

# 2023-2024

# Course Registration Guide

BALTIMORE COUNTY PUBLIC SCHOOLS

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*Baltimore County Public Schools Towson,  
Maryland 21204*



Thanks to the Office of Visual Arts for contributing student artwork for the Course Registration Guide

# BALTIMORE COUNTY PUBLIC SCHOOLS

Darryl L. Williams, Ed.D. ♦ Superintendent ♦ 6901 North Charles Street ♦ Towson, MD ♦ 21204

Dear Team BCPS students, parents, and guardians,

At Baltimore County Public Schools, we are proud of our high school course offerings. Beyond simply satisfying graduation requirements, the core and elective options in this Course Registration Guide provide choices that build on students' prior knowledge, introduce new concepts and ideas, and extend learning in all content areas.

Academic choices made during high school can have a lasting impact on a student's future. We encourage students to make informed decisions and choose courses that will create a pathway toward further learning and enrichment. I hope students will select rigorous courses that provide challenging work, offer multiple perspectives, and open doors to numerous future opportunities.

Parents and guardians play an important role in guiding these choices. In addition, teachers, school counselors, and administrators are invaluable resources in the course selection process.

My focus will always be on high-quality teaching and learning in every classroom, every day. By working together, Team BCPS is providing a well-rounded education that prepares students for college, career, and lifelong success.

Sincerely,



Darryl L. Williams, Ed.D.  
Superintendent

# Introduction

The vision of Baltimore County Public Schools (BCPS) is to produce graduates who have the content knowledge, skills, and attitudes to reach their full potential as globally competitive graduates. All students will achieve when the necessary conditions for learning are provided. Students are encouraged to use the Course Registration Guide to plan with their parents or guardians to select courses and programs that will best prepare them for a successful high school experience. Teachers, school counselors, and administrators are available to help students plan their high school programs. School counselors will schedule appointments to meet with students and parents to assist them in planning for academic and career goals.

The Course Registration Guide aligns with the Baltimore County Public Schools' Compass, the five-year strategic plan that builds on the successes of the system's Blueprint 2.0. The Compass is our pathway to excellence and provides clear direction for everyone involved in education in Baltimore County. The Compass delineates the school system's vision, purpose, core value statements, strategic initiatives, and goals and progress indicators. These goals and indicators are concrete, measurable statements of expectations for all students, with an emphasis on critical 21st century skills. This framework is built on a foundation of clear standards, quality instruction, and individual accountability. The Compass can be found on the [Baltimore County Public Schools Web site](#).

The Course Registration Guide outlines the rigorous curricula, standards, and requirements expected of Baltimore County Public Schools' graduates. The Guide includes Descriptions of Assessments, Programs, and Requirements; Student/Parent Educational Planning forms; Baltimore County Public Schools Graduation Requirements; Career and Technical Education (CTE) Required Computer Science and Engineering Education Graduation Requirement; and Approved Career and Technical Education Completer Programs. The courses described in this Guide reflect rigorous curriculum implemented through high quality instruction. These courses support the performance goals as stated in The Compass. We take pride in offering a variety of quality programs designed to provide students with fulfilling high school experiences.



"Harvest Still Life" by Steven R. at Chase Elementary School, Kindergarten

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#### NOTICE OF NONDISCRIMINATION

Baltimore County Public Schools does not discriminate based on gender, race, disability, color, or national origin and do comply with Title VI, Title VII, Title IX, and Section 504 of the civil rights regulations in all educational programs. All courses are open to both male and female students.

For further information, contact the Office of Equity and Assurance, Baltimore County Public Schools, 6901 Charles Street, Towson, Maryland 21204



"Winter Cardinal" by Liah F. at the Virtual Learning Program, Grade 1

# Purpose: Ways to Use this Document

## 1) As a reference tool

- a. Students and families may refer to the Course Registration Guide to help them to locate information related to a variety of topics. This resource includes detailed descriptions that can help improve a family's understanding of courses and options available within Baltimore County Public Schools. Below is an image that provides an explanation of the components of a course listing.

## 2) To locate graduation requirements

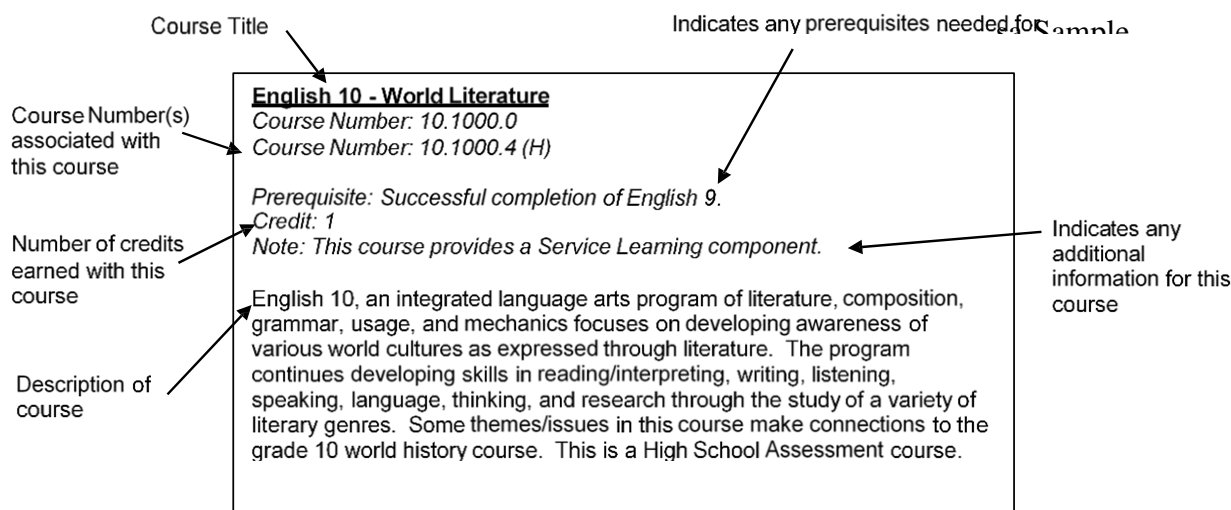
- a. A section of this guide is dedicated to an examination of the graduation requirements as outlined at the printing of this document.

## 3) To create or update a 6 Year Plan

- a. A section of this guide provides an explanation of the 6 Year Plan, an academic and post-secondary advising tool. There are samples of the document included for families to begin the process that will continue with the support of a School Counselor.

## 4) To learn about Completer Programs

- a. A Completer Program is required for graduation and consists of a sequence of courses in a career pathway.



### Important Notes:

- Check the web-based version of this document for changes and updates to information including offered courses, programs, and graduation requirements.
- This guide is best used in combination with registration materials provided by local schools.
- Not all courses listed in this guide are available in all schools.
- Where courses are offered at five or fewer schools, those schools are listed.
- Some courses are determined by enrollment.

### Alternative Activities

In compliance with Section 7-112 of the Education Article of the Annotated Code of Maryland, those courses with alternative activities provided are indicated within this catalog. To request an alternative activity, please see your child's teacher or school administrator.



# Academic Advising: 6-Year Planning

## Developing an Academic and Post-Secondary Plan for Your Future

Baltimore County Public Schools is committed to graduating globally competitive students with post-graduation plans that align with their strengths, interests, and long-term career goals. In support of this mission, our district is offering every student in Grades 7 through 12 the opportunity to develop a 6 Year Plan. Each student meets annually with their School Counselor to develop the plan, which starts by identifying the student's unique interests and aspirations to determine a rigorous high school course schedule leading to on-time graduation, and goals for college and career.

### Parts of the 6 Year Plan

- **Student Ambitions**

Any academic plan should begin with the student's interests. We ask questions on the 6 Year Plan survey to learn more about things like interests, hobbies, extracurricular involvement, favorite subjects in school and college and career aspirations.

- **Goal Setting**

The second step in the 6 Year Plan process is to connect student ambitions to a plan for the future. A key component of academic advising is helping students to find the links between their aspirations and talents and their current and future coursework. Students create SMART Goals that can be viewed and tracked by their parents and their counselor.

- **Course Recommendations**

The third step in the 6 Year Plan process is discussing courses that students can take that align with their ambitions and their future plans. Part of this process involves looking for opportunities to take more challenging courses wherever possible.

- **Exploring Opportunities**

The fourth step in creating a 6 Year Plan is to discuss educational opportunities that may help each student to reach their individual goals. Students discuss with their School Counselor programs that may be available both inside and outside of BCPS and ways that your family can learn more about them.

## HOW CAN PARENTS SUPPORT THE 6-YEAR PLAN PROCESS?

- Talk to your child about their interests. Ask questions about their talents, their favorite subjects in schools and their hobbies. Help students to explore the commonalities so that they can identify strengths and interests that will one day lead to a career.
- Help your child to identify extra-curricular programs that relate to their strengths and interests to help them to continue to cultivate and explore these areas. These may be programs inside and outside of school.
- Talk to your child about their short-term and long-term goals. Help your child to develop meaningful goals that are specific, measurable, attainable, realistic and time-sensitive.
- Work with your child to identify supports and resources that they may have both inside and outside of school that will help them to stay on track with their short term and long-term goals.
- Talk to your child about how their schoolwork relates to their goals. Help them to identify courses that will help them along the path to achieving their goal.
- Encourage your child to take more challenging courses whenever appropriate. Explore the connection between those challenging courses and your child's goals for the future.
- Support your child in identifying the tools available both inside and outside of school which can help them as they attempt to take more rigorous courses. Encourage them to learn about coach class or peer tutoring supports that may be available for students at your school.
- Explore resources with your child that will help them to learn about academic and extracurricular opportunities that may be of interest to them. Learn more about offerings such as Educational Opportunities, Career & Technical Education Completer Programs, AVID, Early College Access, Magnet Programs and much more by exploring Baltimore County Public School's website.
- Throughout all steps in the 6 Year Plan process, consult with your child's School Counselor to learn more about options and recommendations.

## 6 Year Plan Program of Study for Students Entering 9th grade in 2018-2020

EDUCATION LEVELS	GRADE	English/ Language Arts 4 credits	Social Studies 3.5 credits	Science 3 credits	Math 3 credits <span style="color: red;">MUST TAKE MATH EACH YEAR OF HS</span>	Health .5 credit and Physical Education 1 credit	Fine Arts 1 credit	Technology 1 credit	Elective Credits	CTE Courses or Other Completer options
MIDDLE	7									
	8									
SECONDARY	9	English 9	Amer. Gov't	Earth Systems						
	10	English 10	World History	Living Systems						
	11	English 11	US History	Physical Science						
	12	English 12	Personal Finance							
		Fall College Courses	Spring College Courses	Student Verification <i>Please initial and date to confirm 6 Year Plan meeting</i>						
ECAP	9							7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	
	10							9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	
	11							11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	
	12							Junior Conference Parent Signature:		
Articulated CTE Credits			Applied for articulated credits from CCBC or transcribed credits from various universities through CTE Program?							
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A							

## 6 Year Plan Program of Study Students entering 9<sup>th</sup> grade in 2021 & Beyond

EDUCATION LEVELS	GRADE	English/ Language Arts 4 credits	Social Studies 3.5 credits	Science 3 credits	Math 4 credits <b>MUST TAKE MATH EACH YEAR OF HS</b>	Health - 1 credit & Physical Education - 1 credit	Fine Arts 1 credit	Technology 1 credit	Elective Credits	CTE Courses or Other Completer options
<b>MIDDLE</b>	<b>7</b>									
	<b>8</b>									
<b>SECONDARY</b>	<b>9</b>	English 9	Amer. Gov't	Earth Systems						
	<b>10</b>	English 10	World History	Living Systems						
	<b>11</b>	English 11	US History	Physical Science						
	<b>12</b>	English 12	Personal Finance							
		Fall College Courses	Spring College Courses	Student Verification <i>Please initial and date to confirm 6 Year Plan meeting</i>						
<b>ECAP</b>	<b>9</b>			6 Year Plan Review						
	<b>10</b>			7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade			
	<b>11</b>			11 <sup>th</sup> Grade	12 <sup>th</sup> Grade					
	<b>12</b>			Junior Conference Parent Signature:						
<b>Articulated CTE Credits</b>		Applied for articulated credits from CBC or transcribed credits from various universities through CTE Program?								
		<input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b> <input type="checkbox"/> <b>N/A</b>								

NEW page with students entering in 2022-23 and 2023-24

Science: NGSS aligned courses with a laboratory component including one credit in physical science, one credit in Earth/space science (or a course with the topics of Earth/space science integrated and one credit in Life Science.



## Students entering 9<sup>th</sup> Grade during the 2021-2022 School Year

### BCPS Graduation Requirements at-a-Glance

Beginning with students entering the 9th grade class in the 2021—2022 school year, to be awarded a diploma, a student shall be enrolled in Baltimore County Public Schools and shall have earned a minimum of **22.5** credits that include the following specified credits: **Students must also meet Maryland high school assessment requirements as established by the Maryland State Department of Education.**

COURSE CREDITS		
English	4 credits	
Social Studies	3.5 credits 1 American Government credit, 1 World History credit, 1 United States History credit and a .5 Economics credit are required.	
Mathematics	4 credits 1 credit must be Algebra, 1 credit must be Geometry, and two additional math courses. <b>Students must be enrolled in a math course each year of high school.</b>  <i>Students should consult math instructors about their mathematics sequence.</i>	
Science	3 credits High school courses including one credit in physical science, one credit in Earth/space science or a course with the topics of Earth/space science integrated, and one credit in Life Science.  <i>Students should consult science instructors about their science sequence.</i>	
Physical Education	1 credit	
Health	1 credit - .5 credit in grade 9 or 10 and .5 credit in grade 11 or 12	
Technology Education	1 credit - <i>computer science*, engineering, or technology education</i>	
Fine Arts	1 credit	
Completer Program: completion of at least one of the following sequences  <i>*See CTE approved courses and completer programs in this guide</i>	Successful completion of a State-approved career and technical education program *  3 or 4 credit CTE programs - any additional elective is needed for programs that require a minimum of 3-credits	2 credits of the <u>same</u> World Language earned in high school, including American Sign Language and 2 credits in any elective  (Science and math electives are recommended)
STUDENT SERVICE LEARNING		
75 hours of pre-approved student service learning		



## Students entering 9<sup>th</sup> Grade during the 2018-2020 School Year

### BCPS Graduation Requirements at-a-Glance

The Baltimore County Public Schools Graduation Requirements are outlined on this page.  
 All Baltimore County Public Schools offer the required core courses. Electives are courses other than the core courses.  
 Students must meet Maryland high school assessment requirements as established by the Maryland State Department of Education.

COURSE CREDITS			
English	4 credits		
Social Studies	3.5 credits 1 American Government credit, 1 World History credit, 1 United States History credit and a .5 Economics credit are required.		
Mathematics	3 credits 1 credit must be Algebra and 1 credit must be Geometry. Most colleges require at least Algebra 1, Geometry and Algebra 2. <b>MARYLAND STATE REQUIREMENT FOR STUDENTS GRADUATING IN 2018 AND LATER:</b> Students graduating in 2018 and later must be enrolled in a math course during each year of high school. This may result in students earning more than 4 credits in math upon graduation. <i>Students should consult counselors or math instructors about their mathematics sequence.</i>		
Science	3 credits 1 credit must be Biology or Living Systems. High school required courses are aligned with Next Generation Science Standards (NGSS), including Earth, Physical or Life sciences. <i>Students should consult counselors or science instructors about their science sequence.</i>		
Physical Education	1 credit		
Health	.5 credit		
Technology Education	1 credit		
Fine Arts	1 credit		
Completer Program: completion of at least one of the following sequences	Successful completion of a State-approved career and technical education program*  3 or 4 credit CTE programs - any additional elective is needed for programs that require a minimum of 3-credits	2 credits in World Language earned in high school AND 2 credits in any elective (science and math electives are recommended)	2 credits in Advanced Technology courses AND 2 credits in any elective
STUDENT SERVICE LEARNING			
75 hours of pre-approved student service learning			

# Graduation Requirements

## Courses that Fulfill Specific Graduation Requirements

Fine Arts Requirement	Course Number	Number of Credits
Dance I	5200100	1 credit
Dance II	5200200	1 credit
Dance III	5200300, 5200304, 5200305	1 credit
Dance IV	5200400, 5200404, 5200405	1 credit
Dance Company	5271104, 5271105	1 credit
Dance for Athletes	5456000	1 credit
Ballet I	5210105	1 credit
Ballet II	5210205	1 credit
Modern Dance I	5220105	1 credit
Modern Dance II	5220205	1 credit
Dance I Magnet/GT	5202105	2 credits
Dance II Magnet/GT	5202205	2 credits
IB Dance	5203007	1 credit
Jazz I	5230000	1 credit
Theater Arts I	1030100	1 credit
Theater Arts I	1030500	1 credit
AP Art History	4023006	1 credit
Fundamentals of Art	4010100	1 credit
Music and Audio Technology	4580500	1 credit
Music and Society	4591200	1 credit
Music Design and Production	4583100	1 credit
Music Recording and Marketing	4583200	1 credit
Music Theory	4551100	1 credit
AP Music Theory	4553006	1 credit
Jazz Ensemble	4524100	1 credit
Class Piano	4527100	1 credit
Guitar	4528100	1 credit
Percussion Ensemble	4254200	1 credit
Steel Pan Ensemble	4525400	1 credit
Chorus, Orchestra or Band	see guide for course numbers	1 credit
IB Music	4551107	1 credit

Health Requirement	Course Number	Number of Credits
Health 9/10	5110100	½ credit
Health 11/12	5110200	½ credit

Physical Education Requirement	Course Number	Number of Credits
Fitness Foundation/Fitness Mastery	5009000	1 credit

Computer Science, Engineering, or Technology Education Graduation Requirement	Course #	# of Credits
Foundations of Engineering	5512500	1 credit
Engineering Principles and Applications (honors)	5535004	1 credit
Engineering Technology (GT)	5545005	1 credit
Introduction to Engineering Design – PLTW (honors)***	5602004	1 credit
Foundations of Computer Science (honors)	3535004	1 credit
Advanced Placement Computer Science Principles (AP)	3535106	1 credit
Advanced Placement Computer Science A (AP) *Prior programming experience highly recommended.	3535206	1 credit

\*\*\* Offered ONLY at schools with the Project Lead the Way Engineering CTE Completer Program

# Program Requirements and Options

## Student Service Learning

### Student Service-Learning in Baltimore County Public Schools

Baltimore County Public Schools provides students with opportunities to earn these hours through class projects (integrated into the curriculum), student-initiated service activities in the community, extra-curricular activities, and special projects.

BCPS has attempted to include enough service-learning class projects into the curriculum so students that transfer into BCPS or have been absent for some projects – will still be able to earn 75 hours strictly from school-based projects.

### What is Service-Learning?

According to the Maryland State Department of Education, service-learning is: "...a teaching method that combines meaningful service to the community with curriculum-based learning. Students improve their academic skills by applying what they learn in school to the real world; they then reflect on their experience to reinforce the link between their service and their learning."

### The Maryland Service-Learning Requirement

The Maryland State Board of Education passed a service-learning requirement in July 1992 that requires students to earn 75 service-learning hours prior to graduation. School systems were given the option of allowing students to gain service hours during middle school grades in addition to high school grades. Here is a chart of the current course with infused hours:

Grade 6	Grade 7	Grade 8	Grades 9 - 10
Business/Comp. Science Health English Tech Ed ( <i>where offered</i> )	Art Business/Comp Science Tech Ed ( <i>where offered</i> ) Family and Consumer Sciences ( <i>where offered</i> )	Business/Comp. Science Health Family and Consumer Sciences ( <i>where offered</i> ) Science Social Studies	Science (Earth Systems) English 9 American Government Tech Ed ( <i>where offered</i> )

Students also may complete independent service-learning projects outside of school. All Independent service-learning projects need to be pre-approved by the school-based coordinator to ensure alignment with the standards and guidelines.

Approved hours completed outside of school will count toward the graduation requirement. Each year, BCPS recognizes the top 5 students in Grades 8 who earn more than 75 Independent Hours and the top 10 graduating seniors who earn 150 or more Independent service-learning hours.



## Components of a Service-Learning Project

Preparation is the first step of service-learning. During this step, students work with teachers and/or community members to: Identify issues affecting the community, related to health, education, the environment, or public safety.

Select project sites and how to address a selected issue. Plan service-learning reflection. Explore the concept of active citizenship.

Action is the next step of service-learning. Students can carry out their service in one of the following ways:

**Direct Service** – Students have face-to-face contact with service recipients. Examples include tutoring other students, serving meals at a homeless shelter, and working with the elderly in a senior citizen community.

**Indirect Service** – Students perform a service without having direct contact with the recipient. Usually, resources are channeled to help alleviate a problem. Examples include food and clothing drives, environmental projects, and raising money for a cause through activities such as a walk-a-thon.

**Advocacy** – Students educate others about a selected issue with the goal of eliminating the causes of a problem. Examples include writing letters to legislators or newspaper editors, creating web pages, creating, and displaying posters within the community, writing, and performing informative plays, creating educational materials for other target groups, and legislative testimony.

**Reflection** – is the last step of service-learning. During reflection, students look back at the completed project and review what they have learned. Reflection may be done individually (e.g., journals, scrapbooks, or teacher-student meetings) or as a group (e.g., class evaluation of the project based on the goals and outcomes).

More information about the Baltimore County Service-Learning Program can be found on the BCPS Website: [Student Service Learning - Division of Chief of Staff \(bcps.org\)](http://bcps.org)

## Maryland High School Certificate

The decision to award a student with a disability a Maryland High School Certificate of Program Completion may not be made until after the beginning of the student's last year in high school unless the student is participating in the Alternate Maryland School Assessment program (ALT-MSA). This is intended to ensure that all students, as required by both the Individuals with Disabilities Education Act and No Child Left Behind, continue to have access to the general curriculum and the school systems remain committed to the progress of students with disabilities until the last year of the student's eligibility. [COMAR 13A.03.02.09 D (3)]

## Program Completion Options Available to Students

To be awarded the Maryland High School Diploma, a student must have earned a minimum of 21 credits (or 22.5 credits for students entering 9th grade in 2021), passed all required high school assessments, and accrued 75 hours of service learning at the completion of grade 12.

The following alternatives are available to students on a limited and approved basis. Each request is considered individually. The general procedures to be used in applying for options begin with a written waiver request from parent(s)/guardian(s) and submitted to the principal for review and recommendation. An appeal of the principal's recommendation must be made in writing to the appropriate Community Superintendent.

Early admission is permitted if, by the end of the grade 11, a student has been accepted to an accredited college or to an approved vocational, technical, or post-high school before high school graduation and wants to complete Baltimore County Public Schools credit requirements during the first year in college or in the approved post-high school program. All state competency and student service requirements must be met before early admission is granted.

At the conclusion of a full year of study (agreed to be 24 semester hours), a written request for the high school diploma is submitted to the superintendent with a letter from the postsecondary institution to the high school principal indicating successful completion of a year of study. [Granted under the authority of COMAR 13A.03.02.10 C (1).]

General Educational Development (GED) Testing Program may satisfy the requirements for a Maryland High School Diploma provided the student has achieved satisfactory performance on approved general educational development tests. [Granted under the authority of COMAR 13A.09.10.02.]

Waivers of full-time attendance may be granted for:

- Concurrent enrollment in college and the senior year of high school.
- Concurrent enrollment in work-based experience.
- Full-time enrollment in an Extended Day program.

To participate, students must attend scheduled classes, and then leave the school building and grounds to pursue the approved released-time program. Students and/or parents/guardians must provide transportation to carry out the optional program. Students must obey any other rules necessary to implement their programs.

Alternatives for structuring programs are permitted for individuals or groups of students to fulfill graduation requirements. An alternative plan may include a waiver of the fourth year if all credit, competency prerequisites, and student service requirements are met and if the local superintendent or designee determines that this waiver is in the best interest of the student(s). Consideration for and implementation are done on a case-by-case basis. [Granted under the authority of COMAR 13A.03.02.11.]

Students who intend to apply for any of these options must see their school counselor to incorporate these options into their academic plan by the end of 10th grade.

## Advanced Placement Program (AP)

The Advanced Placement Program represents a cooperative effort between secondary schools and colleges and universities. It is a program of introductory college-level courses for students who are willing to apply themselves to college level studies during their high school years. The Advanced Placement Program offers the opportunity to sharpen academic skills in preparation for college and to demonstrate accomplishment through successful completion of AP exams. Baltimore County Public Schools pays for one AP Exam per student each spring.

Participation in AP courses demonstrates to colleges and universities students' willingness to complete more difficult courses and can be advantageous in the admissions process. Students who successfully complete AP courses and exams are exempted from introductory courses by many colleges and universities. See your school counselor for the Advanced Placement courses offered in your school.

AP Capstone Diploma™: The College Board grants an AP Capstone Diploma to students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing.

AP Seminar and Research Certificate™: The College Board grants an AP Seminar and Research Certificate to students who earn scores of 3 or higher in both AP Seminar and AP Research.

## PSAT 8/9 and PSAT/NMSQT

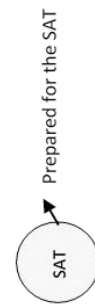
The Preliminary SAT8/9 and the Preliminary SAT/National Merit Scholarship Qualifying Tests (PSAT8/9 and PSAT/NMSQT) are cosponsored by the College Board and National Merit Scholarship Corporation (NMSC). They are standardized tests that provide practice for the SAT® and measure critical reading skills, math problem-solving skills and writing skills. The scores from the PSAT/NMSQT are used to determine eligibility and qualification for the National Merit Scholarship Program. Baltimore County Public Schools pays for all enrolled students in grade 9 to take the PSAT8/9 and for all students in grades 10 and 11 to take the PSAT/NMSQT each fall.

