit Grade 11 Codes: CTP, CERT

Prerequisite: Advanced Graphic Communications and Digital File Prep/Output

Students will learn the types of screen-printing equipment technologies that are commonly used, typical workflows to print a project and maintenance procedures as defined by industry standards, including understanding of various practices considered typical to the screen-printing industry, creating visual representation of ideas and messages by combing words and images, and problem-solving through the use of type, space, and image. The competencies include seven subsections: Technology, Design and Prepress, Frame and Mesh Preparation, Stencil and Screen Preparation, Print Production, Cleanup Process, and Math and Measurement.

#### **GRAPHIC DESIGN**

17274N 1 credit Grade 12 Codes: CTP, CERT

Prerequisite: Digital Print Production and Screen Printing

The culminating course provides advanced study into the most major facet of the graphics industry. Students will design and create multidimensional projects to target specific audiences. The daily activity is a combination of class projects and the production of live work contracted from other schools, non-profit organizations and the Board of Education. This course is designed to prepare the student for the Advertising and Design certification exam, through the Print ED certification process. Students will be required to attempt certification.

# <u>CAREER CLUSTER – HEALTH & BIOSCIENCES</u> <u>ACADEMY OF HEALTH PROFESSIONS: CERTIFIED NURSING ASSISTANT (CNA)</u>

The Academy of Health Professions is an exploratory and preparatory program for the secondary school student. It is designed to develop healthcare skills and practices that will enable the student to effectively function in a healthcare entry-level position and to successfully pursue further studies at a college or university. The program incorporates and correlates instruction in the classroom, simulation laboratory, and clinical settings. In addition to the program's core courses, students are expected to enroll in multiple classes that will enhance their learning in this field and better prepare them for the rigor of postsecondary studies.

After students have demonstrated mastery of specific content set by the Maryland Board of Nursing and the clinical sites, students are permitted to begin their clinical experiences. Through strong healthcare industry partnerships, students can participate in planned clinical experiences in multiple areas of healthcare specializations where they are able to become an integrated member of the healthcare team.

This program requires three years for completion. At which time, if the students have met the requirements set by the school system and the Maryland Board of Nursing, they will be eligible to attempt licensure as a Certified Nursing Assistant. Students are expected to pass all courses and attempt licensure as a CNA prior to graduation.

Uniform and certification fees are required and set by outside agencies. Additional requirements are set by the clinical sites that include but are not limited to professional health, safety, and physical standards such as professional conduct, appearance, vaccinations, medical screenings, and lifting capabilities.

Required Courses: All six (6) of these courses are required to achieve Completer Status.

#### STRUCTURES AND FUNCTIONS OF THE HUMAN BODY

17112N 1 credit Grade 10 Codes: CTP. W

Students in this course study the structure and functions of the human body, including cellular biology and histology. Systematic study involves homeostatic mechanisms of the integumentary, skeletal, muscular, nervous, lymphatic, respiratory, circulatory, digestive, urinary, endocrine, reproductive, special senses systems. Systematic study will also include basic pathological conditions. Students will investigate the body's responses to external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy systems, use scientific methods during investigations

to solve problems and make informed decisions. Students will learn medical terminology and abbreviations related to the body systems. Students will study and apply professional safety and infection control guidelines.

# FOUNDATIONS OF MEDICAL AND HEALTH SCIENCE

C1713N 1 credit Grade 11 Codes: CTP, W

Prerequisite: Structures and Functions of the Human Body

This course is designed to provide students with an overview of the therapeutic, diagnostic, environmental and information systems of the healthcare industry. Students will begin to prepare for a medical health science career by developing a broad understanding of the cluster and pathways in the Health and Biosciences Cluster. Students will learn about ethical and legal responsibilities, as well as the history and economics of healthcare. Students will continue to expand on their medical terminology base and integrate it into their studies and patient care. They will develop academic and technical skills necessary to function as a health professional.

#### INTRODUCTORY SIMULATIONS SKILLS LABORATORY

17121N 1 credit Grade 11 Codes: CERT, W

Prerequisite: Structures and Functions of the Human Body

This course is designed to immerse students in introductory skills that are utilized in the healthcare industry. Students will be instructed on the basic principles and best practices of a multitude of procedures, safety measures, infection prevention, basic life support for healthcare providers, and basic first aid. They will be expected to master the skills used in the delivery of essential healthcare services while in the laboratory setting.

# ADVANCED SIMULATIONS SKILLS LABORATORY

17123N 1 credit Grade 12 Codes: CTP, W, CERT, EOC Prerequisite: Foundations of Medical and Health Sciences and Introductory Simulation Skills Laboratory

The student must be on track to successfully complete the course, demonstrated mastery of content, and complete their clinical requirements to attempt licensure as a Certified Nursing Assistant as defined by the Maryland Board of Nursing. This course is designed to immerse students in advanced skills that are utilized in the healthcare industry. Students will be instructed on the basic principles and best practices of a multitude of new procedures. They will be expected to master the skills used in the delivery of essential healthcare services while in the laboratory setting and will then have the opportunity to apply these skills in the clinical setting during their Nursing Assistant Clinical Internship and Specialized Clinical Internship. Students will be expected to consistently identify, demonstrate, and integrate knowledge base and basic principles for all instructed materials throughout the program curriculum.

#### **CERTIFIED NURSING CLINICAL INTERNSHIP**

17122N 1 credit Grade 12 Codes: CTC, W, CERT, EOC Prerequisite: Foundations of Medical and Health Sciences and Introductory Simulation Skills Laboratory

The student must be on track to successfully complete the course, demonstrated mastery of content, and complete their clinical requirements to attempt licensure as a Certified Nursing Assistant as defined by the Maryland Board of Nursing. This course is designed to provide students the opportunity to further develop their academic and technical skills necessary to function as a healthcare professional. Students will continue to expand and integrate their knowledge base of medical terminology, anatomy, physiology, and pathophysiology into their patient care. They will continue to engage in processes and procedures that are used in the delivery of essential healthcare services and perform them during their clinical rotations.

#### SPECIALIZED CLINCIAL INTERNSHIP

C1714N 1 credit Grade 12 Codes: CTP, W, CERT, EOC Prerequisite: Foundations of Medical and Health Sciences and Introductory Simulation Skills Laboratory

This course is designed to provide students the opportunity to further develop their academic and technical skills necessary to function as a health professional. Students will continue to expand and integrate their knowledge base of medical terminology, anatomy, physiology, and pathophysiology into their studies and patient care. They will continue to engage in processes and procedures that are used in the delivery of essential healthcare services and perform them during their clinical rotations. The student must be on track to successfully complete the course, demonstrated mastery of content, and complete their clinical requirements to attempt licensure as a Certified Nursing Assistant as defined by the Maryland Board of Nursing. Once they have met these requirements, they will have the opportunity to tailor clinical experiences based on aspiring professional goals. Additional clinical experiences include but are not limited to the following settings: community health, veterinary medicine, private medical offices, private dental offices, private vision offices, community pharmacy, well therapy, and rehabilitation services.

# **BIOTECHNOLOGY**

Biotechnology is the use of biochemistry, genetics, and molecular biology to develop new products, methods and organisms intended to improve human health and society. Students in this program will participate in scientific exploration with direct and indirect applications to biotechnology. The program will include an introduction to techniques used in many biotechnology fields, such as DNA analysis, gene technology, protein analysis, and bioengineering. Students in Biotechnology will supplement their study with multiple sciences as well as an independent research project.

Biotechnology students will be expected to take Advanced Placement science courses such as AP Chemistry, AP Biology, AP Physics, AP Environmental Science. Science and math classes are required all four years.

Required Courses: All four (4) of these courses are required to achieve Completer Status.

#### STANDARD LABORTORY OPERATING PROCEDURES

272814 1 credit Grade 10 Codes: CTP, W

Students will learn basic laboratory techniques such as how to create serial dilutions, solutions, and buffers, as well as prepare media, and conduct Gel Electrophoresis (making and running a gel of DNA).

#### **MOLECULAR BIOTECHNOLOGY**

272824 1 credit Grade 11 Codes: CTP, W

Students will be able to learn how to analyze proteins using spectrophotometer readings. Students will also learn how to analyze DNA, digest DNA using restriction enzymes, amplify single and double stranded DNA by using PCR, and practice transforming cells. They will further investigate organisms by using chromatography techniques, protein and antibody engineering, Polymerase Chain Reaction (PCR), and DNA analysis.

# SPECIAL TOPICS IN BIOTECHNOLOGY

272834 2 credits Grade 12 Codes: CTC, W

Students will expand their expertise in laboratory techniques related to biotechnology. They will be introduced to agricultural biotechnology and explore applications that include the production of a bioinsecticide, bioremediation, Genetically Modified Organism (GMO) foods, and pharmaceutical production using plants. Other topics include medical biotechnology, bioinformatics, environmental biotechnology, and marine biotechnology.

#### RESEARCH IN BIOTECHNOLOGY CAPSTONE

272844 1 credit Grade 12 Codes: CTP, W

Students will extend their biotechnology research skills and will design an individual capstone project which will involve problem-based learning experiences. Additional components of the course are reviewing scientific literature, case studies and career exploration.

# **CAREER CLUSTER - HUMAN RESOURCES SERVICES**

# **CHILD DEVELOPMENT PROFESSIONS**

The Child Development Professions program aligns with the Child Development Associate (CDA) competencies, Interstate Teacher Assessment and Support Consortium (InTASC), and National Association for the Education of Young Children (NAEYC) standards.

The program of study prepares students for further education and careers in early childhood education and child development. The program consists of four high school courses that cover child growth and development with an emphasis on preschool, preschool learning environment best practices, establishing a purposeful preschool childcare program and internship. This program is designed to articulate a Maryland postsecondary early childhood education and care program and sets the foundation for advanced studies in child development. Program of study completers will be required to complete the CDA exam, a verification visit, and the CDA professional portfolio through a minimum of 480 required hours in a licensed early childhood program working with children ages 3-5. Additionally, student have the opportunity to earn college credits from the College of Southern Maryland by earning a "B" or better in all four courses in the pathway.

Program fees are associated with this program and are set by outside agencies. Program fees may include but are not limited to uniforms, tools, equipment, and the certification process.

Required Courses: All four (4) of these courses are required to achieve Completer Status.

#### CHILD GROWTH AND DEVELOPMENT (BIRTH TO ADOLESCENCE)

19975 1 credit Grade 10 Code: CTP

This course focuses on child development birth through adolescence with emphasis of preschool development. Theories of development, the role of caregivers, family, health, safety, and contemporary issues will be introduced. Students will explore special challenges to growth and development and will have opportunities for guided observation of children in a variety of settings. Students will begin to compile artifacts and written competency statements that are aligned with the required Child Development Associate (CDA) portfolio guidelines for preschool. Students will explore career pathways in Early Childhood Education and Child Care.

#### STRUCTURE AND FUNCTIONS OF THE HUMAN BODY (HONORS)

19979 1 credit Grade 11 Code: CTP Prerequisite: Completion of Child Growth and Development (Birth to Adolescence)

This course focuses on learning environments for preschool care, as well as establishing positive, responsive, and cooperative relationships with families. Students will explore the relationship of health, nutrition, and safety to learning. Students will establish strategies to support a safe, healthy learning environment that provides appropriate mealtime experiences and promotes good nutrition for preschool care while meeting best practice and regulated requirements for quality learning environments. Students will continue to explore physical and cognitive development and competencies for preschool care. The preschool classroom environment will support social and emotional development and provide opportunities for positive guidance. In addition, students will explore the local social service, health and education resources of the community and be able to recommend home activities to support preschool development. Students will observe, document, and assess preschool development and use multiple sources of evidence to set goals and develop lesson plans in response to the developmental needs of all children. Students will become familiar with local childcare regulations and adhere to professional mandate reporting requirements related to abuse and neglect. Students will develop components of a professional CDA Preschool portfolio.

#### CHILD DEVELOPMENT ASSOCIATE PORTFOLIO AND INTERNSHIP 1

19981 2 credits Grade 11 Code: CTP

Prerequisite: Completion of Child Growth and Development (Birth to Adolescence)

This course provides opportunities for students to complete the CDA Preschool Professional Portfolio and prepare for the CDA certification exam and site visit. During this course students will have an opportunity to become directly involved with students in the teaching- learning process. Students will be required to begin earning their required 480 experiential learning hours in a licensed program serving preschool age children. Students will translate classroom observations into effective teaching and management practices.

# **CHILD DEVELOPMENT ASSOCIATE INTERNSHIP 2**

19982 4 credits Grade 12 Codes: CTP, CC, CERT

Prerequisite: Completion of Learning Environment for Preschoolers and Child Development Associate Portfolio and Internship I

This course is the culminating course. It provides opportunities for students to link course content to theory in early childhood education as well as apply knowledge in a classroom setting. Students will have an opportunity to become directly involved in the teaching-learning process.

Students will complete the CDA Preschool Professional Portfolio and prepare for the CDA certification exam and site visit. Students will be required to complete their required 480 experiential learning hours in a licensed program serving preschool age children. With a passing score on the CDA exam, the verification visit, the CDA professional portfolio, and completion of the required 480 hours in a licensed program serving preschool age children, the student will earn the CDA certification.

# CRIMINAL JUSTICE, LAW, AND SOCIETY

Criminal Justice prepares students for employment in the law enforcement field. The objectives of this course are to encourage law-abiding behavior, to develop informed and responsible citizens, to teach critical thinking and organizational skills, to foster qualities of self-reliance, individual discipline, and leadership. The program prepares students for immediate entry into the private security field, corrections, loss prevention, and provides students with the opportunity to gain valuable experience toward a college degree in law enforcement. Classroom instruction, physical training, field trips, and shadowing experiences are all important components of this program. Program uniforms must be worn twice a week. Community service is required.

Required Courses: All four (4) of these courses are required to achieve Completer Status.

#### INTRODUCTION TO CRIMINAL JUSTICE

17092N 2 credits Grade 10 Codes: CTP, W

This course provides an overview of the American system of criminal justice. It includes past, present, and future theories of justice, criminal law, policing, courts and the associated pre-trial and post-trial legal processes, punishment and corrections, and juvenile justice. Students will also concentrate on standard operating procedures and rules, fingerprinting, drill, traffic direction, radio procedures, ethics in policing, use of force, handcuffing, officer safety, patrol procedures, making an arrest, and first aid/CPR.

# **ADVANCED TOPICS IN CRIMINAL JUSTICE**

17093N 2 credits Grade 11 Codes: CTP, W

Prerequisite: Introduction to Criminal Justice

This course provides an opportunity for students to gain advanced understanding of selected topics in criminal justice. Topics include criminal courts and the legal process, criminal justice ethics, punishment and corrections, and the juvenile justice. All the skills obtained in the first-year course will be maintained and extended. The largest area of study will be criminal law. Scenarios will be utilized as a teaching technique.

#### CONTEMPORARY ISSUES IN CRIMINAL JUSTICE, LAW, AND SOCIETY

17094N 1 credit Grade 12 Codes: CTC, W

Prerequisite: Advanced Topics in Criminal Justice

This course provides opportunities for students to explore contemporary issues in the fields of criminal justice, law and society. Students examine topics that have become of significant interest within today's society such as forensic testing, public safety, environmental law, ethics, police and society, and homeland security. All skills obtained in the first and second course will be maintained, extended and practiced. Scenarios again will be utilized.

#### CRIMINAL JUSTICE CAPSTONE AND INTERNSHIP

17095N 2 credits Grade 12 Code: CTP

Prerequisite: Advanced Topics in Criminal Justice

Students intern at many law enforcement agencies around the county where they apply academic and technical skills to real-life applications to develop employability.

# **CAREER CLUSTER - INFORMATION TECHNOLOGY**

# **CISCO CYBER SECURITY**

The Cisco Cybersecurity program is an adjunct to the Cisco Networking Academy, which is a nationally recognized program that prepares students for successful careers in information technology fields. It prepares high school students with the professional skills they require to pursue quality academic and professional opportunities. Emphasis is given to using decision-making and problem-solving techniques in the application of science, mathematics, communication, and social studies concepts to solve networking problems.

Topics relating to Cybersecurity will be interwoven throughout the course of study. Emphasis is placed on ethics, operating systems security, vulnerability assessment, legal issues, the hacker culture, intellectual property laws, encryption, decryption, algorithms, technologies, protection of critical infrastructure, and disaster recovery.

Required Courses: All four (4) of these courses are required to achieve Completer Status.

#### CYBERSECURITY ESSENTIALS

272514N 1 credit Grade 9 Codes: W, CTC, CERT

This course combines Cisco's Introduction to Cybersecurity and Cybersecurity Essentials courses where students start by exploring the broad topic of cybersecurity in a way that matters to them. They learn how to protect their personal data, online privacy including social media, and learn why more and more IT jobs require cybersecurity awareness and understanding. From there, they develop foundational understanding of cybersecurity and how it relates to information and network security. Students are introduced to the characteristics of cybercrime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical and professional skills to pursue careers in cybersecurity.

# **INTRODUCTION TO NETWORKS (ITN)**

27252 2 credits Grade 10 Codes: CTP, W, CERT

Prerequisite: Cybersecurity Essentials

This course is designed for students with basic PC usage skills. It introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing as well as the fundamentals of Ethernet concepts, media, and operations are introduced to create a foundation for the curriculum.

This course provides students with hands-on classroom and laboratory work in current and emerging networking technology that emphasizes practical experience. The career-oriented approach to learning networking empowers students to enter employment or further their education and training in the computer-networking field. Also, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment. A task analysis of current industry standards and occupational analysis was used to develop the content.

#### **CCNA CYBER OPS**

27255N 2 credits Grade 11 Codes: CC, W, CTP, CERT

Prerequisite: Introduction to Networks (ITN)

This course is offered during the 2nd Semester to develop career-ready skills needed to detect, monitor, analyze, and respond to ever growing cyber threats world-wide. In this course, students learn about cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations. Students develop hands-on knowledge leveraging rich multimedia content and Cisco Packet Tracer activities. The course extends the cybersecurity material covered in Cybersecurity Essentials. Students will prepare and attempt the Cisco Cybersecurity Operations certification exam.

# CCNA SECURITY (COMP TIA SECURITY +)

17182N 2 credits Grade 12 Codes: W, CTC, CERT

Prerequisite: CCNA Cyber Ops

Upon completion of this course, the student will gain a clearer understanding of certain ethical issues in information technology as well as 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 will develop a rational, coherent, consistent, and systemic approach to addressing moral issues in information technology. Students will prepare and attempt the (CompTIA) Security+ certification exam.

#### CISCO NETWORKING ACADEMY

CISCO NETWORKING ACADEMY:

Cisco Networking Academy is for students with strong math skills and a desire to work in the computer field. In this program students prepare for the following certifications

- (1) CCST Networking Cisco Certified Support
- (2) Cisco Certified Network Associate certificate (CCNA)

Required Courses: All five (5) of these courses are required to achieve Completer Status.

#### **CISCO IT ESSENTIALS WITH LINUX**

172514 1 credit Grade 9 Codes: W, CTP, CERT

This course covers fundamental computer and career skills for entry-level IT jobs. The IT Essentials course includes hands-on labs that provide practical experience to prepare students for enterprise networking. Simulation tools help students hone their troubleshooting skills and practice what they learn. Within the IT Essentials course is a unit on Linux. It is designed for learners who are beginning to build Linux knowledge for a career in information technology. NDG Linux Essentials is an introduction to Linux as an operating system, basic open-source concepts and the basics of the Linux command line. The course content is developed by experts and includes a Linux virtual machine as well as step-by- step labs which give students hands-on access to practice Linux command line concepts.

# CISCO CCT INTRODUCTION TO NETWORKS (ITN) WITH LINUX

17252N 2 credits Grade 10 Codes: CTP, W, CERT

This course covers fundamental computer and career skills for entry-level IT jobs. The IT Essentials course includes handson labs that provide practical experience to prepare students for enterprise networking. Simulation tools help students hone
their troubleshooting skills and practice what they learn. Within the IT Essentials course is a unit on Linux. It is strongly
recommended that the NDG Linux Essentials course is used to teach this unit. NDG Linux is the starting point for learning
Linux skills. It is designed for learners who are beginning to build Linux knowledge for a career in information technology.
NDG Linux Essentials is an introduction to Linux as an operating system, basic open-source concepts and the basics of the
Linux command line. The course content is developed by experts and includes a Linux virtual machine as well as step-bystep labs which give students hands-on access to practice Linux command line concepts.

# CISCO CCNA SWITCHING, ROUTING, AND WIRELESS ESSENTIALS (SRWE)

17181N 2 credits Grade 11 Codes: W, CTP, CERT

This course focuses on switching technologies and router operations that support small-to-medium business networks, including wireless local area networks (WLAN) and security concepts. Students perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN. Upon completion of

this course, students will be able to: Work with routers, switches and wireless devices to configure and troubleshoot VLANs, Wireless LANs and Inter-VLAN routing; Configure and troubleshoot redundancy on a switched network using STP and EtherChannel. Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols.

# CISCO ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION (ENSA)

17253N 2 credits Grade 12 Codes: W, CTC, CERT

This accelerated course is designed to prepare students to work in the information technology industry as network administrators. Large enterprises depend heavily on the smooth operation of their network infrastructures. This final course in the CCNA series describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. It covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks. In addition to computer-based activities, students will formally construct a network. Students will earn a badge after successfully completing this course and be prepared to take the CISCO Certified Network Associate (CCNA) certification examination.

# **CISCO CAPSTONE COURSE**

17256N 2 credits Grade 12 Codes: W, CTP, CERT

The Cisco Capstone Course will utilize the NetAcad Platform called Skills for All by Cisco. The Skills for All by Cisco platform offers diverse learning pathways featuring cybersecurity, python programming language, cloud infrastructure, and automation. This diverse platform will allow students already enrolled in the Cisco Networking Academy Program to gain an introduction to other pathways that utilize networking understanding and skills. Students can differentiate their focus and expertise based on their personal interest and preferences.

# <u>CAREER CLUSTER – MANUFACTURING, ENGINEERING AND TECHNOLOGY</u> DRAFTING AND DESIGN TECHNOLOGY

In Drafting and Design Technology, students start with the basics of mechanical drawing, then move into orthographic projections, sectional views and pictorial plans for use in many engineering fields. Drafting requires students to have a strong conceptual foundation. Focus is on equivalency and linearity, modeling, geometric objects and algebraic expressions. Other courses suggested for this major are Drawing and Design, Architecture and Interior Design, and Physics.

Required Courses: All six (6) of these courses are required to achieve Completer Status.

# INTRODUCTION TO CONSTRUCTION DEVELOPMENT

172015 1 credit Grade 10 Codes: CTP. CERT

In this course, students will concentrate on basic drafting skills, including exploring the various aspects of sketches, demonstrating the use of English and metric scales, drawing media and projection lines, showing views in an orthographic projection, executing basic drawing line commands, creating text using appropriate style and size.

# **COMPUTER ASSISTED DRAFTING AND DESIGN (CADD)**

137083 1 credits Grade 10 Code: CERT

This course provides the opportunity for students to understand basic mechanical drawing concepts through the use of computer-assisted design & drafting software. CADD is the foundation course for numerous technical & engineering career fields. Students will prepare and attempt the AutoCAD certification exam.

#### PRINCIPLES OF DRAFTING AND CONSTRUCTION DESIGN

17208N 2 credits Grade 11 Codes: CTP, W, CC

Prerequisite: Introduction to Construction Development

The curriculum includes the origin and basics of drafting including line types, sketching, orthographic projection, pictorials, dimensioning, shading. Students will be introduced to skills used in surveying, engineering and mechanical drafting. Students will be able to read, understand, and use the "language of industry." They will develop professionally appropriate penmanship in order to enable clear representation and understanding of the product. Students will develop complex mechanical drawings and demonstrate the ability to use and apply fractions, decimals, conversions, ratios and other basic math skills. AutoDesk programs/software will be taught as the software used in the profession.

#### **RIVIT 3D ARCHITECTURAL DRAFTING**

137084 1 credit Grade 11 Code: CERT

Prerequisite: Completion of CADD

This course will provide the opportunity for students to understand building information modeling concepts by adding to the course content previously taught in CADD while utilizing an additional industry standard computer program, REVIT. REVIT

enables students to create 3D architectural project models for numerous technical and engineering career fields. Students will prepare and attempt the REVIT certification exam.

# ADVANCED DESIGN AND 3D MODELING

17210N 2 credits Grade 12 Codes: W, CTP, CC

Prerequisite: Principles of Drafting and Construction Design

Students are introduced to mechanical and advanced architectural drafting techniques and methods. They work together as well as individually, to research, design and construct models. Application of basic local building codes for residential construction is taught. This course provides students with experience in advanced concepts of the construction design process. At completion, students have the knowledge and skills to sit for an industry certification.

#### ADVANCED DRAFTING AND CONSTRUCTION CAPSTONE

17211N 1 credit Grade 12 Codes: W, CTP, CC, CERT

Prerequisite: Principles of Drafting and Construction Design

The course builds on an understanding of the construction design process in a capstone project, with advanced BIM knowledge and skill in drafting and design. Students work in small groups or independently to develop a project that utilizes all the skills and knowledge that have been mastered throughout the Drafting and Design Technology pathway.

# **ENGINEERING**

The North Point Engineering program is designed for college-bound students who have a strong math and science background and interest, and who wish to pursue a career in engineering. This program encompasses a wide variety of engineering principles including the design process, manufacturing processes, technological systems, and problem-based learning used in a variety of engineering field. Through their studies, students will have the opportunity to enhance and extend their study of engineering principles.

Students will examine electronics, computer applications, robotics, CADD, materials science, physics, and computer engineering programming languages such as MATLAB. Analyzing, synthesizing, and evaluating data will be stressed through laboratory experiences and project design culminating in a senior research and design patent project.

The Engineering pathway does not meet the CTE graduation requirement.

#### INTRODUCTION TO ENGINEERING

172404 1 credit Grade 9 Code: W
Prerequisite: Algebra 1, Concurrently enrolled in Honors Geometry (or Honors Algebra 2)

This is the introductory course for the Engineering Pathway. This course encompasses a wide variety of engineering principles including the design process, manufacturing processes, technological systems as well as a plethora of problem-based learning used in a variety of engineering fields. This course engages high school students through project and problem-based learning. Problem solving and real-world research are integral parts of this curriculum. A high level of math is required to solve many engineering and physics concepts taught, including vectors and kinematics.

# COMPUTER ASSISTED DRAFTING AND DESIGN (CADD)

172414 1 credits Grade 10 Code: W

Prerequisite: Honors Geometry and Introduction to Engineering, concurrently enrolled in AP Physics 1 (for Engineers), Computer Applications for Engineers, and Honors Algebra 2 (or Pre-Calculus)

All laboratory work, experimentation and engineering projects in this course will result from studies conducted in the AP Physics 1 course taken in conjunction with Engineering Fundamentals. Topics follow directly from the physics course and include measurement, motion, forces, work and energy, momentum, and fluids. Students will gain experience in using a variety of scientific equipment. In addition to laboratory experiments, engineering projects will emphasize application of physics principles to real world engineering problems.

# **COMPUTER APPLCATIONS FOR ENGINEERS**

172314 1 credit Grade 10 Code: W

Prerequisite: Honors Geometry and Introduction to Engineering, concurrently enrolled in AP Physics 1 (for Engineers), Engineering Fundamentals, and Honors Algebra 2 (or Pre-Calculus)

Students will become literate in the computer tools engineers use. Students will be able to: program a scientific graphing calculator to store, input, loop, list and graph; build projects analyze engineering concepts using Autodesk Inventor consisting of 3-D modeling, constraining geometry and standard dimensioning; model and simulate various engineering principles; utilize all functions of Microsoft Excel including differentiation, integration and other pertinent engineering functions; utilize a programming language for engineering applications using Visual Basic. Creativity through design is continually encouraged.

#### **ENGINEERING APPLICATIONS MAT SCI**

C1711N 1 credit Grade 11 Code: W

Prerequisite: Honors Algebra 2, Physics, Engineering Fundamentals, Computer Applications for Engineers, concurrently enrolled in Engineering Applications MAT LAB

Students will explore properties of materials through an understanding of physics and basic chemistry. Different types of materials such as metals, ceramics, and polymers will be examined. Students will be able to use their knowledge of MATLAB to analyze data collected in their materials science laboratories.

#### **ENGINEERING APPLICATIONS MAT LAB**

C1712N 1 credit Grade 11 Code: W

Prerequisite: Honors Algebra 2, Physics, Engineering Fundamentals, Computer Applications for Engineers, concurrently enrolled in Engineering Applications SCI LAB

Students will be introduced to MATLAB, a high-level language and interactive environment that enables engineers to perform computationally intensive tasks faster than with traditional programming languages such as C, C++ and Fortran.

#### ADVANCED ENGINEERING RESEARCH AND DESIGN

172424 1 credit Grade 12 Code: W

Prerequisite: Pre-Calculus, MATSCI, MATLAB, concurrently taking AP Calculus (or AP Calculus BC)

This capstone class consists of formal, independent research that may lead to a patent-based project which answers and supports an engineering question. When possible, students will have an outside professional mentor. A prototype and presentation will be made and presented by each student to an advisory board.

# CAREER AND TECHNICAL EDUCATION PROGRAMS ROBERT D. STETHEM EDUCATIONAL CENTER



The Robert D. Stethem (RDS) Educational Center Career and Technical Education (CTE) programs offer a variety of career related courses for students considering post-secondary options. The CTE programs housed at RDS offer students the opportunity to earn National Certification in a specific career field.

CTE students attend their zoned high school for ½ a day and RDS for ½ a day for their chosen CTE program for two years. Because not all courses fulfill graduation requirements, interested students must consult carefully with their high school counselors in the planning process. Students must complete an application for enrollment and must:

- Earn a minimum of 12 credits,
- Pass two of the four math courses required for graduation

# CAREER AND TECHNICAL EDUCATION COMPLETER PROGRAMS

# **CAREER CLUSTER – TRANSPORTATION TECHNOLOGIES**

# AUTOMOTIVE TECHNOLOGY

The Automotive Technology Program incorporates the Automotive Service Excellence (ASE) program certification standards and the National Automotive Technicians Education Foundation (NATEF) task lists. Automotive Service Excellence (ASE) certifications should include: Engine Repair, Engine Performance, Electrical/Electronic Systems, Brakes, Heating and Air Conditioning, Suspension and Steering, Manual Drive Train and Axels, and Automatic Transmissions. The program prepares students for further education and careers in automotive technology.

Required Courses: All seven (7) of these courses are required to achieve Completer Status.

#### SUSPENSION AND STEERING

170114 1 credit Grade 11 Code: CTP

This course provides students with the knowledge and skills necessary to take the NATEF test for Automobile Suspension and Steering as well as to enter a career in this area and/or attend post-secondary education or training. Students develop diagnostic, technical problem solving, and academic skills through classroom instruction and hands-on maintenance applications. Students will use state-of-the-art precision steering and alignment measurement tools and equipment to gather, analyze, and make necessary repairs. The ASE certification test will be taken at the end of the course.

#### **BRAKES**

170124 1 credit Grade 11 Code: CTC

This course provides students with the knowledge and skills necessary to take the technical skills assessment for automobile brakes as well as to enter a career in this area and/or attend post-secondary education or training. Students develop diagnostic, technical problem-solving, and academic skills through classroom instruction and hands-on maintenance applications. Students will use state-of-the-art precision brake measurement tools and equipment to gather, analyze, and make necessary repairs. The ASE certification test will be taken at the end of the course.

# **ENGINE REPAIR**

170154 1 credit Code: CTP Grade 11

This course provides students with the knowledge and skills necessary to take the technical skills assessment for engine rotations, valve trains, timing, small engines, Bernoulli's Principle, Venturi Effect, micrometer, material safety, engine teardown, abnormal engine noise, and evaluation of engine mechanical problems. Students will begin to work on customer's vehicles. The ASE certification test will be taken at the end of the course.

#### **ELECTRICAL SYSTEMS**

Code: CTP 170134 1 credit Grade 12

Prerequisite: Suspension & Steering, Brakes, and Engine Repair

This course provides students with the knowledge and skills necessary to take the technical skills assessment for automobile electrical/electronic systems and immediately enter a career in this area and/or attend postsecondary education and/or training. Students develop diagnostic, technical problem-solving and academic skills through classroom instruction and hands-on maintenance applications. Students will use state-of-the-art precision electronic measurement tools, fault code readers and other equipment to gather, analyze, and make necessary required electrical and electronic system repairs. The ASE certification test will be taken at the end of the course.

#### **AUTOMOTIVE HVAC**

17016T ½ credit Grade 12 Code: CTP

Prerequisite: Suspension & Steering, Brakes, and Engine Repair

This course will focus on the principle of refrigeration, the high and low sides of an air conditioning system and the safety precautions for working on heating and air conditioning systems. Students will work on customer vehicles. They will also take mock ASE tests to prepare for the ASE testing they take after completion of the course.

TRANSMISSIONS (AUTOMATIC & MANUAL)

17016U ½ credit Grade 12 Code: CTP

Prerequisite: Suspension & Steering, Brakes, and Engine Repair

This course allows students to learn to identify/define the major part of both a manual and automatic transmission. They will be able to explain the fundamental operations of both types of transmission gears. Students will work on customer's vehicles. They will also take mock ASE tests to prepare for the ASE testing they take after completion of the course.

# **ENGINE PERFORMANCE**

170144 1 credit Grade 12 Code: CTP

Prerequisite: Suspension & Steering, Brakes, and Engine Repair

This course provides students with the knowledge and skills necessary to take the technical skills assessment for automobile engine performance and immediately enter a career in this area and/or attend postsecondary education and/or training. Students develop diagnostic, technical problem-solving, and academic skills through classroom instruction and hands-on maintenance applications. Students will use state-of-the-art precision electronic engine performance measurement tools, fault code readers and other equipment to gather, analyze, and make necessary required engine performance repairs. The ASE certification test will be taken at the end of the course.

# CAREER CLUSTER - CONSUMER SERVICES, HOSPITALITY & TOURISM

# **BARBERING**

The Barbering program prepares students to become licensed professional barber-stylists. This program teaches a wide variety of skills and topics including, the history of barbering, life skills, professional image, infection control, the basics of chemistry and electricity, properties of the skin hair and scalp, men's facial massage and treatments, nail care and men's and women's haircutting and styling. Emphasis is placed on hygiene, safety, sanitation, and state board rules and regulations. Related areas of instruction include human anatomy, physiology, chemistry, consumer relations, and employability skills. Students will participate in work-based learning experience for barbering that occurs during the senior year of the program at which time they receive practical work experience in the barbering industry under the supervision of a licensed Master barber, certificated by the Maryland State Department of Education. Students are expected to pass all courses and take the Maryland State Board Barbering Examination (either 900 hr. or 1200 hr.) prior to graduation.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

# PRINCIPLES AND PRACTICE OF BARBERING

170814 1 credit Grade 11 Code: CTP

This course will prepare students to become licensed professional barbers. Students will begin with basic hair cutting techniques for men and women, fundamentals and techniques in shaving, beard and mustache trimming, skin care and massage, and various chemical services. The hours earned during his course work toward the hours needed to attain Maryland Board of Barber's Certification.

# **ADVANCED BARBERING AND APPLICATION**

170824 2 credit Grade 11 Codes: CTP, W

This course continues the practical application and clinical practices needed to become a licensed professional barber. Students continue to develop basic skills in hair cutting techniques for men and women, shaving and mustache trimming, skin care and massage, and various chemical services. The hours earned during this course count toward the hours needed to earn Maryland Board of Barber's Certification.

#### **BARBERING CAPSTONE**

170834 3 credit Grade 12 Codes: CTC, W\*

This course provides students the opportunity to refine skills that support all aspects of the barbering industry. It will assist in preparing students to obtain employment and advance in the field upon passing the State Board licensing examination. Students will have the opportunity to attend work-based learning experiences in order to gain hours of experience in the field. Upon the completion of this course, students take the Maryland State Board Barbering Examination (900 hrs. or 1200 hrs.).

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# CAREER CLUSTER - CONSTRUCTION AND DEVELOPMENT

# **HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)**

The Construction Trades pathway CTE programs are based on the National Center for Construction Education and Research (NCCER) standards that lead to a national certification for those students who successfully complete Level I and/or Level II curriculum. Pathway options start with the NCCER Core Curriculum for Construction. This provides a strong foundation for all students entering the career field. After the first course, students must pass the National Construction Career Test (NCCT) for the Core and then proceed into a specific trade option. This program prepares students for further education and careers in Heating, Ventilation, and Air Conditioning.

Required Courses: All three (3) of these courses are required to achieve Completer Status.

# FOUNDATIONS OF BUILDING AND CONSTRUCTION TECHNOLOGY (NCCER CORE)

170104 1 credit Grade 11 Code: CTP

Prerequisite: Concurrently enrolled in HVAC Level I

This course is the Core Curriculum of the Construction and Development Cluster. The NCCER Core Curriculum is taught within this course and is the basis for all construction skills. The course includes basic safety, construction math, hand tools, power tools, blueprints, basic rigging, and hands-on experiences. Students can earn NCCER Core certification.

# HEATING, VENTILATION, AND AIR CONDITIONING (HVAC LEVEL I)

170105 1 credit Grade 11 Code: CTP

Prerequisite: Concurrently enrolled in Foundations of Building and Construction Technology (CORE)

This course of study includes mastery of trade mathematics, tools of the trade, copper and plastic piping practices, soldering and brazing, ferrous metal piping practices, basic electricity, introduction to cooling, and introduction to heating. Students can earn CFC certification.

#### HEATING, VENTILATION, AND AIR CONDITIONING (HVAC LEVEL II)

170106 2 credits Grade 12 Code: CTC

Prerequisite: Foundations of Building and Construction Technology (CORE) and HVAC Level I

This course of study includes mastery of air distribution systems, chimney, vents and flues, maintenance skills for the service technician, alternating current, basic electronics, and electric heating. The course also explains accessories and optional equipment, metering devices, compressors, heat pumps, leak detection, evacuation recovery and charging. Students can earn NCCER HVAC Level I certification.

#### HEATING, VENTILATION, AND AIR CONDITIONING WORK-BASED LEARNING

170107 1 credit Grade 12 Code: CTP

Prerequisite: Foundations of Building and Construction Technology (CORE)

Students enrolled in this course will complete a work-based learning experience, in the school clinic or other experience where students apply academic and technical skills to real-life applications and develop employability in the Heating, Ventilation, and Air Conditioning field.

# CAREER CLUSTER - ARTS, MEDIA, AND COMMUNICATION

# INTERACTIVE MEDIA PRODUCTION

The Interactive Media Production (IMP) program includes a strong foundation in arts and communication with particular emphasis on design, graphic and media communications, interactive technologies, and project development. The program consists of four courses.

Required Courses: All four (4) of these courses are required to achieve Completer Status.

#### PRINCIPLES OF ARTS, MEDIA, AND COMMUNICATION

170314 1 credit Grade 11 Code: CTP

Prerequisite: Concurrently enrolled in Interactive Media and Design I

This course provides students with an understanding of the arts, media, and communication industries. Students will examine the opportunities and requirements of the major careers in this industry, including communication and broadcast technologies, multimedia production, graphic design, and print communication.

# **INTERACTIVE MEDIA AND DESIGN I**

171324 1 credit Grade 11 Code: CTP

Prerequisite: Concurrently enrolled in Principles of Arts, Media, and Communication

In this course, students' learning will focus on three pathway areas: Graphic Design, Digital Media, and Interactive Media.

Emphasis will be placed on group project development, and individual portfolio development.