## ACT

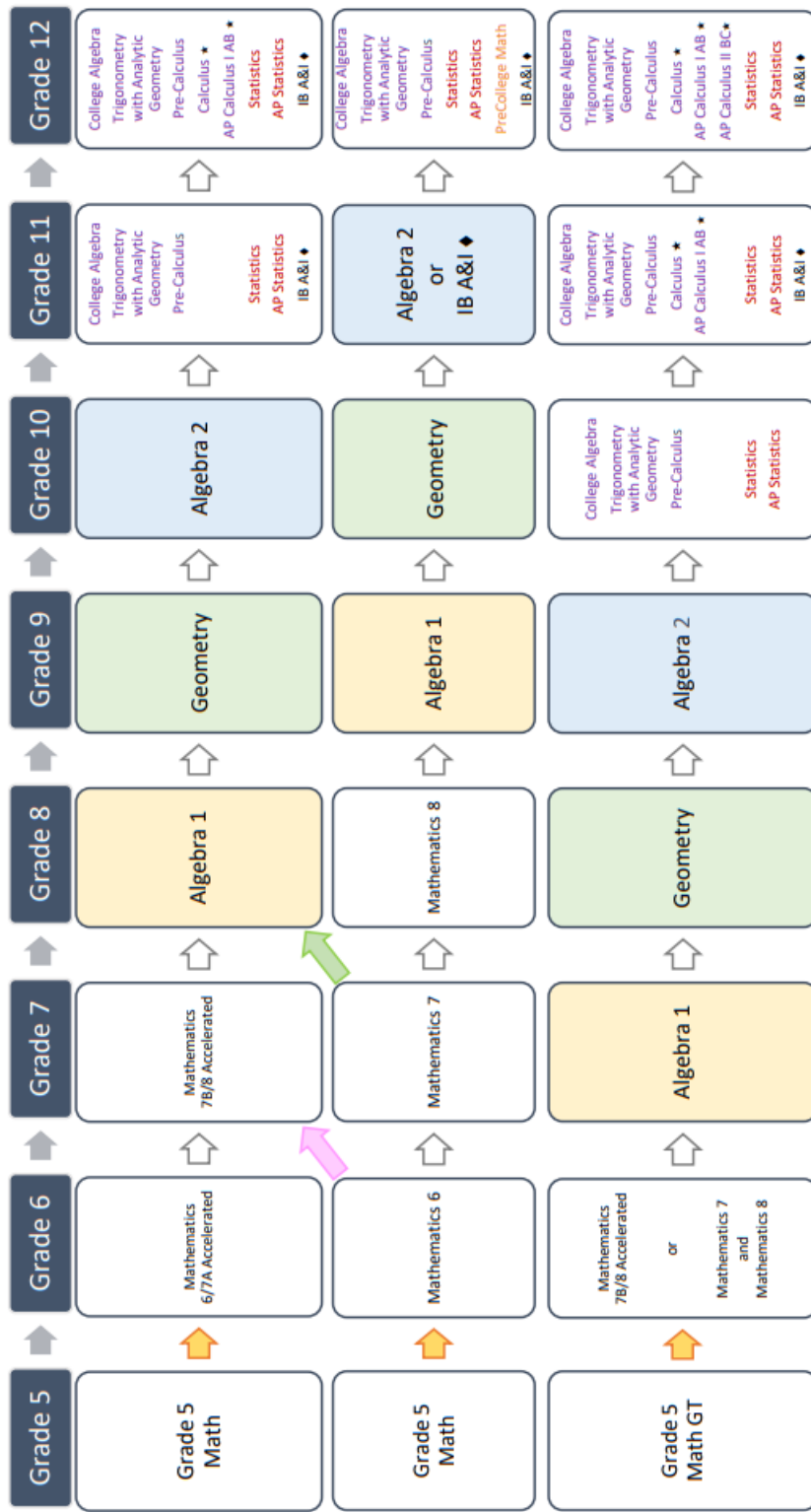
The ACT® test is a college admissions test that consists of four tests: English, Mathematics, Reading, and Science Reasoning with an optional Writing test. The main four tests are scored individually on a scale of 1-36 and a Composite Score is provided which is the whole number average of the four scores. The ACT® test assesses high school students' general educational development and their ability to complete college-level work. The multiple-choice tests cover four skill areas: English, mathematics, reading, and science. The Writing Test, which is optional, measures skill in planning and drafting a short essay.

## SAT

The SAT Reasoning Test is a college admissions test that measures the disciplinary literacy and mathematical reasoning skills students have developed over time. It is used by colleges as one measure of a student's readiness for college level course work. Students who intend to take the SAT should consider the course sequences shown on the following pages for the English/Language Arts and Mathematics programs to prepare to master the requisite content for success on the SAT. Baltimore County Public Schools' pays for all enrolled students in grade 11 to participate in a system-wide, school-day administration of the SAT each spring.

[illegible]

# Baltimore County Public Schools Mathematics Program Grades 6 – 12



## Key:

Orange arrow: Data Checkpoint: Grade 5 Universal Screening.

Pink arrow: Data Checkpoint and Summer Programming to cover Math 7A content (Math Pi-oncers).

Green arrow: Data Checkpoint and Spring / Summer Programming to cover Math 8 content (Sprummer Course).

★: Courses labeled with a star (★) require prerequisite courses beyond Algebra 2. Refer to the course description for prerequisite requirements for these courses.

♦: IB Applications and Interpretations (IB A&I) is a two year course only offered at Kenwood High School and New Town High School in their International Baccalaureate Diploma Programme.

## Glossary of Acronyms

AA	Advanced Academics
ALT-MISA	Alternate Maryland Integrated Science Assessment
AP	Advanced Placement (Program)
AVID	Advancement Via Individual Determination
BCPS	Baltimore County Public Schools
CAD	Computer Aided (Technical) Drafting
CAM	Computer Automated Manufacturing
CCBC	Community College of Baltimore County
CINS	Computer Information Systems (Information Technology)
CIP	Classification of Instructional Programs
CTE	Career and Technical Education
ESOL	English for Speakers of Other Languages
EFL	English as a Foreign Language
GT	Gifted and Talented (Education)
FARMS	Free and Reduced Meals
HTML	Hypertext Markup Language
HSA	(Maryland) High School Assessments
H	Honors
IB	International Baccalaureate
JROTC	Junior Reserve Officers Training Corps
MISA	Maryland Integrated Science Assessment
NGSS	Next Generation Science Standards
PARCC	Partnership for Assessment of Readiness for College and Careers
PSAT/NMSQT	Preliminary Scholastic Assessment Test/National Merit Scholarship Qualifying Test
RMVP	Retail Merchandising and Visual Presentation
SAT	Scholastic Assessment Test
TOEFL	Test of English as a Foreign Language



“Winter Fox” by Anissa C. at Maiden Choice Elementary, Kindergarten

## **SCHOOL ABBREVIATIONS**

CT	Catonsville High
CH	Chesapeake High
DL	Dulaney High
DN	Dundalk High
ET	Eastern Technical High
FH	Franklin High
CC	George Washington Carver Center for Arts and Technology
HH	Hereford High
KN	Kenwood High
LN	Lansdowne High
LR	Loch Raven High
MM	Milford Mill Academy
NT	New Town High
OV	Overlea High
OM	Owings Mills High
PR	Parkville High
PT	Patapsco High School and Center for the Arts
PH	Perry Hall High
PK	Pikesville High
RA	Randallstown High
RC	Rosedale Center
SPT	Sollers Point Technical High
SP	Sparrows Point High
TW	Towson High
WST	Western School of Technology
WD	Woodlawn High

## Descriptions of Programs

### Advancement via Individual Determination (AVID)

Advancement Via Individual Determination (AVID) is a K-12 college readiness system designed to increase the academic success of students. The AVID College Readiness System (ACRS) accelerates student learning, uses research-based methods of effective instruction, provides meaningful and motivational professional learning, and acts as a catalyst for systemic reform and change. AVID promotes student success in rigorous college preparation curricula. The AVID Program is implemented in all BCPS middle schools and all comprehensive high schools. Please see your school's AVID Site Coordinator for an application.

### CAREER AND TECHNICAL EDUCATION COMPLETER PROGRAMS

Career and Technical Education (CTE) programs of study provide high school students with both academic and technical/workplace skills aligned with current and emerging workforce needs. Through CTE, students are taught subject matter related to career pathways – which include four-year college degree programs, community college programs, early college access programs, registered apprenticeships, and industry certification. Course descriptions for Career and Technical Education programs in 10 career clusters, JROTC, and work-based learning from Business Education, JROTC, School to Career Transition, Technical Programs, and Technology Education are described at the end of the Course Registration Guide.

Completer programs are listed by career cluster. A completer program contains a minimum of three or four credits (not individual courses) offered in a prescribed sequence in a program area. Upon graduation, students can enter employment, register for an apprenticeship, earn industry certification, attend a private/postsecondary school, and/or earn a certificate or degree at a two-, or four-year college. A work-based learning component may be available to eligible students in their junior and senior year. Note: Program availability may be limited to students in their area or community of the high school or technical center. Magnet schools and programs require an application, usually in November the year prior to high school.



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

English Learners receiving English language support attend high school at an ESOL center. Based on their level of English proficiency, students take a combination of ESOL and content courses. ESOL I confers English 9 credit, while ESOL II confers English 12 credit. ESOL Newcomer, ESOL Academic Foundations, ESOL III, ESOL IV, and ESOL V may be applied as world language credits for English Learners. ESOL Math will be applied as a math credit. All other ESOL courses confer elective credits. In the spring of each school year, students are assessed for progress and/or exit from the ESOL program using the state mandated ELP test of English language proficiency in listening, speaking, reading, and writing. Criteria for exit from the program are set by the state and are uniform across the state of Maryland.



## **ADVANCED ACADEMICS/GIFTED AND TALENTED K-12 EDUCATION**

Advanced Academics/Gifted and Talented Education serves students who, when compared with others of their age, experiences, or environment, demonstrate high potential or performance in academic, creative, or technical areas. These students require learning experiences beyond the standard curriculum. Curriculum enrichment and acceleration are how instructional experiences are differentiated to encourage the development of students' outstanding potential. These instruction experiences provide research-based differentiated curricula to meet the needs of students who demonstrate or have the potential to demonstrate advanced learning capabilities, K-12. The overarching goal of Advanced Academics/Gifted and Talented Education is to enhance students' capabilities to develop the learning and thinking characteristics of experts: advanced content knowledge organized around key ideas and principles applied meaningfully in problem solving.

## **INTERNATIONAL BACCALAUREATE (IB) PROGRAM**

The International Baccalaureate (IB) Program provides motivated students with an opportunity to pursue a rigorous university preparatory curriculum with a global perspective. Students in Grades 9 and 10 participate in interdisciplinary units across all content areas. In grades 11 and 12, students participate in the internationally recognized IB Diploma Programme (available at Kenwood and New Town High Schools) or the IB Careers-Related Programme (available at New Town High School).

Based on individual interest, students will select and explore a variety of courses in depth and breadth to develop individualized research and community-based action projects. Students completing IB courses and exams may receive college credit for courses taken in high school, like the way students receive credit for Advanced Placement courses. Students completing requirements for the IB Diploma may receive up to 30 college credits. The IB Program is one high school magnet program option, which requires an application be submitted by the application deadline the year prior to enrollment.

## **MAGNET PROGRAMS**

Coordinated through the Office of Educational Opportunities, magnet programs are theme-related curricula and instructional programs that may not be available as comprehensive school program options; serve as incubators for innovative instructional practices; draw students across student attendance boundaries, in accordance with state- rated capacity; and are accessed through a centralized application and admissions process. Baltimore County Public Schools presently have a wide variety of elementary, middle, and high school magnet programs across the county. Magnet schools and programs require an application, submitted by the application deadline the year prior to enrollment.

## **REQUESTING CREDIT FOR COURSES OUTSIDE OF BCPS BY CURRENTLY ENROLLED STUDENTS**

All Courses, other than the approved Dual Credit courses at the Community College of Baltimore County (CCBC), taken for high school credit by students who are currently enrolled in Baltimore County Public Schools, must be approved prior to being taken and must be reviewed by BCPS curricular offices for Maryland curriculum alignment to state curriculum expectations and BCPS' standards of rigor. No Maryland State required testing course may be taken for credit outside of the Baltimore County Public Schools by students concurrently enrolled in BCPS. Students must see their counselor for the approved application forms prior to taking any course other than the approved Dual Credit courses at CCBC for credit outside of BCPS. All fully online courses taken outside of BCPS must be pre-approved by the school counselor and enrollment must be facilitated by BCPS. Students may only take fully online courses approved by MSDE.

## **DUAL CREDIT PROGRAM**

The Dual Credit Program is an early college access program offered to BCPS high school students. Dual Credit courses are approved college courses that meet high school graduation requirements for Maryland and standards of rigor for BCPS. The Dual Credit Program in partnership with CCBC offers select, pre-approved college courses that provide both high school and college credit for BCPS students attending CCBC. Please visit the [Office of College and Career Readiness website](#) for a current list of CCBC/BCPS Dual Credit Courses.

## **TUITION FREE PROGRAM**

The Tuition Free Program is an early college access program offered to BCPS high school freshmen, sophomores, juniors, and seniors in partnership with the Community College of Baltimore County (CCBC). BCPS High School students may take an unlimited number of non-credit-bearing remedial courses, non-credit-bearing courses that lead to industry credentials, and credit-bearing courses tuition free during any semester (summer, fall, winter, and/or spring). CCBC will pay 50% of the tuition and BCPS will pay 50% of the tuition. BCPS will also pay for the students' fees and books.

## **DIPLOMA TO DEGREE (D2D)**

The Diploma to Degree (D2D) program is designed for students who want to graduate from Baltimore County Public Schools (BCPS) with a high school diploma and to simultaneously earn an Associate of Arts Degree in General Studies at the Community College of Baltimore County (CCBC). Focused on academic rigor and preparation for the twenty-first century work force, this program allows students to earn college credits that they can easily transfer to Maryland colleges and universities in pursuit of advanced degrees.

Students must earn a college readiness score on the PSAT in their 9th grade year to be considered for this program. Students can earn credits that will allow them to graduate with both a high school diploma and an associate degree through several options:

- CCBC coursework - earn college credits by taking a college course.
- Credit by exam - earn college credits by achieving a certain score on an exam such as the AP Test.
- Articulation - receive college credit for approved courses taken in high school.
- Dual credit - take a college course that awards both high school and college credit.

## **DIPLOMA TO CREDENTIAL (D2C)**

The Diploma to Career program is designed for BCPS students who want to earn workplace certification or credit certificate with their high school diploma. Students enrolled in a BCPS Career and Technical Education (CTE) Pathway program may apply certain high school courses towards the certification. Please see your school counselor for specific eligibility requirements and details.

## **EDUCATIONAL OPPORTUNITIES**

Middle and high school students may choose to access learning using innovative digital learning strategies and resources that allow our students and teachers to engage in responsive teaching and learning anchored in performance and proficiency. These opportunities may include use of self-paced blended learning, approved online courses, purchased digital content, BCPS created and curated digital learning objects accessed through BCPS One, virtual instruction delivered through webinars, and real time student performance data. Students may access

Educational Opportunities programs for any of the following reasons:

- Expanding the range of courses and opportunities available to them.

- Taking a course when there are too few students in the school to assign a teacher to teach that course.
- Accessing courses that conflict with their schedules.
- Accessing courses beyond their regular schedule.
- Recovering or advancing credits.

The following programs and opportunities are offered to students through the Office of Educational Opportunities:

**eLearning** – Students access regularly scheduled middle and high school courses aligned with BCPS course scope and sequence through BCPS One and virtual webinars. Courses are blended to include independent online work, peer-to-peer group work and teacher directed instruction.

**Extended Day Learning Program (EDLP)** - BCPS high school students access courses in this part-time program beyond the traditional school day in the evenings or on Saturday mornings at one of five high schools in Baltimore County when students return to a brick-and-mortar setting. Courses are self-paced and blended to include independent online work, small group work and teacher-directed instruction.

**Extended Year Learning Program (EYLP)** - Students access personalized middle school reading and mathematics support or high school courses during the summer, most often at the middle or high school in their attendance area.

**Maryland Virtual Learning Opportunities (MVLO)** - Students access high school courses approved by MSDE and BCPS content offices through vendor provided platforms with vendor provided instructors. Students work independently with the support of a school-based coach. Students must be enrolled in their zoned school to access online courses.

**School Programs for Acceleration and Recovery of Credits (SPARC)** - Students access high school courses flexibly scheduled through their zoned school. Courses are self-paced and blended to include independent online work, peer-to-peer group work and teacher directed instruction. Students must be enrolled in their zoned school to access SPARC courses.

**Home and Hospital Instruction** - The Home and Hospital program is designed to provide instruction to students enrolled in BCPS in grades Pre-School (Age 3) through Grade 12 who are unable to attend their comprehensive schools due to certified physical illnesses, emotional conditions, or pregnancy conditions.

**Prevention and Intervention** - Youth ages 14-21 are provided comprehensive services during incarceration at the Baltimore County Detention Center (BCDC). The instructional program uses the same instructional model provided in EDLP, EYLP and SPARC.

Each Educational Opportunities program has unique course offerings; please visit the Educational Opportunities webpage for more information about specific courses available.

**Homeschool** - is an educational option for a parent/guardian who opts to provide instruction to his or her own child in lieu of enrolling the student in a public, nonpublic, or church-exempt school that is registered in the State of Maryland. Parents should consult school counselors and the Homeschool Office before electing this option.

## MARYLAND SCHOLARS

In Maryland, we are committed to ensuring that:

- High school graduates are well prepared to succeed in college, the workplace, and in life.
- Our workforce is highly skilled and productive.
- Our young people can contribute to and benefit from a strong, prosperous economy.

A program originally sponsored by the U.S. Department of Education – State Scholars Initiative – is helping us achieve these goals. Based on highly selective criteria, Maryland was chosen by The Center for State Scholars as one of the first five states to implement a State Scholars program that is designed to encourage students to complete a rigorous course of study in high school.

In partnership with Governor, State Superintendent of Schools, and 24 local superintendents, the Maryland Business Roundtable for Education – a nonprofit coalition of leading employers – is working to increase the percentage of Maryland high school students completing a course of study that will prepare them for post-secondary success in higher education or the workforce.

A major focus for the Scholars program is engaging Grade 8 and 9 students in the importance of their course selections for high school and the pivotal role higher level math and science courses play in future career opportunities and reinforcing these messages throughout high school.

Maryland Scholars is an integral component of MBRT's multi-faceted, award-winning Achievement Counts campaign – which demonstrates to students, parents, and the community the critical connection between achievement in school and success in the workplace and in life. Each strategic and interwoven component of the campaign – Speakers Bureau, Maryland Scholars, Parents Count, BeWhatIWantToBe Web site – was designed to strengthen and reinforce the others and to establish a continuum of effort that motivates and supports middle and high school students.

### The Maryland Scholars Course of Study

- 4 credits of English
- 3 credits of Mathematics (Algebra 1, Geometry, Algebra 2)
- 3 credits of Science (Biology, Chemistry, and one additional lab science—Physics preferred)
- 3 credits of Social Studies/History credits
- 2 credits of the same World Language (Students must attain a 3.0 GPA to qualify.)

### The Maryland Scholars Course of Study (Graduating classes 2016 and beyond)

- 4 credits of English
- 4 credits of Mathematics (including Algebra 1, Geometry, Algebra 2)
- 3 credits of Science (Biology, Chemistry, Physics\*\*)
- 3 credits of Social Studies (U.S. History, World History, Government)
- 2 credits of the same World Language

Courses in bold are beyond state graduation requirements

\*\*A 3rd lab science may be substituted for

Physics. (Students must attain a 3.0 GPA to qualify.)

The Maryland Scholars program provides workplace volunteers to help motivate and guide Grades 8 and 9 students as they prepare to select courses for their high school schedule and incentives to encourage students to stay in the program throughout high school.

**Maryland Business Roundtable for Education  
5520 Research Park Drive, Suite 150 Baltimore, Maryland 21228**

# Visual Arts

The Baltimore County Visual Arts Program is aligned with the national and state standards for visual arts and guided by The Compass. Its mission is to educate all students in creative thinking, creative production, and the artistic process while developing their understanding and appreciation of the artistic achievements of people from various times, places, and cultures. The Office of Visual Arts supports the implementation of a rich, rigorous visual arts curriculum and encourages a culture of artistic thinking, learning, creative production, and achievement of excellence.

**Notes:** All students must earn one full credit in Fine Arts. This Fine Arts graduation requirement may be satisfied by successful completion of Fundamentals of Art, Foundations of Art, or AP Art History-Advanced Placement.

Artistic Process Interest	Grade 9 Level 1	Grade 10 Level 2 (Intermediate)	Grade 11 Level 3 (High Intermediate)	Grade 12 Level 4 (Advanced)
Drawing & Painting	Fundamentals of Art or Foundations of Art*	Intermediate Art or Drawing & Painting*	Studio Practice I, Painting 1*, 2*, Figure Drawing 1*, IB Art and Design 1*	Studio Practice II, Painting 2*, 3*, Figure Drawing 2*, IB Art and Design 2*  (AP Studio Art: Drawing or 2D Design)
Photography	Fundamentals of Art or Foundations of Art*	Photography 1 & Photography 2	Photography Studio, Photojournalism	Advanced Photography Studio  (AP Studio Art: 2D Design)
Digital Arts & Design	Fundamentals of Art or Foundations of Art*	Digital Arts	Digital Arts Studio	Digital Arts Studio Advanced  (AP Studio Art: 2D Design)
Multimedia & Televideo	Fundamentals of Art or Foundations of Art*	Multimedia Production*, Televideo Production*	Multimedia Production Intermediate*, Televideo production Intermediate *	Multimedia Production Advanced*, Televideo production Advanced *  (AP Studio Art: 2D Design)
Ceramics	Fundamentals of Art or Foundations of Art*	Design in Clay 1 & Design in Clay 2	Design Clay/Mixed Media	Design in Clay/Mixed Media Advanced AP 3D Design Studio  (AP Studio Art: 3D Design)
Sculpture	Fundamentals of Art or Foundations of Art*	Sculpture 1*	Sculpture 2*, Figure Sculpture 1*	Sculpture 3*, 4*, Figure Sculpture 2* AP 3D Design Studio  (AP Studio Art: 3D Design)

*\*Magnet Program Offering Only*

## Art History-Advanced Placement

**Course Number:** 40.2300.6

**Prerequisite:** None

**Credit:** 1

**Note:** This course is a concentrated study in art and satisfies the 1 credit Fine Arts graduation requirement.

Students examine and critically analyze major forms of artistic expression from the past and present and from a variety of global cultures. In this course students engage in both visual and historical study about art and its contexts to prepare for the AP Art History Exam.

## Art Seminar

**Course Number:** 40.9200.0

**Prerequisite:** None

**Credit:** ½

**Note:** This course is for ½ of an elective credit.

This course allows students to explore art concepts and media through the study of past and present cultures. It is designed to acquaint them with the visual arts as a means of self-expression, to use design criteria to make consumer judgments, and to develop an awareness of art expressions throughout history.

## Art and Technology

**Course Number:** 40.2200.0

**Credit:** ½

**Note:** This course is for ½ of an elective credit.

Students will be provided opportunities to understand ways that art and design concepts can be used for visual communication and presentation. They will study advances in technology and use technological applications with traditional art tools for developing purposeful visual products.

## Fundamentals of Art (Art I)

**Course Number:** 40.1010.0

**Course Number:** 40.1010.5 (GT)

**Prerequisite:** None

**Credit:** 1

**Note:** This is the foundation course for a concentrated study in art and satisfies the 1 credit Fine Arts graduation requirement.

Students will develop the foundational skills needed to communicate ideas visually while developing understandings about the contributions of various artists/craftsmen to their cultures. Emphasis is placed on observational drawing and exploring composition and design in the art of various cultures using drawing, painting, and 3-D media. Students will be encouraged to keep a sketchbook and a portfolio.

## Intermediate Art

**Course Number:** 40.3000.0

**Course Number:** 40.3000.0

**Course Number:** 40.3000.5 (GT)

**Prerequisites:** Successful completion of Fundamentals of Art

**Credit:** 1

This course provides opportunities for students to refine skills developed in Fundamentals of Art. Students will study and critique artistic styles and trends and apply knowledge gained in their own work. Emphasis is placed on working from observation using drawing, painting, and 3-D media and incorporating imaginative ideas to begin developing a personal style. Students in this course will be required to maintain a sketchbook and a portfolio.

## Digital Arts

**Course Number:** 40.2100.0

**Course Number:** 40.2100.5 (GT)

**Prerequisites:** Successful completion of Fundamentals of Art

**Credit:** 1

This course provides opportunities in career exploration in a variety of graphic arts fields. It develops the student's ability to use technology for visual communication and focuses on art processes that develop awareness of the attitudes and disciplines required in the graphic arts field. Emphasis is placed on the development of skills and understandings in the following areas: drawing and design for illustration, advertising, and construction/display and the use of drawing and graphic arts applications on the computer.

## Digital Arts Studio (AP Studio Art: 2D Design)

**Course Number:** 40.4500.0

**Course Number:** 40.4500.5 (GT)

**Course Number:** 40.4500.6 (AP)

**Prerequisites:** Successful completion of Digital Arts

**Credit:** 1

Emphasis is on developing knowledge and skill in contemporary art and technology of image processing and developing an understanding of art/technology applications in contemporary enterprises and institutions. Students will apply knowledge of design concepts and traditional art media in developing effective aesthetic expression, technical competency, and critical judgment to various image digitizing and manipulating technology applicable for a variety of purposes. Students will maintain a portfolio of artwork, which may be used for AP and/or college or scholarship competitions.

## Digital Arts Studio Advanced (AP Studio Art: 2D Design)

**Course Number:** 40.4510.0

**Course Number:** 40.4510.5 (GT)

**Course Number:** 40.4510.6 (AP)

**Prerequisites:** Successful completion of Digital Arts Studio

**Credit:** 1

Emphasis is on refining skills and knowledge in design, digital image processing, and experimentations in traditional art media and the computer to produce multimedia artwork that include animation, Web page design, video, etc. with the purpose of developing an understanding of art/technology applications in contemporary enterprises and institutions. Students will maintain a portfolio of artwork that will serve a variety of purposes: applications for AP, college, or scholarship competitions, and/or as professional presentations for jobs.