# **INTERACTIVE MEDIA AND DESIGN II**

171334 1 credit Grade 12 Code: CTC

Prerequisite: Principles of Arts, Media, and Communication and Interactive Media and Design I

In Interactive Media and Design II, students will continue their learning of the three pathway areas. Emphasis will be placed on group project development, project management, and individual portfolio development. Students will update their IMP Project Portfolio with exemplars of their best work. Students will advance their knowledge and skills in multimedia design and production through project planning and product development. Students will demonstrate the use of multiple tools and modalities in the production process.

#### INTERACTIVE MEDIA PORTFOLIO CAPSTONE

171344 1 credit Grade 12 Codes: CTP, CC Prerequisite: Principles of Arts, Media, and Communication and Interactive Media and Design I

This capstone course enables students to apply what they learned in their previous academic and IMP classes to complete a challenging, client-driven project. Students work in teams to design and create a solution to satisfy or fill a client's need or want. Students are also expected to refine the products that comprise their portfolio to meet the specifications identified by the affiliate partner. Student teams make progress reports to their peers, meet regularly with their clients, and exchange constructive criticism and consultation. At the end of the course, teams present their projects to industry partners for feedback and professional review. Students are able to earn several Adobe certifications at the end of the course.

# CAREER CLUSTER - HEALTH & BIOSCIENCES

# **ACADEMY OF HEALTH PROFESSIONS: PHARMACY TECHNICIAN**

The Academy of Health Professions (AHP) Pharmacy Technician program immerses students in healthcare-related knowledge and skills through project and problem-based learning, internship experiences, and classroom and lab instruction. The four courses in this career pathway sequence are: two foundation courses, one pharmacy technician medical specialty course, and an allied health internship. Students are prepared to take the exam for the Certification of Pharmacy Technicians (ExCPT) administered by the National Health career Association (NHA) and to work in a variety of pharmacy settings.

Required Courses: All four (4) of the following courses are required to achieve Completer Status.

#### FOUNDATIONS OF MEDICINE AND HEALTH SCIENCES

130910 1 credit Grade 11 Code: CTP

Prerequisite: Biology and concurrently enrolled in Structure and Functions of the Human Body

Students learn about the history and economics of the healthcare industry while engaging in the medical terminology, processes, and procedures used in the delivery of essential healthcare services. Ethical and legal responsibilities in healthcare will be analyzed in order to learn about making informed patient care decisions.

# STRUCTURE AND FUNCTIONS OF THE HUMAN BODY (HONORS)

130920 1 credit Grade 11 Codes: CTP, W

**Prerequisite:** Biology and concurrently enrolled in Foundations of Medicine & Health Sciences and Chemistry
Students study the structure and functions of the human body, including cellular biology, histology, and the medical terminology related to body systems. Students investigate the body's responses to the external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy processes.

#### PHARMACY TECHNICIAN MEDICAL SPECIALTY (HONORS)

130930 1 credit Grade 12 Codes: CTC, W

Prerequisite: Biology, Chemistry, Foundations of Medicine & Health Sciences; Structure & Functions of the Human Body and concurrently enrolled in Allied Health Internship

Students learn the scope of practice, standards of conduct, and ethical responsibilities supporting the proper performance of the duties of a pharmacy technician. Students' preparation for the national certification exam includes knowledge of drugs and drug therapy, the dispensing process, pharmacy calculations, effective communication skills, and Federal & State laws governing the practice of pharmacy.

# **ALLIED HEALTH INTERNSHIP (HONORS)**

130940 2 credits Grade 12 Codes: CTP, W

Prerequisite: Biology, Chemistry, Foundations of Medicine & Health Sciences; Structure & Functions of the Human Body and concurrently enrolled in Pharmacy Technician Medical Specialty Students will participate in a work-based learning opportunity in a professional healthcare setting which should reflect their interest in pursuing a career in Health Care. Students will be supervised by an instructor and participate in a school-based seminar class at least once per week to share experiences.

# **ACADEMY OF HEALTH PROFESSIONS: PHYSICAL REHABILITATION**

The Academy of Health Professions (AHP) Physical Rehabilitation program introduces students to healthcare knowledge and skills through project problem-based learning, internship experiences, and classroom and lab instruction. There are four courses in this career pathway sequence: two foundation courses, one physical rehabilitation medical specialty course, and an allied health internship. Students are prepared to take the national exam.

Required Courses: All four (4) of the following courses are required to achieve Completer Status.

# FOUNDATIONS OF MEDICINE AND HEALTH SCIENCES

130911 1 credit Grade 11 Code: CTP

Prerequisite: Biology and concurrently enrolled in Structure and Functions of the Human Body

Students learn about the history and economics of the healthcare industry while engaging in the medical terminology, processes, and procedures used in the delivery of essential healthcare services. Ethical and legal responsibilities in healthcare will be analyzed in order to learn about making informed patient care decisions.

# STRUCTURE AND FUNCTIONS OF THE HUMAN BODY (HONORS)

130921 1 credit Grade 11 Codes: CTP, W

**Prerequisite:** Biology and concurrently enrolled in Foundations of Medicine & Health Sciences and Chemistry
Students study the structure and functions of the human body, including cellular biology, histology, and the medical terminology related to body systems. Students investigate the body's responses to the external environment, maintenance of homeostasis, electrical interactions, transport systems, and energy processes.

# PHYSICAL REHABILITATION-MEDICAL SPECIALITY (HONORS)

130935 1 credit Grade 12 Codes: CTC, W

Prerequisite: Biology, Chemistry, Foundations of Medicine & Health Sciences; Structure & Functions of the Human Body and concurrently enrolled in Allied Health Internship

This course is designed to expose students to varied careers related to the physical and occupational therapy field by integrating concepts of physical therapy, occupational therapy, kinesiology, and athletic training. Students will be prepared for experience in the clinical setting with a focus on the specific knowledge, skills and abilities that relate to physical rehabilitation and/or occupational therapy. Students are able to take the Certified Personal Trainer Exam through the National Strength Professionals Association (NSPA).

#### **ALLIED HEALTH INTERNSHIP (HONORS)**

130941 2 credits Grade 12 Codes: CTP, W, CC

Prerequisite: Biology, Chemistry, Foundations of Medicine & Health Sciences; Structure & Functions of the Human Body and concurrently enrolled in Physical Rehabilitation Specialty

Students will participate in a work-based learning opportunity in a professional healthcare setting which should reflect their interest in pursuing a career in Health Care. Students will be supervised by an instructor and participate in a school-based seminar class at least once per week to share experiences.

# **CTE INTERNSHIPS**

# **CTE INTERNSHIP**

 153074
 1 Credit
 Grade 12

 153075
 2 Credits
 Grade 12

 153076
 3 Credits
 Grade 12

Students who are in a Career and Technical Education (CTE) pathway can enter an internship to support the content within their program of study. This course allows students to enter the workforce in order to gain hands-on experience. A school-based instructor oversees the course and grades will include, but are not limited to, student reflections and employer feedback.

# **COMPUTER SCIENCE & TECHNOLOGY EDUCATION**

The most important aspect of computer science is problem solving, an essential skill for life. Students study the design, development and analysis of using computers to solve problems in a variety of business, arts, scientific, and social contexts. Because computers solve problems to serve people, there is a significant human side to computer science as well. Computer science contributes to a well-rounded education for every student in the 21<sup>st</sup> century.

ADVANCED PLACEMENT COMPUTER SCIENCE A

179030 1 credit Grades 10, 11, 12 Codes: CTC, W\*

17903E 1 credit Grades 10, 11, 12

Prerequisite: Introduction to Computer Programming or approval of instructor

This course is designed to prepare students for the AP Computer Science A examination. The course emphasizes content comparable to a first college course in programming for Computer Science majors. Using the Java programming language, the course introduces program design, including static and object-oriented programming. It also introduces data structures, searching and sorting algorithms, and algorithm comparison.

# ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

179060 1 credit Grades 10, 11, 12 Codes: TE, CTP, W\*

As described by the College Board, this course introduces foundational concepts of computer science and explores computing's impact on the world. It focuses on creative problem solving and real-world applications. The Computer Science Principles course teaches use of computational tools to analyze and develop computational artifacts and computational thinking practices including abstraction, collaborative problem solving, and communication. This course is designed to support student preparation of the one project required to be submitted to the College Board and prepare them for the end of the year exam. This course cannot be used as the TE requirement for graduation if taken as part of the Computer and Information Sciences pathway.

**COMPUTER INTERNSHIP** 

C17920 1 credit Grades 11, 12 Code: CC

C17921 (lab) 1 credit

(1 credit class instruction and 1 credit independent lab training)

Prerequisite: One additional computer science/computer technology course

This course allows students to serve as technicians and information systems specialists for their high school. They will be introduced to network administration and basic computer repair. Students will solve hardware and software problems throughout the entire school. Independent work and exploration, under the guidance of their instructor, will be a major part of this course. With the additional network rights and privileges come added student expectations of responsibility, especially the expectation that no intern will abuse or misuse this privilege.

#### **COMPUTER SCIENCE CAPSTONE**

179070 1 credit Grade 12 Code: W\*

Prerequisite: Introduction to Computer Programming, Advanced Placement Computer Science Principles, and concurrent with Advanced Placement Computer Science-A

This course is designed to provide students with an in-depth understanding on how to provide Information Technology (IT) solutions to real-world problems. They will build on knowledge and skills gained from previous courses and provides a forum for analyzing, synthesizing, and implementing skills and knowledge. This course offers two national certifications in CompTIA A+ and CompTIA Security+, and in which students will have demonstrated mastery in the IT and cybersecurity content. Students can apply what they have learned to advancements in the computer science field.

#### **DIGITAL ELECTRONICS (HONORS)**

130750 1 credit Grades 11, 12 Codes: CTP, W

13075E 1 credit Grades 11, 12

Prerequisite: Principles of Engineering and Introduction to Engineering Design OR Introduction to Computer Programming

This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. From smart phones to appliances, digital circuits are all around us. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

#### **EXPLORING COMPUTER SCIENCE**

179040 1 credit Grades 9, 10, 11, 12 Code: TE

This year-long course consisting of 6 units, approximately 6 weeks each. The course was developed around a framework of both computer science content and computational practice. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. Units utilize a variety of tools/platforms and culminate with final projects. Students interested in pursuing a career in computer science are encouraged to take this course.

#### FOUNDATIONS OF TECHNOLOGY

130414 1 credit Grades 9, 10, 11, 12 Code: TE

This course involves a broad study of technology while preparing students to understand and apply technological concepts and processes. Topics include current and future technological problems and opportunities associated with technology.

#### **INTRODUCTION TO COMPUTER PROGRAMMING (HONORS)**

179000 1 credit Grades 9, 10, 11, 12 Codes: CTP, W

Prerequisite: Completion or concurrent enrollment in Algebra I

This course prepares and provides students the skill sets for the AP Computer Science Principles and the AP Computer Science A courses. The emphasis is on solving real-world problems by means of computer programming using the following languages: Java, JavaScript, and Python. Topics will include object-oriented design techniques, classes, objects, data types, control statements (selection and iteration), and arrays. Emphasis will be placed on computer science skills, problem solving, algorithm design, and documentation.

#### WEB DESIGN AND DEVELOPMENT I

179016 1 credit Grades 9, 10, 11, 12

Prerequisite: Algebra I

This course concentrates on the two main aspects of web development: design and programming. Design is concerned with the appearance and user-friendliness of the site. Programming relates to the instructions that control what tasks are performed on the site. Students will use a variety of techniques and tools within a professional web development suite, such as Adobe CS6, to develop web sites. Students will also hand code web pages using current markup standards.

#### WEB DESIGN AND DEVELOPMENT II

179017 1 credit Grades 10, 11, 12

Prerequisite: Web Design and Development I

This course extends web development skills by creating dynamic, data driven web sites. Students will learn to build web applications that authenticate users, send email, perform calculations, and store and retrieve data from databases. Students will also learn how to install and manage web and database servers. Web applications and technologies such as Adobe Creative Suite, JavaScript, XHTML, CSS, ASP, and PHP will be used in course projects.

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# **ENGLISH**

The high school English program is designed to develop skills in reading, writing, viewing, listening, and speaking as well as to provide an in-depth study of literature and language. Enrichment opportunities are also provided in journalism, speech, and yearbook. Levels of English classes are provided to meet a variety of instructional and educational needs. Advanced Placement courses are also offered.

- Advanced Placement (AP) courses are designed for the student who has demonstrated the ability to move beyond
  the honors level courses and aspires to become a critical reader of college-level texts and strengthen the effectiveness
  of his/her writing through close reading and frequent practice at applying rhetorical strategies. Extensive reading and
  writing outside of the classroom are required.
- Honors courses are designed for the student who has an interest in English, has the ability to move beyond grade
  level in content, and wishes to be prepared to enter a competitive four-year college or university at the end of his/her
  high school career.
- **A Level** courses are designed for students who wish to improve their reading and writing skills and whose plans may include entry into postsecondary education or significant employment.

#### ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

017020 1 credit Grades 11, 12 Code: W\*

Prerequisite: English II or III Honors

This course is designed for students who wish to take the College Board examination in Advanced Placement Language

and Composition. The course involves intensive analysis of college-level texts for mature readers. Both content and rhetorical/stylistic elements will be studied. Timed writings and analysis of texts will form major components of the course. Students will learn to write essays in all rhetorical modes, especially exposition, persuasion, and argumentation, to prepare them for college writing tasks. **Summer reading is required.** 

#### ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

017010 1 credit Grade 12 Code: W\*

Prerequisite: English III Honors or AP Language and Composition

This course is designed for students who desire to prepare to take the College Board examination in Advanced Placement Literature and Composition. The course involves intensive critical analysis of college-level works of literature for mature readers. Timed writings, essay writing, critiques, and critical analysis papers will form the writing component of this course. **Summer reading is required**.

#### **COMPOSITION AND RHETORIC**

012810 1 credit Grade 12 Code: W

Prerequisite: Successful completion of a junior English course

The focus of this course is the refinement of students' reading, writing, and language skills in preparation for college-level classes. During the first semester, students will work on developing critical reading and comprehension skills by analyzing rhetoric in a wide-range of texts. 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 refine their research and documentation skills. This course fulfills the 12<sup>th</sup> grade English credit requirement and may not be used as an elective credit. **Summer reading is required.** Under conditions determined by the College of Southern Maryland (CSM), this course may earn college credit.

# **ENGLISH I (HONORS)**

011010 1 credit Grade 9 Code: W

This course is provided for students who wish to pursue an enriched English program. It focuses on reading, writing, speaking, listening, and language. It builds upon prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing. An intensive study of literary and informational genres will also be addressed. Writing will be linked to the reading selections. **Summer reading is required.** 

# **ENGLISH I (A LEVEL)**

011011 1 credit Grade 9

This course is designed to develop skills in reading, writing, speaking, listening, and language. It builds upon prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing. It includes the study of various genres of literature and informational texts, which will be linked to writing assignments.

# **ENGLISH I (INDIVIDUALIZED)**

01981V or W 1 credit Grade 9

This course is available to students on recommendation of the Individualized Education Program (IEP) Committee. Individual goals and objectives are developed in an IEP. Goals and objectives on the IEP reflect a student's level of performance and rate of learning. Instruction is based on individual needs in any of the following areas: (1) basic reading skills, (2) effective oral expression, (3) enjoyment of literature, (4) functional writing skills, (5) listening skills, and/or (6) viewing skills.

#### **ENGLISH II (HONORS)**

011510 1 credit Grade 10 Codes: EOC, W

Prerequisite: English I

This course is provided to challenge students who have demonstrated interest and ability in above-grade level English work. Intensive study and in-depth analysis of literature and informational texts are provided, as are opportunities for speaking and listening. Students will have multiple opportunities to write argumentative, informational, and narrative multi-paragraph essays and compositions. Students will continue to develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message. **Summer reading is required.** 

#### **ENGLISH II (A LEVEL)**

011511 1 credit Grade 10 Code: EOC

Prerequisite: English I

This course offers a balanced focus on composition, literature, and informational texts. Students will have opportunities to write argumentative, informational, and narrative essays and compositions. Through the study of literature and informational texts, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme. Speaking and listening skills continue to be developed.

#### **ENGLISH II (INDIVIDUALIZED)**

01982V or W 1 credit Grade 10 Code: EOC

This course is available to students on recommendation of the Individualized Education Program (IEP) Committee. Individual goals and objectives are developed in an IEP. Goals and objectives on the IEP reflect a student's level of performance and rate of learning. Instruction is based on individual needs in any of the following areas: (1) basic reading skills, (2) effective oral expression, (3) enjoyment of literature, (4) functional writing skills, (5) listening skills, and/or (6) viewing skills.

**ENGLISH III (HONORS)** 

012020 1 credit Grade 11 Codes: EOC, W

Prerequisite: English II

This course focuses instruction on the critical analysis of literature and informational texts with an emphasis on structure and thematic foundations, which form the backbone of writing assignments. Students continue to develop their writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as they write argumentative, informational, and narrative essays. Literary conventions and stylistic devices receive greater emphasis than previous courses. Speaking and listening skills continue to be developed. ACT/SAT preparation will also be addressed in this course. **Summer reading is required.** 

**ENGLISH III (A LEVEL)** 

012021 1 credit Grade 11 Code: EOC

Prerequisite: English II

This course is designed to enable students to understand and appreciate literary works of various genres and non-fiction texts, with an emphasis on reading strategies, text analysis, and language study. This course continues to develop writing, speaking, and listening skills in order to prepare students for college or career. Students will write argumentative, informational, and narrative essays. Literary conventions and stylistic devices receive greater emphasis than in previous courses.

# **ENGLISH III (INDIVIDUALIZED)**

01983V or W 1 credit Grade 11 Code: EOC

This course is available to students on recommendation of the Individualized Education Program (IEP) Committee. Individual goals and objectives are developed in an IEP. Goals and objectives on the IEP reflect a student's level of performance and rate of learning. Instruction is based on individual needs in any of the following areas: (1) basic reading skills, (2) effective oral expression, (3) enjoyment of literature, (4) functional writing skills, (5) listening skills, and/or (6) viewing skills.

**ENGLISH IV (HONORS)** 

012710 1 credit Grade 12 Code: W

Prerequisite: English III

This course is designed to meet the needs of students who are reading and writing at or above grade level but do not wish to pursue college-level AP classes. This course blends composition, literature, and informational texts into a cohesive whole as students write critical analyses while they continue to develop their language arts skills. Students primarily write argumentative, informational, and narrative essays. Literary conventions and stylistic devices receive greater emphasis than in previous courses. Speaking and listening skills continue to be developed. **Summer reading is required.** 

#### **ENGLISH IV (A LEVEL)**

012711 1 credit Grade 12

Prerequisite: English III

This course is designed to help students develop and strengthen communication and interpretation skills necessary to perform well in college or career. Students will continue reading literature and informational texts and writing argumentative, informational, and narrative essays. Literary conventions and stylistic devices receive greater emphasis than in previous courses. Speaking and listening skills continue to be developed.

#### **ENGLISH IV (INDIVIDUALIZED)**

01984V or W 1 credit Grade 12

This course is available to students on recommendation of the Individualized Education Program (IEP) Committee. Individual goals and objectives are developed in an IEP. Goals and objectives on the IEP reflect a student's level of performance and rate of learning. Instruction is based on individual needs in any of the following areas: (1) basic reading skills, (2) effective oral expression, (3) enjoyment of literature, (4) functional writing skills, (5) listening skills, and/or (6) viewing skills.

**JOURNALISM** 

016114 1 credit Grades 10, 11, 12

**JOURNALISM II** 

016124 1 credit Grades 11, 12

**JOURNALISM III** 

016134 1 credit Grade 12

Prerequisite: Approval of instructor

These elective courses expose students to the principles of journalism. Students will learn the skills necessary for communicating in the print media with emphasis on interviewing, observing, reporting, editing, layout, and design. Students will help produce a school newspaper. Students will develop computer skills using current technology in the field of journalism.