## Studio (AP Studio Art: 2D Design, AP Studio Art: 3D Design, AP Studio Art: Drawing)

**Course Number:** 40.3110.0

**Course Number:** 40.3110.5 (GT)

**Course Number:** 40.3110.6 (AP)

**Prerequisites:** Successful completion of Intermediate Art

**Credit:** 1

This course provides flexibility in planning an independent program for the highly motivated, honors, or GT art student. Emphasis is on preparing a portfolio that reflects the development of a personal style and/or artistic focus. Opportunities to help students develop depth, breadth, and quality in creating artworks will be provided through the investigations of ideas and art problems, and the exploration and experiences in a variety of media. Students have the option of submitting their portfolio for review by the AP College Board. Career guidance and scholarship opportunities in the visual arts are provided.

## Studio Advanced (AP Studio Art: 2D Design, AP Studio Art: 3D Design, AP Studio Art: Drawing)

**Course Number:** 40.3120.0

**Course Number:** 40.3120.5 (GT)

**Course Number:** 40.3120.6 (AP)

**Prerequisites:** Successful completion of Studio.

**Credit:** 1

This course is for students who want to continue advanced level study begun in Studio. It provides flexibility for planning independent study and focuses on experiences that further develop personal artistic style through refinement in three areas of emphasis: 1) quality, 2) concentration in one or more areas of interest, and 3) breadth of experiences in exploring formal, technical, and expressive qualities of works. Students have the option of submitting their portfolios for review by the AP College Board. Career guidance and scholarship opportunities in the visual arts are provided.

## Photography I

**Course Number:** 40.4010.0

**Course Number:** 40.4010.5 (GT)

**Prerequisite:** Successful completion of Fundamentals of Art

**Credit:** ½

**Note:** Photography I & II courses should be scheduled consecutively. Students may use their own personal cameras in the class, but personal cameras are not required.

In these courses, students will have opportunities to learn the basic processes and techniques of photography which include elements of the 35mm and digital camera, composition in photography, film processing, and editing.

## Photography II

**Course Number:** 40.4020.0

**Course Number:** 40.4020.5 (GT)

**Prerequisite:** Successful completion of Fundamentals of Art and Photography I

**Credit:** ½

**Note:** Photography I & II courses should be scheduled consecutively. Students may use their own personal cameras in the class, but personal cameras are not required. Students may be asked to supply their own subject matter for photography projects.



In these courses, students will have opportunities to learn the basic processes and techniques of photography which include elements of the 35mm and digital camera, composition in photography, film processing, and editing.

## Photojournalism

**Course Number:** 40.4210.0

**Course Number:** 40.4210.5 (GT)

**Prerequisites:** Successful completion of Photography I and II and Journalism I

**Credit:** 1

Photojournalism I introduces the field of photojournalism. Students will build on technical expertise and artistic understanding gained in Photography I and II and the information gathering and writing techniques gained in Journalism I to become effective reporters. They will work on assignments focusing on spot and general news, sports, features, illustration, and human interest both inside and outside the school.

## Photojournalism Advanced (AP Studio Art: 2D Design)

**Course Number:** 40.4310.0

**Course Number:** 40.4310.5 (GT)

**Course Number:** 40.4310.6 (AP)

**Prerequisite:** Successful completion of Photojournalism

**Credit:** 1

Photojournalism II develops the skills and characteristics necessary to become effective photojournalists while learning the philosophy and history of photojournalism. Students will critically examine their work as they develop a portfolio that encompasses all the major areas of photojournalism. This portfolio may be submitted to fulfil the requirements of the AP 2D Design Portfolio.

## Photography Studio (AP Studio Art: 2D Design)

**Course Number:** 40.4100.0

**Course Number:** 40.4100.5 (GT)

**Prerequisites:** Successful completion of Photography I and II

**Credit:** 1

Students will explore and develop skills in composition, advanced techniques in digital and/or darkroom film processing, and presentation of artwork. Students will explore the purposes of photography and begin to develop a portfolio of artwork. This portfolio may be considered for submission to the AP 2D Design Portfolio exam.

## Photography Studio Advanced (AP Studio Art: 2D Design)

**Course Number:** 40.4110.0

**Course Number:** 40.4110.5 (GT)

**Course Number:** 40.4110.6 (AP)

**Prerequisites:** Successful completion of Photography Studio

**Credit:** 1

In advanced courses, emphasis will be on composition, advanced techniques in digital and/or darkroom film processing, and presentation of artwork. Students will explore the purposes of photography and develop a portfolio of artwork. This portfolio may be submitted to fulfill the requirements of the AP 2D Design Portfolio exam.

## Environmental Photography MAG (SP)

**Course number:** 25.9610.0

**Prerequisite:** None

**Credit:** 1

This course provides students with an understanding of photographic media techniques and processes to explore the environment in context. These courses focus on the development of photographic compositions through manipulation of the fundamental processes of artistic expression. Students learn to make meaningful visual statements with an emphasis on personal creative expression to communicate ideas, feelings, or values. This course includes the history of photography, historic movements, image manipulation, critical analysis, and some creative special effects. Students engage in critiques of their photographic images, the works of other students and those by professional photographers for the purpose of reflecting on and refining work.

## Design in Clay I

**Course Number:** 40.8210.0

**Course Number:** 40.8210.5 (GT)

**Prerequisite:** Successful completion of Fundamentals of Art

**Credit:** ½

Students will explore a variety of hand-building clay techniques using design criteria. Students will have opportunities to explore functional and non-functional clay works through an analysis of past and contemporary collections and apply their knowledge in design.

## Design in Clay II

**Course Number:** 40.8220.0

**Course Number:** 40.8220.5 (GT)

**Prerequisites:** Successful completion of Design in Clay I

**Credit:** ½

Students will solve a variety of design problems in clay to reflect personal expression. Students will study functional and non-functional artwork and apply their knowledge to the creation of personal work reflecting a variety of purposes.

## Design in Clay and Mixed

**Media Course Number:** 40.8410.0

**Course Number:** 40.8410.5 (GT)

**Prerequisites:** Successful completion of Design in Clay II

**Credit:** 1

Students will solve a variety of design problems in clay and other sculptural materials to reflect personal expression. Students will explore the sculptural forms and techniques and begin to develop a portfolio of artwork. This portfolio may be considered for submission to the AP 3D Design Portfolio exam.

## Design in Clay and Mixed Media Advanced (AP Studio Art: 3D Design)

**Course Number:** 40.8420.0

**Course Number:** 40.8420.5 (GT)

**Course Number:** (AP)

**Prerequisites:** Successful completion of Design in Clay & Mixed Media

**Credit:** 1

In advanced courses, emphasis is on an in-depth exploration of media and techniques as students are empowered to make more purposeful artistic decisions. Students will develop a portfolio of artworks that reflect their personal aesthetic. This portfolio may be submitted to fulfill the requirements of the AP 3D Design Portfolio exam.

## AP 3D Design Studio (AP Studio Art: 3D Design)

**Course Number:** 40.4520.6 (AP)

**Prerequisite:** Successful completion of Design in Clay II or Intermediate Art

**Credit:** 1

This course is for students who want to continue the advanced level study begun in Design in Clay or Intermediate Art. It provides flexibility for planning independent study and focuses on experiences that further develop personal artistic style through the development and refinement of a sustained artistic investigation in 3D design. Students have the option of submitting their portfolios for review by the AP College Board. Career guidance and scholarship opportunities in the visual arts are provided.

## Art in the Theatre

**Course Number:** 40.8310.0

**Prerequisite:** None

**Credit:** ½

This course acquaints students with the fundamentals of set design and related crafts. Emphasis is on stage design and construction, costume design, make-up, and the history of art in the theatre.

## Art and Artifacts: Clues to Distant Cultures

**Course Number:** 43.4050.0

**Course Number:** 43.4050.4 (H)

**Prerequisite:** None

**Credit:** ½

Students assume roles of art historians, archeologists, and anthropologists as they analyze the material culture of Ancient Egypt, Classical India, Classical China, the Islamic Empire, and Feudal Japan. Included in the course work will be museum experiences at The Walters Art Gallery.

## Art and Advocacy

**Course number:** 40.9300.0

**Prerequisite:** None

**Credit:** 1

This Course provides students with a structured engagement in art as a form of communication and action. This course empowers students to examine and impact structures related to social equity at both local and global levels. The instructional practices and content in this course come from artistic investigation connected to community arts engagement arts entrepreneurship design thinking.

## VISUAL ARTS ADVANCED PLACEMENT COURSES

AP visual arts courses are scheduled whenever they are justified by enrollment. Students enrolled in advanced placement courses are eligible for AP credit. Each AP course includes portfolio development based on the criteria of the AP Studio Art program: sustained investigation (inquiry-guided investigation of media and ideas through practice, experimentation, and revision) and selected works (demonstrate skillful synthesis of materials, processes, and ideas).

### *Art History-Advanced Placement*

**Course Number:** 40.2300.6

**Credit:** 1

**Note:** This course may be offered online or in person.

### *Studio (AP Studio Art: Drawing, AP Studio Art: 2D Design, AP Studio Art: 3D Design)*

**Course Number:** 40.3110.6

**Credit:** 1

### *Studio Advanced (AP Studio Art: Drawing, AP Studio Art: 2D Design, AP Studio Art: 3D Design)*

**Course Number:** 40.3120.6

**Credit:** 1

### *Photography Studio Advanced (AP Studio Art: 2D Design)*

**Course Number:** 40.4110.6

**Credit:** 1

### *Photojournalism Advanced AP (AP Studio Art: 2D Design)*

**Course Number:** 40.4310.6

**Credit:** 1

### *Digital Arts Studio (AP Studio: 2D Design)*

**Course Number:** 40.4500.6

**Credit:** 1

### *Digital Arts Studio Advanced (AP Studio: 2D Design)*

**Course Number:** 40.4510.6

**Credit:** 1

### *Figure Drawing 1 AP (AP Studio Art: Drawing)*

**Course Number:** 42.6110.6

**Credit:** 1

### *Figure Drawing 2 AP (AP Studio Art: Drawing)*

**Course Number:** 42.6120.6

**Credit:** 1

### *Painting IV AP (AP Studio Art: Drawing)*

**Course Number:** 42.6640.6

**Credit:** 1

*Figure Sculpture II AP (AP Studio Art: 3D Design)*

**Course Number:** 42.6820.6

**Credit:** 1

*Sculpture 3 GT/AP (AP Studio Art: 3D Design)*

**Course Number:** 42.6330.6 (AP)

**Credit:** 1

*Sculpture 4 GT/AP (AP Studio Art: 3D Design)*

**Course Number:** 42.6340.6 (AP)

**Credit:** 1

*AP 3D Design Studio (AP Studio Art: 3D Design)*

**Course Number:** 40.4520.6

**Credit:** 1

*AP Studio Photo Magnet (AP Studio Art: 2D Design)*

**Course Number:** 42.4730.6

**Credit:** 1

*Televideo Production Advanced AP (AP Studio Art: 2D Design)*

**Course Number:** 42.4530.6

**Credit:** 1



“Cat at Home” by Amaya T. at Randallstown Elementary School, Grade 2

## ***VISUAL ARTS INTERNATIONAL BACCALAUREATE PROGRAM (IB)***

International Baccalaureate visual arts courses provide students opportunities to develop their personal aesthetic, imaginative, and creative faculties through the study of Art History, Criticism, Art Principles, and Studio practices. Working with the elements of art and principles of design, students can analyze, critique, and understand historical exemplars to form their own work. Students use observation, investigation, sketch notation, and writing to thoroughly explore a variety of topics. Studio experiences in a variety of media allow them to express visual ideas generated through research. All students have portfolio exhibits at the end of their senior year.

### ***Visual Arts 1 IB***

**Course Number:** 40.1110.7

**Credit:** 1

### ***Visual Arts 2 IB***

**Course Number:** 40.1120.7

**Credit:** 1

## ***VISUAL ARTS MAGNET COURSES***

Magnet courses are unique courses that can only be offered as part of an approved magnet program and/or school.

### **Foundations of Art (CC, PT, MM)**

**Course Number:** 42.1000.0

**Course Number:** 42.1000.5 (GT)

**Credit:** 2

### **Studio 2 Drawing/Painting GT/AP (AP Studio Art: Drawing) MAG (CC, PT, MM)**

**Course Number:** 42.6420.5 (GT)

**Credit:** 1

### **Photography 1M (CC, PT, MM)**

**Course Number:** 42.4110.5

**Credit:** 1

### **Photography 2M (CC, PT, MM)**

**Course Number:** 42.4120.5

**Credit:** 1

### **Photography 3M (CC, PT, MM)**

**Course Number:** 42.4130.0

**Course Number:** 42.4130.5

**Credit:** 1

### **Photography 4M (CC, PT, MM)**

**Course Number:** 42.4410.0

**Course Number:** 42.4140.5

**Credit:** 1

**AP Studio Photo M (AP Studio Art: 2D Design) MAG (CC, PT, MM)**

**Course Number: 42.4730.6**

**Credit: 1**

**Environmental Photography MAG**

**Course Number: 25.9610.0**

**Credit: 1**

**Multimedia Production MAG (CC, CH, LN, PT, MM)**

**Course Number: 42.4410.0**

**Credit: 1**

**Multimedia Production GT MAG (CC, CH, LN, PT, MM)**

**Course Number: 42.4410.5**

**Credit: 1**

**Multimedia Production Intermediate MAG (CC, CH, LN, PT, MM)**

**Course Number: 42.4420.0**

**Credit: 1**

**Multimedia Production Intermediate GT MAG (CC, CH, LN, PT, MM)**

**Course Number: 42.4420.5**

**Credit: 1**

**Multimedia Production Advanced MAG (PT, MM)**

**Course Number: 42.4430.0**

**Credit: 1**

**Multimedia Production Advanced GT (CC, CH, LN, PT, MM)**

**Course Number: 42.4430.5**

**Credit: 1**

**Televideo Production MAG (CC, CH, KN, LN, PT)**

**Course Number: 42.4500.0**

**Credit: 1**

**Televideo Production GT MAG (PT)**

**Course Number: 42.4500.5**

**Credit: 1**

**Televideo Production Intermediate MAG (CC, CH, KN, LN, PT)**

**Course Number: 42.4520.0**

**Credit: 1**

**Televideo Production Intermediate GT MAG (CC, CH, KN, LN, PT)**

**Course Number: 42.4520.5**

**Credit: 1**

**Televideo Production Advanced MAG (CC, CH, KN, LN, PT)**

**Course Number: 42.4530.0**

**Credit: 1**

**Televideo Production Advanced GT MAG (CC, CH, KN, LN, PT)**

**Course Number: 42.4530.5**

**Credit: 1**

**Televideo Production Advanced AP MAG (CC, CH, KN, LN, PT)**

**Course Number: 42.4530.6**

**Credit: 1**

**Figure Drawing 1 MAG**

**Course Number: 42.6110.0**

**Credit: 1**

**Figure Drawing 1 GT/AP (AP Studio Art: Drawing) MAG (CC, PT)**

**Course Number: 42.6110.5 (GT)**

**Course Number: 42.6110.6 (AP)**

**Credit: 1**

**Figure Drawing 2 MAG**

**Course Number: 42.6120.0**

**Credit: 1**

**Figure Drawing 2 GT/AP (AP Studio Art: Drawing) MAG (CC, PT)**

**Course Number: 42.6120.5 (GT)**

**Course Number: 42.6120.6 (AP)**

**Credit: 1**

**Painting 1 GT MAG (PT, MM)**

**Course Number: 42.6210.5**

**Credit: 1**

**Painting 2 GT MAG (PT, MM)**

**Course Number: 42.6220.5**

**Credit: 1**

**Painting 3 GT/AP (AP Studio Art: Drawing) MAG (CC, PT, MM)**

**Course Number: 42.6230.5 (GT)**

**Course Number: 42.6230.6 (AP)**

**Credit: 1**

**Painting 4 GT/AP (AP Studio Art: Drawing) MAG (CC, PT)**

**Course Number: 42.6240.5 (GT)**

**Course Number: 42.6240.6 (AP)**

**Credit: 1**



**Sculpture 1 MAG (PT)**

**Course Number:** 42.6310.0

**Credit:** 1

**Sculpture 1 GT MAG (PT)**

**Course Number:** 42.6310.5

**Credit:** 1

**Sculpture 2 MAG (CC, PT)**

**Course Number:** 42.6320.0

**Credit:** 1

**Sculpture 2 GT MAG (CC, PT)**

**Course Number:** 42.6320.5

**Credit:** 1

**Sculpture 3 GT/AP (AP Studio Art: 3D Design) MAG (CC, PT)**

**Course Number:** 42.6330.5 (GT)

**Course Number:** 42.6330.6 (AP)

**Credit:** 1

**Sculpture 4 GT/AP (AP Studio Art: 3D Design) MAG (CC, PT)**

**Course Number:** 42.6340.5 (GT)

**Course Number:** 42.6340.6 (AP)

**Credit:** 1

**Figure Sculpture I GT MAG (CC)**

**Course Number:** 42.6810.5 (GT)

**Credit:** 1

**Figure Sculpture II GT/AP (AP Studio Art: 3D Design) MAG (CC)**

**Course Number:** 42.6820.5(GT)

**Course Number:** 42.6820.6(AP)

**Credit:** 1

"It's Raining Confetti" by Victoria F.  
at Deer Park Elementary, Grade 3



# College and Career Readiness

The Office of College and Career Readiness provides tools, support, and opportunities to students and staff members through the implementation of Advancement Via Individual Determination (AVID), Early College Access Programs (ECAP), and Mentoring programs so that all students graduate from BCPS ready for college, careers, and productive lives.

The Advanced Placement (AP) Capstone Program is a diploma program from the College Board. It is based on two yearlong AP courses: AP Seminar and AP Research. Rather than teaching subject-specific content, these courses develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students who complete the two-year program can earn one or two different AP Capstone awards. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate.

AVID is a college readiness system designed to increase the academic success of students who are traditionally underrepresented in higher education using research-based writing, inquiry, collaboration, organization, and reading (WICOR) strategies. AVID promotes student success in rigorous college-preparatory curricula.

College and Career Ready Assessments Preparation (CCR Assess Prep) courses are designed to promote student success on the PSATs, SATs, ACTs, ASVAB, Accuplacer, ALEKs, and other college and career ready standardized tests.

Effective Learning Habits for College and Career Readiness (ELH4CCR) is a series of courses designed to increase the academic success of students through executive functioning, social, and emotional strategies, and skills.

For more information about Early College Access Programs, specifically Dual Enrollment opportunities, please review The Early College Access Programs Overview for Students and Parents and the BCPS/CCBC Dual Credit List which can be found on the Office of College and Career Readiness' website.

## ADVANCED PLACEMENT RESEARCH

**Course Number:** 86.903.06

**Prerequisite:** AP Seminar

**Credit:** 1

Students in AP Research build on what they learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. Students design and present their findings.

## ADVANCED PLACEMENT SEMINAR

**Course Number:** 86.902.06

**Prerequisite:** None

**Credit:** 1

AP Seminar is an interdisciplinary course that encourages students to demonstrate critical thinking, collaboration, and academic research skills on topics of the student's choosing. Students investigate topics in a variety of subject areas, draft research-based essays, and design and give presentations both individually and as part of a team.

## AVID 9 (Honors)

**Course Number:** 81.0100.4 (H)

**Prerequisite:** None

**Credit:** 1

The AVID (Grade 9) course is an elective class for college bound students. It will provide academic, tutorial, career goal planning, and social support for students through the AVID curriculum (WICOR) and AVID High School Libraries focus on Writing, Inquiry, Collaboration, Organization, and Reading. To ensure success in college-prep courses, students work independently and as partners, as well as in teacher and tutor-led collaborative groups.

Note-taking, outlining, writing, speaking, reading, test-taking strategies, maintaining organized notebook binders, self-awareness, and preparation for PSAT online are stressed. Students receive introductory information and direction regarding AP classes and may participate in AP classes. In addition, the AVID course includes college motivational activities.

## AVID 10 (Honors)

**Course Number:** 81.0200.4 (H)

**Prerequisite:** None

**Credit:** 1

This Grade 10 course continues with the AVID WICOR curriculum, advancing to more rigorous individual and small-group instruction in support of all the student's academic courses, and college-awareness activities. Instructional emphasis is on writing skills and helping students to successfully pass High School Assessments.

Students continue to receive instruction and practice using PSAT online. Students are given guidance and support in preparation for enrollment in AP classes. AVID tutorials meet individual and group needs for real-time academic support through teacher or tutor-led collaborative work. Tutors serve as role models and as sources of information about college life and expectations. By the end of this course, students are expected to enroll in one or more AP courses.

## AVID 11 (Honors)

**Course Number:** 81.0300.4 (H)

**Prerequisite:** None

**Credit:** 1

This Grade 11 AVID course is an elective class for students who are college bound. To ensure success in college-prep courses, students work independently, as well as in teacher or tutor-led collaborative groups. Note-taking, outlining, writing, speaking, reading, test-taking strategies, SAT preparation, and self-awareness are stressed.

The course provides college motivational and career exploration activities. Students use problem solving and decision-making skills. In addition, students work independently and with others in a variety of settings using critical thinking skills to organize information acquired from a variety of sources such as electronic technology and research. Grade 11 students begin to complete writing, reading, and research projects as required in the College Readiness Curriculum. By the end of this course, students are expected to enroll in at least two or more AP courses.

## AVID 12 (Honors)

**Course Number:** 81.0400.4 (H) (Senior Seminar)

**Prerequisite:** AVID 11

**Credit:** 1

This AVID Senior Seminar is the culmination of the students' years in the AVID program. Like all AVID courses, it encompasses WICOR curriculum and tutors. The course involves substantial critical reading and writing, as well as preparation for weekly Socratic Seminars. Students working with tutors are expected to eventually act as moderators for Socratic Seminars. Students receive support in test-readiness for external exams such as AP and International Baccalaureate.

Students enrolled in the Senior Seminar are required to complete weekly timed writings and analytical discourses in subjects across the curriculum. Grade 12 students increase completion of more complex and in-depth writing, reading, and research projects as required in the College Readiness Curriculum. In addition, students are required to make written and oral presentations to the class on topics related to college admissions, contemporary issues, and social concerns. During this course, students are expected to apply for admission to several colleges and/or universities.

## AVID Tutorial (Honors)

**Course Number:** 81.1000.4 (H) (students in grade 12 who tutor)

**Prerequisite:** Grade 12 students must have achieved at least a C or better in an AP Course or have been enrolled in AVID.

**Credit:** 1

The tutorial is a practicum course for Grade 12 students. The AVID school-based coordinators offer tutorial training for the students. Grade 12 students serving as AVID Tutors assist AVID students in the tutorial session with Socratic questioning so that the AVID students will take responsibility for their learning and actively engage in the learning process. The AVID tutorial process uses the AVID curriculum, writing, inquiry, collaboration, organization and reading (WICOR) skills and strategies. Grade 12 students serving as AVID tutors are academic coaches who assist AVID students with organizational and time management skills, research, rigorous learning, and college preparatory requirements to help them transition successfully to college.

## AVID Tutorial (Honors)

**Course Number:** 81.1000.4 (H) (students in grade 12 who tutor)

**Prerequisite:** Grade 12 students must have achieved at least a C or better in an AP Course or have been enrolled in AVID.

**Credit:** ½

The tutorial is a practicum course for Grade 12 students. The AVID school-based coordinators offer tutorial training for the students. Grade 12 students serving as AVID Tutors assist AVID students in the tutorial session with Socratic questioning so that the AVID students will take responsibility for their learning and actively engage in the learning process.

The AVID tutorial process uses the AVID curriculum, writing, inquiry, collaboration, organization and reading (WICOR) skills and strategies. Grade 12 students serving as AVID tutors are academic coaches who assist AVID students with organizational and time management skills, research, rigorous learning, and college preparatory requirements to help them transition successfully to college.

## College and Career Ready Assessment Preparation-Mathematics

**Course Number:** 80.0990.0

**Prerequisite:** Successful completion of Algebra 1 and Geometry are recommended. Completion of PSAT required.

**Credit:** ½

College and Career Ready Assessments Preparation (CCR Assess Prep) courses are designed to promote student success on the PSATs, SATs, ACTs, ASVAB, Accuplacer, ALEKs, and other college and career ready standardized tests. The CCR Assess Prep-Math course includes an analysis of the tests as well as practice exercises in mathematics test-taking techniques. Credits from this course may not be used to fulfill the mathematics credit graduation requirement.

## College and Career Ready Assessment Preparation-Disciplinary Literacy

**Course Number:** 80.0970.0

**Prerequisite:** Completion of PSAT required.

**Credit:** ½

College and Career Ready Assessments Preparation (CCR Assess Prep) courses are designed to promote student success on the PSATs, SATs, ACTs, ASVAB, Accuplacer, ALEKs, and other college and career ready standardized tests. The CCR Assess Prep-Disc Lit course focuses on disciplinary literacy as well as practice exercises in test-taking techniques. Students who have not met the requirements for College and Career Readiness may be enrolled in this course in Grade 12 to change their status.

## Effective Learning Habits for College and Career Readiness

**Course Number:** 10.9510.0

**Credit:** ½

This course is designed for high school students, primarily grade nine students transitioning from middle school. The course will begin by focusing on positive belief systems about academic success. Students will then address college and career connections beginning with an overview of national standardized tests for college entrance. The course will also review study skills and the basics for managing time. Students will end the course with an analysis of student transcripts and resume writing skills. This course is an abbreviated version of the 1 credit course.

## Effective Learning Habits for College and Career Readiness

**Course Number:** 10.9500.0

**Credit:** 1

This course is designed for high school students, primarily grade nine students transitioning from middle school. The course will begin by focusing on positive belief systems about academic success. Students will then address college and career connections beginning with an overview of national standardized tests for college entrance. The course will also review study skills and the basics for managing time. Students will end the course with an analysis of student transcripts and resume writing skills.



"Godzilla in New York" by Anthony Y. at Edmonson Heights Elementary, Grade 3

# Dance Education

Guided by the Compass: Our Pathway to Excellence, Dance Education contributes to the BCPS commitment to improve achievement for all students and provide a well-rounded education. The mission of the Office of Performing Arts is to provide direction and support for schools in delivering a comprehensive, engaging, and challenging dance program for all children in grades K-12 in alignment with the Maryland Fine Arts Standards for Dance and the National Core Arts Standards.

The vision of the Dance Education program is to provide students with the opportunity to be artistically educated in Dance having acquired skills in artistic movement, observation, performance, communication, critical and creative thinking, and healthy behaviors to meet the increasing challenges of life in the 21st century. All students have a right to an arts education as a fundamental part of their overall education.

The purpose of the Dance Education curriculum is to provide developmentally appropriate practices that build on a sequential program of dance experiences, which contribute to the overall achievement of all students. Dance courses are carefully designed with experiences that include perception and response activities with movement, historical, social, and cultural dance forms, creative expression and production, aesthetics, and personal development for a successful and healthy lifetime. Honors and Gifted and Talented courses in Dance III, IV, and Company are offered at the teacher's discretion.

**Note:** Dance II, III, IV, and Company require regular attendance at all performances to demonstrate performance competencies. Students will receive the performance dates at the beginning of the course. Demonstration of performance competencies through day and evening performances is considered equivalent to an exam and is included as a portion of the course grade. Students must be enrolled in an appropriate Fine Arts Dance course to participate in events that represent our schools, such as the Countywide Dance Festival, All-County, All-State, Regional, National, and other enriching dance activities.

## Dance for Athletes

**Course Number:** 54.5610.0

**Credit:** ½

**Course Number:** 54.5600.0

**Credit:** 1

**Prerequisites:** None

**Note:** This course meets the fine arts requirement for graduation. Course 5456000 and Course 5456100 meet the fine arts requirement for graduation.

Dance for Athletes is a comprehensive movement course intended to provide cross training in fine arts dance for student athletes/non-dancers with limited dance experience. Each unit of study includes dance technique, anatomy, history, in-class evaluations, written reflections, and peer-to-peer collaboration.

This course will not satisfy the Grade 9 or 10 physical education requirement. This course can be repeated for credit.

## Dance I (Introductory)

**Course Number:** 52.0010.0

**Prerequisites:** None

**Credit:** 1

**Note:** This course meets the fine arts requirement for graduation. Course 52.0110.0 meets the fine arts requirement for graduation.

Dance I is an introductory movement course in the fundamentals of ballet, modern, and jazz. Each unit of study includes dance technique, history, anatomy, written/reading assignments, in-class evaluations, and a countywide final exam. Additional study includes cultural and social dance forms. This course will not satisfy the Grade 9 or 10 physical education requirement.

## Dance II (Beginning)

**Course Number:** 52.0020.0

**Prerequisites:** Admission to this course is by audition or successful completion of Dance I.

**Credit:** 1

**Note:** This course meets the fine arts requirement for graduation. Course 52.0120.0 meets the fine arts graduation requirement.

Dance II is offered to students who have had Dance I or have one to three years of sufficient outside training. Units of study include ballet, modern, and jazz with further instruction in cultural and social forms, history, anatomy, improvisation, and composition. Students will have written/reading assignments, in-class evaluations, and a countywide final exam. There is one required performance in a dance concert. This course will not satisfy the Grade 9 or 10 physical education requirement.

## Dance III (Intermediate) \*

**Course Number:** 52.0030.0 **Course Number:** 52.0030.4 (H) **Course Number:** 52.0030.5 (GT)

**Prerequisites:** Admission to the course is by audition or successful completion of Dance II.

**Credit:** 1

**Note:** This course fulfills the fine arts requirement for graduation. Course 52.0130.0 meets the fine arts requirement for graduation.

Dance III continues the work in ballet, modern, and jazz techniques. Students will begin to focus on the development of performance skills. Anatomy, dance history, improvisation, and composition will enrich the course of study. Twentieth century theatrical and social dance will be explored experientially and historically. Students will have written/reading assignments, in-class evaluations, and a countywide final exam. Students will perform in various concerts throughout the year. This course may be repeated for credit.

\*Honors and GT Credit are available on an individual basis.

## Dance IV (Intermediate/Advanced) \*

**Course Number:** 52.0040.0 **Course Number:** 52.0040.4 (H) **Course Number:** 52.0040.5 (GT)

**Prerequisites:** Admission to this course is by audition or successful completion of Dance III.

**Credit:** 1

**Note:** This course meets the fine arts requirement for graduation.



Dance IV is an intermediate/advanced course offered to students interested in progressing to an advanced level and gaining more performance experiences. Further development in ballet, modern, jazz, and historical, cultural, social forms is correlated with a concentration on performance. Students will have written/reading assignments, in-class evaluations, student/teacher assessments, a mid-term, and final exam.

Students will perform throughout the year. This course may be repeated for credit.

\*Honors and GT Credit are available on an individual basis.

### **Dance Company (Advanced) \***

**Course Number:** 52.7110.4 (H) **Course Number:** 52.7110.5 (GT)

**Prerequisites:** Students are accepted through an audition.

**Credit:** 1

**Note:** Weekly, evening rehearsals are required to prepare for upcoming concerts/assemblies. Participation in countywide, state, and national fine arts dance events may require evening and weekend commitment.

Dance Company is an advanced performance course offered to students in Grades 9-12. Advanced development in ballet, modern, and jazz correlates with a concentration on performance. Historical, cultural, and social dance forms will be included in history and criticism activities. Interdisciplinary work will be included in student projects.

Students will have written/reading assignments, in-class student and teacher evaluations, a mid-term, and final exam. The company will perform in a variety of settings throughout the year that will require extracurricular dedication from the student. This course may be repeated for credit.

\*Honors and GT Credit are available on an individual basis. Additional responsibilities may include leadership, choreography, attendance at concerts, and projects. See your dance teacher.

### **F.A.M.E.: Fundamentally Adaptive Movement Education**

**Course Number:** 5212900

**Prerequisites:** None

**Credit:** 1

**Note:** This course meets the fine arts requirement for graduation.

F.A.M.E. (Fundamentally Adaptive Movement and Enrichment) is a mixed ability level dance course designed for students with special needs and for general education students by providing an opportunity for students to express themselves through collaborative movement. In this course, movement is used to build community, refine fine and gross motor skills, and develop physical self-confidence and self-expression. This course will not satisfy the Grade 9 or 10 physical education requirement.

### **Latin Dance I**

**Course Number:** 5291200

**Prerequisites:** None

**Credit:** 1

**Note:** This course meets the fine arts requirement for graduation.

Latin Dance I is an introductory course, which gives a foundation of movement for English-language learners who have had little or no dance experience. In this course, students will integrate elements of Latin culture such as traditions, rhythms, and ballroom/social Latin dances into a variety of dance forms. Emphasis will be on the development of collaborative practices that promote musicality, coordination, dance technique, and body awareness. This course will not satisfy the Grade 9 or 10 physical education requirement.

## **DANCE MAGNET COURSES**

Magnet courses are unique courses that can only be offered as part of an approved magnet program and/or school.

### **Ballet I**

**Course Number:** 52.1010.5 (GT)

**Credit:** 1

### **Ballet II**

**Course Number:** 52.1020.5 (GT)

**Credit:** 1

### **Ballet III**

**Course Number:** 52.1030.5 (GT)

**Credit:** 1

### **Ballet IV**

**Course Number:** 52.1040.5 (GT)

**Credit:** 1

### **Ballet V**

**Course Number:** 52.1050.5 (GT)

**Credit:** 1

### **Modern Dance I**

**Course Number:** 52.2010.5 (GT)

**Credit:** 1

### **Modern Dance II**

**Course Number:** 52.2020.5 (GT)

**Credit:** 1

### **Modern Dance III**

**Course Number:** 52.0230.5 (GT)

**Credits:** 1

### **Modern Dance IV**

**Course Number:** 52.2040.5 (GT)

**Credit:** 1

### **Modern Dance V**

**Course Number:** 52.2050.5 (GT)

**Credit:** 1

### **Dance Composition I**

**Course Number:** 52.6110.4 (H)

**Credit:** ½

### **Dance Composition II**

**Course Number:** 52.6120.4 (H)

**Credit:** ½

### **Language of Dance**

**Course Number:** 52.6200.4 (H)

**Credit:** ½

### **Dance I Magnet**

**Course Number:** 52.0210.5 (GT)

**Credits:** 2

### **Dance II Magnet**

**Course Number:** 52.0220.5 (GT)

**Credits:** 2

### **Dance III Magnet**

**Course Number:** 52.2030.5 (GT)

**Credit:** 2

### **Dance IV Magnet**

**Course Number:** 52.0240.5 (GT)

**Credits:** 2

### **Dance Company Magnet**

**Course Number:** 52.7140.5 (GT)

**Course Number:** 52.6110.4 (H)

**Credit:** 2

### **Jazz I (Elective)**

**Course Number:** 52.3000.0

**Credit:** 1

# English/Language Arts

The BCPS Office of English Language Arts is committed to producing globally competitive graduates who are critical and creative thinkers, accomplished readers and writers, and skillful communicators. Our mission is to empower school communities by providing high-quality professional learning and culturally responsive anti-racist curricula to facilitate high expectations and equitable access so that all student groups can reach their maximum potential for personal, social, and academic achievement.

To that end, students will be provided opportunities for creative expression on the level of their capacities and interests and taught through experiences with literature, the language techniques and literary forms used by accomplished writers and the significant themes that reflect the human condition. Students will learn to listen attentively, to evaluate what they hear, and develop competence in those reading skills necessary for the performance of school tasks and for the use of reading as an instrument of personal achievement, enlightenment, and enjoyment throughout life.

English 9, 10, 11, and 12 are required for graduation. Multiple levels of the required courses, English 9-12, are offered in the schools. All English elective courses count as elective graduation credits and cannot be used to fulfill the four-credit English requirement.

Standard, honors, and GT levels of English are offered as enrollments justify. In these classes, the instructional level and materials are modified according to the needs of the students. Suggested course sequences are shown below.

Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Standard Program</b>	English 9	English 10 or English 10 Honors	English 11 or English 11 Honors	English 12 or English 12 Honors
<b>Honors Program</b>	Honors English 9	Honors English 10	Honors English 11 or AP English Language and Composition	Honors English 12 or AP English Literature and Composition
<b>GT Program</b>	English 9 GT	English 10 GT	English 11 AP English Language and Composition	English 12 AP English Literature and Composition

## English 9

**Course Number:** 10.0900.0

**Course Number:**10.0900.4 (H)

**Prerequisite:** None

**Credit:** 1

**Note:** This course provides a Service-Learning component.

The English 9 program culminates the study of literary genre initiated in middle school and provides a balanced program of reading, writing, speaking, listening, grammar, usage, and mechanics skills within the context of literature. Participating in a variety of integrated, student-centered, interdisciplinary activities, students learn to process information efficiently, examine ideas critically, and express themselves effectively in the real-life worlds of study, work, and leisure.

## English 9 GT

**Course Number:** 10.0900.5 (GT)

**Prerequisite:** Successful completion of GT 8 English or a teacher recommendation for placement.

**Credit:** 1

**Note:** This course provides a Service-Learning component.

The English 9 GT program introduces several approaches to literary criticism which students use to examine the universal themes expressed in a variety of genres and forms from both early and modern literature. Open-ended and structured writing experiences, significant research opportunities, and frequent oral/aural activities ensure continued growth in all major skill areas.

## English 10

**Course Number:** 10.1000.0

**Course Number:** 10.1000.4 (H)

**Prerequisite:** Successful completion of English 9 is recommended.

**Credit:** 1

The English 10 program is an integrated language arts program of literature, composition, grammar, usage, and mechanics that focuses on developing awareness of various world cultures as expressed through literature. The program continues developing skills in reading/interpreting, writing, listening, speaking, language, thinking, and research through the study of a variety of literary genres. Some themes/issues in this course make connections to the Grade 10 world history course.

## English 10 GT

**Course Number:** 10.1000.5 (GT)

**Prerequisite:** Successful completion of GT 9 English or a teacher recommendation for placement.

**Credit:** 1

The English 10 GT program is organized thematically to present the universality of the search for meaning in society through its expression in a variety of cultures and historical time periods. The focus on literary criticism begun in GT English 9 is continued with the introduction of three innovative approaches and is synthesized with the study of a literary work that addresses the interplay of all the approaches. Frequent open-ended and structured writing experiences, and specific attention to syntactical structures, usage, and mechanics further the development of composing and language skills.

## English 11

**Course Number:** 10.1100.0

**Course Number:** 10.1100.4 (H)

**Prerequisite:** Successful completion of English 10 is recommended.

**Credit:** 1

The English 11 program builds on the awareness of the diversity of cultures and literature begun in Grade 10. This course provides a balanced program of reading, writing, speaking, listening, grammar, usage, and mechanics skill development within the context of an expanded and updated canon of American literature reflecting the cultural and ethnic mosaic of American society. The themes and issues studied make direct connections to the Grade 11 American history course.

### **AP English 11 - English Language & Composition**

**Course Number:** 10.1100.6 (AP)

**Prerequisite:** Successful completion of GT 10 English or a teacher recommendation for placement.

Students should be able to read and comprehend college-level texts.

**Credit:** 1

AP English Language and Composition is a college level introductory composition course that focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effect in nonfiction texts-including images as forms of text – from a range of disciplines and historical periods.

Since this course involves intensive preparation for the AP test in English Language and Composition, students are expected to take the AP test.

## English 12 - Honors

**Course Number:** 10.1200.4

**Prerequisite:** Successful completion of English 11 is recommended.

**Credit:** 1

The English 12 Honors program incorporates opportunities for students to read, analyze, and write about grade-level appropriate complex literature/text that will prepare them for post-graduation academic study and work. Students will draft essays in a variety of rhetorical modes with a focus on documentary analysis, research, and composing experiences that require student responses to be text-based, clear and logical, with attention to appropriate grammar usage and mechanics.

## English 12 -Standard

**Course Number:** 10.1200.0

**Prerequisite:** Successful completion of English 11 is recommended.

**Credit:** 1

The Standard English 12 program is designed to transition students to college and career readiness. It incorporates opportunities for students to focus on developing improved skills in reading and writing. Students will write text-based responses in a variety of modes with attention to documentary analysis and argument writing.

Additionally, the course is designed to assist students in test-taking skills, especially as related to the strengthening of critical reading and writing skills.

## AP English 12 - English Literature and Composition

**Course Number:** 10.1200.6 (AP)

**Prerequisite:** Successful completion of AP 11

English or a teacher recommendation for placement. Students should be able to read and comprehend college-level texts.

**Credit:** 1

AP English Literature and Composition is an introductory college-level literary analysis course that focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Students compose a variety of analytical and creative pieces as they continue to develop and refine their own writing style. Since this course involves intensive preparation for the AP test in English Literature and Composition, students are expected to take the AP test.

## ENGLISH ELECTIVES

Credits from these courses may not be used to fulfill the four-credit graduation requirement for English. Some courses run for one semester and will be awarded ½ credit; some courses are year-long and run for two periods, will receive 2 credits.

### Hip Hop Lyrics as Literature

**Course Number:** 10.1323.4 (H)

**Credit:** ½

**Prerequisite:** None

This course is designed for students to explore connections between hip hop lyrics, literature, literacy, and social justice issues.

### Journalism I

**Course Number:** 10.1510.0Credit: 1

**Course Number:** 10.1810.0

**Credit:** ½

**Prerequisite:** None

Journalism I prepare students with the fundamentals for writing, producing, and editing school newspapers.

### Journalism II

**Course Number:** 10.1520.4 (H) Credit: 1

**Course Number:** 10.1560.4 (H) Credits: 2 **Course Number:** 10.1820.4 (H)

**Credit:** ½

**Prerequisites:** Successful completion of Journalism I.

This advanced course provides the production staff for the local school newspaper. Skills developed in Journalism are applied to all levels of newspaper preparation and distribution.

**Journalism II: Desktop Publishing****Course Number:** 10.1620.4 (H)**Credits:** 1**Prerequisite:** Successful completion of Journalism I.

In schools with desktop publishing capabilities, this advanced course provides the production staff for the local school newspaper. Students will gain skills in keyboarding and computer-assisted graphic layout and design as the skills developed in Journalism and understanding of appropriate technological systems are applied to all levels of newspaper preparation and distribution.

**Journalism III****Course Number:** 10.1530.4 (H)**Credit:** 1**Course Number:** 10.1830.4 (H)**Credit:** ½**Prerequisites:** Successful completion of Journalism II.

For this course, students must accept major leadership responsibility, usually as an editor, for the school paper. This group must meet with the Journalism II production staff at least three periods a week.

**Journalism IV****Course Number:** 10.1540.5 (GT)**Credit:** 1**Course Number:** 10.1840.5 (GT)**Credit:** ½**Prerequisites:** Successful completion of Journalism III

In this course, students continue to refine newspaper skills of writing, layout, and management in an editorial or management position.

**Literature Seminar****Course Number:** 10.9200.0**Credit:** 1**Course Number:** 10.9210.0**Credit:** ½**Prerequisite:** Teacher recommendation.

This course is designed for students interested in an in-depth analysis of literature. Students must be able to work independently and participate actively in classroom seminars.

**Language and Composition****Course Number:** 10.9100.4 (H)**Credit:** 1**Course Number:** 10.9110.4 (H)**Credit:** ½**Prerequisite:** None

**Note:** This course is an elective for sophomores and juniors to be taken concurrently with Honors English 10, English 11, or AP English classes.

This course is designed to provide students who have not previously enrolled in AP or GT classes with additional opportunities to develop the skills in critical thinking, analytical reading, and college-level writing that they need to be successful on the AP English tests.

## Film Appreciation and Criticism

**Course Number:** 10.7000.4 (H)

**Credit:** 1

**Course:** 10.7010.4(H)

**Credit:** ½ **Prerequisite:** None

This elective is open to students in Grades 10-12. It offers students the opportunity to engage critically with visual text by addressing cinematic reading strategies and textual analysis.

## Accelerated English

**Course Number:** 10.1150.0

**Prerequisite:** This elective is for students who passed English 10 but did not pass the grade level assessment on their first attempt.

**Credit:** ½

This course is designed to assist these students in developing improved skills in test-taking, critical reading, informative and persuasive writing, grammar, usage, and mechanics. This course could assist students in 11th grade who need to complete an English Bridge project.

## Critical Reading

**Course Number:** 10.8580.0

**Credit:** 1

**Prerequisite:** None

This course is designed to assist students in developing college-level reading skills including a focus on before, during and post reading strategies that are appropriate for the rigor of high school and college texts. The course could include explicit teaching in word study for students with deficits in that area.

## Speech I

**Course Number:** 10.2510.0

**Credit:** 1

**Course Number:** 10.2550.0

**Credit:** ½

**Prerequisite:** None

This is an introductory course in interpersonal communication and public speaking. It is designed to serve as either a self-contained program or as a springboard to more advanced courses and activities in public speaking, competitive speaking, or mass communication. It is not a speech correction course.



## Speech II

**Course Number:** 10.2520.4 (H)

**Credit:** 1

**Course Number:** 10.2560.4 (H)

**Credit:** ½

Prerequisite: Successful completion of Speech I. This course focuses on public speaking. Students will gain skills beyond those taught in Speech I and will be exposed to a wider variety of speeches and public speaking opportunities.

## Speech III

**Course Number:** 10.2530.4 (H)

**Credit:** 1

**Course Number:** 10.2570.4 (H)

**Credit:** ½

**Prerequisites:** Successful completion of Speech I and II

This is an advanced public speaking course. In it, students will polish their public speaking skills, continue to gain experience in a wide variety of types of public speaking, and participate in more types of public speaking opportunities, including contests, tournaments, and leagues.

## Speech IV

**Course Number:** 10.2540.5 (GT)

**Credit:** 1

**Course Number:** 10.2580.5 (GT)

**Credit:** ½

**Prerequisites:** Successful completion of Speech I, II, and III

This course is an advanced public speaking course in which students will hone their competitive speaking skills and further develop their expertise in a variety of types of public speaking venues, including local, state, and national contests, tournaments, and leagues.

## Technical Writing

**Course Number:** 10.4510.0

**Credit:** 1

**Course Number:** 10.4610.0

**Credit:** ½

**Prerequisite:** None

In this course, students will learn the basics of technical writing.

## Introduction to Creative Writing

**Course Number:** 10.1360.0

**Credit:** 1

**Course Number:** 10.1370.0

**Credit:** ½

**Prerequisite:** None

This course introduces all aspects of creative writing, including poems, short stories, short plays, and essays.

## Advanced Creative Writing

**Course Number:** 10.1420.4 (H)

**Credit:** 1

Course Number: 10.1470.4 (H) Credit: ½

Prerequisite: Successful completion of Introduction to Creative Writing.

This course will focus on advanced skills in writing sketches, short stories, plays, poetry, and essays.

## GT Creative Writing

**Course Number:** 1014205

**Credit:** 1

**Prerequisite:** Successful completion of Advanced Creative Writing

This course is designed to provide students with continued practice with advanced writing techniques, devices, and forms.

## Yearbook I

**Course Number:** 10.1910.0

**Credit:** ½

**Course Number:** 10.2010.0

**Credit:** 1

**Prerequisite:** None

Yearbook I develops the skills necessary to produce the school yearbook; copy writing, photography, layout, budgeting, promotion, and art design are addressed.

## Yearbook II

**Course Number:** 10.1920.4 (H)

**Credit:** ½

**Course Number:** 10.2020.4 (H)

**Credit:** 1

**Prerequisites:** Successful completion of Yearbook I

In this course, the student continues to apply yearbook skills, extend areas of expertise, and assume more responsibility, usually in an editorial or management position, in the production of the school yearbook.

## Yearbook III

**Course Number:** 10.1930.4 (H)

**Credit:** ½

**Course Number:** 10.2030.4 (H)

**Credit:** 1

**Prerequisites:** Successful completion of Yearbook I and II

In this course, the student continues to apply yearbook skills, extend areas of expertise, and assume more responsibility in an editorial or management position in the production of the school yearbook.

## Yearbook IV

**Course Number:** 10.1940.5 (GT)

**Credit:** ½

**Course Number:** 10.2040.5 (GT)

**Credit:** 1

**Prerequisites:** Successful completion of Yearbook I, II, and III

In this course, students continue to refine yearbook skills and assume more responsibility in an editorial or management position in the production of the school yearbook.

## Yearbook II: Publishing Enterprises

**Course Number:** 10.2100.4 (H)

**Credit:** 1

**Prerequisites:** Successful completion of Yearbook I

This course is designed to teach those skills necessary for layout, design, and publishing of a yearbook.

## ENGLISH ADVANCED PLACEMENT COURSES

Advanced Placement English courses are scheduled whenever they are justified by enrollment. Students enrolled in advanced placement courses are eligible for GT credit. Each advanced placement course includes a study of critical reading, author's style, argument, and writing. Successful completion of course and scoring high on the AP test may give students college credit.

### AP English 11 - English Language & Composition

**Course Number:** 10.1100.6

**Credit:** 1

### AP English 12 - English Literature and Composition

**Course Number:** 10.1200.6

**Credit:** 1

## ENGLISH INTERNATIONAL BACCALAUREATE COURSES (IB)

International Baccalaureate English courses fulfill the rigorous requirements needed for the Honors level courses as set forth by the International Baccalaureate Program. Students will be engaged in in-depth study of author's diction, historical context for writing, author's style, and internal meaning of the works. Additionally, students will hone their own writing skills through study of language usage, engaging in numerous writing assignments, and by critically reading the writing of authors, peers, and themselves.

English 9 Pre-Diploma (KN, MM)

**Course Number:** 10.0910.7 (IB)

**Credit:** 1

English 10 Pre-Diploma (KN, MM)

**Course Number:** 10.1010.7 (IB)

**Credit:** 1

English 11 IB (KN, MM)

**Course Number:** 10.1120.7 (IB)

**Credit:** 1

English 12 IB (KN, MM)

**Course Number:** 10.1220.7 (IB)

**Credit:** 1

## ENGLISH MAGNET COURSES

### Advanced Journalism (CC)

Course Number: 10.1700.5 (GT)

Credit: 1

### Literary Forms (CC)

Course Number: 10.6410.5 (GT)

Credit: 1

### Poetic Traditions (CC)

Course Number: 10.6420.5 (GT)

Credit: 1

### Free Verse (CC)

Course Number: 10.6500.5 (GT)

Credit: ½

### Advanced Topics in Fiction (CC)

Course Number: 10.6550.5 (GT)

Credit: ½

### Film Making (CC)

Course Number: 10.6610.5 (GT)

Credit: ½

### Advanced Literature Seminar (CC)

Course Number: 10.9260.5 (GT)

Credit: 1

Course Number: 10.9270.5 (GT)

Credit: ½

### Writing Seminar (CC)

Course Number: 10.9300.5 (GT)

Credits: 2

Course Number: 10.9320.5 (GT)

Credit: 1

### Writing Seminar: Literary Nonfiction Writing (CC)

Course Number: 10.9310.5 (GT)

Credit: ½

### Writing Seminar: Screenwriting (CC)

Course Number: 10.9330.5 (GT)

Credit: ½

### Performance Styles (CC)

Course Number: 10.3510.5 (GT)

Credit: ½



"Sunny & Cloudy" by Mia C. Hillcrest Elementary,  
Grade 5

# English for Speakers of Other Languages (ESOL)

The Office of ESOL empowers English Learners by providing culturally and linguistically responsive instruction and support services. The Office of ESOL supports student achievement through the design, implementation and assessment of curricula focused on the academic language necessary for success in content areas. By incorporating the WIDA standards of the Language of Math, the Language of Science, the Language of Social Studies, the Language of Language Arts and Social and Instructional Purposes students are increasingly prepared for the language demands associated with the grade-level content classes.