#### POET'S WORKSHOP

This course is an elective study of the craft of writing poetry. Students will focus on the various fundamental elements of this art, examine how professional writers employ literary devices to create poetry, and use those techniques to compose original poetry that will be peer-critiqued using a workshop format. The main objective for this course is to create a community of writers and thinkers. Students will keep a works-in-progress folder from which a portfolio of poems will be created and collected. Topics to be covered in the class include tone, imagery, persona, form, figurative language, alliteration, revision, and publication.

**SPEECH** 

014014 1 credit Grades 10, 11, 12 01401T or U ½ credit Grades 11, 12

This elective course provides opportunities for the student to improve oral communication skills, planned discussions, reports, formal speeches, oral interpretation, and debate.

# ESOLA Samuelars of Other London

# **ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)**

These courses are designed for English Learners (ELs) whose native or first language is not English and are enrolled at the Secondary Academy of International Languages (SAIL). The ESOL courses are also open to eligible immigrant students who require assistance in adjusting to American culture even though their English skills may be fairly proficient. Those USA-born students who consistently use a language other than English in their homes and social settings may also be eligible to take these courses. Students will be recommended and selected for these courses as determined by the World-Class Instructional Design and Assessment (WIDA) Screener English Proficiency Test.

Coursework focuses on the four domains of listening, speaking, reading, and writing within the context of the core curriculum and the WIDA English Language-Development (ELD) Standards. The ESOL teachers work closely with classroom teachers to assist the EL in obtaining a satisfactory level of achievement in academic subjects. An ESOL-based curriculum textbook series and MSDE-mandated assessments are the basis for the course. Students enrolled in the ESOL program are required to participate in the MSDE-mandated WIDA ACCESS for ELLs (Assessing Comprehension and Communication in English State-to-State for English Learners) annual assessment.

# **ENGLISH I (SAIL)**

\$11011 1 credit Grade 10

Prerequisite: ESOL Literacy

This course is designed to develop skills in reading, writing, speaking, listening, and language. It builds upon prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing. It includes the study of various genres of literature and informational texts, which will be linked to writing assignments. This course is designed for English Learners (ELs) whose native or first language is not English and are enrolled in the Newcomer's Program at the Secondary Academy of International Languages (SAIL). This course is taken concurrently with ENGLISH II (SAIL).

# **ENGLISH II (SAIL)**

**S11511** 1 credit **Grade 10** 

Prerequisite: ESOL Literacy

This course offers a balanced focus on composition, literature, and informational texts. Students will have opportunities to write argumentative, informational, and narrative essays and compositions. Through the study of literature and informational

texts, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme. Speaking and listening skills continue to be developed. This course is designed for English Learners (ELs) whose native or first language is not English and are enrolled in the Newcomer's Program at the Secondary Academy of International Languages (SAIL). This course is taken concurrently with ENGLISH I (SAIL).

# **ESOL I**

019814 1 credit Grade 9

# Prerequisite: Parent/guardian approval, meets established criteria

This elective course is designed for native speakers of languages other than English who follow the Newcomer's Pathway as part of the Secondary Academy of International Languages (SAIL) and who have demonstrated limited English proficiency as measured by the WIDA Screener Test. Parent/guardian approval is required to be enrolled in this class. *Entering* or *Beginning* students are introduced to the basic structures of reading, writing, speaking, and listening in English. Students learn to use English appropriately in a range of academic and social situations. They also develop basic reading and writing strategies, expand oral comprehension, and learn initial conventions of grammar and punctuation. This course does not satisfy the graduation requirement for English credit.

#### **ESOL II**

019824 1 credit Grade 10 Prerequisite: ESOL I and parent/quardian approval

This elective course is designed for native speakers of languages other than English who attend the Secondary Academy of International Languages (SAIL) and who need to develop intermediate skills in English listening, speaking, reading, and writing. English Learners (ELs) focus on the expanding social and academic language skills. Emphasis is placed on developing or expanding grammatical structures, reading comprehension, and writing skills as they relate to academic coursework. This course does not satisfy the graduation requirements for English credit.

# **ESOL III/ESOL IV**

019834 1 credit Grade 11 019844 1 credit Grade 12 Prerequisite: ESOL II and/or Parent/guardian approval

This elective course is designed for native speakers of languages other than English who attend the Secondary Academy of International Languages (SAIL) and who are developing intermediate and advanced skills in English listening, speaking, reading, and writing. English Learners (Els) focus on expanding social and academic language skills. Emphasis is placed on developing or expanding grammatical structures, reading comprehension, and writing skills as they relate to academic coursework. This course will also prepare students for post-secondary academic and career success. This course does not satisfy the graduation requirement for English credit.

# **ESOL LITERACY**

019714 1 credit Grade 9

Prerequisite: Parent/guardian approval

This course is designed for English Learners (Els) whose native or first language is not English and are enrolled in the Newcomer's Program at the Secondary Academy of International Languages (SAIL). This course builds knowledge of grammar, vocabulary, word usage, and the mechanics of writing in English with native language support. This course provides an elective credit. It does not fulfill an English credit towards graduation.

# Security Tropos Interior Security Tropos Family 1000

# **FAMILY AND CONSUMER SCIENCES**

Students in Family and Consumer Sciences will discover the economic, technological, cultural, and social conditions influencing individuals when considering the multiple roles that may be assumed as they relate to family, work, careers, and society.

These courses have been developed around five areas of study. They include fashion, housing and interior design, consumerism, interpersonal relationships, and nutrition. Courses have been developed to allow students to pursue a wide variety of personal interests. The content for all courses will address current trends and emerging technologies.

#### ARCHITECTURE AND INTERIOR DESIGN

120654 1 credit Grades 9, 10, 11, 12 Code: FA

This course is designed to explore the topics, trends, and concerns of housing, architecture, and interior design. The student

is expected to apply the elements and principles of design, financial considerations, community planning, and environmental issues to the program topics. They will design and present projects that reflect their understanding of these concepts. The course will also provide information about a wide range of careers related to housing, design, and home furnishings.

# PROSTART BECOMING A FOOD SERVICE PROFESSIONAL (LEVEL 1)

Prerequisite: Completed or concurrently enrolled in Foods and Nutrition Science
131114 1 1 Credit Grades 10, 11 Code: CTP

This course provides an introduction to the food service and hospitality industry. 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 food service and hospitality industry, and have the opportunity to earn the ServeSafe credential. Students can begin to accrue hours to meet the 400-hour work-based learning experience requirement. Of the 400 hours, 150 hours can be earned through in-class clinical experience. All students enrolled in the course must take the NRAEF end-of-course exam.

# PROSTART BECOMING A FOOD SERVICE PROFESSIONAL (LEVEL 2)

Prerequisite: Prostart Becoming a Food Service Professional (Level 1)

131124 1 credit Grades 11, 12 Code: CTP

Students enrolled in this course will continue to prepare a variety of foods. They will create menus and demonstrate various types of restaurant service. They will apply purchasing techniques and demonstrate an understanding of inventory monitoring and control. Students will have the opportunity for an authentic, mentored work-based learning experience. Students can continue to accrue hours to meet the 400-hour work-based learning experience requirement. Of the 400 hours, 150 hours can be earned through in-class clinical experience. All students enrolled in the course must take the NRAEF end-of-course exam.

#### **FASHION DESIGN**

120684 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Textiles and Apparel or teacher approval

This course will introduce students to the principle of flat pattern design and draping. The course is recommended for the student interested in fashion production as it relates to self and/or career. Students will investigate the elements and principles of design, textiles, and related careers. Current trends in fashion will also be explored. All projects are the financial responsibility of the student.

#### **FASHION MERCHANDISING AND MARKETING**

120694 1 credit Grades 9, 10, 11, 12

This course is designed for students having a special interest in fashion merchandising and retailing. It addresses specific job preparation skills for the fashion industry. It will explore careers in textiles, design, merchandising, media and promotion, fashion illustration, manufacturing, retailing, as well as an exploration of emerging retail technologies. Students are expected to design and present projects that reflect their understanding of these concepts.

# FOODS AND NUTRITION SCIENCE

120514 1 credit Grades 9, 10, 11, 12

This course prepares students with skills in nutritious meal planning and preparation. Students explore current concepts of nutrition and the application to healthy lifestyle patterns. Topics include the relationship of nutrients to optimal health, weight management, exercise, nutritional labeling, and scientific principles of food production, preparation, and consumption.

#### INTERCULTURAL FOODS

120644 1 credit Grades 10, 11, 12

Prerequisite: Foods and Nutrition Science

This is an advanced course designed to introduce students to the multi-cultural aspects of people through the study of regional and foreign foods. Units of study include world nutritional concerns, socio-cultural influences on food choices, meal planning, and preparation. Gourmet food preparation will also be explored.

#### **TEXTILES AND APPAREL**

120624 1 credit Grades 9, 10, 11, 12

This is an introductory textile course designed to strengthen the individual's knowledge of clothing construction skills. It provides a comprehensive study of the many facets of fashion and wardrobe planning. Students are required to construct clothing projects that are the financial responsibility of the student.

#### PROSTART PRACTICAL EXPERIENCE AS A FOOD SERVICE PROFESSIONAL

Prerequisite: Prostart Becoming a Food Service Professional (Level 1) and concurrently enrolled in Prostart Becoming a Food Service Professional (Level 2)

131125 2 credits Grade 12 Code: CTC

This course provides students the opportunity to further refine and apply skills that support all aspects of the hospitality industry. It will assist in preparing students for employment and advancement in the field of hospitality and food and beverage management. Students will complete an industry-mentored work-based learning experience. The remaining 250 hours of the 400 hours is completed through this course. Students are expected to attain work experience in the food and hospitality industry.



# FINANCIAL LITERACY

Students need a strong foundation in personal financial literacy. It is important to prepare students with the knowledge and skills necessary to meaningfully plan for their financial future, manage their money, and evaluate choices to make informed decisions.

#### PERSONAL FINANCIAL LITERACY

120525

½ credit

Grades 10, 11, 12

This course covers a wide variety of personal financial literacy concepts to prepare students to manage their financial future. Students will learn to manage credit and debit, make informed financially responsible decisions, develop goals and spending plans, and learn ways to save and invest to achieve long-term financial goals.



# FINE AND PERFORMING ARTS

The Fine Arts curriculum is a course of study designed to promote the student's life-long appreciation and participation in the arts. Through courses in the visual arts, theatre, and music, students have an opportunity to enhance their personal expression and creativity, to master basic skills, and to understand how the arts reflect humanity and culture.

#### **VISUAL ARTS ELECTIVES**

The visual arts electives are designed to help all students develop aesthetic awareness, art appreciation, and experience a variety of art techniques through production. Time management, craftsmanship, proper use of tools, and presentation techniques are an integral part of this program. Art I is the foundation course and a prerequisite for all advanced classes unless prior approval is given by the Art Department through a portfolio review. Visual Arts courses may require a sketchbook.

#### **ADVANCED ART**

067010 1 credit Grades 11, 12 Code: FA

Prerequisite: Successful completion of two art courses or approval of instructor

This course is designed for students interested in building a portfolio. Students will produce original artwork in a variety of media. Students will also be encouraged to develop a specialization in a media of their choice.

# **ADVANCED PLACEMENT ART HISTORY**

060410 1 credit Grades 10, 11, 12 Codes: FA, W\*

This course prepares students to take the national Advanced Placement Examination in Art History to earn college credit. Instruction provides an understanding of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine major forms of artistic expression from the past and present across cultures. Students will develop aesthetic appreciation for various art forms and the ability to view art critically and analytically.

#### ADVANCED PLACEMENT STUDIO ART & DESIGN: DRAWING

060530 1 credit Grades 11, 12 Codes: FA, W\*

Prerequisite: Art II or approval of instructor

This course prepares students to take the national examination offered by the College Board in Studio Art. In the Drawing portfolio, mastery of drawing can be demonstrated through a wide range of approaches and media. Light and shade, line quality, rendering of form, composition, surface manipulation, and the illusion of depth are drawing issues that can be addressed through a variety of means, which include painting, printmaking, mixed media, etc. Works may include drawings, paintings, prints, etc. The evaluation of portfolio materials will reflect two areas of concern: quality, breadth, and concentration.

#### **ADVANCED PLACEMENT STUDIO ART & DESIGN: 2-D**

060510 1 credit Grades 11, 12 Codes: FA, W\*

Prerequisite: Art II or approval of instructor

This course prepares students to take the national examination offered by the College Board in Studio Art. Students may submit any 2-D process or medium, which may include graphic design, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking. The evaluation of portfolio materials will reflect three areas of concern: quality, breadth, and concentration. The evaluation of portfolio materials will reflect two areas of concern: quality of the artwork and the sustained investigation of materials, processes, ideas, and artistic skills in the student's concentration of artwork.

# ADVANCED PLACEMENT STUDIO ART & DESIGN: 3-D

060520 1 credit Grades 11, 12 Codes: FA, W\*

Prerequisite: Art II or approval of instructor

This course prepares students to take the national examination offered by the College Board in Studio Art. Students will demonstrate an understanding of design principles as they relate to depth and space. Students may submit works to include figurative or nonfigurative sculpture, architectural models, metal work, ceramics, and three dimensional fiber arts, among others. The evaluation of portfolio materials will reflect two areas of concern: quality, breadth, and concentration. The evaluation of portfolio materials will reflect two areas of concern: quality of the artwork and the sustained investigation of materials, processes, ideas, and artistic skills in the student's concentration of artwork.

# <u>ART I</u>

060514 1 credit Grades 9, 10, 11, 12 Code: FA

This course provides art fundamentals and is primarily a course in basic design. The concepts may be taught through the use of a variety of media. Emphasis is placed upon developing art skills and critical judgment along with aesthetic awareness through written and oral criticism. Structural awareness is emphasized through art history as it applies to fundamental learning in art. The student should gain an understanding of the visual arts as a part of his/her environment. Art history is presented as it applies to fundamental learning in art.

ART II

060524 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Art I or approval of instructor

This course is an extension of the Art I program, designed for students who have an interest in refining their individual art skills. More sophisticated media will be used and further research of art history with a cultural emphasis will be encouraged.

**CERAMICS I** 

069914 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Art I or approval of instructor

This is the basic course for students interested in working with clay. Students will learn the history of ceramics, ceramic theory, basic hand-building and sculptural techniques, glaze theory and techniques, and art criticism.

**CERAMICS II** 

069924 1 credit Grades 11, 12 Code: FA

Prerequisite: Ceramics I

**CERAMICS III** 

069934 1 credit Grade 12 Code: FA

Prerequisite: Ceramics II

These courses will allow for the refinement of skills and development of individual creative style by exploring individual areas of interest. Students will complete assignments of a technical and experimental nature in addition to pursuing independent projects. Students may assume more responsibility for studio operations and maintenance (kiln loading, glaze research, etc.) and will produce pottery and sculpture which reflects individuality and critical discrimination.

#### DRAWING/DESIGN

069954 1 credit Grades 10, 11, 12 Code: FA

# Prerequisite: Art II or approval of instructor

This course develops drawing techniques and concepts in a variety of media. Refinement of perceptual skills through written/oral critique of students and instructor, along with development of an expressive style, will be emphasized. Different applications of design will be explored as they relate to historical and cultural perspectives.

PAINTING I

069944 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Art II or approval of instructor

**PAINTING II** 

069945 1 credit Grades 11, 12 Code: FA

Prerequisite: Painting I

**PAINTING III** 

069946 1 credit Grade 12 Code: FA

Prerequisite: Painting II

These courses are designed to analyze the use of color through utilization of a variety of materials and techniques. In the study of the history of painting, students will create paintings related to various historical/cultural issues. Emphasis will be placed on the study of specific styles of painting to help the students develop their own personal approach to their work.

#### **PHOTOGRAPHY I**

069984 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Art I or approval of instructor; students <u>must</u> supply a camera that meets the instructor's specifications.

This course will explore the basics of 35 mm photography, including camera operation, exposure techniques, composition, and darkroom skills. The history of photography will be presented in chronological order and major photographers will be examined as styles correlate to classroom projects. The aesthetics of photography will be explored through a combination of photo assignments, darkroom work, class critiques, and field trips emphasizing the development of each student's personal photographic style and artistic vision. Students are responsible for purchasing additional photo paper if they use their allotment.

**PHOTOGRAPHY II** 

069985 1 credit Grades 11, 12 Code: FA

Prerequisite: Photography I

**PHOTOGRAPHY III** 

069986 1 credit Grade 12 Code: FA

Prerequisite: Photography II

These courses will provide the intermediate photography student with the opportunity to expand on techniques learned in Photography I. The student will learn more advanced darkroom and camera techniques and will incorporate acquired skills in the development of each student's photographic style and artistic vision. Class projects will include a portfolio of mounted assignments, several three-dimensional photo assignments, a research paper, a notebook, and other assignments as appropriate. Students are responsible for purchasing additional photo paper if they use their allotment.

#### **SCULPTURE**

069994 1 credit Grades 11, 12 Code: FA

# Prerequisite: Ceramics I or approval of instructor

This course will concentrate on three-dimensional work. The four basic techniques used are manipulative, substitutive, subtractive, and additive. An integral part of the class will be a focus on art history, art criticism, and aesthetic awareness.

#### **MUSIC ELECTIVES**

The music course electives are designed to provide:

- Instruction in vocal and instrumental music performance for those students who began a sequential program of training at the elementary and middle school levels
- Beginning instruction in music performance to promising students with no previous instruction
- Music electives for non-performing students who wish to extend their general knowledge of the world of music, <u>or</u> a sequence of course offerings for the prospective college music major

# **ADVANCED PLACEMENT MUSIC THEORY**

081540 1 credit Grades 10, 11, 12 Codes: FA, W\*

This course prepares students for the Advanced Placement Examination in Music Theory. The goal of this course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard

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or presented in a score. Students will be required to read, notate, compose, perform, and listen to music. The student's ability to read and write musical notation is critical to this course. The student must have basic performance skills in voice or on an instrument.

# **MUSIC THEORY**

089954 1 credit Grades 9, 10, 11, 12 Code: FA

This course focuses on the theoretical aspects of music. Ear-training, sight-reading, harmony, form, and analysis will be explored. Composition may be an outgrowth of this course.

# **INSTRUMENTAL ELECTIVES**

**CLASS PIANO I** 

080514 1 credit Grades 9, 10, 11, 12 Code: FA

This course provides the basic techniques of piano performance. The course will also include the study of music theory, history, and literature. Activities may include improvisation, transposition, and solo and ensemble work. A possible outgrowth of this class may be public recitals. It is suggested that the members of the class have access to a piano after regular school hours for practice purposes. No prior experience in piano performance is necessary. A music workbook is a requirement for this course.

**CLASS PIANO II** 

080524 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Class Piano I

**CLASS PIANO III** 

080534 1 credit Grades 11, 12 Code: FA

Prerequisite: Class Piano II

**CLASS PIANO IV** 

080544 1 credit Grade 12 Code: FA

Prerequisite: Class Piano III

These courses are designed for the student who wishes to develop more advanced skills in piano performance. A possible outgrowth of this class may be public recitals. A music workbook is a requirement for this course.

**CONCERT BAND I** 

087034 1 credit Grades 9, 10, 11, 12 Code: FA

**CONCERT BAND II** 

087035 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Concert Band I

**CONCERT BAND III** 

087036 1 credit Grades 11, 12 Code: FA

Prerequisite: Concert Band II

**CONCERT BAND IV** 

087037 1 credit Grade 12 Code: FA

# Prerequisite: Concert Band III and approval of instructor

These courses require satisfactory completion of instruction in a middle school ensemble or its equivalent for admission to this class. Music of levels II, III, and IV in difficulty will be studied and performed. Students will continue developing skills in the basic music fundamentals (embouchure, technique, expression, intonation, etc.). After-school rehearsals and public performances outside the regular school day are a crucial component of these courses. A music method book and formal concert attire is a requirement for these classes.