<b>Newcomer</b> (Students at proficiency level 1-1.9 with interrupted education)	<b>Proficiency Level 1.0 - 1.9</b>	<b>Proficiency Level 2.0 – 2.9</b>	<b>Proficiency Level 3.0 – 3.9</b>	<b>Proficiency Level 4.0+</b>
<b>ESOL Newcomer*</b>	ESOL 1*	ESOL II/ ESOL Literacy for English Learners**	ESOL III*/ESOL Literacy for English Learners**	ESOL IV*/ESOL V*/ESOL Literacy for English Learners**
<b>ESOL Academic Foundations*</b>	ESOL Academic Foundations* (unless taken as a newcomer)	<p>For native/heritage speakers of Spanish:</p> <p>Spanish for Native and Heritage Speakers World Language- Language and Culture World Language- Special Topics</p> <p>For native/heritage speakers of other languages:</p> <p>World Language Level 3 Chinese or World Language -Language and Culture World Language Level 4 Chinese or Special Topics</p> <p>*Pursue testing to earn the Maryland Seal of Biliteracy</p>	<p>For native/heritage speakers of Spanish:</p> <p>Spanish for Native and Heritage Speakers World Language- Special Topics AP World Language</p> <p>For native/heritage speakers of other languages:</p> <p>World Language Level 4 Chinese or Special Topics AP World Language</p> <p>*Pursue testing to earn the Maryland Seal of Biliteracy</p>	<p>For native/heritage speakers:</p> <p>AP World Language AP World Literature</p> <p>*Pursue testing to earn the Maryland Seal of Biliteracy</p>
<b>American Culture</b>	American Culture (unless taken as a newcomer)			
<b>ESOL Math I</b>	ESOL Learning Through Content 1*			

*\*These courses must be taught by a certified ESOL teacher. All other courses should be taught by certified content teachers with the option of co-teaching.*

*\*\*Students in this course must meet the criteria for Long-Term English Learner.*

## Newcomer ESOL Courses

**Newcomer (if data indicate academic deficit) (DN, LN, OM, PR, WD)**

**Course Number:** 31.1050.0 ESOL

**Prerequisite:** None

**Credit:** 1

**Note:** This course earns a world language credit.

**ESOL Math (If data indicate a math deficit) (DN, LN, OM, PR, WD)**

**Course Number:** 31.6010.0

**Prerequisite:** None

**Credit:** 1

**Note:** ESOL math earns a mathematics credit

**ESOL Academic Foundations (DN, LN, OM, PR, WD)**

**Course Number:** 31.7150.0

**Prerequisite:** None

**Credit:** 1

**Note:** This course earns a world language credit.

\*Only students between 1-1.9 proficiency on the WIDA-APT test who are new to the United States and who have interrupted schooling, limited formal schooling, or other gaps in their education should be scheduled into ESOL Newcomer.

## Level I (Beginner) ESOL Courses

**ESOL I (DN, LN, OM, PR, WD)**

**Course Number:** 31.11010.0

**Prerequisite:** None

**Credit:** 1

**ESOL American Culture (DN, LN, OM, PR, WD)**

**Course Number:** 31.5010.0

**Prerequisite:** None

**Credit:** 1

**Learning Through Content I (DN, LN, OM, PR, WD)**

**Course Number:** 31.31100.0

**Prerequisite:** None

**Credit:** 1

**Note:** ESOL I is equivalent to **English 9** credit.

Beginning English Learners enroll in courses from among those listed above that target their specific needs. American Culture is a course appropriate for any English learner who is new to American school at a proficiency level of 1 or 2.

## **Level II (High Beginner) ESOL courses**

**ESOL II (DN, LN, PR, OM, WD)**

**Course Number:** 31.1020.0

**Learning through Content II (DN, LN, OM, PR, WD)**

**Course Number:** 31.31200.0

**Prerequisite:** LTC I or score on placement test

**Credit:** 1

**Note:** ESOL II is equivalent to **English 12** credit.

High Beginner English Learners have either entered Baltimore County Public Schools with a 2.0 English proficiency level or have progressed through the ESOL program to this level. These students combine ESOL courses from those listed above determined by individual student needs with mainstream classes.

## **Level III (Low Intermediate) ESOL course**

**ESOL III (DN, LN, PR, OM, WD)**

**Course Number:** 31.3030.0

**Prerequisite:** ESOL II or score on placement test.

**Credit:** 1

**Note:** This course earns a world language credit.

Low intermediate English Learners have either entered Baltimore County Public Schools at a 3.0 English proficiency level, or they have progressed through the ESOL program to this level.

## **Level IV (High Intermediate) ESOL Course**

**ESOL IV (DN, LN, PR, OM, WD)**

**Course Number:** 31.100.0

**Prerequisite:** ESOL III or score on placement test.

**Credit:** 1

**Note:** This course earns a world language credit.

High intermediate English Learners have either entered Baltimore County Public Schools at a 4.0 English proficiency level, or they have progressed through the ESOL program to this level.

## **Level V (Advanced) ESOL course**

**ESOL V (DN, LN, PR, OM, WD)**

**Course Number:** 31.3150.0

**Prerequisite:** ESOL IV

**Credit:** 1

**Note:** This course earns a world language credit. Advanced English Learners have progressed through the ESOL program to this level.

## Literacy for English Learners course

ESOL Literacy for English Learners (DN, LN, PR, OM, WD)

Course Number: 31.9120.0

Prerequisite:

Credit: 1

**Note:** This course earns a world language credit. English Learners should take this course if they have been in the ESOL program for more than 6 years.



"Year of the Tiger by Brandon A. at McCormick Elementary, Grade 5



# Health Education

The mission of health education is to provide a comprehensive PreK-12 skills-based instructional program founded on sound research, stakeholder collaboration, and performance skills. The curriculum is aligned with national and state standards, meets legislative requirements and is designed to motivate and assist all students in maintaining and/or improving their wellness and reducing injury and disease-related risks.

The health education curriculum provides students with the knowledge and skills needed to adopt and maintain healthy lifestyles and become health-literate individuals. The health-literate individual can access, understand, appraise, apply, and advocate for health information and services to maintain or enhance one's own health and the health of others. Students will have opportunities to improve health literacy, including improving knowledge and developing life skills, which are conducive to individual and community health.

Health 9/10 or Health 11/12 both meet the current health education graduation requirement of the .5 credit (Graduating Classes of 2022, 2023, and 2024). Starting with the graduating class of 2025, students must be enrolled in and pass both Health 9/10 (.5 credit) and Health 11/12 (.5 credit) to meet the 1.0 graduation credit requirement in Health Education.

Health 9/10 is offered for students in either Grade 9 or 10. Health 11/12 is offered for students in either Grade 11 or 12.

## Health 9/10

**Course Number:** 51.1010.0

**Course Number:** 51.1010.5 (GT)

**Prerequisite:** None

**Credit:** ½

**Note:** Required for either Grade 9 or 10 students.

This course is the required .5 grade-band (9/10) health education graduation credit. Content is designed to encourage students to develop functional knowledge, skills, attitudes, and behaviors that will enable them to make decisions that promote healthful behaviors. Topics covered in this course include mental and emotional health, substance abuse prevention, family life and human sexuality, safety and violence prevention, healthy eating, and disease control and prevention.

## Health 11/12

**Course Number:** 51.1020.0

**Course Number:** 51.1020.5 (GT)

**Prerequisite:** None in Class of 22, 23, and 24 - Health 9/10 for Class of 25

**Credit:** ½

**Note:** Required for either Grade 11 or 12 students. This course is the required .5 grade-band (11/12) health education graduation credit.

This course expands upon the functional knowledge and student development of the skills, attitudes, and behaviors addressed in Health 9/10 that will enable students to make decisions that promote healthful behaviors. The topic areas of mental and emotional health, substance abuse prevention, family life and human sexuality, safety and violence prevention, healthy eating, and disease control and prevention are

integrated into skills-based units. The skills-based units include analyzing influences, accessing valid and reliable information, interpersonal communication, decision making, goal setting, and advocacy.

## Health (Advanced)

**Course Number:** 51.1100.0

**Course Number:** 51.1100.4 (H)

**Prerequisite:** Successful completion of Health 9/10 (.5 credit) or Health 9/10 GT (.5 credit) and Health 11/12 (.5 credit) or Health 11/12 GT (.5 credit) as a total credit required (1.0 credit) from the listed health education courses.

**Credit:** ½

**Note:** This is an elective course that requires the successful completion of both 9/10 (.5 credit) and 11/12 (.5 credit) to meet the 1.0 credit requirement.

This course is available to those students who would like to extend their knowledge of health topics such as: mental and emotional health, substance abuse prevention, family life and human sexuality, safety and violence prevention, healthy eating, and disease control and prevention. Students will explore current health issues and career opportunities. Through discussions, group presentations, guest speakers, research opportunities, and advocacy projects, students will develop the skills to take active roles in their current and future wellness.



“Sunflower Girl” by Isabella T. Seventh District, Grade 5

# Library Media

The mission of the library media program of instruction is to prepare students as “knowledge workers” by integrating information and technology literacy skills with all curricular content. The library media specialist is the catalyst that inspires students to choose reading for pleasure by providing an age/level appropriate and current collection of reading materials. Library media centers provide comprehensive services related to the organization and management of print, digital, video-on-demand resources, and related information technologies to provide equitable instruction and access by the educational community to information resources that support teaching and learning.

## Independent Research Seminar - Semester

**Course Number:** 86.9000.0

**Course Number:** 86.9000.4 (Honors) Course Number: 86.9000.5 (GT)

**Prerequisite:** None

**Credit:** ½

This course will lead students to the completion of original and independent research. Students will work independently with a faculty team support to generate a research question, conduct a literature review, contact content-area experts, and engage them as mentors, develop hypotheses, collect, and analyze data and present their findings at the annual Student Independent Research Symposium. Students will be taught statistical analysis, research methods and how to draft a thesis-type report to accompany their research. Students will be encouraged to continue their study, data collection, and/or prototype development and may apply for an internship through the School to Career program to work with a mentor from a local university, community-based organization, or research facility. The course research framework is accessible by clicking on this link.

## Independent Research Seminar - Year

**Course Number:** 86.9010.0

**Course Number:** 86.9010.4 (Honors)

**Course Number:** 86.9010.5 (GT)

**Prerequisite:** None

**Credit:** 1

This course will lead students to the completion of original and independent research. Students will work independently with a faculty team support to generate a research question, conduct a literature review, contact content-area experts, and engage them as mentors, develop hypotheses, collect, and analyze data and present their findings at the annual Student Independent Research Symposium. Students will be taught statistical analysis, research methods and how to draft a thesis-type report to accompany their research. Students will be encouraged to continue their study, data collection, and/or prototype development and may apply for an internship through the School to Career program to work with a mentor from a local university, community-based organization, or research facility.

# Mathematics

The Office of Mathematics PreK-12 provides leadership and support around the impactful program implementation of our mathematics curriculum. The office is committed to engaging leadership teams, teachers, and instructional support staff in ongoing professional learning through an equity pedagogy lens with the intent of supporting the development of all students as innovative problem solvers and global critical thinkers. Our work is situated in the rigor, letter, and spirit of the Maryland College and Career Ready Standards for Mathematics (inclusive of both process and content standards).

**Algebra 1, Geometry, and Algebra 2 meet the University of Maryland System college entrance requirements** and satisfy the Maryland graduation requirements for mathematics. Course selections will vary according to the occupational goals of students. Possible course sequences are shown below. All high school mathematics courses will engage students in the use communication, reasoning, problem solving, and mathematical tools (graphing utility or graphing calculator). Please visit the [Office of College and Career Readiness website](#) for a current list of CCBC/BCPS Dual Credit Courses.

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
<b>Algebra 1</b>	Geometry **	Algebra 2	<ul style="list-style-type: none"> <li>College Algebra</li> <li>Trigonometry with Analytic Geometry</li> <li>Pre-Calculus</li> <li>Statistics</li> <li>AP Statistics</li> <li>IB Math 1</li> </ul>	<ul style="list-style-type: none"> <li>College Algebra</li> <li>Trigonometry with Analytic Geometry</li> <li>Pre-Calculus</li> <li>Calculus *</li> <li>AP Calculus I AB *</li> <li>Statistics</li> <li>AP Statistics</li> <li>IB Math 2</li> </ul>
<b>Math 8</b>	Algebra 1	Geometry **	<ul style="list-style-type: none"> <li>Algebra 2</li> <li>IB Math 1</li> </ul>	<ul style="list-style-type: none"> <li>College Algebra</li> <li>Trigonometry with Analytic Geometry</li> <li>Pre-Calculus</li> <li>Statistics</li> <li>AP Statistics</li> <li>Pre-College Math</li> <li>IB Math 2</li> </ul>
<b>Geometry</b>	Algebra 2	<ul style="list-style-type: none"> <li>College Algebra</li> <li>Trigonometry with Analytic Geometry</li> <li>Pre-Calculus</li> <li>Statistics</li> <li>AP Statistics</li> </ul>	<ul style="list-style-type: none"> <li>College Algebra</li> <li>Trigonometry with Analytic Geometry</li> <li>Pre-Calculus</li> <li>Calculus *</li> <li>AP Calculus I AB *</li> <li>Statistics</li> <li>AP Statistics</li> <li>IB Math 1</li> </ul>	<ul style="list-style-type: none"> <li>College Algebra</li> <li>Trigonometry with Analytic Geometry</li> <li>Pre-Calculus</li> <li>Calculus *</li> <li>AP Calculus I AB *</li> <li>AP Calculus II BC *</li> <li>Statistics</li> <li>AP Statistics</li> <li>IB Math 2</li> </ul>

Courses labeled with a star (\*) require prerequisite course requirements beyond Algebra 2. Refer to the course description for prerequisite requirements for these courses.

**Geometry\*\*:** Students needing support in preparation for Algebra 2 may enroll in Geometry with Math Assistance to support Algebra skills.

## Algebra 1

**Course Number:** 20.2100.0

**Prerequisite:** None

**Credit:** 1

This course begins with one-variable statistics, building on ideas from previous courses. Then, students expand their understanding of linear equations, inequalities, and systems of linear equations and inequalities by modeling and representing relationships and constraints. This learning is applied to two-variable statistics through scatter plots, lines of best fit, residuals, and correlation coefficients. A study of functions (linear, piecewise, exponential, and quadratic) provides opportunities for students to represent, interpret, and communicate quantitative relationships. The course ends with a close look at quadratic equations to model relationships and solve problems.

## Geometry

**Course Number:** 20.3000.0

**Course Number:** 20.3000.4 (Honors)

**Course Number:** 20.0900.5 (GT/AA)

**Prerequisites:** Successful completion of Algebra 1 is recommended.

**Credit:** 1

This course begins with generating conjectures and observations through constructions and builds towards formal proof. Students build on their knowledge from previous courses to study transformations and similarity. This learning is extended to right triangle trigonometry. Students derive and use volume formulas and connect ideas from algebra through coordinate geometry. A study of the relationships in circles and the development of radian measures provides a foundation for future coursework. The course ends by extending learning from probability in grade 7 mathematics to study conditional probability.

## Algebra 2

**Course Number:** 20.2200.0

**Course Number:** 20.2200.4 (Honors)

**Course Number:** 20.0850.5 (GT/AA)

**Prerequisites:** Successful completion of Algebra 1 is required.

**Credit:** 1

This course begins with a study of sequences, building on ideas from Algebra 1, to develop models for polynomial relationships. Students work to graph and represent rational functions. Then, students extend exponent rules to include rational exponents to solve equations involving square and cube roots. The number system is expanded to include complex numbers and connected to solving quadratic equations with non-real solutions. A deep study of functions (exponential and logarithmic), including transformations and models to fit data, connects to the study of functions in Algebra 1. Students learn about periodic functions through the unit circle to make sense of trigonometric functions and periodic relationships. The course ends with a unit on statistical inference.

## Pre-College Mathematics: Advanced Algebra

**Course Number:** 20.2500.0

**Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2 is required.

**Credit:** 1

This course uses applications to enhance understanding of advanced algebraic topics like linear models and systems, quadratic and rational functions, exponential and logarithmic functions, and systems of equations and inequalities. This course supports a seamless transition from high school to college level mathematics and is recommended for seniors only.

## College Algebra

**Course Number:** 20.2800.4 (Honors)

**Course Number:** 20.2820.5 (GT/AA)

**Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2.

**Credit:** 1

**Note:** To complete the study of Pre-Calculus, students should enroll in either College Algebra **and** Trigonometry with Analytic Geometry **OR** Pre-Calculus.

This course serves as a foundation for students who will be taking calculus and may be taken concurrently with Trigonometry with Analytic Geometry. The course focuses on extending applications of linear, quadratic, polynomial, piecewise, radical, rational, exponential, and logarithmic functions. Additional topics include sequences, series, binomial expansion, and combinations and permutations.

## Trigonometry with Analytic Geometry

**Course Number:** 20.4010.4 (Honors)

**Course Number:** 20.4010.5 (GT/AA)

**Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2.

**Credit:** 1

**Note:** To complete the study of Pre-Calculus, students should enroll in either College Algebra **and** Trigonometry with Analytic Geometry **OR** Pre-Calculus.

This course serves as a foundation for students who will be taking calculus and may be taken concurrently with College Algebra. Topics include right triangle trigonometry, circular functions, graphs of trigonometric functions, inverse trigonometric functions, trigonometric identities, coordinate geometry, oblique triangles, vectors, conic sections, parametric equations, and polar coordinates.

## Pre-Calculus

**Course Number:** 20.4900.4 (Honors)

**Course Number:** 20.4910.5 (GT/AA)

**Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2.

**Credit:** 1

**Note:** To complete the study of Pre-Calculus, students should enroll in either College Algebra **and** Trigonometry with Analytic Geometry **OR** Pre-Calculus

This course serves as a foundation for students who will be taking calculus and combines content from College Algebra and Trigonometry with Analytic Geometry. Additional topics include partial fraction decomposition and introduction to limits.

## Statistics and Probability (Honors)

**Course Number:** 20.6030.4 (Honors)

**Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2.

**Credit:** 1

This course features the study of techniques in descriptive statistics for one variable, bivariate, and categorical data; frequency and probability of distributions; and the introduction of hypothesis testing.

## Statistics: AP

**Course Number:** 20.6030.6

**Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2.

**Credit:** 1

This course features the study of techniques in descriptive and inferential statistics and includes frequency and probability distributions, Central Limit Theorem, hypothesis testing and confidence intervals, correlation and regression for bivariate data, analysis of variance, and nonparametric statistics. Students are provided with structured preparation for the AP Statistics exam. Advanced Placement mathematics courses are scheduled whenever they are justified by enrollment. Students enrolled in advanced placement courses are eligible for GT credit.

## Calculus (Honors)

**Course Number:** 20.5040.4 (Honors)

**Prerequisites:** Successful completion of Pre-Calculus, or College Algebra and Trigonometry with Analytic Geometry.

**Credit:** 1

This course is designed as an introduction to calculus in anticipation of taking AP Calculus AB or calculus as college freshmen. The course presents the theory and techniques of differential and integral calculus with applications but does not maintain the pace or level of rigor appropriate for students planning to take the AP Calculus AB exam.

## AP Calculus I AB

**Course Number:** 20.5120.6

**Prerequisites:** Successful completion of Pre-Calculus, or College Algebra and Trigonometry with Analytic Geometry.

**Credit:** 1

This course includes the study of the theory and techniques of limits, and differential and integral calculus with applications. Students are provided structured preparation for the AP Calculus AB exam. Advanced Placement mathematics courses are scheduled whenever they are justified by enrollment. Students enrolled in advanced placement courses are eligible for GT credit.

## AP Calculus II BC

**Course Number:** 20.5300.6

**Prerequisites:** Successful completion of Pre-Calculus, or College Algebra and Trigonometry with Analytic Geometry.

**Credit:** 1

This course includes the study of the theory and techniques of limits, differential and integral calculus with applications, and extends to parametric, polar, and vector relationships. Topics also include infinite series and sequences. Students are provided with structured preparation for the AP Calculus BC exam. Advanced Placement mathematics courses are scheduled whenever they are justified by enrollment. Students enrolled in advanced placement courses are eligible for GT credit.

## Multivariable Differential Calculus #

**Course Number:** 20.7000.5 (GT/AA)

**Credit:** 1

This course is designed to provide students with a sound background in multivariable differential calculus. Topics include vector-valued functions, partial derivatives, directional derivatives, multiple integrals, vector fields, line and surface integrals, and Green's and Stokes' Theorems.

## Linear Algebra #

**Course Number:** 20.2830.5 (GT/AA)

**Credit:** 1

This introductory course is designed to provide students with a sound background in linear algebra. Topics include matrices, linear equations, vector spaces, bases and coordinates, linear transformations, eigenvectors and eigenvalues, and diagonalization.

## Differential Equations #

**Course Number:** 20.2600.5 (GT/AA)

**Credit:** 1

This introductory course is designed to provide students with a sound background in differential equations. The course presents basic techniques and methods for solving ordinary differential equations, covering many if not all the topics found in most first-quarter college courses in differential equations.

# Offered through dual enrollment opportunities. Please visit the [Office of College and Career Readiness website](#) for a current list of CCBC/BCPS Dual Credit Courses and additional eligibility requirements.

## MATHEMATICS INTERNATIONAL BACCALAUREATE (IB)

### Math Applications & Interpretations 1 IB

**Course Number:** 20.6200.7

**Credit:** 1

The IB DP Mathematics: applications and interpretation course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Students are encouraged to solve real-world problems, construct, and communicate this mathematically and interpret the conclusions or generalizations. Students should expect to develop strong technology skills and will be intellectually equipped to appreciate the links between the theoretical and the practical concepts in mathematics.



## Math Applications & Interpretations 2 IB

**Course Number:** 20.6210.7

**Credit:** 1

The IB DP Mathematics: applications and interpretation course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Students are encouraged to solve real-world problems, construct, and communicate this mathematically and interpret the conclusions or generalizations. Students should expect to develop strong technology skills and will be intellectually equipped to appreciate the links between the theoretical and the practical concepts in mathematics.

## Math Analysis & Approaches 1 IB

**Course Number:** 20.6220.7

**Credit:** 1

The IB DP Mathematics: analysis and approaches course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. The focus is on developing important mathematical concepts in a comprehensible, coherent, and rigorous way, achieved by a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve abstract problems as well as those set in a variety of meaningful contexts. Mathematics: analysis and approaches has a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments. Students should expect to develop insight into mathematical form and structure and should be intellectually equipped to appreciate the links between concepts in different topic areas.

## Math Analysis & Approaches 2 IB

**Course Number:** 20.6230.7

**Credit:** 1

The IB DP Mathematics: analysis and approaches course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. The focus is on developing important mathematical concepts in a comprehensible, coherent, and rigorous way, achieved by a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve abstract problems as well as those set in a variety of meaningful contexts. Mathematics: analysis and approaches have a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments. Students should expect to develop insight into mathematical form and structure and should be intellectually equipped to appreciate the links between concepts in different topic areas.

# Music

The mission of the Office of Performing Arts is to provide leadership and support for schools in delivering comprehensive, engaging, and rigorous Music, Dance and Theatre instructional programs for all students' grades K-12 in alignment with the Maryland Fine Arts Standards and National Core Arts Standards. Creative expression, active engagement, performance, and development of artistic literacy are hallmarks of Music, Dance and Theatre instruction in our schools empower lifelong relationships with the arts and enrich perspectives as global citizens.

Extra-curricular countywide enrichment activities provide students with additional experiences to develop higher levels of performance skills. Baltimore County Public Schools was recognized by the President's Committee on the Arts and the Humanities as a school system offering high quality fine arts education for all students. Additionally, BCPS has been named as one of the Best Communities for Music Education by the NAMM Foundation (2004, 2006-2022).

Notes: All students must earn one full credit in Fine Arts. This Fine Arts graduation requirement may be satisfied by successful completion of any music course offering listed below. Courses such as band, chorus, and orchestra require regular attendance at all performances to demonstrate performance competencies. Students will receive these dates at least one month prior to performances.

Demonstration of performance competencies through day and evening performances is considered equivalent to an exam and is included as a portion of the course grade. Students must be enrolled in their appropriate school performance ensemble to participate in events that represent our schools such as District and State Assessments, All-Honors, All-State, Solo and Ensemble, and other enrichment musical activities.

Programs	Fine Arts Credit
<b>Standard</b>	Class Piano, Guitar, Music and Society, Music and Audio Technology, Music Design and Production, Music Recording and Marketing, Concert Band, Symphonic Band, Mixed Chorus, Choral Ensemble, Tenor Bass Chorus, Treble Chorus, Concert Choir, Concert Orchestra, Symphonic Orchestra, Jazz Ensemble, Percussion Ensemble, Steel Pan Ensemble
<b>Honors</b>	Class Piano, Guitar, Music and Audio Technology, Music Design and Production, Music Recording and Marketing, Music Theory, Symphonic Winds, Wind Ensemble, Chorale, Tenor Bass Chorus, Treble Chorus, Concert Choir, Chamber Choir, Symphonic Orchestra, Chamber Orchestra, Jazz Ensemble, Percussion Ensemble, Steel Pan Ensemble
<b>AP</b>	AP Music Theory
<b>GT</b>	Class Piano, Guitar, Music and Audio Technology, Music Design and Production, Music Recording and Marketing, Wind Ensemble, Chamber Choir, Chamber Orchestra, Jazz Ensemble

## Music and Audio Technology

**Course Number:** 45.8050.0

**Course Number:** 45.8060.4 (H)

**Course Number:** 45.8070.5 (GT)

**Prerequisite:** None

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Course content will include the latest innovations and advances in the field of Music Technology. Topics will include digital sampling, sequencing, original computer-generated compositions, MIDI, and multi-track recording. In a laboratory setting, students will use technology to compose, edit, arrange, perform, and record their own music. The ability to read music is not required.

## Music Design and Production

**Course Number:** 45.8310.0

**Course Number:** 45.8310.4 (H)

**Course Number:** 45.8310.5 (GT)

**Prerequisite:** Music and Audio Technology

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Music Design and Production is the second course in sequence after Music and Audio Technology. In this course, students will study advanced elements of mixing, sound design, and composition. Other embedded topics include related aspects of business and production.

## Music Recording and Marketing

**Course Number:** 45.8320.0

**Course Number:** 45.8320.4 (H)

**Course Number:** 45.8320.5 (GT)

**Prerequisite:** Music Design and Production

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Music Recording and Marketing is the third course in sequence after Music Design and Production. In this course, students will study advanced concepts of recording, composition, and business-related concepts. Other embedded topics include pioneers of audio recording, consumerism of audio/recording products, and career options.

## Music and Society

**Course Number:** 45.9120.0

**Prerequisite:** None

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Students will explore and evaluate the impact of societal connections and its significant impacts on music. They will learn the foundational skills of music such as: note reading, rhythm interpretation, traditional and non–traditional music composition skills. Students will be able to create, respond, and connect to music by gaining an understanding of the roots of music, its history, and how events have shaped the musical landscape.

## Class Piano

**Course Number:** 45.2710.0

**Course Number:** 45.2720.4 (H)

**Course Number:** 45.2730.5 (GT)

**Prerequisite:** None

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

In a group setting, students will acquire the basic skills required to play the piano. Reading music notation, theory, and music elements are taught to provide the skills necessary to pursue musical interests.

## Class Piano

**Course Number:** 45.2610.0

**Course Number:** 45.2620.4 (H)

**Course Number:** 45.2630.5 (GT)

**Prerequisite:** None

**Credit:** 0.5

**Note:** Successful completion of the above course satisfies half of the fine arts graduation requirement.

In a group setting, students will acquire the basic skills required to play the piano. Reading music notation, theory, and music elements are taught to provide the skills necessary to pursue musical interests.

## Guitar

**Course Number:** 45.2810.0

**Course Number:** 45.2820.4 (H)

**Course Number:** 45.2830.5 (GT)

**Prerequisite:** None

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Students are given the opportunity to study music through a performance on the guitar. They will learn to read musical notation as they acquire performance skills and play various styles of music.

## Guitar

**Course Number:** 45.2910.0

**Course Number:** 45.2920.4 (H)

**Course Number:** 45.2930.5 (GT)

**Prerequisite:** None

**Credit:** 0.5

**Note:** Successful completion of the above course satisfies half of the fine arts graduation requirement.

Students are given the opportunity to study music through a performance on the guitar. They will learn to read musical notation as they acquire performance skills and play various styles of music.

## Music Theory

**Course Number:** 45.5110.4 (H)

**Course Number:** 45.5110.5 (GT)

**Prerequisite:** None

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Music Theory improves students' basic understanding of music, especially as it contributes directly to appreciation and performance. It includes study in music reading and notation, ear training, keyboard training, harmony, analysis, and composition.

## Music Theory-Advanced Placement

**Course Number:** 45.5300.6

**Prerequisite:** Music Theory or permission of instructor.

**Credit:** 1

**Note:** Successful completion of the above course satisfies the Fine Arts graduation requirement.

AP Music Theory concentrates instruction on a higher level of theoretical music training commensurate with college level expectations. Successful completion of the exam awards AP credit.

## Band

### Concert Band

**Course Number:** 45.2020.0

### Wind Ensemble (H)

**Course Number:** 45.2400.4

### Symphonic Band

**Course Number:** 45.2030.0

### Wind Ensemble (GT)

**Course Number:** 45.2400.5

**Credit:** 1

**Prerequisite:** Requirements for admission may be selective and schools may require an audition for acceptance into this course.

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Various bands are offered to students interested in instrumental ensemble music experiences and who have the necessary background for the group. The course provides an opportunity for musical growth through the study and performance of a variety of instrumental literature. Students will develop skills and confidence in playing an individual part while working closely with others in a group.

## Chorus

### **Tenor Bass Chorus (H)**

**Course Number:** 45.4100.4

### **Concert Choir**

**Course Number:** 45.4450.0

### **Choral Ensemble**

**Course Number:** 45.4210.0

### **Chorale (H)**

**Course Number:** 45.4500.4

### **Chorus**

**Course Number:** 45.4220.0

### **Chamber Choir (H)**

**Course Number:** 45.4800.4

### **Treble Chorus**

**Course Number:** 45.4310.0

### **Chamber Choir (GT)**

**Course Number:** 45.4800.5

**Credit:** 1

**Prerequisite:** Requirements for admission may be conducted via audition/placement and schools may require an audition for acceptance into this course.

Note: Successful completion of the above course satisfies the fine arts graduation requirement.

Various choruses are offered to students interested in singing. The courses provide an opportunity for musical growth through the study and performance of a variety of vocal literature. Students will develop skills and confidence in singing an individual part while working closely with others in a group.

## Orchestra

### **Concert Orchestra**

**Course Number:** 45.3010.0

### **Chamber Orchestra (H)**

**Course Number:** 45.2100.4

### **Symphonic Orchestra**

**Course Number:** 45.3020.0

### **Chamber Orchestra (GT)**

**Course Number:** 45.2100.5

### **Symphonic Orchestra (H)**

**Course Number:** 45.3020.4

**Prerequisite:** Requirements for admission may be selective and schools may require an audition for acceptance into this course.

**Note:** Successful completion of one of the courses listed above satisfies the Fine Arts graduation requirement.

**Credit:** 1

Various orchestras are offered to students interested in instrumental ensemble music experience and who have the necessary background for the group. The course provides an opportunity for musical growth through the study and performance of a variety of instrumental literature.

Students will develop skills and confidence in playing an individual part while working closely with others in a group.

## Jazz Ensemble

Course Number: 45.2410.0

Course Number: 45.2410.4 (H)

Course Number: 45.2410.5 (GT)

**Prerequisite:** Requirements for admission may be selective and schools may require an audition for acceptance into this course.

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement.

Students will study and perform a variety of literature ranging from big band swing charts to Latin and rock arrangements. The fundamentals of improvisation will be taught along with the interpretation of jazz notation. The ensemble will be involved in presenting public performances throughout the year.

## MUSIC ADVANCED PLACEMENT COURSE

### Music Theory-Advanced Placement

Course Number: 45.5300.6

**Credit:** 1

**Note:** Successful completion of the above course satisfies the fine arts graduation requirement. Students enrolled in AP courses are eligible for GT credit.

## MUSIC INTERNATIONAL BACCALAUREATE (IB)

### IB Music Theory

Course Number: 45.5110.7

**Credit:** 1

## MUSIC MAGNET COURSES

Only students who have applied and have been accepted into approved magnet schools or programs can take magnet courses.

### History of Jazz

**Course Number:** 45.7010.4

**Credit:** ½

### Music Seminar

**Course Number:** 45.9400.4

**Credit:** ½

### Chorus 9

**Course Number:** 45.4620.5

**Credit:** 2

### Strings 9

**Course Number:** 45.3000.5

**Credit:** 2

**Music Theory I/GT**

**Course Number:** 45.5110.5

**Credit:** 1

**Opera/Musical Theatre Workshop I**

**Course Number:** 45.5710.5

**Credit:** 1

**Opera/Musical Theatre Workshop II**

**Course Number:** 45.5720.5

**Credit:** 1

**Band 9**

**Course Number:** 45.4610.5

**Credit:** 2

**Voice 1/GT**

**Course Number:** 45.4910.5

**Credit:** 1

**Voice 2/GT**

**Course Number:** 45.4920.5

**Credit:** 1

**Voice 3/GT**

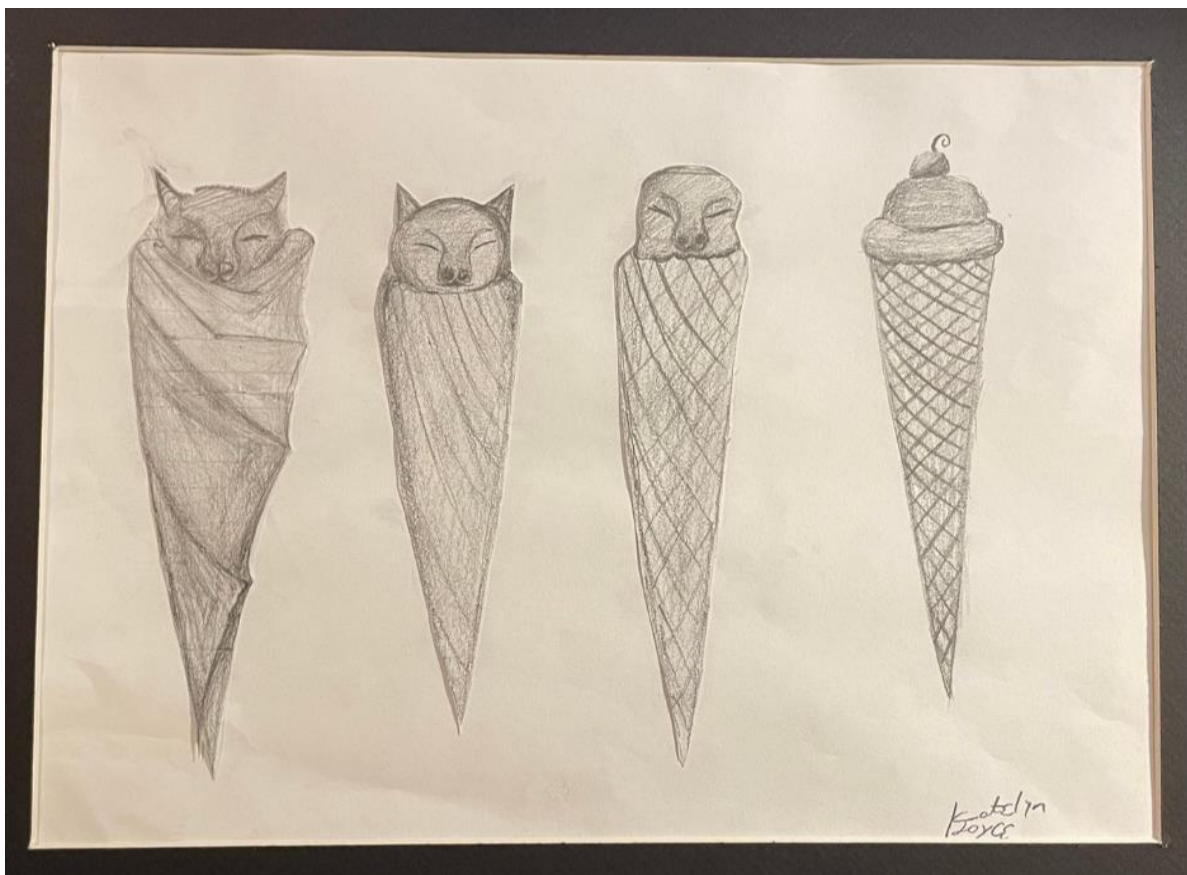
**Course Number:** 45.4930.5

**Credit:** 1

**Voice 4/GT**

**Course Number:** 45.4940.5

**Credit:** 1



"Bat to Ice Cream Metamorphosis" by Karen J. at General John Stricker Middle, Grade 7



# Physical Education

The purpose of the physical education program is to contribute to each student's growth and development in the physical, cognitive, and affective domains through a movement-based curriculum. This involves the delivery of a planned, sequential PreK-12 instructional program that teaches skills, knowledge, and behaviors to promote lifelong fitness and activity. These components are all necessary to assist the student in becoming a physically literate individual who has the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity. The curriculum is aligned with national and state standards and is designed to educate students on improving, maintaining, and/or enhancing their personal health and wellness.

At the high school level, emphasis is placed on personalized fitness and student choice in selecting elective courses of interest.

## REQUIRED COURSE

Fitness Foundations/Fitness Mastery is the only course which meets the Physical Education graduation requirement. There are no waivers for this requirement. Physical limitations or disabling conditions will be accommodated with an adapted program. Fitness Foundations/Fitness Mastery is required before taking electives.

In the Fitness Foundations/Fitness Mastery course, students will receive instruction and information about personal fitness components and self-management skills. With this information, students will be able to integrate the knowledge to design, plan, and perform an individualized fitness program based on personalized fitness goals. A variety of evidence-based assessments and physical activities related to skill performance, fitness, and health are analyzed and explored. The course will concentrate on concepts involving cardiorespiratory/aerobic fitness, muscular strength and endurance, body composition, and flexibility. Specific aspects of health-related fitness components will be explained and applied to activities. As students extend and refine their abilities, they will also explore and participate in individual and team sports, along with adventure and rhythmic activities related to personal fitness. Students will learn how to adjust their personal fitness plans as their interests and physical abilities change throughout their lives.

To meet the Physical Education graduation requirement students can complete the 1 credit Fitness Foundations/Fitness Mastery course or complete the Fitness Foundations ½ credit course followed by the Fitness Mastery ½ credit course. Fitness Foundations/Fitness Mastery is required before taking 1.0 Physical Education electives.

**Note:** According to IDEA, students with disabilities must be provided with the opportunity to enroll in a physical education class each year they are enrolled in school. Only students receiving a Maryland High School Certificate may take the Fitness Foundations/Fitness Mastery course multiple times in the appropriate environment. If students are receiving adapted physical education services, they would continue to receive the service.

## **Fitness Foundations/Fitness Mastery**

**Course Number:** 50.0900.0

**Prerequisite:** None

**Credit:** 1

## **Fitness Foundations/Fitness Mastery**

**Course Number:** 50.0900.0

**Prerequisite:** None

**Credit:** 1

## **Fitness Foundations**

**Course Number:** 50.9120.0

**Prerequisite:** None

**Credit:** ½

Note: This course only provides ½ of the Physical Education graduation requirement and would need to be followed by the Fitness Mastery .5 course to fulfill the 1 credit graduation requirement.

## **Fitness Mastery**

**Course Number:** 50.9130.0

**Prerequisite:** Fitness Foundations .5

**Credit:** ½

Note: This course can be taken after successful completion of Fitness Foundations .5 to complete the 1.0 graduation requirement and may be combined with a .5 elective.

## **ELECTIVE COURSES**

Electives require the successful completion of the Fitness Foundations/Fitness Mastery Course. A ½ credit elective may be paired with the .5 Fitness Mastery course upon the completion of the .5 Fitness Foundations course. All electives are designed to meet the specific interests of students in adventure activities, aerobics and body conditioning, individual sports, team sports, and weight training. Electives provide additional experiences for students to participate in activities of their interests throughout their high school career. They extend and refine specific physical skills, life skills, and health-related components of fitness. Once an introductory elective course is completed, the course can be taken multiple times for credit using the advanced course number.

## **Adventure Elective**

### **Advent. Elective-Introductory**

**Course Number:** 50.1510.0

### **Advent. Elective-Advanced**

**Course Number:** 50.1520.0

**Credit:** 1

### **Advent. Elective-Introductory**

**Course Number:** 50.1810.0

**Advent. Elective-Advanced**

**Course Number:** 50.1820.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/Fitness Mastery course.

**Aerobics and Body Conditioning**

**Aerobics and Body Conditioning (ABC)-Introductory**

**Course Number:** 50.3010.0

**ABC-Advanced**

**Course Number:** 50.3020.0

**Credit:** 1

**ABC-Introductory**

**Course Number:** 50.3110.0

**ABC-Advanced**

**Course Number:** 50.3120.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/Fitness Mastery course.

**Individual Elective**

**Ind. Elective-Introductory**

**Course Number:** 50.1310.0

**IE-Advanced**

**Course Number:** 50.1320.0

**Credit:** 1

**IE-Introductory**

**Course Number:** 50.1350.0

**IE-Advanced**

**Course Number:** 50.1360.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/Fitness Mastery course.

**Physical Education Elective**

**Phys. Educ. Elective-Introductory**

**Course Number:** 50.1010.0

**PE-Advanced**

**Course Number:** 50.1020.0

**Credit:** 1

**PE-Introductory**

**Course Number:** 50.1040.0

**PE-Advanced**

**Course Number:** 50.1050.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/Fitness Mastery course.

## **Team Elective**

### **Team Elective-Introductory**

**Course Number:** 50.1410.0

### **Team Elective-Advanced**

**Course Number:** 50.1420.0

**Credit:** 1

### **Team Elective-Introductory**

**Course Number:** 50.1450.0

### **Team Elective-Advanced**

**Course Number:** 50.1460.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/ Fitness Mastery course.

## **Weight Training**

### **Weight Training-Introductory**

**Course Number:** 50.4010.0

### **Weight Training-Advanced**

**Course Number:** 50.4020.0

**Credit:** 1

### **Weight Training-Introductory**

**Course Number:** 50.4110.0

### **Weight Training-Advanced**

**Course Number:** 50.4120.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/Fitness Mastery course.

## **Leadership PE & REC**

### **Leadership PE & Rec (LPR)-Introductory**

**Course Number:** 50.8010.0

### **LPR-Advanced**

**Course Number:** 50.8020.0

**Credit:** 1

### **LPR-Introductory**

**Course Number:** 50.8110.0

### **LPR-Advanced**

**Course Number:** 50.8120.0

**Credit:** ½

**Prerequisite:** Successful completion of Fitness Foundations/Fitness Mastery course.

The leadership elective courses develop leadership skills in Physical Education and recreation and allow students to perform specific responsibilities in connection with the routine organization of a class and assistance with planned learning experiences. In the advanced courses, there will be practical experiences geared toward a better understanding of the many areas of physical education and recreation.

# Science

The mission of the Office of Science PreK-12 is to work collaboratively with all stakeholder groups to define a vision for science education aligned with the Next Generation Science Standards (NGSS) and to provide leadership for the development, implementation, and assessment of that vision for Baltimore County Public Schools. These efforts are all directed toward one goal—accessing all standards for all students to support a well-rounded science curriculum that will help students to become globally competitive citizens. The Office of Science staff is committed to actively engaging students in science and engineering practices (SEP) and applying crosscutting concepts (CCC) to deepen the understanding of core ideas. They understand that the best way for students to learn is to carry out science investigations and engineering design projects related to the Disciplinary Core Ideas (DCI).

## High School graduation requirements include the following:

Science courses that align to or exceed the Next Generation Science Standards

- One credit in Earth/Space Science (Earth Systems) +
- One credit in Life Sciences (Living Systems) +
- One credit in a Physical Science (Chemistry, Physics, Integrated Physics and Chemistry) +
- + Advanced Placement courses in the domains of Earth, Life and Physical Sciences meet and exceed the NGSS

**All other science courses are considered electives. Students have the options of standards, honors, or advanced academic level. In these courses, the instructional level and materials are modified according to the needs of the students.**

Examples of suggested course sequences are shown below.

Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Standard NGSS Program</b>	Earth Systems	Living Systems	Integrated Physics and Chemistry (IPC)	Science elective
<b>Honors NGSS Program</b>	Honors Earth Systems	Honors Living Systems	IPC or Honors NGSS Chemistry	Honors Physics
<b>GT/Advanced Academics NGSS Program</b>	AA/GT Earth Systems or Advanced Placement Environmental Science	AA/GT Living Systems	AA/GT Chemistry	AA/GT Physics

*\*Animals may be used for experimentation/dissection in this course; however, alternative activities may also be provided.*

*NOTE: In the following course descriptions, "successful completion" suggests a grade of "C" or better.*

## Earth Systems

**Course Number:** 25.0960.0

**Prerequisites:** None

**Credit:** 1

Earth Systems is a problem-based course aligned with NGSS that is designed to investigate processes that operate on Earth and address its place in the universe. Earth consists of a set of systems- atmosphere, hydrosphere, geosphere, and biosphere - that are intricately interconnected. Students will explore how minor changes, including human impacts, in one part of one system can have large and sudden consequences in parts of other systems or have no effect at all.

## Earth Systems Honors

**Course Number:** 25.0960.4

**Prerequisites:** Concurrent enrollment in Geometry is recommended.

**Credit:** 1

Earth Systems is a complex, problem-based course aligned with NGSS that is designed to investigate processes that operate on Earth and address its place in the universe. Earth consists of a set of systems - atmosphere, hydrosphere, geosphere, and biosphere - that are intricately interconnected. Students will explore how minor changes, including human impacts, in one part of one system can have large and sudden consequences in parts of other systems or have no effect at all.

## Earth Systems Gifted and Talented/Advanced Academics

**Course Number:** 25.0960.5

**Prerequisites:** Successful completion or concurrent enrollment in Geometry is recommended.

**Credit:** 1

Earth Systems is a complex problem-based course aligned with NGSS that is designed to use critical thinking to investigate processes that operate on Earth and address its place in the universe. Earth consists of a set of systems - atmosphere, hydrosphere, geosphere, and biosphere - that are intricately interconnected. Students will explore and design solutions for how minor changes, including human impacts, in one part of one system can have large and sudden consequences in parts of other systems or have no effect at all.

## Living Systems

**Course Number:** 25.3200.0

**Prerequisites:** Earth systems is recommended.

**Credit:** 1

Living Systems is a problem-based course aligned with NGSS designed to investigate the relationships between organisms. The study of life ranges from single molecules, through organisms and ecosystems, to the entire biosphere and its history that is all life on Earth. Students will explore the interconnected and interacting components of life.

## Living Systems Honors

**Course Number:** 25.3200.4

**Prerequisites:** Successful completion of or concurrent enrollment in Earth Systems is recommended

**Credit:** 1

Living Systems is a complex, problem-based course aligned with NGSS designed to investigate the relationships between organisms. The study of life ranges from single molecules, through organisms and ecosystems, to the entire biosphere and its history that is all life on Earth. Students in this course analyze the interconnected and interacting components of life.

## Living Systems Gifted and Talented/Advanced Academics

**Course Number:** 25.3200.5

**Prerequisites:** Successful completion of or concurrent enrollment in Earth Systems is recommended.

**Credit:** 1

Living Systems is a complex, problem-based course aligned with NGSS designed to investigate the relationships between organisms. The study of life ranges from single molecules, through organisms and ecosystems, to the entire biosphere and its history that is all life on Earth. Students in this course will use critical thinking to evaluate the interconnected and interacting components of life.

## Integrated Physics and Chemistry

**Course Number:** 25.1400.0

**Prerequisites:** Earth Systems and Living Systems are recommended.

**Credit:** 1

Integrated Physics and Chemistry is a problem-based course aligned with NGSS designed to investigate how systems or processes depend on physical and chemical sub-processes. To understand the physical and chemical basis of a system, one must consider the structure of matter at the atomic and subatomic scale and discover how it influences the system's larger scale structures, properties, and function. The goal is to help students see that there are mechanisms of cause and effect in all systems.

## Integrated Physics and Chemistry Honors

**Course Number:** 25.1400.4

**Prerequisites:** Successful completion of Earth Systems and Living Systems is recommended.

**Credit:** 1

Integrated Physics and Chemistry is a complex, problem-based course aligned with NGSS designed to investigate how systems or processes depend on physical and chemical sub processes. To understand the physical and chemical basis of a system, one must consider the structure of matter at the atomic and subatomic scale and discover how it influences the system's larger scale structures, properties, and function. The goal is to help students apply the mechanisms of cause and effect in all systems.

## Integrated Physics and Chemistry Gifted and Talented/Advanced Academics

**Course Number:** 25.1400.5

**Prerequisites:** Successful completion of Earth Systems and Living Systems is recommended.

**Credit:** 1

Integrated Physics and Chemistry is a complex, problem-based course aligned with NGSS designed to investigate how systems or processes depend on physical and chemical sub processes. To understand the physical and chemical basis of a system, one must consider the structure of matter at the atomic and subatomic scale and discover how it influences the system's larger scale structures, properties, and function. The goal is to help students evaluate the mechanisms of cause and effect

## NGSS Chemistry

**Course Number:** 25.1100.0

**Prerequisites:** Successful completion of Living Systems and Algebra I is recommended.

**Credit:** 1

NGSS Chemistry is a fundamental, problem-based course, with relevant laboratory applications. Topics such as atomic theory and structure, chemical bonding and reactions, formulas and equations, solutions, acids and bases, nuclear chemistry, and environmental chemistry are included. NGSS Science and Engineering Practices are emphasized.

## NGSS Chemistry: Honors

**Course Number:** 25.1100.4 (H)

**Prerequisites:** Successful completion of Living Systems and Algebra I is recommended.

**Credit:** 1

This problem-based course provides a quantitative and qualitative approach to the fundamentals of chemistry. Students do an in-depth study of the topics listed under Chemistry including acid-based equilibria, electrochemistry, thermodynamics, and redox reactions.

## NGSS Chemistry: Gifted and Talented/Advanced Academics

**Course Number:** 25.1100.5 (GT)

**Prerequisites:** Successful completion of Living Systems and concurrent enrollment in Algebra II or higher is recommended.

**Credit:** 1

This problem-based course includes quantitative, qualitative, and descriptive chemistry with an emphasis on computational/problem solving skills. The lab program stresses both qualitative and analytical chemistry. Organic chemistry may be included.

## NGSS Physics

**Course Number:** 25.9120.0

**Prerequisite:** Successful completion of Living Systems, NGSS Chemistry, and Algebra II is recommended.

**Credit:** 1

NGSS Physics is a complex, problem-based course that builds upon the science and engineering practices and blends the core ideas with science and engineering practices and cross-cutting concepts. The course includes projects and laboratory investigations in the study of motion, forces and their interactions, collisions, energy, momentum, wave properties, electricity, magnetism, light, and information technology.



## NGSS Physics: Honors

**Course Number:** 25.9120.4 (H)

**Prerequisite:** Successful completion of Earth Systems, Biology or Living Systems, and NGSS Chemistry and concurrent enrollment in Trigonometry/Analytic Geometry or higher is recommended.

**Credit:** 1

This course is a complex, problem-based course that incorporates critical thinking to build upon the science and engineering practices and blends the core ideas with cross-cutting concepts. The course increases student's evaluation and analysis skills using additional mathematics principals, content depth, projects and laboratory investigations in the study of motion, forces and their interactions, collisions, energy, momentum, wave properties, electricity, magnetism, light, and information technology.

## NGSS Physics: Gifted and Talented/Advanced Academics

**Course Number:** 25.9120.5 (GT)

**Prerequisites:** Successful completion of Earth Systems, Biology or Living Systems, and NGSS Chemistry and successful completion or concurrent enrollment in Trigonometry/Analytic Geometry or higher is recommended.

**Credit:** 1

This rigorous course is a complex, problem-based course that incorporates critical thinking to build upon the science and engineering practices and blends the core ideas with cross-cutting concepts. The course increases student's evaluation, analysis, and application skills using additional mathematical principals, content depth, projects, research, and laboratory investigations in the study of motion, forces and their interactions, collisions, energy, momentum, wave properties, electricity, magnetism, light, and information technology.

\*AP courses may be used for graduation requirements or electives.

## SCIENCE ELECTIVES

Credits from these courses may not be used to fulfill the three-credit graduation requirement for Science.