<u>GUITAR I</u>			
08065T or U	1/2 credit	Grades 9, 10, 11, 12	Code: FA
080615	1 credit	Grades 9, 10, 11, 12	Code: FA
GUITAR II			
08066T or U	1/2 credit	Grades 10, 11, 12	Code: FA
080616	1 credit	Grades 10, 11, 12	Code: FA
Prerequisite: Guitar I			
GUITAR III			
08067T or U	1/2 credit	Grades 11, 12	Code: FA
080617	1 credit	<b>Grades 11, 12</b>	Code: FA
Prerequisite: Guitar II			
GUITAR IV			
08068T or U	1/2 credit	Grade 12	Code: FA
080618	1 credit	Grade 12	Code: FA

#### Prerequisite: Guitar III

These courses provide the basic techniques of guitar performance. These courses will also include the study of music theory, history, and literature. Activities may include improvisation, transposition, and solo and ensemble work. A possible outgrowth of these classes may be public performances. It is a requirement that all students have a guitar of their own. No prior experience in guitar instruction is necessary. A music workbook is a requirement for this course.

JAZZ ENSEMBLE I (HONORS)					
087174	1 credit	Grades 9, 10, 11, 12	Codes: FA, W		
Prerequisite: Approval of instructor					
JAZZ ENSEMBLE II (HONORS	<u>S)</u>				
087274	1 credit	Grades 10, 11, 12	Codes: FA, W		
Prerequisite: Jazz Ensemble I					
JAZZ ENSEMBLE III (HONORS)					
087374	1 credit	Grades 11, 12	Codes: FA, W		
Prerequisite: Jazz Ensemble	II				
JAZZ ENSEMBLE IV (HONOR	<u>(S)</u>				
087474	1 credit	Grade 12	Codes: FA, W		
Prerequisite: Jazz Ensemble	III				

These courses provide the opportunity for the study of jazz, rock, and dance band styles, and are open to advanced band students through an annual audition. The courses foster creativity through improvisation and performance in the rock, jazz, and swing style. Students are required to prepare scales and solos. The solos must be selected from a variety of styles that includes piano or audio accompaniment. After-school rehearsals and public performances outside the regular school day are a crucial component of these courses. A music method book and formal concert attire is a requirement for these classes.

CONCERT ORCHESTRA I			
088214	1 credit	Grades 9, 10, 11, 12	Code: FA
CONCERT ORCHESTRA II			
088224	1 credit	Grades 10, 11, 12	Code: FA
Prerequisite: Orchestra I			
CONCERT ORCHESTRA III			
088234	1 credit	Grades 11, 12	Code: FA
Prerequisite: Orchestra II			
<b>CONCERT ORCHESTRA IV</b>			
088244	1 credit	Grade 12	Code: FA
Prerequisite: Orchestra III			

These courses require satisfactory completion of string instruction in a middle school ensemble or its equivalent. Music of levels II, III, and IV in difficulty will be studied and performed. Students will continue developing skills in the basic music fundamentals (bowing, hand positioning, expression, intonation, etc.). After-school rehearsals and public performances outside the regular school day are a crucial component of these courses. A music method book and formal concert attire is a requirement for these classes.

SYMPHONIC ORCHESTRA I (HONORS)				
088314	1 credit	Grades 9, 10, 11, 12	Codes: FA, W	
Prerequisite: Approval of instructor				
SYMPHONIC ORCHESTRA II (HONORS)				
088324	1 credit	Grades 10, 11, 12	Codes: FA, W	
Prerequisite: Orchestra I				
SYMPHONIC ORCHESTRA III (HONORS)				
088334	1 credit	Grades 11, 12	Codes: FA, W	
Prerequisite: Orchestra II				
SYMPHONIC ORCHESTRA IV (HONORS)				
088344	1 credit	Grade 12	Codes: FA, W	
Prerequisite: Orchestra III				

These courses require a higher level of musical proficiency (IV, V, and VI) than Orchestra. Admission to these classes will be determined by an annual audition. Students will develop advanced levels of competencies in the areas of technical skill, stylistic understanding, historical background, and aesthetic awareness through the study and performance of quality orchestra literature from a variety of styles and time periods. In addition to the ensemble literature, students will be required to prepare additional scales and solos. The solos must be a minimum of level IV and currently listed on the Maryland Orchestra Directors Association approved list. After-school rehearsals and public performances outside the regular school day are a crucial component of these courses. A music method book and formal concert attire is a requirement for these classes.

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Please note that not all courses are available at each school due to staffing/student enrollment

**SYMPHONIC BAND I (HONORS)** 

87144 1 credit Grades 9, 10, 11, 12 Codes: FA, W

Prerequisite: Approval of instructor SYMPHONIC BAND II (HONORS)

087244 1 credit Grades 10, 11, 12 Codes: FA, W

Prerequisite: Symphonic Band I SYMPHONIC BAND III (HONORS)

087344 1 credit Grades 11, 12 Codes: FA, W

Prerequisite: Symphonic Band II SYMPHONIC BAND IV (HONORS)

087444 1 credit Grade 12 Codes: FA, W

Prerequisite: Symphonic Band III

These courses require a higher level of musical proficiency (IV, V, and VI) than Concert Band. Admission to these classes will be determined by an annual audition. Students will develop advanced levels of competence in the areas of technical skill, stylistic understanding, historical background, and aesthetic awareness through the study and performance of quality band literature from a variety of styles and time periods. In addition to the ensemble literature, students will be required to prepare additional scales and solos. The solos must be a minimum of level IV and currently listed on the Maryland Band Directors Associations approved list. After-school rehearsals and public performances outside the regular school day are a crucial component of these courses. A music method book and formal concert attire is a requirement for these classes.

# **VOCAL ELECTIVES**

**BASS CHORUS I** 

081015 1 credit Grades 9, 10, 11, 12 Code: FA

Prerequisite: Approval of instructor

BASS CHORUS II

081025 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Bass' Chorus I and approval of the instructor

**BASS CHORUS III** 

081035 1 credit Grades 11, 12 Code: FA

Prerequisite: Bass' Chorus II and approval of the instructor

**BASS CHORUS IV** 

081045 1 credit Grade 12 Code: FA

Prerequisite: Bass' Chorus III and approval of the instructor

These courses are designed to help students who sing tenor and bass to develop both their voices and music theory skills. These classes will cover a variety of styles of music including pop, folk, and classical music. After-school rehearsals and public performances outside of the regular school day are a crucial component of these courses. Formal concert attire is a requirement for these classes.

**CHAMBER CHOIR I (HONORS)** 

087124 1 credit Grades 9, 10, 11, 12 Codes: FA, W

Prerequisite: Approval of instructor CHAMBER CHOIR II (HONORS)

087224 1 credit Grades 10, 11, 12 Codes: FA, W

Prerequisite: Chamber Choir I
CHAMBER CHOIR III (HONORS)

087324 1 credit Grades 11, 12 Codes: FA, W

Prerequisite: Chamber Choir II
CHAMBER CHOIR IV (HONORS)

087424 1 credit Grade 12 Codes: FA, W

Prerequisite: Chamber Choir III and approval of instructor

These courses require a high level of musical proficiency, which is to be determined by an annual audition for admission to these classes. Chamber Choir is designed for singers performing chamber music from all styles and time periods. Students will be required to prepare scales and solos as well as rhythmic and melodic sight-singing. The solos must be a minimum of level IV and currently listed on the Maryland Choral Directors Association approved list. After-school rehearsals and public performances outside of the regular school day are a crucial component of these courses. Formal concert attire is a requirement for these classes.

**CONCERT CHOIR I** 

087114 1 credit Grades 9, 10, 11, 12 Code: FA

**CONCERT CHOIR II** 

087214 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Concert Choir I

**CONCERT CHOIR III** 

087314 1 credit Grades 11, 12 Code: FA

Prerequisite: Concert Choir II

**CONCERT CHOIR IV** 

087414 1 credit Grade 12 Code: FA

Prerequisite: Concert Choir III and approval of instructor

These courses are designed to expose experienced singers to the best of accompanied and unaccompanied choral literature through study and performance and may require a yearly audition. Students will work on melodic and rhythmic sight-reading skills. The ability to read music is strongly recommended. After-school rehearsals and public performances outside of the regular school day are a crucial component of these courses. Formal concert attire is a requirement for these classes.

**SHOW CHOIR I (HONORS)** 

089914 1 credit Grades 9, 10, 11, 12 Codes: FA, W

Prerequisite: Approval of instructor

**SHOW CHOIR II (HONORS)** 

089924 1 credit Grades 10, 11, 12 Codes: FA, W

Prerequisite: Show Choir I SHOW CHOIR III (HONORS)

089934 1 credit Grades 11, 12 Codes: FA, W

Prerequisite: Show Choir II SHOW CHOIR IV (HONORS)

089944 1 credit Grade 12 Codes: FA, W

Prerequisite: Show Choir III and approval of instructor

These courses are for advanced vocal students as determined by an annual audition. Presentation of works from the musical stage in addition to other selected materials will be emphasized. Students will develop the skills necessary to read, interpret, and present selections from musical theatre. Students will be required to write and perform dance routines. Student will learn music from a variety of styles including jazz, pop, and Broadway musicals. Students will be required to prepare scales and solos. The solos must be a minimum of level IV and currently listed on the Maryland Choral Directors Association approved list. After-school rehearsals and public performances outside of the regular school day are a crucial component of these courses. Formal concert attire is a requirement for these classes.

TREBLE CHORUS I

081016 1 credit Grades 9, 10, 11, 12 Code: FA

Prerequisite: Approval of instructor

TREBLE CHORUS II

081026 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Treble's Chorus I

**TREBLE CHORUS III** 

081036 1 credit Grades 11, 12 Code: FA

Prerequisite: Treble's Chorus II

**TREBLE CHORUS IV** 

081046 1 credit Grade 12 Code: FA

Prerequisite: Treble's Chorus III

These courses are designed to help students who sing alto and soprano to develop their voices, sight-singing, and music theory skills. These classes will cover a variety of styles of music including pop, folk, and classical music. After-school rehearsals and public performances outside the regular school day are a crucial component of these courses. Formal concert attire is a requirement for these classes.

#### **DANCE PROGRAM**

The dance program is a four-year comprehensive program that allows students to discover their own inherent aptitude for the communication of ideas, thoughts, and feelings through the art of dance. Students interested in pursuing dance in college should plan on building their performance portfolio as soon as possible. The study of dance promotes aesthetic sensitivity and provides an opportunity for students to experience intellectual, physical, emotional, and social growth. Students observe, respond, create, and perform using the body as an instrument to communicate feelings, thoughts, and ideas. Through

exploring dance concepts, students demonstrate critical thinking skills and core values as well as develop personal integrity. The sequentially developed program presents a broad cultural and historical perspective and provides unique opportunities for cross-curricular connections.

**DANCE I** 

062014 2 credits Grade 9 Code: FA Prerequisite: Approval of Instructor – Application and Audition during 8th grade year

This course is available to students who have been selected through an application and audition process during their 8th grade year. This course provides students with an introduction to a basic working knowledge of performance concepts that they can apply to all dance forms. Experiences are based on fundamentals of ballet, modern, and jazz dance. This course fulfills the graduation requirement for the Fine Arts elective as it provides instruction in aesthetics, dance history, anatomy, choreographic techniques, and performance components. May need to attend after-school practices, events, and performances during a school year.

**DANCE II** 

062024 2 credits Grade 10 Code: FA

Prerequisite: Dance I

This course is available to students who successfully completed Dance I. Students will continue to focus on the fundamentals of ballet, modern, and jazz dance styles. This will provide students with a deeper understanding of dance techniques, which they will apply to their own dance development. This course fulfills the graduation requirement for the Fine Arts elective as it provides instruction in aesthetics, dance history, anatomy, choreographic techniques, and performance components. Students may need to attend after-school practices, events, and performances during a school year.

**DANCE III** 

062034 2 credits Grade 11 Code: FA

Prerequisite: Dance II

This course is available to students who successfully completed Dance II and provides students with an intermediate working knowledge and application of performance concepts they will apply to all dance forms. This intermediate level of Ballet, Modern, and Jazz will challenge students to apply technical skills, critical thinking, and creativity for making connections and a deeper aesthetic interest in dance. Students will deepen their knowledge of various dance artists and companies around the world, growing a multicultural base. Fundamentals of ballet, modern, and jazz dance styles continue to be the foundation of the experience's students receive. This course fulfills the graduation requirement for the Fine Arts elective as it provides continued instruction in aesthetics, dance history, anatomy, choreographic techniques, and performance components. Students may need to attend after-school practices, events, and performances during a school year.

**DANCE IV** 

062044 2 credits Grade 12 Codes: FA, W

Prerequisite: Dance III

This course is available to students who successfully completed Dance III and provides students with a more advanced working knowledge and application of performance concepts. This advanced level of Ballet, Modern, and Jazz will continue to challenge students to apply technical skills, critical thinking, and creativity for making connections and a deeper aesthetic interest in dance. Students will continue to investigate various style of dance as well as aesthetics, dance history, anatomy, choreographic techniques, and performance components. Students may need to attend after-school practices, events, and performances during a school year.

## **THEATRE ELECTIVES**

The theatre electives provide students opportunities to explore the creative process through collaborative theatre activities. In addition, these courses are designed to provide hands-on experience for those students who have an interest in preparing for professional theatre and related careers.

**ACTING** 

014034 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Theatre Arts and/or approval of Instructor

This course provides advanced skills in acting, resume development, stage makeup, theatre history, theatre criticism, and play analysis. Quarterly after-school rehearsals and public performances outside the regular school day are a crucial component of this course.

#### ADVANCED ACTING I (HONORS)

014044 1 credit Grades 11, 12 Codes: FA, W

## Prerequisite: Acting and/or approval of Instructor

This course provides advanced skills in acting, resume development, costumes, old age and fantasy makeup, theatre history, theatre criticism, and play analysis. Students will focus on different genres of theatre such as Dinner Theatre and Children's Theatre. Quarterly after-school rehearsals and public performances outside the regular school day are a crucial component of this course.

## **ADVANCED ACTING II (HONORS)**

014054 1 credit Grade 12 Codes: FA, W

Prerequisite: Advanced Acting I

This course provides advanced skills in acting, directing, resume development, costumes, special makeup, scenic design, acting for the camera, theatre history, theatre criticism, and play analysis. Each student will have to direct a one act play by the end of the year. Quarterly after-school rehearsals and public performances outside the regular school day are a crucial component of this course.

#### **DIGITAL MEDIA I**

015005 1 credit Grades 10, 11, 12 Code: FA

This course includes the use of video and editing equipment, both in and out of the classroom. Students will be introduced to the various types of multimedia such as news broadcast, television, film, advertising, journalism, talk shows, documentaries, radio, music, magazines, and the Internet. The course also includes the study of the history and development of the media and the ethics and legalities of media production.

#### **DIGITAL MEDIA II**

015006 1 credit Grades 11, 12

Prerequisite: Digital Media I
DIGITAL MEDIA III (HONORS)

015007 1 credit Grade 12 Codes: FA, W

Prerequisite: Digital Media II

These courses include the use of video and editing equipment, both in and out of the studio, including the writing and delivery of the in-school broadcasts of the morning announcements (equipment permitting). The students will also participate in the creation and production of film, weekly magazines, and remote broadcasts using computer-generated and digital multimedia equipment. These classes will be project-based with students enhancing previously acquired knowledge and skills through hands-on work.

#### **FILM STUDY**

01804T or U ½ credit Grades 11, 12

This course will focus on an analysis of film with an emphasis upon the elements of plot, setting, style, and point of view. The course will include viewing, listening, and researching film.

#### INTRODUCTION TO THEATRE

014024 1 credit Grades 9, 10, 11, 12 Code: FA

This course provides the students with an introduction to the many aspects of theatre including acting, directing, stagecraft, theatre history, theatre criticism, and play analysis.

## LITERATURE AND FILM

01806T or U ½ credit Grades 11, 12

This course will explore literature and the direct tie it has to film. Students will read literary works and evaluate their translation into film.

## TECHNICAL THEATRE I

014064 1 credit Grades 10, 11, 12 Code: FA

Prerequisite: Theatre Arts and/or approval of instructor

TECHNICAL THEATRE II

014074 1 credit Grades 11, 12 Code: FA

Prerequisite: Stage Production I and/or approval of instructor

**TECHNICAL THEATRE III** 

014084 1 credit Grade 12 Code: FA

#### Prerequisite: Stage Production II and/or approval of instructor

These elective courses are designed for the student who wishes to gain experience in the various aesthetic, technical and commercial aspects of theatre, which are essential in the production of a play for an audience. Quarterly after-school rehearsals and public performances outside the regular school day are a crucial component of this course. Safety Glasses

and gloves are required for these classes.

YEARBOOK PUBLICATIONS I

016054 1 credit Grades 10, 11, 12

**YEARBOOK PUBLICATIONS II** 

016064 1 credit Grades 11, 12

YEARBOOK PUBLICATIONS III

016074 1 credit Grade 12

Prerequisite: Approval of instructor

These elective courses develop computer skills using a professional desktop publishing program. Students will learn to operate hardware such as computers, laser printers, and scanners correctly, to take photographs and develop them in a darkroom, and to apply the principles of layout and design to the production of the yearbook. Additional desktop publishing projects may be undertaken as time permits.

## **HEALTH**



Health education focuses on the development of skills that promotes health enhancing lifestyle choices. Instruction emphasizes lifelong positive health-promoting attitudes and behaviors. Students will develop the knowledge and ability to maintain and enhance their own health or the health of others.

## **FIRST AID AND SAFETY**

07999T or U ½ credit Grades 10, 11, 12

Prerequisite: Health I

This elective course is designed to develop the knowledge and skills necessary to certify interested students in the areas of cardiopulmonary resuscitation (CPR) and American Red Cross first aid. Optional topics could include boating and hunter safety. There is a \$10 fee associated with this course.

## **HEALTH I**

070574 ½ credit Grades 9, 10, 11, 12

This required course focuses on comprehensive health education and encourages students to develop skills, attitudes, and behaviors that will enable them to make decisions that promote healthful behaviors. Topics included are: Mental and Emotional Health; Substance Abuse Prevention; Family Life and Human Sexuality; Safety and Violence Prevention; Healthy Eating; and Disease Prevention and Control. Skills developed in relation to health enhancing behaviors include analyzing influences, accessing valid and reliable information, interpersonal communication, decision-making, goal setting, self-management, and advocacy.

**HEALTH II** 

070575 ½ credit Grades 11, 12

Prerequisite: Health I

This course is required for students entering the ninth-grade in the 2021-2022 school year. Health II uses the introductory instruction from Health I to expand on the development of skills, attitudes, and behaviors that will enable students to make decisions that promote healthful behaviors. Students will engage in inquiry and problem-solving approaches utilizing a developmentally appropriate progression of content related to health education concepts.

## LIBRARY MEDIA



## **LIBRARY MEDIA STUDENT ASSISTANT I**

019944 ½ credit Grades 11, 12

Prerequisite: Approval of Library Media Specialist

LIBRARY MEDIA STUDENT ASSISTANT II

019954 ½ credit Grade 12

## Prerequisite: Library Assistant I and approval of Library Media Specialist

These courses allow students to earn one-half credit for each year of satisfactory performance. While assisting in the operation of the school Library Media Center, the student assistant will learn fundamentals of materials location, information retrieval, and reference skills. The student assistant will also learn and practice tasks related to the preparation of materials for circulation and the use of instructional technology.



## MATHEMATICS

The high school mathematics program is designed to provide students the opportunity to prepare for the world of work or continue to pursue their interests in mathematics. It takes into consideration students who are planning for careers in business and industry as well as those who are preparing for college. All courses are designed to motivate students to use higher-level thinking and to transfer this knowledge to everyday experiences. Technology is an integral part of instruction. The chart below provides guidelines for a **recommended** sequence of mathematics courses.