### Anatomy and Physiology\*

**Course Number:** 25.5020.4 (H)

**Prerequisites:** Successful completion of Living Systems and Chemistry or IPC is recommended.

**Credit:** 1

This elective provides a comprehensive overview of human body systems and stresses both the structure (microscopic and macroscopic) and functioning of those systems. Research using original articles, historical papers, and other resources are required. A project or term paper may also be required.

### Animal Behavior\*

**Course Number:** 25.1080.0

**Prerequisites:** Successful completion of Living Systems and IPC, or Chemistry is recommended.

**Credit:** 1

This elective provides students with the opportunity to use their knowledge of life cycles, parental behavior strategies, and environmental factors to analyze population dynamics.

## Aquatic Science\*

**Course Number:** 25.6010.0

**Prerequisites:** Successful completion of Living Systems and Environmental Science, IPC, or Chemistry is recommended.

**Credit:** 1

This elective provides students with the opportunity to use inquiry and knowledge of ecological principles to investigate Maryland's aquatic fresh water and tidal water environments and to demonstrate the interrelationships between the biotic and abiotic components.

## Astronomy

**Course Number:** 25.7100.0

**Magnet Course Number:** 25.7150.5 (GT)

**Prerequisites:** Successful completion of Earth Systems, Living Systems, and Chemistry or IPC is recommended.

**Credit:** 1

This elective provides students with the opportunity to use their knowledge of astronomy to provide an explanation for the development of the modern model of the universe.

## Biology: AP\*

**Course Number:** 25.1070.6

**Prerequisites:** Successful completion of Living Systems, Algebra II and Chemistry or IPC is recommended.

**Credits:** 2

The AP Biology course is equivalent to a two- semester college introductory biology course. The content of the course is grouped into the four big ideas of evolution, cell biology, genetics, and ecology. This is a lab intensive course. Students who take AP Biology will also develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses.

## Biotechnology\*

**Course Number:** 25.4530.4 (H)

**Prerequisites:** Successful completion of Living Systems and Chemistry or IPC is required. Concurrent enrollment in Physics is also recommended.

**Credit:** 1

This elective combine science research techniques and hands- on laboratory activities to study molecular biology, genetics, genetic engineering, cellular biology, aquaculture, hydroponics, biological pest management, environmental and ecological management techniques, and bioethics. Development of protocols for Science and Engineering Practices are taught for use in independent research projects. The course may be co-taught by science and technology teachers.

## Chemistry: AP

**Course Number:** 25.1790.6

**Prerequisites:** Successful completion of Living Systems, Chemistry and Algebra II or higher is recommended.

**Credit:** 2

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The content of the course is grouped into the six big ideas of atomic theory, chemical and physical properties of matter, chemical reactions, thermodynamics, and bonding. This is a lab intensive course. Students who take AP Chemistry course will also develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses.

### Ecology of Maryland and the Chesapeake Bay\*

**Course Number:** 25.6100.0

**Prerequisites:** Successful completion of Living Systems, Earth Systems, and Chemistry or IPC is recommended.

**Credit:** 1

This elective allows students the opportunity to analyze the ecology, geology, and Chesapeake Bay and the entire Chesapeake Bay watershed, its tributaries, and the geography of the state of Maryland. Students will design and defend a proposal for an aquatic or wetland restoration.

### Environmental Science: AP \*

**Course Number:** 25.3030.6

**Prerequisites:** Successful completion of Earth Systems, Living Systems, Chemistry, or IPC, and Algebra I is recommended.

**Credit:** 1

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. Topics in the course include earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change. It is a rigorous science course that stresses scientific principles and analysis and that often includes a laboratory component.

### Forensic Science

**Course Number:** 25.4810.0

**Credit:** ½

**Course Number:** 25.4800.4 (H)

**Credit:** 1

**Prerequisites:** Successful completion of Living Systems and Chemistry or IPC is recommended.

This elective emphasizes the integration of science in the legal process. Students can learn the role of the forensic scientist and crime laboratory in a criminal investigation, as well as crime scene procedures including the simulation of a crime scene investigation and proper collection and analysis of evidence. Students learn about toxicology and anthropology and appropriate scientific analysis of physical evidence. Problem solving and critical thinking are emphasized during extensive hands-on laboratory activities. Students also receive an introduction into the workings and application of microspectro-photometry, gas chromatography, and the polarizing microscope. Supplemental case readings may be required.

## Forensic Science: Gifted and Talented/Advanced Academics

**Course Number:** 25.4810.5 (GT)

**Credit:** ½

**Course Number:** 25.4800.5 (GT)

**Credit:** 1

**Prerequisites:** Successful completion of Living Systems and Chemistry or IPC is required. Concurrent enrollment in Physics is also recommended.

This elective allows students the opportunity for an in-depth look at chromatography, polarizing microscopy, and analysis of drugs using spectrophotometry. Independent problem-solving, and supplemental case readings are also required.

## Horticulture

**Course Number:** 25.2040.0

**Prerequisites:** Successful completion of Living Systems is recommended.

**Credit:** 1

This elective is designed for students who are interested in learning or pursuing a career in how to plant and raise garden vegetables, flowering plants, shrubs, and trees, creating a landscape design, plant conservation, or who are interested in aquaponics or the floral and/or landscaping industry.

## Microbiology

**Course Number:** 25.1180.4 (H)

**Prerequisites:** Successful completion of Living Systems and Chemistry is recommended.

**Credit:** 1

This elective provides students with the opportunity to study organisms that are microscopic, unicellular, or exist in cell clusters. Students study these organisms as biological entities. The course includes eukaryotes, such as fungi and protists, as well as prokaryotes. Microbiology also includes the study of the immune system and the body's reaction to invasion by pathogens.

## Oceanography/Marine Science

**Course Number:** 25.6000.0

**Prerequisites:** Successful completion of Living Systems and Earth Systems or Earth/Space Science and Chemistry is recommended.

**Credit:** 1

This elective provides students with the opportunity to identify, locate, and describe the major bodies of water on Earth's surface. Included in this study are ecosystem dynamics, ocean currents and waves, plate tectonics and the geology of the sea floor, as well as the various physical and chemical factors which interact to influence climate and weather to form suitable habitats for marine organisms.

## Paramedical Biology

**Course Number:** 25.5400.0

**Prerequisites:** Successful completion of Living Systems is recommended.

**Credit:** 1

This elective provides students with the opportunity to use their knowledge of human anatomy and physiology to explain how body systems react to and are affected by injuries and medical emergencies. Included in this study are the legal aspects of patient care and the health care provider's rights and responsibilities under the law. Students learn how to gather information at the scene of a medical emergency and provide basic life support techniques. Additionally, students will study selected aspects of human anatomy and physiology. The course includes hands-on laboratory work, outside readings, and investigation of allied health careers.

## Physics 1: Algebra-based: AP

**Course Number:** 25.1890.6

**Prerequisites:** Successful completion of Earth Systems, Living Systems, and Chemistry and successful completion or concurrent enrollment in Trigonometry/Analytic Geometry or higher is recommended.

**Credit:** 1

This course is the equivalent of a first-semester college course in algebra-based physics, taught over a full year to enable students to develop a deep understanding of the physics content and to focus on applying their knowledge through inquiry labs. The course is organized around seven big ideas that cover Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electric circuits.

## Physics 2: Algebra-based: AP

**Course Number:** 25.1910.6

**Prerequisites:** Successful Completion of AP Physics 1 and Trigonometry/Analytic Geometry is recommended.

**Credit:** 1

This course is the equivalent to a second-semester college course in algebra-based physics, taught over a full year to enable students to develop a deep understanding of the physics content and to focus on applying their knowledge through inquiry labs. The course is organized around seven big ideas that cover fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics.

## Physics C: AP

***Mechanics only***

**Course Number:** 25.1900.6

**Credit:** 1

***Electricity and Magnetism only***

**Course Number:** 25.1380.6

**Credit:** 1

***Mechanics and Electricity and Magnetism***

**Course Number:** 25.1290.6

**Credit:** 2

**Prerequisites:** Successful completion of Physics or AP Physics 1 and Pre-calculus is recommended.

Concurrent enrollment in Calculus is recommended. This course builds on the conceptual understanding attained in a first course in physics and normally forms the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The sequence is parallel to or preceded by mathematics courses that include calculus. Methods of calculus are used in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus, in mechanics, and/or electricity and magnetism.

## Pre-College Science

**Course Number:** 25.7200.4 (H)

**Prerequisites:** Successful completion of Living Systems and Algebra I is recommended.

**Credit:** 1

This course is for students who may decide late in their high school career that they would like to go to college. The course has been designed to fill potential gaps in learning and provides science content information as well as training in skills that students will need to be successful in college-level science courses. This course approaches science from a historical perspective and examines the thinking behind many important scientific achievements in the fields of Biology, Chemistry, and Physics.

## Projects\*

**Course Number:** 25.1360.4 (H)

**Prerequisite:** Successful completion of Living Systems and IPC or Chemistry and Physics is recommended.

**Credit:** 1

This elective provides students interested in a STEM Career with the opportunity to explore their science application skills through independent research projects. Students use skills and knowledge from earth, life and physical Science, and mathematics applying them to experiments and projects. All students compete in at least one Museum of Industry competition. Every project/experiment will be accompanied by pre-project planning, experiment proposal, data from testing, analysis of results, and self-evaluation of the plan and project. Individual and/or group presentations are also required.

## Zoology\*

**Course Number:** 25.4010.0

**Credit:** ½

**Course Number:** 25.4000.0

**Credit:** 1

**Prerequisite:** Successful completion of Living Systems is recommended.

This elective provides students with the opportunity to complete a phylogenetic survey of the animal kingdom from simple invertebrate to complex vertebrate species.

## SCIENCE ADVANCED PLACEMENT COURSES

Advanced Placement science courses are scheduled whenever they are justified by enrollment. Students enrolled in Advanced Placement courses are eligible for GT credit. Each advanced placement course includes a study of major scientific concepts, principles, and unifying themes, and includes laboratory work that supports the development of research skills.

## Biology: AP\*

**Course Number:** 25.1070.6

**Credits:** 2

## Chemistry: AP

**Course Number:** 25.1790.6

**Credit:** 2

Environmental Science: AP \*

**Course Number:** 25.3030.6

**Credit:** 1

Physics 1: AP

**Course Number:** 25.1890.6

**Credit:** 1

Physics 2: AP

**Course Number:** 25.1910.6

**Credit:** 1

Physics C: AP-Mechanics only

**Course Number:** 25.1900.6

**Credit:** 1

Physics C: AP-Electricity and Magnetism only

**Course Number:** 25.1380.6

**Credit:** 1

Physics C: AP -Mechanics and Electricity and Magnetism

**Course Number:** 25.1290.6

**Credit:** 2

### **SCIENCE INTERNATIONAL BACCALAUREATE PROGRAMME (IB)**

International Baccalaureate science courses contain a body of knowledge together with scientific practices and techniques which students are required to learn and apply. In their application of science and engineering, students develop an ability to analyze, evaluate, and synthesize scientific information. A compulsory project encourages students to appreciate the environmental, social, and ethical implications of science. The project is collaborative and interdisciplinary: students analyze a topic or problem which can be investigated in each of the science disciplines offered by the school. It is also an opportunity for students to explore scientific solutions to global questions.

Biology 9: Pre-IB\*

**Course Number:** 25.1010.7

**Credit:** 1

Chemistry 10: Pre-IB

**Course Number:** 25.1110.7

**Credit:** 1

Biology 11 IB, Honors Level\*

**Course Number:** 25.1040.7

**Credit:** 1

Chemistry IB, Standard Level

**Course Number:** 25.1120.7

**Credit:** 1

Biology 12 IB, Honors Level\*

**Course Number:** 25.1050.7

**Credit:** 1

Physics IB, Standard Level

**Course Number:** 25.1220.7

**Credit:** 1

Note: IB courses are available only to students who have been admitted to the International Baccalaureate (IB) program. Registration for IB courses is predicated upon satisfactory completion of the requirements outlined in the International Baccalaureate curriculum.

## SCIENCE MAGNET COURSES

### Field and Wildlife Biology Honors\*

**Course Number:** 25.3100.4

**Prerequisites:** Concurrent enrollment in Earth Systems or Biology/Living Systems is recommended.

**Credit:** 1

In Field and Wildlife Biology, students are involved in a study of living organisms in the context of ecology. The course provides emphasis on identification of organisms in the field with the intent of developing a conceptual understanding of community structure and wildlife habitats.

**NOTE:** Field and Wildlife Biology is offered only at Sparrows Point High School



“Symmetry” by Mariangel M-B. at Holadird Middle/STEM, Grade 8



# Social Studies

Social Studies is the integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provide coordinated, systematic study drawing upon such disciplines as anthropology, archaeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences.

The primary purpose of social studies is to help young people develop “the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world.” (National Council for Social Studies.) To that end, social studies instruction is based on content that draws upon appropriate elements of the human and environmental condition, supports intellectual integrity, and facilitates the development of skills and processes. An effective social studies program ensures the academic development of students through appropriate balances between domestic and global contexts, between skills and concepts, between the present and past, and among the disciplines being employed. Effective social studies instruction is student-centered, relevant, rigorous, and provides students with opportunities to apply the knowledge and skills required of successful adults.

Standard, honors, and gifted and talented/advanced academic levels of social studies courses are offered as enrollments justify. Students are required to earn 3½ credits in social studies: American Government, World History, United States History, and Personal Finance & Economic Theory. In these classes, the instructional level and materials are modified according to the needs of the students. Course selections will vary according to the academic level and occupational goals of students. Course sequences are shown below.

Programs	Grade 9	Grade 10	Grade 11	Any Grade Level 9-12
<b>Standard Program</b>	American Government	World History	United States History	Personal Finance and Economic Theory (PFET) and other social studies electives
<b>Honors Program</b>	Honors American Government	Honors World History	Honors United States History	Honors Personal Finance and Economic Theory (PFET) and other social studies electives
<b>GT &amp; AP Programs</b>	GT American Government or AP US Government	GT World History or AP World History	Advanced Placement United States History	Advanced Placement Macro and Micro-Economics and other Advanced Placement electives in Psychology, United States Government, European History, Human Geography, or World History

## Abnormal Psychology

**Course Number:** 15.1310.4 (Honors)

**Prerequisite:** Grade 12 standing, and completion of Psychology are recommended.

**Credit:** ½

Students define and analyze abnormal behavior from a variety of perspectives. The major types and ranges of abnormal behavior are examined in detail, with special emphasis on causation and symptoms. The course culminates with analysis of treatment approaches and their respective techniques.

## African American Experience

**Course Number:** 15.3000.4 (Honors)

**Prerequisite:** Grade 11 or 12 standing is recommended.

**Credit:** ½

This case study of the minority experience in American society is designed to develop an understanding of the consequences, causes, and character of the African American experience. The course provides a variety of academic and cultural activities, beginning with a historical and cultural understanding of Africa. It examines the cultural impact and economics of the slave trade, the development of the African American culture, and the continuing struggle for freedom. Appropriate political, social, and economic issues will be presented for analysis. The study of African American achievements will be reinforced with field experiences.

## American Government Grade 9

**Course Number:** 15.0900.0

**Course Number:** 15.0900.4 (Honors)

**Prerequisite:** None

**Credit:** 1

**Note:** This course provides a Service-Learning component. This course satisfies the grade level requirement for Drug Education and includes an MCAP End of Course exam.

This course helps students develop skills and acquire insights essential to an understanding of American political, economic, and social life at the national, state, and local levels. Attention will be paid to political, economic, and social issues and preparation for responsible citizenship.

## American Government Grade 9: GT

**Course Number:** 15.0900.5 (GT)

**Prerequisite:** Participation by selection only. Note: This course provides a Service-Learning component. This course satisfies the grade level requirement for Drug Education and includes an MCAP End of Course exam.

**Credit:** 1

This course is a study of American political, economic, and social issues in national, state, and local government. In addition to factual content, the processes, institutions, and values of the American political, economic, and social systems are analyzed. Students apply understanding of government by completing ongoing issues analysis projects.

## Civil Rights and Civil Liberties

**Course Number:** 15.6050.4 (Honors)

**Course Number:** 15.6050.5 (GT)

**Prerequisite:** Grade 11 or 12 standing is recommended.

**Credit:** ½

This course provides a focused analysis of the historical issues related to equality for African Americans. Special emphasis is placed upon the consequences of slavery, as well as segregation and discrimination in the nineteenth and twentieth century. The course concludes with investigations of the modern civil rights movement and its impact on contemporary society.

## Comparative Government: AP

**Course Number:** 15.5040.6

**Credit:** 1

This course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. Students will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.

## Cultural Diversity

**Course Number:** 15.3020.4 (Honors)

**Prerequisite:** Completion of United States History is recommended.

**Credit:** ½

This elective course analyzes diversity within the U.S. through anthropological, historical, and sociological approaches. The course is initiated with an analysis of the multicultural nature of American society. Students then determine the opportunities and challenges of life within a diverse society using a continuum of intergroup relations and conclude with an analysis of a public policy issue related to multiculturalism.

## Personal Finance and Economic Theory

**Course Number:** 15.1500.0

**Course Number:** 15.1500.4 (Honors)

**Prerequisite:** None

**Note:** This course satisfies the Economics graduation requirement and Maryland Financial Literacy Standards requirement.

Personal Finance and Economic Theory will prepare students for the personal financial decisions they will need to make as adults. The primary focus of the course will be personal financial literacy as well as an understanding of basic economic concepts. The course will also provide students with skills they need as they assume roles as consumers, producers, and citizens.

## European History: AP

**Course:** 15.2030.6

**Prerequisites:** Completion of American Government Grade 9 and World History is recommended.

**Credit:** 1

This course is designed to prepare students to take an AP exam for college credit. Students will conduct in-depth analysis of European history from the Renaissance to the present. Course content will be based on the demands of the exam and processes required for success on the examination.

### Facing History: The Holocaust

**Course Number:** 15.1910.4 (Honors)

**Prerequisite:** Grade 11 or 12 standing is recommended.

**Credit:** ½

Students in this course will develop an appreciation for justice, a concern for interpersonal understanding, and sensitivity for those who have been wronged. Using the Holocaust as a case study, students will identify historical patterns of racism to connect the past with the present. Students will then apply their understandings of human behavior to recognize different forms of prejudice and discrimination in a variety of settings.

### Films and History

**Course Number:** 15.1810.4 (Honors)

**Prerequisite:** Grade 11 or 12 standing is recommended.

**Credit:** ½

Students will develop criteria for judging the accuracy of historical films. They will view and analyze films that portray various periods of history and research life during the portrayed historical eras to determine their historical accuracy. This will enable them to determine if movies about a historical period can be viewed for educational value and to raise questions they should consider when watching a historical film.

### History through Sports

**Course Number:** 15.3040.4 (Honors)

**Prerequisite:** Completion of United States History is recommended.

**Credit:** ½

Using sports as a catalyst, students analyze United States history during the twentieth century. Special emphasis is placed on social history, the status of minorities and women, and the insights sports can provide regarding the conditions and attitudes of historical eras. The course culminates with analysis of contemporary issues related to sports, such as substance abuse, the status awarded to athletes, and public financing of sports facilities.

### Human Geography: AP

**Course Number:** 15.1750.6

**Prerequisite:** none

**Credit:** 1

This course is designed to prepare students to take an advanced placement examination for college credit. Students will conduct in-depth analysis of the causes and consequences of human interactions with their physical surroundings. Course content will be based on the demands of the examination and processes required for success on the examination.

## Introduction to International Relations

**Course Number:** 15.2100.4 (Honors)

**Credit:** ½

**Note:** Completion of World History is recommended.

This elective course gives students the opportunity to trace the historical development of international relations. Students will analyze the relationships and behavior of nations toward each other, including the role of the United States in the international community. The course content will span history and focus on key concepts that have repeatedly influenced diplomatic initiatives.

## Juvenile Justice

**Course Number:** 15.6020.4 (Honors)

**Prerequisite:** None

**Credit:** ½

This course will help students develop successful patterns of behavior by making them more aware of what triggers conflict and confrontation. Juvenile Justice will improve understanding of legal terminology, provide a greater sense of self-awareness and understanding of rules, and increase communication skills. Students will analyze the purposes and consequences of the distinctions between the juvenile and adult legal systems. While examining issues and problems which affect our society, students will develop a sense of citizenship and responsibility.

## Macro and Micro-Economics: AP

**Course Number:** 15.1400.6

**Prerequisites:** Completion of American Government Grade 9, World History, and United States History is recommended.

**Credit:** 1

**Note:** This course satisfies the grade level requirement for Drug Education, the graduation requirement for Economics, and Maryland Financial Literacy Standards.

This course is designed to prepare students to take AP exams for college credit, including micro and macroeconomics. Course content will be based on the demands of the exams and processes required for success on the exams.

## Military History

**Course Number:** 15.2400.4 (Honors)

**Prerequisites:** Completion of World History and United States History is recommended.

**Credit:** ½

Military History presents students with an opportunity to enrich their study of World History and United States History. Students will analyze the meanings, motivations, and methods underlying war in different societies over time. The course investigates the development of military institutions within global and comparative frameworks.

## Philosophy

**Course Number:** 15.1800.4 (Honors)

**Prerequisite:** Grade 11 or 12 standing is recommended.

**Credit:** ½

This course examines philosophical questions about the nature of being, the mind, ethical behavior, and life. A range of important philosophical systems and several ethical dilemmas that have consistently perplexed thoughtful people will be examined. This course should appeal to students who have a strong interest in questions rather than answers, the unknown rather than the known, ideas rather than facts, and the “why” rather than the “what.”

## Principles of Government

**Course Number:** 15.1050.0

**Prerequisite:** This elective is designed for students who have passed American Government but have not successfully completed the Government High School Assessment (HSA).

**Note:** This class should not be scheduled as the HSA is no longer administered. Students need to pass the American Government course with the MCAP assessment included as part of their grade.

**Credit:** ½

This course is structured to the testable content of the Government HSA and includes analysis of types and systems of government, governmental structures and powers, and public issues. This course affords students opportunities to apply their understanding of our political system to their experiences as young adults and citizens.

## Psychology

**Course Number:** 15.1300.4 (Honors)

**Prerequisite:** Grade 12 standing is recommended.

**Credit:** ½

This is a study of human behavior, examined within the context of the behavioral sciences of psychology and sociology. Fundamental to this course is a focus on identity development, schools of psychology, normal and abnormal behaviors, and treatment. Students are afforded opportunities to consider and apply findings of psychological research toward understandings of the dynamics of human behavior.

## Psychology: AP

**Course Number:** 15.1350.6

**Prerequisite:** Grade 12 standing is recommended.

**Credit:** 1

This course is designed to prepare students to take an AP exam for college credit. Students will analyze the approaches, methods, and applications of psychology. There is a special emphasis on physiological processes and resulting impacts on human behavior. Course content will be based on the demands of the exam and processes required for success on it.

## United States Government and Politics: AP

**Course Number:** 15.5030.6

**Prerequisites:** Completion of American Government Grade 9, World History, and United States History is recommended or participation by selection.

**Credit:** 1

This course is designed to prepare students to take an advanced placement examination for college credit in U.S. Government and Politics. Students will conduct in-depth analysis of our governmental structures and processes and political behaviors of individuals, groups, and institutions. Course content will be based on the demands of the examination and processes required for success on the examination.

## United States History Grade 11

**Course Number:** 15.1100.0

**Course Number:** 15.1100.4 (Honors)

**Prerequisite:** Completion of World History is recommended.

**Credit:** 1

A thematic chronological format beginning with the Reconstruction era provides the structure for this study of U.S. History that helps students understand the evolution and relevance of their national heritage. Themes are presented chronologically, emphasizing more recent U.S. History and development of historical thinking skills. Opportunities for analysis of historical issues and for research are embedded within this course.

## U.S. History Grade 11: AP

**Course:** 15.1100.6

**Prerequisite:** Participation by selection only.

**Credit:** 1

This is a chronologically organized course addressing political, economic, diplomatic, social, intellectual, and cultural history. Content emphasis is from European colonization to the present. This course will be directed toward assisting students. Course content will be based on the demands of the examination and processes required for success on the examination.

## World History Grade 10

**Course Number:** 15.1000.0

**Course Number:** 15.1000.4 (Honors)

**Prerequisite:** Completion of American Government is recommended

**Credit:** 1

Significant episodes from global history are investigated including global and regional development; the growth of historical ties of interdependence; the expansion of Europe and its domination of the world in the modern era; the development of Africa and Asia in the modern era; and the development of global networks of political, economic, and social interdependence in the contemporary world. Historical themes are used to provide a structure of study. References to a variety of perspectives and resources help students develop a comprehensive view of global development.

## World History Grade 10: GT

**Course Number:** 15.1000.5

**Prerequisite:** Participation by selection only.

**Credit:** 1

This course provides opportunities to analyze history in a global setting. Units of study are organized chronologically and emphasize regional studies, historical turning points, and interregional relationships. The course is based upon contemporary world history scholarship and requires students to apply an understanding of historiography.

## World History Grade 10: AP

**Course Number:** 15.1010.6

**Prerequisite:** Participation by selection only.

**Credit:** 1

This course requires students to analyze and interpret global history through periodization and themes such as interaction, continuity, and change, impacts of technology and demography, social and gender structures, cultural and intellectual developments, and functions and structures of states. This course will be directed toward assisting students to pass the AP exam in World History. Course content will be based on the demands of the examination and processes required for success on the examination.

## **SOCIAL STUDIES ADVANCED PLACEMENT COURSES**

Advanced placement courses are scheduled whenever they are justified by enrollment. Students enrolled in advanced placement courses are eligible for GT credit. Each advanced placement course includes a study of major concepts, relationships, and interpretations, and requires students to assume roles as historians and social scientists.