## **Recommended Sequence of Mathematics Courses**

9 <sup>th</sup> Grade		10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade		
Foundations of Algebra	Algebra I	Geometry	Algebra with Trig and Stats	Introduction to Advanced Math OR Algebra II		
Algebra I		or Geometry (Honors)	Algebra II (Honors)	Adv. Algebra with Trig. (Honors) OR Pre-Calculus (Honors) OR AP Pre-Calculus OR AP Statistics** OR Honors Statistics**		
Geometry (Honors)		Algebra II (Honors)	Advanced Algebra with Trig. (Honors)	Pre-Calculus (Honors) OR AP Pre-Calculus OR AP Statistics** OR Honors Statistics**		
			Pre-Calculus (Honors)	AP Pre-Calculus OR AP Calculus AB OR AP Statistics** OR Honors Statistics**		
			AP Pre-Calculus	AP Calculus AB OR AP Calculus BC OR AP Statistics** OR Honors Statistics**		

<sup>\*</sup>MSDE requires students to enroll in a math class every year that they attend high school (up to 4 years).

## **ADVANCED ALGEBRA WITH TRIGONOMETRY (HONORS)**

032044 1 credit Grades 10, 11, 12 Codes: W, CC

Prerequisite: Algebra II and Geometry

This course is designed to further prepare students for Pre-Calculus. Topics include quadratic equations and functions, variation and polynomial equations, exponential and logarithmic functions, trigonometric functions and their graphs, trigonometry and triangles, trigonometric identities, and inverse functions/equations. A graphing calculator is highly recommended for this course. *Under conditions determined by the College of Southern Maryland (CSM), this course may earn college credit.* 

<sup>4</sup> credits of math are required for graduation for students in 9th grade in SY 2021-2022.

<sup>\*\*</sup>AP Statistics may be taken after successful completion of Algebra II and may be doubled with the appropriate sequential mathematics course. If AP Statistics if taken as the only math course, it should be taken in 12<sup>th</sup> grade.

<sup>\*\*\*</sup>Honors Statistics may be taken after successful completion of Algebra II and may be doubled with the appropriate sequential mathematics course. If Honors Statistics if taken as the only math course, it should be taken in 12<sup>th</sup> grade.

ADVANCED PLACEMENT CALCULUS AB

037020 1 credit Grades 11, 12 Code: W\*

Prerequisite: Pre-Calculus

This course is a college-level course designed to prepare students for the Advanced Placement (AP) Calculus AB exam. Major topics of study in the course include the use of limits, derivatives, definite integrals, differential equation, and the applications of these concepts. The course uses a multi-representative approach to calculus, with concepts and problems expressed numerically, graphically, verbally, and analytically. A graphing calculator is highly recommended.

ADVANCED PLACEMENT CALCULUS BC

037025 1 Credit Grade 12 Code: W\*

Prerequisite: AP Calculus AB or AP Pre-Calculus

This course is a college-level course designed to prepare students for the Advanced Placement (AP) Calculus BC exam. The course emphasizes 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, to implement experimentation, and to assist in interpreting results. A graphing calculator is highly recommended for this course.

**ADVANCED PLACEMENT PRE-CALCULUS** 

037000 1 Credit Grades 10, 11, 12 Code: W\*

Prerequisite: Algebra II Honors

This course is a college-level course designed to prepare students for the Advanced Placement (AP) Pre-Calculus exam, college-level calculus, and the fundamental skills for other math and science courses. Students will acquire and apply mathematical tools in real-world modeling situations to deepen their understanding of each function type explored in the course. Multiple representations of functions will be explored with and without the use of technology. A graphing calculator is highly recommended for this course.

**ADVANCED PLACEMENT STATISTICS** 

037030 1 credit Grades 11, 12 Code: W\*

Prerequisite: Algebra II

This course is a college-level course designed to prepare students for the Advanced Placement (AP) Statistics exam. Prior to 12<sup>th</sup> grade, the course can only be taken concurrently with another math course in the recommended sequence. During the 12<sup>th</sup> grade, the course can satisfy the 4<sup>th</sup> year math requirement for college bound advanced math students who are not interested in pursuing a STEM-related field of study. The four broad conceptual themes of the course include exploring data, designing a study, anticipating patterns, and statistical inference with emphasis placed on critical thinking and problem solving. A graphing calculator is highly recommended.

**ALGEBRA I** 

031514 1 credit Grades 9, 10 Code: EOC

This course develops the algebraic skills and concepts that are critical to success in future mathematics courses. Students will apply algebraic concepts in a variety of problem-solving situations. Topics include linear, quadratic and exponential equations, real and complex numbers, expressions with rational and irrational numbers, functions and modeling, and descriptive statistics.

**ALGEBRA I (INDIVIDUALIZED)** 

03991V or W 1 credit Grade 9 Code: EOC

This course is available to students on recommendation of the Individualized Education Program (IEP) committee. Individual goals and objectives are developed in an IEP that reflects a student's level of performance and rate of learning.

**ALGEBRA II (HONORS)** 

032010 1 credit Grades 10, 11 Codes: EOC, W

Prerequisite: Geometry Honors or approval/request of instructor

This course is designed for students who have shown interest and ability in above level mathematics work. The course will include a more in-depth study of the topics covered in the Algebra II course. Additional topics will include the fundamental theorem of algebra, the binomial theorem, and applying polynomial identities to the complex number system.

**ALGEBRA II** 

032014 1 credit Grades 9, 10, 11, 12 Code: EOC

Prerequisite: Geometry

This course further develops the real number system and knowledge of linear, quadratic, and exponential functions. Topics will include polynomial, rational, and radical functions and algebraic modeling. Students solve various types of equations,

including quadratic equations over the complex number system and exponential equations using the properties of logarithms.

#### **ALGEBRA WITH TRIGONOMETRY AND STATISTICS**

034014 1 credit Grades 11, 12

Prerequisite: Algebra I and Geometry

This course focuses on algebraic problem-solving techniques, trigonometric concepts, and statistical analysis. Students will apply the Maryland College and Career Ready Standards (MCCRS) math practices in a variety of problem solving situations. Topics in the course include linear, quadratic and exponential equations, real and complex numbers, functions and modeling, trigonometry and analytic trigonometry, and descriptive statistics. Successful completion of this course fulfills one algebra credit.

## **ALGEBRA WITH TRIGONOMETRY AND STATISTICS (INDIVIDUALIZED)**

03401V or W 1 credit Grades 11, 12

Prerequisite: Algebra I and Geometry

This course is available to students on recommendation of the Individualized Education Program (IEP) committee. Individual goals and objectives are developed in an IEP that reflects a student's level of performance and rate of learning. Successful completion of this course fulfills one algebra credit.

## **ESOL MATH CONCEPTS**

019614 1 credit Grade 9

This course is designed for English Learners (ELs) whose native or first language is not English and are enrolled in the Newcomer's Program at the Secondary Academy of International Languages (SAIL). This course is designed to strengthen foundational mathematics concepts in preparation for entering Foundations of Algebra. Topics in the course include modeling algebraic expressions and equations, using proportional reasoning, analyzing functions, and graphing linear equations. This course provides an elective credit. It does not fulfill an algebra credit towards graduation.

## **FOUNDATIONS OF ALGEBRA**

03051T 1 credit Grade 9

This course is designed for selected students to help build a foundational knowledge of algebraic concepts prior to enrollment in Algebra I. Topics will include integers, rational numbers, algebraic expressions, linear equations, inequalities, coordinate plane graphing, and patterns. Successful completion of this course fulfills one algebra credit.

#### FOUNDATIONS OF ALGEBRA (INDIVIDUALIZED)

03051TV or W 1 credit Grade 9

This course is available to students on recommendation of the Individualized Education Program (IEP) committee. Individual goals and objectives are developed in an IEP that reflects a student's level of performance and rate of learning.

## **GEOMETRY**

033014 1 credit Grades 9, 10, 11, 12

Prerequisite: Algebra I

This course is designed to provide students with a basic knowledge of plane and solid geometric figures and their properties. Topics will include logical deductions using postulates, definitions, and theorems of plane geometry, trigonometry, three dimensional figures, and connections to algebra.

## **GEOMETRY (INDIVIDUALIZED)**

03301V or W 1 credit Grades 9, 10, 11, 12

Prerequisite: Algebra I

This course is available to students on recommendation of the Individualized Education Program (IEP) committee. Individual goals and objectives are developed in an IEP that reflects a student's level of performance and rate of learning.

#### **GEOMETRY (HONORS)**

033010 1 credit Grades 9, 10 Code: W

Prerequisite: Algebra I

This course is designed for students who have shown interest and ability in above level mathematics work. The course will include a more in-depth study of the topics covered in the geometry course. Additional topics will include the laws of sine and cosine, deriving formulas, and constructing tangent lines.

#### INTRODUCTION TO ADVANCED MATHEMATICS

035014 1 credit Grade 12 Code: CC

## Prerequisite: Algebra I and must be taken during 12th grade

This course develops student skills in interpreting, understanding, and using quantitative information. It teaches algebraic reasoning and modeling skills through a quantitative literacy lens and emphasizes critical thinking and statistical reasoning. Additional topics include solving linear and quadratic equations and graphing linear and quadratic functions. Successful completion of this course fulfills one algebra credit. *Under conditions determined by the College of Southern Maryland (CSM), this course may earn college credit.* 

## INTRODUCTION TO ADVANCED MATHEMATICS (INDIVIDUALIZED)

03501V or W 1 credit Grade 12 Code: CC

## Prerequisite: Algebra I and must be taken during 12th grade

This course is available to students on recommendation of the Individualized Education Program (IEP) committee. Individual goals and objectives are developed in an IEP that reflects a student's level of performance and rate of learning. Successful completion of the course fulfills one algebra credit. *Under conditions determined by the College of Southern Maryland (CSM), this course may earn college credit.* 

## PRE-CALCULUS (HONORS)

037010 1 credit Grades 11, 12 Codes: CC, W

#### Prerequisite: Advanced Algebra with Trigonometry or Algebra II Honors

This course is specifically designed to give students an in-depth study of topics that are essential to the study of Calculus. Such topics include theory of equations, functions analysis, trigonometry, introduction to limits, and other advanced topics to prepare for Calculus. A graphing calculator is highly recommended for this course. *Under conditions determined by the College of Southern Maryland (CSM), this course may earn college credit.* 

#### STATISTICS (HONORS)

037040 1 credit Grade 12 Code: W\*

Prerequisite: Algebra II

This course is designed to prepare students for college-level Statistics. Students will acquire and apply mathematical tools in the real-world following the MSDE Standards for Statistics and Probability. Students will explore data, conduct statistical studies, find patterns in univariate and bivariate data, and evaluate probabilities. A graphing calculator is highly recommended for this course.



## PHYSICAL EDUCATION

Physical Education is an essential part of the total education of the individual. At the high school level, students are afforded a variety of experiences which provide a thorough knowledge of content, skills, and confidence to live a physically activity, healthy, lifestyle. Students will be able to develop an understanding of the relationship between physical activity and maintenance of lifetime fitness.

#### ADAPTED PHYSICAL EDUCATION

079984 1 credit Grades 9, 10, 11, 12

This course is available to students on recommendation of the Individualized Education Program (IEP) team. Individual goals and objectives are developed through the IEP process, which reflects a student's present level of performance.

#### ADVANCED PHYSICAL EDUCATION I

 07053T or U
 ½ credit
 Grades 10, 11, 12

 070534
 1 credit
 Grades 10, 11, 12

Prerequisite: Fitness for Life

**ADVANCED PHYSICAL EDUCATION II** 

07054T or U ½ credit Grades 11, 12 070544 1 credit Grades 11, 12

Prerequisite: Advanced Physical Education I

**ADVANCED PHYSICAL EDUCATION III** 

07055T or U ½ credit Grade 12 070554 1 credit Grade 12

Prerequisite: Advanced Physical Education II

These courses emphasize the development of intermediate skills in a wide variety of individual, team, and lifetime sports.

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These codes appear with course descriptions where appropriate: ATE = Advanced Technology Credit; CC = may be eligible for college credit; CTP = Maryland State
Dept. of Education Approved Career Technical Program; CTC = CTP Concentrator Course; EOC = End-of-Course Assessment; FA = Fine Arts; TE = Technology Education;
W = Weighted (HONORS); W\*= Weighted (AP); CERT = Certification

Please note that not all courses are available at each school due to staffing/student enrollment

All classes are open on a coeducational basis and are structured to meet the interests and needs of the students.

**AEROBICS I** 

07997T or U 1/2 credit Grades 10, 11, 12

Prerequisite: Fitness for Life

**AEROBICS II** 

07988T or U ½ credit Grades 11, 12

Prerequisite: Aerobics I

AEROBICS III

07989T or U ½ credit Grade 12

Prerequisite: Aerobics II

These courses emphasize dance movements as well as a mixture of running, hopping, skipping, jumping, and stretching. All activities are choreographed to include warm-up, conditioning, and cool-down phases in the development of cardio-respiratory fitness.

**BASIC WEIGHT TRAINING I** 

07065T or U ½ credit Grades 11, 12

Prerequisite: Introduction to Weight Training

**BASIC WEIGHT TRAINING II** 

07066T or U ½ credit Grade 12

Prerequisite: Basic Weight Training I

These courses emphasize the lifetime application of weight training as it relates to personal fitness. All classes are open on a coeducational basis and are structured to meet the needs and interests of the students.

**FITNESS FOR LIFE** 

070514 ½ credit Grades 9, 10, 11, 12 Code: EOC

This course is required for ALL students and should be taken in Grade 9.

This course consists of an assessment of health and skill related components of fitness and the formulation of individual fitness programs. It is designed to provide adolescents with knowledge and skills needed to engage in a physically active, healthy lifestyle throughout life.

**INTRODUCTION TO WEIGHT TRAINING** 

07064T or U ½ credit Grades 10, 11, 12

Prerequisite: Fitness for Life

This course emphasizes weight training techniques. Students will be instructed in the lifetime application of weight training as it relates to personal fitness. All classes are open on a coeducational basis and are structured to meet the needs and interests of the students.

LIFETIME SPORTS

079964 1 credit Grades 10, 11, 12

Prerequisite: Fitness for Life

This course introduces skiing, orienteering, bicycling, hiking, swimming and boating safety, bowling, and other life sports as determined by student interest are offered. These courses consist of advanced training and techniques in a minimum of four lifetime sports skills. Students would gain an understanding and appreciation of the value of leisure-time recreational activities.

PHYSICAL EDUCATION AND SPORT I

07061T or U ½ credit Grades 10, 11, 12

Prerequisite: Fitness for Life

PHYSICAL EDUCATION AND SPORT II

07062T or U ½ credit Grades 10, 11, 12

Prerequisite: Physical Education and Sport I

These courses emphasize the development of intermediate skills and a wide variety of physical education activities. All classes are open on a coeducational basis and are structured to meet the interests and needs of the students.

## PHYSICAL EDUCATION LEADERSHIP AND DISABILITY AWARENESS

079985 1 credit Grades 10, 11, 12

Prerequisite: Approval of instructor

This elective course develops leadership skills in physical education and recreation. It allows students to carry out specific responsibilities in connection with the routine organization of a class when working with students with disabilities. Students will be given specific training targeted toward effective peer tutoring. As the course progresses, there will be practical

experiences geared toward a better understanding of the many areas of teaching students with disabilities in physical education based on an Individualized Education Program (IEP). Specific assignments will center on disability awareness.

**SPORTS OFFICIATING I** 

079944 1 credit Grades 10, 11, 12

Prerequisite: Fitness for Life SPORTS OFFICIATING II

070054 1 crodit

1 credit Grades 11, 12

Prerequisite: Sports Officiating I

**SPORTS OFFICIATING III** 

079955 1 credit Grade 12

Prerequisite: Sports Officiating II

These courses train students in techniques and rules of officiating various sports. Sports officiating experience is provided in the Physical Education program and in the intramural program of the school. The proper use of responsibility and authority is a major task for students enrolled in this course. In addition, qualified students will officiate in the Charles County middle school tournaments.

#### **SWIMMING AND CONDITIONING I**

070734 1 credit Grades 10, 11, 12

Prerequisite: Fitness for Life, ability to swim 500 yards non-stop

**SWIMMING AND CONDITIONING II** 

070735 1 credit Grades 11, 12

Prerequisite: Swimming and Conditioning I

These courses offer the opportunity of both aquatic and land-based conditioning techniques to be introduced to students. These techniques will help to continue the fitness for life goals introduced in the 9<sup>th</sup> grade physical education curriculum.

#### **SWIMMING AND LIFEGUARDING**

070744 1 credit Grades 10, 11, 12

Prerequisite: Fitness for Life and departmental approval

This course is designed to certify the student as an American Red Cross lifeguard. Through lectures, videos, and practice sessions, students will be given the skills and knowledge needed to prevent and respond to water emergencies and have the skills to work as a lifeguard. In association with this course, there is a \$120 certification fee to become a Red Cross Lifeguard upon successful completion of the tests and course.

#### WALKING FOR WELLNESS I

 07067T or U
 ½ credit
 Grades 10, 11, 12

 070664
 1 credit
 Grades 10, 11, 12

Prerequisite: Fitness for Life WALKING FOR WELLNESS II

Prerequisite: Walking for Wellness I

**WALKING FOR WELLNESS III** 

07069T or U ½ credit Grades 11, 12 070694 1 credit Grades 11, 12

Prerequisite: Walking for Wellness II

These courses emphasize the benefits of walking for fitness. Technology will be a key component of motivation for the students. Pedometers, heart rate monitors, and other software will be used to track and store data on walking wellness.

## **WATER SAFETY INSTRUCTOR**

070814 1 credit Grades 11, 12

Prerequisite: Fitness for Life; Seventeen years old by the end of the school year, have a current American Red Cross Lifeguarding Certificate, and departmental approval

This course is for current American Red Cross Lifeguards who wish to become certified American Red Cross Water Safety Instructors with the ability to teach swimming to others. Students are required to earn a minimum of 80 percent on a precourse test and pass all skills tests. The courses require providing assistance with the scheduled classes at the pool.

#### WEIGHT TRAINING AND CONDITIONING I

079914 1 credit Grades 10, 11, 12

Prerequisite: Fitness for Life and departmental approval

**WEIGHT TRAINING AND CONDITIONING II** 

1 credit **Grades 11. 12** 

Prerequisite: Weight Training and Conditioning I and departmental approval

**WEIGHT TRAINING AND CONDITIONING III** 

1 credit 079934 Grade 12

Prerequisite: Weight Training and Conditioning II and departmental approval

These courses provide instruction in weight training techniques, development of the understanding of muscle physiology, and how progressive resistance exercises can be used to develop and condition the human body. The conditioning phase of the program is composed of running and other movement exercises, which improve total fitness. Students are instructed in a sport specific application of weight training to meet personal needs for improving fitness.



## **SCIENCE**

Charles County's science program is that component of the school curriculum where student inquiry and discovery can develop and flourish. Science instruction encourages examining, probing, questioning, and exploring. It allows students to cultivate personal strategies for learning and problem solving. Each student must earn a minimum of three credits in science as a requirement for graduation. The recommended sequence for science includes Earth Systems, Biology, and Chemistry. Levels of classes are offered to meet a variety of instructional and educational needs. Advanced Placement courses are also offered.

- Advanced Placement (AP) courses are provided for the student who has demonstrated the ability to move beyond enrichment level content and skills acquisition based on achievement and interest. AP science courses are fast-paced and support students in cultivating important skills and habits of mind that are essential for college and career readiness through hands-on immersion into the content.
- Honors courses are designed for students who have an interest in science, the ability to move beyond grade level in content, and the willingness to work independently on projects.
- A Level courses are designed for students whose career choices may require skills and content knowledge in science and who have demonstrated mastery of appropriate basic skills.

## ADVANCED PLACEMENT BIOLOGY

Code: W\* 047310 **Grades 11, 12** 1 credit

Prerequisite: Biology and Chemistry

This course prepares students for the Advanced Placement examination. This course involves an intensive study of college-level biology. Advanced mathematics may be employed in the solution of problems and laboratory analysis.

## ADVANCED PLACEMENT CHEMISTRY

047110 1 credit **Grades 11, 12** Code: W\* Prerequisite: Chemistry; Algebra II is recommended and may be taken concurrently

This course prepares students for the Advanced Placement examination. This course involves an intensive study of college-level general chemistry. Advanced mathematics may be employed in the solution of problems and laboratory analysis.

#### ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

Code: W\* 1 credit **Grades 11. 12** 

Prerequisite: Algebra I, Biology, and Chemistry (may be taken concurrently)

This course prepares students for the Advanced Placement examination. 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.

## **ADVANCED PLACEMENT PHYSICS 1: ALGEBRA-BASED**

047220 1 credit Grades 11, 12 Code: W\*

Prerequisite: Algebra II (may be taken concurrently)

This course is equivalent to a first-semester college course in algebra-based physics. This course helps students to develop a deep understanding of introductory physics content and focus on applying their knowledge through inquiry labs. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. This course will also introduce students to electric circuits. Students will be able to apply their knowledge through inquiry labs.

#### ADVANCED PLACEMENT PHYSICS 2: ALGEBRA-BASED

047221 1 credit Grade 12 Code: W\*

Prerequisite: AP Physics 1: Algebra-Based or Honors Physics with PreCalculus concurrently and instructor's approval

This course is the equivalent to a second-semester college course in algebra-based physics. This course helps students to develop a deep understanding of physics content through inquiry-based learning and focus on the development of scientific critical thinking and reasoning skills. The course covers fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.

#### ADVANCED PLACEMENT PHYSICS C

047230 1 credit Grade 12 Code: W\*

Prerequisite: Concurrently taking AP Calculus and completion of AP Physics 1

This course forms the first part of the college sequence for students planning to major in the physical sciences or engineering. Methods of calculus are used whenever appropriate in formulating physical principles and in applying them to physical problems. This course is more intensive and analytic than the B course. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus. The subject matter of the C course is principally mechanics and electricity and magnetism, with approximately equal emphasis on these two areas.

#### **BIOLOGY (HONORS)**

042510 1 credit Grade 10 Codes: EOC, W Prerequisite: Earth Systems or concurrent enrollment in Biomed, I, PLTW Engineering

This course provides an in-depth investigation of biological principles and concepts with a special emphasis on openended laboratory investigations. Higher-level process skills (i.e. analyzing, synthesizing, and evaluating data) are emphasized. Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course.

## **BIOLOGY (A LEVEL)**

042511 1 credit Grade 10 Code: EOC

Prerequisite: Earth Systems

This course provides an investigation of biological principles and concepts, and emphasizes an interpretative method of investigation utilizing process skills such as organizing, analyzing, and graphing. Class activities include numerous laboratory exercises. Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course.

#### **BIOLOGY (INDIVIDUALIZED)**

04982V or W 1 credit Grade 10 Code: EOC

Prerequisite: Earth Systems

This course increases the student's information about life processes, plant and animal life, human systems, communicable diseases, and health. This course is available to students upon recommendation of the Individualized Education Program (IEP) committee and the development of an IEP. Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course.

## **CHEMISTRY (HONORS)**

043010 1 credit Grades 10, 11, 12 Code: W

Prerequisite: Biology and Algebra I

This course provides an in-depth investigation of the concepts and principles of chemistry. Topics to be studied include chemical bonding, the nature of matter, periodicity, electrochemistry, quantitative relationships, and oxidation-reduction. Higher-level process skills such as analyzing, synthesizing, and evaluating data will be emphasized. Class activities will also include numerous laboratory investigations.

## **CHEMISTRY (A LEVEL)**

043011 1 credit Grades 10, 11, 12

Prerequisite: Biology and Algebra I

This course focuses on areas of investigation include periodicity, chemical bonding, chemical reactions, etc. Emphasis will be placed on an interpretive method of investigation utilizing process skills such as observing, organizing, analyzing, and graphing. Laboratory experiences are designed to familiarize students with chemical reactions and to develop skills in using laboratory equipment.

#### **CHEMISTRY (INDIVIDUALIZED)**

04996V or W 1 credit Grades 10, 11, 12

Prerequisite: Biology (may be taken concurrently)

This course emphasizes problem-solving and decision-making skills. It explores the impact of chemistry on society by addressing chemistry related technological issues that are relevant to the community and society. Students learn concepts that are needed to understand societal issues through classroom laboratory investigations, demonstrations, and discussions. This course is available to students upon recommendation of the Individualized Education Program (IEP) Committee and the development of an IEP.

## **EARTH SYSTEMS (HONORS)**

041520 1 credit Grade 9 Code: W

This course provides an in-depth investigation of energy systems that exist on Earth. Earth's history, human impact, stellar evolution, and climate models are covered with a special emphasis on inquiry-based laboratory investigations. Students will engage in the practices of science and engineering to construct their understanding of the natural environment, the processes that bring about change, and the impact of earth and space science on society.

## **EARTH SYSTEMS (A LEVEL)**

041521 1 credit Grade 9

This course will provide a comprehensive study of Earth systems while establishing concepts that will prepare students for physics and chemistry. Students are encouraged to develop problem solving skills, lab techniques, and knowledge pertinent to the science, drawing relevant connections with the physical sciences.

## **EARTH SYSTEMS (INDIVIDUALIZED)**

04152V or W 1 credit Grade 9

This course develops each student's information and problem-solving skills through activities and experiences in the areas of Earth's history, human impact, stellar evolution, and climate. There will also be an emphasis on relating the content of Earth systems to the everyday life experiences of an Individualized Education Program (IEP).

#### INTRODUCTION TO ANATOMY AND PHYSIOLOGY

048224 1 credit Grades 11, 12

This course introduces students to the basics of human anatomy and physiology. Students will survey the structures and functions of human tissues, organs, and organ systems through hands-on laboratory experiences. Techniques will include dissections, applications of specific medical technologies, and data collection related to physiological processes. The application of concepts covered related to medical and health careers will be explored.

#### **ORGANIC CHEMISTRY (HONORS)**

043043 1 credit Grade 12

Prerequisite: Honors Chemistry

Students will understand the structure and reactivity of organic molecules. They will predict bonding and three-dimensional structure, including chirality of organic compounds. Students will be able to predict the reactivity of specific functional groups, and construct efficient, simple mechanistic pathways for the synthesis of a given compound.

#### **PHYSICS (HONORS)**

043510 1 credit Grades 11, 12 Code: W

Prerequisite: Algebra II (may be taken concurrently)

This course provides an in-depth investigation of concepts and principles of physics. Topics to be investigated include motion, force, heat, light, electricity, magnetism, and nuclear reaction. Higher-level process skills such as analyzing, synthesizing, and evaluating data will be emphasized. Class activities will also include numerous laboratory investigations.

## PHYSICS (A LEVEL)

043511 1 credit Grades 11, 12

Prerequisite: Algebra II (may be taken concurrently)

This course provides an investigation into the interrelationships and physical properties of matter and energy. Topics to be studied through experimentation, discussion, and reasoning are motion, magnetism, force, electricity, and energy. Appropriate demonstrations and investigations will also be included.

#### PRINCIPLES OF ANATOMY AND PHYSIOLOGY

043050 1 credit Grades 11, 12 Codes: CC, W\*

Prerequisite: Honors Biology and concurrently enrolled in Honors Chemistry

The course will include anatomy, physiology, and an introduction to pathophysiology in each body system. There will also be planned laboratory experiences that will include dissections. 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. Students who enroll in this course have the opportunity for dual enrollment at the College of Southern Maryland.

#### **SCIENCE LAB ASSISTANT I**

049940 ½ credit Grades 11, 12

SCIENCE LAB ASSISTANT II

049960 ½ credit Grades 11, 12

Prerequisite: Biology, Chemistry, or Physics and approval of department chairperson

The purpose of the laboratory assistant program is to provide an opportunity for individual research as well as provide trained personnel to assist in the science department. Students will earn one-half credit for each year of satisfactory performance up to a maximum of one credit.



## **SOCIAL STUDIES**

Social studies is the part of the school program which teaches the skills, attitudes, and content knowledge that promote responsible citizenship. Social studies is an interdisciplinary field which includes history, geography, economics, political science, anthropology, psychology, sociology, and the humanities. Students are expected to use these disciplines to develop a variety of perspectives to enhance their ability to think critically about the events and issues that shape their community, their nation, and their world.

In addition to the required courses, students are able to select from a variety of social studies electives offered at each high school. Three levels of social studies courses are offered to meet student needs and achievement levels.

- Advanced Placement (AP) courses are provided for the student who has demonstrated the ability to move beyond
  enrichment level content and skills acquisition based on achievement and interest. Independent study and extensive
  outside reading and research are required.
- **Honors** courses are provided for the student who has demonstrated the ability to move to an enrichment level in content and skill acquisition based on achievement and interest. Independent study, outside reading, and research are required.
- A Level courses are provided for the student who reads or writes at or below grade level. Opportunities for the further
  development of skills and understanding of concepts will be provided. Supplementary research projects and reading
  are required.

#### **ADVANCED PLACEMENT AFRICAN AMERICAN STUDIES**

021710 1 credit Grades 11, 12 Code: W\*

This course is an interdisciplinary examination of the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the challenges and achievements of the contemporary moment. Students in this course will develop skills across multiple fields, with an emphasis on developing historical, literary, visual, and data analysis skills. Extensive independent reading and research are required, and may include summer assignments.

## ADVANCED PLACEMENT COMPARATIVE GOVERNMENT AND POLITICS

021030 1 credit Grades 11, 12 Code: W\*

This course introduces students to the process and outcomes of politics in a variety of country settings. This course illustrates the diversity of political life, explains differences in policies and policy outcomes, and communicates to students the importance of global political and economic changes. The course prepares students for the national examination given by the College Board. Extensive independent reading and research are required, **and may include summer assignments.** 

## **ADVANCED PLACEMENT EUROPEAN HISTORY**

027120 1 credit Grades 11, 12 Code: W\*

This course is designed to challenge students who have demonstrated the highest level of achievement and who wish to prepare for the Advanced Placement examination in European History. The scope of study is Europe from the Renaissance to the present using college-level texts and readings. Extensive outside reading and research are required, and may include summer assignments. This course is an elective and will not satisfy the requirement for World History.

#### ADVANCED PLACEMENT HUMAN GEOGRAPHY

022560 1 credit Grades 10, 11, 12 Code: W\*

This course provides students with an introduction to the broad discipline of geography. The basis of this study is "What is where, why there, and why care?" Students will study the processes and patterns that shape how humans understand, use, and change the earth's surface. They will also study how the earth influences human interactions. The methods and tools of geographers are essential to the course. Extensive reading and research are required, **and may include summer assignments**.

## ADVANCED PLACEMENT MACROECONOMICS

026020 1 credit Grades 11, 12 Codes: CTP, W\*

This course gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. It 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. The course prepares students for the national examination given by the College Board. Extensive independent reading and research are required, **and may include summer assignments.** 

#### ADVANCED PLACEMENT MICROECONOMICS

026010 1 credit Grades 11, 12 Codes: CTP, W\*

This course gives students 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. Extensive independent reading and research are required, **and may include summer assignments.** 

## **ADVANCED PLACEMENT PSYCHOLOGY**

022020 1 credit Grades 10, 11, 12 Code: W\*

This course prepares students to take the Advanced Placement Examination. Content includes biological basis of behavior, personality theory, cognition, and abnormal and social psychology. Extensive independent reading and research are required, **and may include summer assignments.** 

## ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS

021020 1 credit Grades 10, 11, 12 Code: W\*

This course gives students an analytical perspective on government and politics in the United States. This course includes the study of both the general concepts used to interpret U.S. government and politics and the analysis of specific examples regarding various institutions, groups, beliefs, and ideas. The course prepares students for the national examination given

by the College Board. Extensive independent reading and research are required, **and may include summer assignments.** Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course. This course fulfills the LSN Government requirement.

## **ADVANCED PLACEMENT UNITED STATES HISTORY**

027020 1 credit Grades 9, 10, 11, 12 Code: W\*

This course challenges students who have demonstrated the highest level of achievement and interest in social studies and are willing to prepare to take the Advanced Placement Examination. The course of study surveys the history of the United States from its origin to the present. This course involves extensive reading of primary source documents and intensive preparation for writing document based essays, **and may include summer assignments.** This course fulfills the United States history requirement.

#### ADVANCED PLACEMENT WORLD HISTORY

027220 1 credit Grades 11, 12 Code: W\*

This course challenges students who have demonstrated the highest level of achievement and who wish to prepare for the Advanced Placement examination. The course covers the period from early man to the present and follows several themes making cultural connections through time. Extensive outside reading and research are required, **and may include summer assignments.** This course fulfills the world history requirement.

#### **AFRICAN AMERICAN HISTORY**

02171T or U ½ credit Grades 10, 11, 12

This course provides students with an in-depth study of the history and culture of African Americans. The major units in African American History include Slavery and Slave Culture, Resistance to Enslavement, African American Contribution to the Civil War, Reconstruction and Disfranchisement, The Civil Rights Movement and the Black Power Movement, and Challenges of African Americans Today. Students in African American History engage in critical thinking and analytical discourse through the exploration of history, political science, economics, sociology, and culture of the United States, the Caribbean, and Latin America.

## **AFRICAN HISTORY**

02161T or U ½ credit Grades 10, 11, 12

This course provides students with an in-depth study of the history and culture of Africa and African people. The major units in African History include Myths about Africa and Africans, Ancient and Medieval African Civilizations, African Empires and Kingdoms, The Slave Trade, Colonialism and Imperialism in Africa, Independence Movements, and Challenges of Contemporary Africa. Students in African History engage in critical thinking and analytical discourse through the exploration of anthropology, history, international relations, government, economics, philosophy, and culture of a world region.

## **CULTURAL HISTORY AND SPORT**

021814 1 credit Grades 10, 11, 12

This course examines the connection between society and sport from Pre-Classical civilizations through the modern day. The connections between athletic competition, their impact on societal trends throughout history, and the extent to which sports reflect and influence the larger culture are analyzed and evaluated. The approach to studying these relationships focuses on high quality research, examination of primary and secondary sources, historical analysis and conclusions, and the development of literacy skills based upon writing prompts about sports-relevant issues.

#### **DOMESTIC AND GLOBAL ISSUES**

022634 1 credit Grades 10, 11, 12

This course is designed to develop geographic, economic, political, and cultural understandings that affect the relationships among nations in the world. Students will engage in research, discussions, role-playing, and simulations as they explore the issues currently facing the United States and nations around the world.

## **HUMAN GEOGRAPHY: THE STUDY OF PEOPLE AND PLACES**

02255T or U ½ credit Grades 10, 11, 12

This course is designed to enhance students understanding of the relationships between people and their physical environment. The course will address geographic concepts to include location, relationships within environments, the movement of humans, and physical and cultural characteristics of regions. A variety of print and non-print resources will be used to enrich students' understanding of human interactions within physical environments.

#### INTRODUCTION TO PSYCHOLOGY

02352T ½ credit Grades 10, 11, 12

This course is designed to develop students understanding of individual human behavior. Work in this course uses a variety of print and non-print materials, class discussions, demonstrations, projects, and community resources. Topics include personality theory, individual behavior, behavior in groups, motivation and emotion, memory and thought, stress and conflict, psychotherapy, psychological testing, and how psychologists conduct research.

#### INTRODUCTION TO SOCIOLOGY

02353U ½ credit Grades 10, 11, 12

This course is designed to develop understanding of how humans function in groups and societies. Work in this course will be based on print and non-print materials, class discussions, projects, demonstrations, and student evaluations of the environment. Topics include examination of self-concept, establishing and maintaining value systems, peer relationships, gender roles, and the role of family, education, government, religion, and economics in our society.

## **LOCAL, STATE, AND NATIONAL GOVERNMENT (HONORS)**

022510 1 credit Grade 10 Codes: EOC, W

This course challenges students who have demonstrated the highest level of achievement and interest in social studies. Students will study the foundations and institutions of the United States system of government at the national, state, and local levels. Students will apply their knowledge of foundations to contemporary issues facing the local, state, and national governments. Students enrolled in this course will be provided an opportunity to complete their Student Service Learning requirement as part of the course of study. Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course.

#### LOCAL, STATE, AND NATIONAL GOVERNMENT (A LEVEL)

022511 1 credit Grade 10 Code: EOC

This course engages students in basic understanding of government and citizenship. Students will study the function, operation, and challenges that face government at the local, state, and national levels. Second semester students will examine contemporary issues facing local, state, and national government. Students will be provided an opportunity to complete Student Service Learning as part of the course of study. Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course.

## LOCAL, STATE, AND NATIONAL GOVERNMENT (INDIVIDUALIZED)

02981V or W 1 credit Grade 10 Code: EOC

This course is designed to develop students understanding of government at the local, state, and national levels. Students will study the issues that relate to their lives as citizens living in a democratic society. This course is available to students upon the recommendation of the Individualized Education Program (IEP) Committee and development of an IEP. Students will be provided an opportunity to receive credit for Student Service Learning as part of the course of study. Students enrolled in this course will take an End Of Course (EOC) state exam that will comprise 20 percent of the student's final grade in the course.

#### **UNITED STATES HISTORY (HONORS)**

021010 1 credit Grade 9 Code: W

This course is designed to challenge motivated students who have demonstrated a high level of achievement and interest in social studies. Course content will focus on the geographic, economic, social, and political factors that continue to influence the development of the United States from the post-Civil War period to the present. Classroom requirements include extensive outside reading and research, as well as the completion of a historical investigation project.

## **UNITED STATES HISTORY (A LEVEL)**

021011 1 credit Grade 9

This course is designed for students who have demonstrated an aptitude and interest in social studies. The content of the course will focus on the geographic, economic, social, and political factors that influenced the development of the United States from the post-Civil War era to the present. Classroom requirements include extensive outside reading and research as well as the completion of a historical investigation project.

#### **UNITED STATES HISTORY (INDIVIDUALIZED)**

02983V or W 1 credit Grade 9

This course is designed for students to develop students understanding of the events and personalities that have shaped life in the United States in the twentieth century. This course is available to students upon the recommendation of the Individualized Education Program (IEP) Committee and the development of an IEP.

## **WORLD HISTORY (HONORS)**

021510 1 credit Grade 11 Code: W

This course is designed to challenge motivated students who have demonstrated a high level of achievement and interest in social studies. Students will link their prior knowledge of world history as they continue to expand their understanding of the personalities and events that have shaped the modern world. Geographic, economic, political, and social factors will be explored from 1450 to the present. Classroom requirements include extensive outside reading and research, as well as the completion of a historical investigation project.

## **WORLD HISTORY (A LEVEL)**

021511 1 credit Grade 11

This course is designed for students who have demonstrated an interest and aptitude in social studies. Students will focus on events and personalities that have shaped the modern world since 1450. Concepts from geography, economics, and politics will be examined. Some outside reading and research are required. Classroom requirements include extensive outside reading and research, as well as the completion of an historical investigation project.

#### WORLD HISTORY (INDIVIDUALIZED)

02985V or W 1 credit Grade 11

This course is designed to develop students understanding of the events and personalities that have shaped the modern world since 1450. This course is available to students upon the recommendation of the Individualized Education Program (IEP) Committee and the development of an IEP.

#### YOU AND THE LAW

02254T or U ½ credit Grades 10, 11, 12

This course is designed to develop an understanding among teenagers of their rights and responsibilities as citizens under the local, state, and federal systems of law. Work in this course will be based on a variety of print and non-print materials, discussions, projects, and the use of community resources. Possible topics may include individual rights, civic responsibilities, laws and the legal system, criminal law, domestic law, and juvenile courts.

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## WORLD LANGUAGES

Charles County Public Schools offers the following World Languages: French, Spanish, Heritage and Native Spanish, Latin, and American Sign Language.

The World Language Program embraces the World-Readiness Standards for Learning Languages which identifies five goal areas in Communication, Cultures, Connections, Comparisons, and Communities. These goals stress the application of learning a language beyond the instructional setting and are essential for citizens in a global community and marketplace.

Students are required to earn 2 credits of the same world language in order to graduate. Some colleges and universities require three years of high school study in the same World Language. Spanish courses and Heritage and Native Spanish courses count as the same language. Students should determine if the college or university of their choice has such a requirement.

#### ADVANCED PLACEMENT FRENCH LANGUAGE AND CULTURE

050554 1 credit Grades 10, 11, 12 Code: W

Prerequisite: French IV

This course is designed for students who wish to take the College Board Advanced Placement French Language examination. The course involves reading original works, writing extended assignments, and analyzing linguistics. Timed

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writings and analysis of texts will form major components of the course. Attaining intermediate to high-level proficiency in listening and speaking will be emphasized. Advanced work in the World Language and a solid foundation in levels I through IV are required.

**ADVANCED PLACEMENT LATIN** 

052064 1 credit Grades 10, 11, 12 Code: W\*

Prerequisite: Latin III or IV

This course is designed for those Latin students interested in progressing to college-level reading, translating, analyzing, and interpreting Latin from original works. The AP Latin students are expected to translate accurately from Latin poetry and prose to English and to demonstrate an in-depth grasp of Latin grammatical structures and vocabulary. Stylistic analysis is an integral part of the course. Cultural, social, and political contexts also are examined. This course focuses on Vergil's *Aeneid* and Caesar's *Gallic Wars*.

ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE

051554 1 credit Grades 9, 10, 11, 12 Code: W\*

Prerequisite: Spanish IV or Heritage and Native Spanish III

This course is designed for students who wish to take the College Board Advanced Placement Spanish Language and Culture examination. The course involves reading original works, writing extended assignments, and analyzing linguistics. Timed writings and analysis of texts will form major components of the course. Attaining intermediate to high-level proficiency in listening and speaking will be emphasized. A solid foundation in levels I through IV is required.

**AMERICAN SIGN LANGUAGE** 

052111 1 credit Grades 11, 12

This course is designed to teach students basic conversational skills in American Sign Language. Students will also learn the history of Deaf Culture, as well as the structure and syntax of the language. The course will focus on three major areas, which include manual communication, Deaf Culture, and history/progress of Deaf Culture in America.

FRENCH I

050514 1 credit Grades 9, 10, 11, 12

This course stresses the communication skills of listening, speaking, reading, and writing in French. These skills are taught through the use of the language in everyday situations typical of the French culture. Vocabulary and grammar are taught by means of oral and written drills based on the curriculum. Students are expected to master the written forms of material covered orally. Much of the teaching is done in French. Memorization is required and stressed through practice in class and at home. Various media resources are used to increase vocabulary and cultural awareness. Students are expected to master oral and written material in French on a daily basis.

FRENCH II

050524 1 credit Grades 9, 10, 11, 12

Prerequisite: French I

This course builds on listening, speaking, reading, and writing skills learned in French I. Activities and conversations are used in class to enable students to relate to French culture through their own lives. The majority of classroom instruction is done in French. Various media resources remain an integral part of the program in order to present an authentic image of the French-speaking world today.

FRENCH III (HONORS)

050535 1 credit Grades 10, 11, 12 Code: W

Prerequisite: French II

This course provides oral practice of more advanced grammatical and idiomatic forms of French. Increased emphasis is placed upon listening, speaking, reading, and writing skills. Various media resources remain an integral part of the program in order to present an authentic image of the French-speaking world today. Classroom instruction is conducted in French.

FRENCH IV (HONORS)

050544 1 credit Grades 11, 12 Code: W

Prerequisite: French III

This course is an extension of the third-year activities. Students are expected to speak French almost exclusively. Students read French literature and articles from the French-speaking world, which include classic and contemporary works. Timed writings and analysis of texts will form major components of the course. Attaining intermediate to high-level proficiency in listening and speaking is emphasized. Classroom instruction is conducted in French.

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These codes appear with course descriptions where appropriate: ATE = Advanced Technology Credit; CC = may be eligible for college credit; CTP = Maryland State
Dept. of Education Approved Career Technical Program; CTC = CTP Concentrator Course; EOC = End-of-Course Assessment; FA = Fine Arts; TE = Technology Education;
W = Weighted (HONORS); W\*= Weighted (AP); CERT = Certification

#### HERITAGE AND NATIVE SPANISH I

051614 1 credit Grades 9, 10, 11, 12

Prerequisite: Proficiency Assessment, World Language teacher recommendation, or counselor after reviewing educational history

This course is designed specifically for heritage and native speakers of Spanish who already have Novice oral and written language proficiency. The purpose of this course is to enable students whose heritage language is Spanish to develop, maintain, and enhance proficiency in all domains of Spanish by providing them the opportunity to listen, speak, read, and write in a variety of contexts and for a variety of audiences including the family, school, and the community. Students taking HNS I will gain a better understanding of the nature of their own language and will develop cross-language literacy skills. Students taking this course must have a home language of Spanish and must have taken the approved Spanish proficiency test and scored within the proficiency range for HNS I, be recommended by a Spanish teacher, or be recommended by a counselor after a review of the student's educational history.

## **HERITAGE AND NATIVE SPANISH II**

051624 1 credit Grades 9, 10, 11, 12

Prerequisite: Proficiency Assessment, World Language teacher recommendation, or successful completion of Heritage and Native Spanish I, or counselor after reviewing educational history

This course is designed specifically for heritage and native speakers of Spanish who already have Intermediate-Low oral and written language proficiency. The purpose of this course is to enable students whose heritage language is Spanish to develop, maintain, and enhance proficiency in all domains of Spanish by providing them the opportunity to listen, speak, read, and write in a variety of contexts and for a variety of audiences including the family, school, and the community. Students taking HNS II will gain a better understanding of the nature of their own language and will develop cross-language literacy skills. Students taking this course must have a home language of Spanish and must have taken the approved Spanish proficiency test and scored within the proficiency range for HNS II OR have successfully completed Heritage and Native Spanish I, be recommended by a Spanish teacher, or be recommended by a counselor after a review of the student's educational history.

#### **HERITAGE AND NATIVE SPANISH III**

051634 1 credit Grades 9, 10, 11, 12 Code: W

Prerequisite: Proficiency Assessment, World Language teacher recommendation, or successful completion of Heritage and Native Spanish II, or counselor recommendation after reviewing educational history

This course is designed specifically for heritage and native speakers of Spanish who already have Intermediate-High oral and written language proficiency. The purpose of this course is to enable students whose heritage language is Spanish to develop, maintain, and enhance proficiency in all domains of Spanish by providing them the opportunity to listen, speak, read, and write in a variety of contexts and for a variety of audiences including the family, school, and the community. Students taking HNS III will gain a better understanding of the nature of their own language and will develop crosslanguage literacy skills. Students taking this course must have a home language of Spanish and must have taken the approved Spanish proficiency test and scored within the proficiency range for HNS III OR have successfully completed Heritage and Native Spanish II, be recommended by a Spanish teacher, or be recommended by a counselor after a review of the student's educational history.

#### LATIN I

052014 1 credit Grades 9, 10, 11, 12

This course is an introduction to the study of the Latin language. Stress is placed upon linguistic structures and cognates. Latin components are used to develop vocabulary in both Latin and English. Students will learn to read Latin and write simple sentences. Brief narratives on Roman history and mythology serve for analysis of language structures and punctuation.

#### **LATIN II**

052024 1 credit Grades 10, 11, 12

Prerequisite: Latin I

This course builds upon skills acquired in Latin I. Concepts in grammar are complex. Readings from Latin literature, covering a wide range of topics and literary forms, are studied. Students continue study of the Roman culture. Acquisition of vocabulary and comprehension of basic reading materials are goals of the course. The application of verbal concepts to English language development is emphasized.

**LATIN III (HONORS)** 

052035 1 credit Grades 11, 12 Code: W

Prerequisite: Latin II

This course emphasizes recognition of the stylistic elements and linguistic functions in Latin literature. Students study a range of Latin prose as examples of the Latin linguistic system and its influence upon Western culture and literacy style. Students will be expected to expand their capabilities in regard to listening, speaking, and reading aloud, reading and analyzing, and writing in Latin. Grammatical constructs will be taught as the functions of language. Literary works, both prose and poetry, will be subjects of class analysis. Aspects of Latin culture as they pertain to Western civilization and letters will be discussed. Upon completion of this course, students should be able to read and understand Latin literature, pronounce the majority of vocabulary words properly, comprehend Latin cultural concepts, and interpret the grammatical constructs accurately.

**LATIN IV (HONORS)** 

052044 1 credit Grade 12 Code: W

Prerequisite: Latin III

This course is concerned with reading and appreciating Latin literature, particularly poetry. In addition to utilizing language skills acquired in previous course work, the student will concentrate on figures of speech, the definition of poetry, poetic structures, and the cultural setting of the epic. Grammar is taught as a linguistic function to be used for accurate translation of ideas and concise expression. Opportunity for research in many phases of classical civilization is provided.

<u>SPANISH I</u>

051514 1 credit Grades 9, 10, 11, 12

This course is designed specifically for students whose families do not use Spanish in the home. This course stresses the communication skills of listening, speaking, reading, and writing in Spanish. These skills are taught through the use of the language in everyday situations typical of the Spanish culture. Vocabulary and grammar are taught by means of oral and written drills based on the curriculum. Memorization is required and stressed through practice in class and at home. Various media resources are used to increase vocabulary and cultural awareness. Students are expected to master oral and written material in Spanish on a daily basis.

**SPANISH II** 

051524 1 credit Grades 9, 10, 11, 12

Prerequisite: Spanish I

This course is designed specifically for students whose families do not use Spanish in the home. This course builds on listening, speaking, reading, and writing skills as learned in Spanish I. Activities and conversations are used in class to enable students to relate to Spanish culture through their own lives. The majority of classroom instruction is versed in Spanish. Various media remain an integral part of the program in order to present an authentic image of the Spanish-speaking world today.

**SPANISH III (HONORS)** 

051535 1 credit Grades 9, 10, 11, 12 Code: W

Prerequisite: Spanish II

This course is designed specifically for students whose families do not use Spanish in the home. This course provides oral practice of more advanced grammatical and idiomatic forms of Spanish. Increased emphasis is placed upon listening, speaking, reading, and writing skills. Various media remain an integral part of the program in order to present an authentic image of the Spanish-speaking world today. Classroom instruction is conducted in Spanish.

**SPANISH IV (HONORS)** 

051544 1 credit Grades 9, 10, 11, 12 Code: W

Prerequisite: Spanish III

This course is an extension of the third-year activities. Students are expected to speak Spanish almost exclusively. Students read Spanish literature and articles from the Spanish-speaking world, which include classic and contemporary works. Timed writings and analysis of texts will form major components of the course. Attaining intermediate to high-level proficiency in listening and speaking is emphasized. Classroom instruction is conducted in Spanish.

## **SPANISH V (HONORS)**

051545 1 credit Grades 9, 10, 11, 12 Code: W

Prerequisite: Spanish IV

This course is an extension of the Spanish IV. Students are expected to participate in Spanish exclusively. Students read Spanish literature and articles from the Spanish-speaking world, which include classic and contemporary works. Timed writings and analysis of texts will form major components of the course. Attaining Intermediate-High level proficiency in all four domains (listening, reading, writing, speaking) is emphasized. Classroom instruction is conducted in entirely in Spanish. This course is designed to prepare students for the rigor of AP Spanish Language and Culture.

## GLOSSARY



APPROVAL OF INSTRUCTOR: This requirement is indicated for particular courses in which prior skills or experiences are needed.

ARTICULATED COURSES: These courses, taken in high school, may be eligible for college credit at a participating institution for students who enroll there after graduation.

CAPSTONE EXPERIENCE: This culminating course in a career and technical completer program gives students an opportunity to demonstrate the knowledge and skills developed through the integration of all coursework.

CAREER CLUSTER: MSDE identified ten (10) Career Clusters that represent core business functions across industry areas in Maryland business. Each Maryland Career Cluster encompasses a range of career pathways based on economic activities, similar interests, common skills, and training required by those in the field.

COMPLETER PROGRAM (CTP): This sequence of courses or career pathway, taken together, prepares students for entrance to a four-year college or university, to gain in-depth knowledge of a particular career field, or for direct entry into the workforce.

CONCENTRATOR COURSE (CTC): The concentrator is the designated course in the sequence of courses in a completer program that usually occurs after the student has completed 50 percent of the Career Technical Education (CTE) Program of Study. This course represents the student's intent to be a CTE program completer.

COURSE SELECTION SHEET (CSS): The CSS is a list of all classes available to students in a particular high school. It is updated annually and used as a guide in selecting courses for the following school year.

DUAL CREDIT: Credit that is awarded for high school graduation requirement and college credit.

DUAL ENROLLMENT: Qualified juniors and seniors have the opportunity to earn dual credit at the College of Southern Maryland (CSM) while attending high school. Classes will appear on transcript.

EARLY COLLEGE: The College of Southern Maryland (CSM) partnership with Charles County Public Schools (CCPS) offers CCPS high school students and their families the CSM Early College Program. Open to rising seniors, this tuition-free program is an opportunity to experience being a full-time college student, save money, and earn a full year's worth of college credits.

EL/ESOL (English Learners/English for Speakers of Other Languages): These terms refer to students whose native language is other than English and for whom special support services may be available.

FULL-TIME COLLEGE WAIVER: This option allows high school students who have met all other graduation requirements to attend college full time during their senior year of high school and receive English IV credit for two semesters of college English.

HIGH SCHOOL ASSESSMENT (HSA): The Maryland High School Assessment is a test that measures school and individual student progress toward Maryland's High School Core Learning Goals in Government.

INDIVIDUALIZED EDUCATION PROGRAM (IEP): The IEP is the educational program specifically designed for a student with special education needs.

MARYLAND COMPREHENSIVE ASSESSMENT PROGRAM (MCAP): Is being developed to replace the PARCC exams that have been used for the past four years to measure progress in areas such as language arts, math, science, and social studies.

MARYLAND INTEGRATED SCIENCE ASSESSMENT (MISA): The Maryland Integrated Science Assessment is an assessment that provides educators, parents, and the public with student progress towards science literacy. This test is given in grades 5, 8, and 10.

MARYLAND STATE DEPARTMENT OF EDUCATION (MSDE): The governing agency in the state of Maryland that oversees the operation of public schools serving children in Pre-K through grade 12.

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA): The governing body that sets the admissions guidelines and eligibility requirements for students planning to participate in collegiate sports.

NON-TRIVIAL ALGEBRA (as defined by the University System of Maryland): The level of mathematical concepts discussed and the level of problems that are used in the course would be at least as sophisticated as those that relate to problems appearing in the Achieve ADP Algebra II test. An important feature of any such course is that it utilizes algebra in a substantive way so that the student does not lose the algebraic and numerical skills achieved in earlier courses. In Charles County, the following math courses satisfy the non-trivial algebra requirement: Advanced Algebra with Trigonometry, Pre-Calculus, AP Statistics, and AP Calculus.

PARTNERSHIP FOR ASSESSMENT OF READINESS FOR COLLEGE AND CAREER (PARCC): The PARCC tests are high quality, computer-based K-12 assessments in Mathematics and English Language Arts/Literacy.

PILOT COURSES: These courses are currently offered on a trial basis and are not available at all high schools.

PREREQUISITE: This term refers to condition(s) that a student must meet in order to enroll in a particular course or program of study.

SECONDARY ACADEMY OF INTERNATIONAL LANGUAGES (SAIL): This program serves as the secondary component of the CCPS ESOL Program. This program supports the social and academic language acquisition necessary for English proficiency.

WEIGHTED COURSES: This term refers to the additional quality points used in the numerical calculation of a student's grade point average for courses that are of exceptional rigor and/or require significant work beyond the school day.

## **CHARLES COUNTY PUBLIC SCHOOLS GRADUATION STATUS REPORT**

STUDENT'S NAME:	STUDENT'S ID#:									
COMPLETER PROGRAM:			COHORT:							
Please review this information make an appointment with y			arents ha	ve any concern	s, please					
High School Graduation Requirements – 23 credits			□=Requirements you have successfully completed							
English – 4 credits	☐ English I		Choose ONE of the following options			Jiipieteu				
	☐ English II	U U	Choose <u>ONE</u> of the following opti		options					
	☐ English III ☐ English IV	2	2 credits of the same World Language and electives							
Social Studies – 3 credits	☐ LSN Government									
Octai Otaales O ordaits	US History	La								
	☐ World History									
Math – 4 credits	☐ Algebra	Ca	Career and Technology							
Algebra (2)	☐ Algebra	Ed	<b>Education Completer</b>							
Geometry	Geometry	Pr	<b>rogram</b> an	d electives						
Geometry										
O to the control of	☐ Fd.									
Science – 3 credits	☐ Earth									
Biology	Life	EI	Electives							
Lab sciences (2)	Physical	Al	ALL students must earn a							
P. E. – ½ credit	☐ P.E.	m	minimum of 23 credits							
<b>Health</b> – 1 credit	☐ Health I	to	to earn a diploma. The							
neatin — i oreait	☐ Health II	ทน	number of <u>electives</u>							
Fine Art – 1 credit		ne	needed will vary based							
Technology – 1 credit			upon the option chosen							
Financial Literacy – ½ credit		ab	above.							
High School Assessments	☐ Algebra (MCAP) ☐ Biology (20% of course final grade) ☐ English (MCAP) ☐ Gov't		redits equired	Grade Level Middle School 9 <sup>th</sup> 10th	Credits Earned	Total				
	(20% of course final grade)		12	11th						
Student Service (SSL)	☐ Completed		16	12th						



## CHARLES COUNTY HIGH SCHOOLS AND CENTERS

Henry E. Lackey High School - 210675\* 3000 Chicamuxen Road Indian Head, Maryland 20640 301-743-5431 & 301-753-1753 Counseling Department 301-934-7472 Counseling FAX 301-743-6850 School FAX 301-743-9076 http://www.ccboe.com/schools/lackey

La Plata High School - 210685\* 6035 Radio Station Road La Plata, Marvland 20646 301-934-1100 & 301-753-1754 Counseling Department 301-934-7448 Counseling FAX 301-392-5506 School FAX 301-934-5657 http://www.ccboe.com/schools/laplata

Maurice J. McDonough High School - 210823\* 7165 Marshall Corner Road Pomfret, Maryland 20675 301-934-2944 & 301-753-1755 Counseling Department 301-392-5510 Counseling FAX 301-934-8005 School FAX 301-753-8408 http://www.ccboe.com/schools/mcdonough

North Point High School for Science, Technology, and Industry - 211061\* 2500 Davis Road Waldorf, MD 20603 301-885-2012 & 301-753-1759 Counseling Department 301-934-7470 Counseling FAX 301-392-5505 School FAX 301-885-2347 http://www.ccboe.com/schools/northpoint

St. Charles High School – 211067\* 5305 Piney Church Road Waldorf, Maryland 20602 301-396-4201 & 301-753-2090 Counseling Department 301-392-5539 Counseling FAX 301-392-5515 School FAX 301-396-4135 http://www.ccboe.com/schools/stcharles

Thomas Stone High School - 211054\* 3785 Leonardtown Road Waldorf, Maryland 20601 301-645-2601 & 301-753-1756 Counseling Department 301-392-5508 Counseling FAX 301-392-5503 School FAX 301-932-4278 http://www.ccboe.com/schools/stone

Westlake High School - 211059\* 3300 Middletown Road Waldorf, Maryland 20603 301-645-8857 & 301-753-1758 Counseling Department 301-392-5509 Counseling FAX 301-392-5502 School FAX 301-932-8583 http://www.ccboe.com/schools/westlake

Robert D. Stethem Educational Center - 214778\* 7775 Marshall Corner Road Pomfret, Maryland 20675 301-932-1003 & 301-753-1757 FAX 301-934-0165 Virtual Academy 301-932-6612 http://www.ccboe.com/schools/stethem

- Alternative Programs
- Virtual Academy
- **Evening High School**
- Summer School

\*School code or CEEB Code – used for SAT, ACT, AP, NCAA, and most college applications