### **Comparative Government: AP**

**Course Number:** 15.5040.6

**Prerequisites:** Completion of American Government Grade 9 and World History is recommended.

**Credit:** 1

### **European History: AP**

**Course Number:** 15.2030.6

**Prerequisites:** Completion of American Government Grade 9 and World History is recommended.

**Credit:** 1

### **United States Government and Politics: AP**

**Course Number:** 15.5030.6

**Prerequisites:** Completion of American Government Grade 9, World History, and United States History is recommended or participation by selection

**Credit:** 1

### **Human Geography: AP**

**Course Number:** 15.1750.6

**Prerequisite:** Grade 12 standing is recommended.

**Credit:** 1

### **Macro and Micro-Economics: AP**

**Course Number:** 15.1400.6 (AP)

**Prerequisites:** Completion of American Government Grade 9, World History, and United States History is recommended.

**Credit:** 1

### **Psychology: AP**

**Course Number:** 15.1350.6

**Prerequisite:** Grade 12 standing is recommended.

**Credit:** 1

### **U.S. History Grade 11: AP**

**Course Number:** 15.1100.6

**Prerequisite:** Participation by selection only.

**Credit:** 1



## World History Grade 10: AP

**Course Number:** 15.1010.6

**Prerequisite:** Participation by selection only.

**Credit:** 1

## **SOCIAL STUDIES INTERNATIONAL BACCALAUREATE PROGRAM (IB)**

International Baccalaureate social studies courses prepare students for success in a world that is becoming increasingly global, technological, interactive, and interdependent. As stated in the “Nature of the Subject,” in the IB History Program, the goal is to “explain trends and developments, continuity and change through time and through individual events.” IB social studies courses analyze “individuals and societies in the widest context: political, social, economic, religious, technological and cultural.” Toward that end, students will engage in processes of inquiry, explanation, and interpretation, and analyze the roles of the historian and social scientist in the generation and applications of knowledge. Students will demonstrate their abilities to meet program goals and objectives through examinations and presentation of in-depth research.

## American Government Pre-IB

**Course Number:** 15.0910.7 (IB)

**Credit:** 1

## Global Politics 1 IB

**Course Number:** 15.2500.7 (IB)

**Credit:** 1

## United States History 10 Pre-IB

**Course Number:** 15.1100.7 (IB)

**Credit:** 1

\*This course prepares students for the Advanced Placement United States History examination.

## Theory of Knowledge

**Course Number:** 15.4100.7 (IB)

**Credit:** 1

## Psychology IB

**Course Number:** 15.1360.7 (IB)

**Credit:** 1

## IB History 1

**Course Number:** 15.1170.7 (IB)

**Credit:** 1

## IB History 2

**Course Number:** 15.1270.7 (IB)

**Credit:** 1

Note: IB courses are available only to students that have been admitted to the International Baccalaureate (IB) program. Registration for these courses is prerequisite on satisfactory completion of the requirements outlined in the International Baccalaureate curriculum.

## **SOCIAL STUDIES MAGNET COURSES**

American Government, Law, and Public Policy

**Course Number:** 15.0910.5

**Credit:** 1

Constitutional Law

**Course Number:** 15.6030.5

**Credit:** 1

Introduction to Law

**Course Number:** 15.6010.5

**Credit:** 1

International Law

**Course Number:** 15.6020.5

**Credit:** 1

Public Policy: Issues to Action

**Course Number:** 15.6070.5

**Credit:** 1

Civil & Criminal Trials

**Course Number:** 15.6050.5

**Credit:** 1

Trial Advocacy

**Course Number:** 15.6040.5

**Credit:** 1

Personal Finance and Economic Theory: GT

**Course Number:** 15.1500.5

**Credit:** ½



“Untitled” by Elaine R. at Dumbarton Middle, Grade 8

# Theatre

The Office of Performing Arts supports the BCPS Theatre Program. The BCPS Theatre Program is aligned with the Maryland Fine Arts Standards and the National Core Arts Standards and guided by The Compass. Our mission is to use the evolving, live, collaborative art of Theatre to develop artists and scholars who have a lifelong passion for the arts. Students are given the opportunity to develop their unique voice and collaborate with others through the process of creating, performing, responding, and connecting to Theatre content. Our programs provide opportunities to integrate core concepts of social-emotional learning with high-quality Theatre education that is student-driven.

## Technical Theatre I

**Course Number:** 10.3110.0

**Prerequisite:** None

**Credit:** 1

This course provides the fundamentals of technical theatre to students having special aptitude for stagecraft -- set design and construction, lighting, and audio effects.

## Technical Theatre II

**Course Number:** 10.3120.4 (H)

**Prerequisite:** Successful completion of Technical Theatre I

**Credit:** 1

This advanced course provides the technical staff for school theatrical productions. Skills developed in Technical Theatre I will be applied to all levels of theatrical productions.

## Theatre Arts I

**Course Number:** 10.3010.0

**Credit:** 1

**Course Number:** 10.3050.0

**Credit:** ½

**Prerequisite:** None

**Note:** If completed for one credit, this course satisfies 1 credit of the fine arts graduation requirement. If completed for ½ credit, this satisfies ½ credit of the fine arts credit requirement.

This course develops an understanding of theatre arts, including activities for voice and body. It includes an introduction to aspects of the visual theatre (scenery, lighting, costumes, and make-up).

## Theatre Arts II

**Course Number:** 10.3020.4 (H)

**Credit:** 1

**Course Number:** 10.3060.4 (H)

**Credit:** ½

**Prerequisites:** Successful completion of Theatre Arts I

**Note:** If Theatre Arts I was taken for ½ credit, Theatre Arts II will satisfy another ½ credit of the Fine Arts graduation requirement. In addition to a more refined approach to creative drama and technical theatre, this course includes script interpretation, character development, and scenic design.

## Theatre Arts III

**Course Number:** 10.3030.4 (H)

**Credit:** 1

**Prerequisites:** Successful completion of Theatre Arts I and II.

This course is directed at students who have a special aptitude for theatre. In addition to in-class course work, students will be responsible for independent projects from such areas as creative drama for children, reader's theatre, puppet theatre, and design and production.

## Theatre Arts IV

**Course Number:** 10.3040.5 (GT)

**Credit:** 1

**Prerequisites:** Successful completion of Theatre Arts I, II, and III.

In this course, students will be responsible for independent projects in such areas as creative drama for children, reader's theatre, puppet theatre, design, and production.

## THEATRE MAGNET COURSES

### Technical Theatre III (CC)

**Course Number:** 10.3130.4 (H)

**Credit:** 1

### Design & Production I (CC, PT)

**Course Number:** 10.3210.5 (GT)

**Credit:** 1

### Design & Production II (CC, PT)

**Course Number:** 10.3220.5 (GT)

**Credit:** 1

**Course Number:** 10.3250.5 (GT)

**Credit:** 2

### Design & Production III (CC, PT)

**Course Number:** 10.3260.5 (GT)

**Credits:** 2

### Design & Production IV (CC, PT)

**Course Number:** 10.3270.5 (GT)

**Credits:** 2

### Fiction to Script (CC)

**Course Number:** 10.1460.5 (GT)

**Credit:** ½

### Musical Acting (CC, PT)

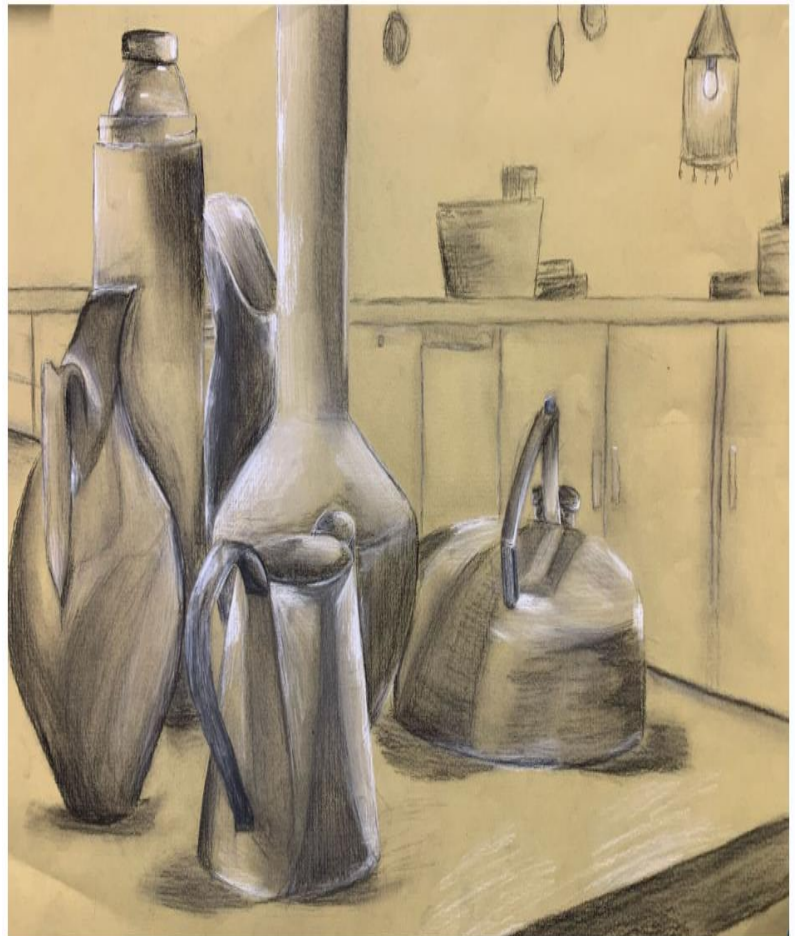
**Course Number:** 10.3310.5

**Credit:** 1

### Advanced Movement in Theater (CC)

**Course Number:** 10.3320.5 (GT)

**Credit:** ½



"Still-Life" by Jamie N. at Perry Hall Middle School, Grade 7

**Fundamentals of Acting (CC, PT)**  
**Course Number:** 10.3400.5 (GT)  
**Credit:** 1

**Acting I (CC, PT)**  
**Course Number:** 10.3410.5 (GT)  
**Credit:** 1  
**Course Number:** 10.3440.5 (GT)  
**Credit:** 2

**Acting II (CC, PT)**  
**Course Number:** 10.3420.5 (GT)  
**Credit:** 1  
**Course Number:** 10.3450.5 (GT)  
**Credits:** 2

**Acting Shakespeare (CC, PT)**  
**Course Number:** 10.3480.5 (GT)  
**Credit:** 1

**Performance Styles (CC)**  
**Course Number:** 10.3510.5 (GT)  
**Credit:** ½

**Theatre Technology (CC)**  
**Course Number:** 10.3610.5 (GT)  
**Credit:** 1

**Assistantship for Introduction to the Theatre (CC, PT)**  
**Course Number:** 10.3900.0  
**Credit:** ½

**Assistantship for Technical Theatre (CC, PT)**  
**Course Number:** 10.3910.0  
**Credit:** ½

**Theatre Production Seminar (CC, PT)**  
**Course Number:** 10.9420.5 (GT)  
**Credits:** 2

**Movement in Theatre (CC, PT)**  
**Course Number:** 10.3300.5 (GT)  
**Credit:** 1



"Connection" by Amrys N. at Cockeysville Middle School, Grade 7

# World Languages

The Office of World Languages is focused on building student proficiency in one or more world languages through the design, implementation, and assessment of proficiency-based curricula in Chinese, French, German, Japanese, Latin, and Spanish. Effective world language instruction offers students opportunities to engage authentically with the language as it is used in the real world.

Our goal is to prepare globally competitive students who are literate in more than one language as demonstrated by their ability to earn the Maryland Seal of Biliteracy prior to graduation. In addition, the office oversees the identification of appropriate proficiency-based resources and materials and provides support and training to teachers on the best practices involved in teaching for proficiency. GT and AP courses are scheduled wherever enrollments justify.

Who?	Grade 9	Grade 10	Grade 11	Grade 12
<b>Students with no prior WL or students starting a new WL</b>	Level 1	Level 2	Language & Culture (H)	Special Topics (GT)
<b>Students who did not successfully complete at least 2 years of WL study in MS</b>	Level 2	Language & Culture (H)	Special Topics (GT)	AP/IB
<b>Novice-level proficiency with successful completion of at least 2 years of WL study in MS</b>	Language & Culture (H)	Special Topics (GT)	AP/IB	AP/IB
<b>Intermediate-level proficiency or above after 3 years of WL study in MS / heritage &amp; native speakers</b>	Special Topics (GT)	AP/IB	AP/IB	AP/IB

**Students who are Native or Heritage speakers of Spanish may enroll in Spanish for Native/Heritage Speakers in middle and/or high school. This course is offered in select schools only.**

## Chinese

<b>Chinese I</b>	<b>Course Number: 30.8010.0</b>
<b>Chinese II</b>	<b>Course Number: 30.8020.0</b>
<b>Chinese III (H)</b>	<b>Course Number: 30.8030.4</b>
<b>Chinese IV (H)</b>	<b>Course Number: 30.8040.4</b>
<b>Chinese V (AP)</b>	<b>Course Number: 30.8050.6</b>
<b>Chinese VI (AP)</b>	<b>Course Number: 30.8060.6</b>
<b>Chinese VII (AP)</b>	<b>Course Number: 30.8070.6</b>

**Prerequisite:** It is recommended that students continue through the longest possible sequence.

**Credit: 1**

These courses develop an understanding of the Chinese people and civilization. Students communicate in spoken and written Chinese while developing their listening, speaking, reading, and writing skills. Students study the history, literature, music, art, political systems, and social institutions of China.

## French

<b>French I</b>	<b>Course Number: 30.2010.0</b>
<b>French I-II (H)</b>	<b>Course Number: 30.2110.4</b>
<b>French II</b>	<b>Course Number: 30.2020.0</b>
<b>French Language &amp; Culture(H)</b>	<b>Course Number: 30.2100.4</b>
<b>Special Topics in French (GT)</b>	<b>Course Number: 30.2300.5</b>
<b>French V (AP)</b>	<b>Course Number: 30.2050.6</b>
<b>French VI (AP)</b>	<b>Course Number: 30.2060.6</b>
<b>French VII (AP)</b>	<b>Course Number: 30.2070.6</b>

**Prerequisite:** It is recommended that students continue through the longest possible sequence.

**Credit: 1**

These courses develop an understanding of the Francophone people and their civilizations. Students communicate in spoken and written French while developing their listening, speaking, reading, and writing skills. Students study the history, literature, music, art, political systems, and social institutions of French-speaking countries.

AP courses include an in-depth study of the structure, vocabulary, and culture of the language along with the processes necessary for success on the exam. Since the course is designed to prepare students to take an AP exam, students who enroll in the course are expected to take the test.

## German

German I	Course Number: 30.5010.0
German II	Course Number: 30.5020.0
German III	Course Number: 30.5030.0
German III (H)	Course Number: 30.5030.4
German IV (H)	Course Number: 30.5040.4

**Prerequisite:** It is recommended that students continue through the longest possible sequence.

**Credit:** 1

These courses develop an understanding of the Germanic people and their civilizations. Students communicate in spoken and written German while developing their listening, speaking, reading, and writing skills. Students study the history, literature, music, art, political systems, and social institutions of German-speaking countries.

\*Only offered at Parkville High School

## Japanese (CT, OM)

Japanese I	Course Number: 30.7010.0
Japanese II	Course Number: 30.7020.0
Japanese III (H)	Course Number: 30.7030.4
Japanese IV (H)	Course Number: 30.7040.4
Japanese V (AP)	Course Number: 30.7050.6
Japanese VI (AP)	Course Number: 30.7060.6
Japanese VII (AP)	Course Number: 30.7070.6

**Prerequisite:** It is recommended that students continue through the longest possible sequence.

**Credit:** 1

These courses develop an understanding of the Japanese people and civilization. Students communicate in spoken and written Japanese while developing their listening, speaking, reading, and writing skills. Students study Japanese literature, art, history, music, political systems, and social institutions. AP courses include an in-depth study of the structure, vocabulary, and culture of the language along with the processes necessary for success on the exam. Because this course is designed to prepare students to take an AP exam, they are expected to take the test.

\*Only offered at Sudbrook Magnet Middle School

## Latin

Latin I	Course Number: 30.1010.0
Latin II	Course Number: 30.1020.0
Latin Language & Culture (H)	Course Number: 30.1030.4
Special Topics in Latin (GT)	Course Number: 30.1040.5
Latin V (AP)	Course Number: 30.1050.6
Latin VI (AP)	Course Number: 30.1060.6



**Prerequisite:** It is recommended that students continue through the longest possible sequence.

**Credit:** 1

In the sequential courses, emphasis is on the Latin language and its influence on the English language as well as on all Roman languages. Students study Roman life — its leaders, government, education, literature, music, and art. AP courses include an in-depth study of the structure, vocabulary, and culture of the language along with the processes necessary for success on the exam. Because this course is designed to prepare students to take an AP exam, they are expected to take the test.

## Spanish

<b>Spanish I</b>	<b>Course Number:</b> 30.3010.0
<b>Spanish I-II (H)</b>	<b>Course Number:</b> 30.3120.4
<b>Spanish II</b>	<b>Course Number:</b> 30.3020.0
<b>Spanish Language &amp; Culture (H)</b>	<b>Course Number:</b> 30.1100.4
<b>Special Topics in Spanish (GT)</b>	<b>Course Number:</b> 30.3130.5
<b>Spanish V (AP)</b>	<b>Course Number:</b> 30.3050.6
<b>Spanish VI (AP)</b>	<b>Course Number:</b> 30.3060.6
<b>Spanish VII (AP)</b>	<b>Course Number:</b> 30.3070.6
<b>Spanish for Native and Heritage Speakers*</b>	<b>Course Number:</b> 30.0800.0

(\*For Native and Heritage Speakers of Spanish only)

**Prerequisite:** It is recommended that students continue through the longest possible sequence.

**Credit:** 1

The sequential courses develop an understanding of the Hispanic people and civilizations. Students communicate in spoken and written Spanish while developing their listening, speaking, reading, and writing skills. Students study the history, literature, music, art, political systems, and social institutions of Spanish-speaking countries.

## WORLD LANGUAGES ADVANCED PLACEMENT COURSES

Advanced Placement world languages courses are scheduled whenever they are justified by enrollment. Each advanced placement course includes an in-depth study of the structure, vocabulary, and culture of the language along with the processes necessary for success on the exam. Because these courses are designed to prepare students to take an AP exam for college credit, students are expected to take the test.

## AP Chinese

<b>Chinese V (AP)</b>	<b>Course Number:</b> 30.8050.6
<b>Chinese VI (AP)</b>	<b>Course Number:</b> 30.8060.6
<b>Chinese VII (AP)</b>	<b>Course Number:</b> 30.8070.6

**Credit:** 1

## **AP French**

<b>French V (AP)</b>	<b>Course Number:</b> 30.2050.6
<b>French VI (AP)</b>	<b>Course Number:</b> 30.2060.6
<b>French VII (AP)</b>	<b>Course Number:</b> 30.2070.6
<b>Credit:</b> 1	

## **AP Japanese**

<b>Japanese V (AP)</b>	<b>Course Number:</b> 30.7050.6
<b>Japanese VI (AP)</b>	<b>Course Number:</b> 30.7060.6
<b>Japanese VII (AP)</b>	<b>Course Number:</b> 30.7070.6
<b>Credit:</b> 1	

## **AP Latin**

<b>Latin V (AP)</b>	<b>Course Number:</b> 30.1050.6
<b>Latin VI (AP)</b>	<b>Course Number:</b> 30.1060.6
<b>Credit:</b> 1	

## **AP Spanish**

<b>Spanish V (AP)</b>	<b>Course Number:</b> 30.3050.6
<b>Spanish VI (AP)</b>	<b>Course Number:</b> 30.3060.6
<b>Spanish VII (AP)</b>	<b>Course Number:</b> 30.3070.6
<b>Credit:</b> 1	

## **WORLD LANGUAGES INTERNATIONAL BACCALAUREATE (IB)**

International Baccalaureate Spanish courses at Kenwood High School, New Town High School and Milford Mill Academy are aimed at promoting an understanding of another culture through the study of a second language. The main emphasis is on language acquisition and use in a range of contexts and for different purposes.

<b>French II Pre IB 9</b>	<b>Course Number:</b> 30.2020.7
<b>French III Pre IB 10</b>	<b>Course Number:</b> 30.2030.7
<b>French 4 IB</b>	<b>Course Number:</b> 30.2040.7
<b>French 5 IB</b>	<b>Course Number:</b> 30.2050.7
<b>Spanish II Pre IB 9</b>	<b>Course Number:</b> 30.3020.0
<b>Spanish III Pre IB 10</b>	<b>Course Number:</b> 30.3030.0
<b>Spanish IB 11</b>	<b>Course Number:</b> 30.3030.7
<b>Spanish IB 12</b>	<b>Course Number:</b> 30.3050.7
<b>Credit:</b> 1	

# Career and Technical Education (CTE): *Courses and Completer Programs*

Career and Technical Education (CTE) is a program that enables students to prepare for their roles as individuals, family members, and citizens. CTE is about education in middle school, high school, and college that provides students with the following:

- Academic subject matter taught with relevance to the workplace, often called contextual or authentic learning.
- Personal and employability skills, from task and skill expertise to workplace ethics.
- Educational pathways that help students explore interests and careers while progressing through school.
- Postsecondary career pathways include registered apprenticeship, industry certification, community college certificate/associate degree programs, and four-year college degree programs.

*CTE programs provide students with BOTH relevant career skills preparation AND rigorous academic skills.*

## WHAT IS THE MISSION OF THE OFFICE OF CAREER AND TECHNICAL EDUCATION?

The mission of the office of CTE is to provide expertise and vision to schools as they deliver integrated programs that prepare learners academically, technically, and interpersonally for careers and lifelong learning.

## WHAT ARE CAREER AND TECHNICAL EDUCATION COMPLETER PROGRAMS?

**A completer program is a sequence of courses in a specific career pathway that provides a minimum of 3 or 4 credits in a CTE program (not individual elective courses).** All completer programs are approved by the Maryland State Department of Education (MSDE), and completion of the required CTE completer credits meets MSDE graduation requirements at the high school level. Students who successfully complete a CTE program in most career pathways are eligible for articulated college credit. (Some CTE programs of study offer as many as 21 articulated [FREE] college credits!)

Students who wish to follow a CTE career completer program may pursue career paths at their comprehensive high schools or may apply to one of the magnet CTE high schools in Baltimore County. Students are encouraged to become “dual completers” by combining a CTE completer program with the University System of Maryland completer requirements. This dual completer program will allow students to develop their full range of talents and abilities, to prepare for gainful employment, and/or to enter a community college, a four-year college, or an apprenticeship program. Dual completers meet requirements to be college AND career ready!

## HOW DO STUDENTS OBTAIN MORE INFORMATION ABOUT CAREER AND TECHNICAL EDUCATION PROGRAMS?

Contact your local high school, the office of CTE, or consult your school’s counselor to obtain more information about programs and school locations or visit the following website to learn more!

<https://dci.bcps.org/departments/academics/career-technical-education-and-fine-arts/career-and-technical-education>

## **Career and Technical Education ...Education for a Lifetime!**

Career and Technical Education (CTE) programs of study provide high school students with the following benefits:

- ✓ Academic subject matter taught with relevance to the workplace.
- ✓ Workplace, personal, academic, and technical skills.
- ✓ Educational programs that help students explore interests and careers.
- ✓ Pathways that include four-year college degree programs, community college certificate/associate degree programs, registered apprenticeship, and industry certification.

**CTE programs provide students with BOTH relevant career skills  
AND rigorous academic skills**

Did you know...students who complete CTE programs:

- ✓ Will be prepared for both college AND careers?
- ✓ May receive FREE college credit by successfully completing a CTE program?
- ✓ May be eligible for industry credentials and related scholarships?
- ✓ May have a program of study in a career pathway that is of interest at their home high school?

### CTE Programs of Study and Courses: 2023-2024 School Year

CTE Courses by Cluster/Program	CTE Contact/High Schools Offering
<b>Arts, Media &amp; Communication Cluster Completer Programs</b>	School to Career Supervisor
Graphic/Print Communications Technology	Kenwood, Western*
Interactive Media Production	Carver*, Catonsville, Chesapeake*, Eastern*, Dundalk, Franklin, New Town, Parkville, Pikesville
<b>Business, Management, &amp; Finance Cluster Completer Programs</b>	Business Education Supervisor
Business Management	Chesapeake*, Dulaney, Dundalk, Franklin, Hereford, Lansdowne*, Milford Mill, Overlea, Owings Mills and Woodlawn
Marketing	Catonsville, Chesapeake*, Dulaney, Hereford, Lansdowne, Owings Mills, Patapsco, Perry Hall, Perry Hall, Pikesville, Randallstown, and Woodlawn
Administrative Services	Milford Mill and Sparrows Point
<b>Construction &amp; Development Cluster Completer Programs</b>	Technical Programs Supervisor Technology Education Supervisor
Carpentry Careers	Carver*, Perry Hall, Owings Mills, Kenwood, Lansdowne*
Electrical Careers	Lansdowne*
Mechanical Construction/Plumbing Careers	Kenwood, Western*
Heating/Ventilation/Air Conditioning/Welding	Dulaney
Construction, Design, and Management	Franklin, Milford Mill, Sparrows Point
Building & Construction Technology	Eastern*, Milford Mill*, Sollers Point*
<b>Consumer Services, Hospitality &amp; Tourism Cluster Completer Programs</b>	Technical Programs Supervisor
Cosmetology Careers	Carver*, Milford Mill*, Sollers Point*, Western*
Culinary Arts (American Culinary Federation – ACF)	Carver*, Eastern*, Sollers Point*, Western*
Baking and Pastry Arts (ACF)	Sollers Point*
Food and Beverage Management (ProStart)	Catonsville, Dulaney, Kenwood, Lansdowne*, Milford Mill, New Town, Overlea, Parkville, Patapsco, Perry Hall, Randallstown, Sparrows Point, Towson, Woodlawn

CTE Courses by Cluster/Program	CTE Contact/High Schools Offering
<b>Environmental, Agricultural &amp; Natural Resource Systems Cluster Completer Programs</b>	Technical Programs Supervisor
Agriculture Science: Animal, Plant, and Mechanical	Hereford
Environmental Technology	Western*
<b>Health &amp; Biosciences Cluster Completer Programs</b>	Technical Programs Supervisor
Academy of Health Professions	Eastern*, Overlea*, Randallstown*, Sollers Point*, Western*
Project Lead the Way: Biomedical Sciences	Franklin, Lansdowne*, Loch Raven, Milford Mill, New Town, Perry Hall, Sollers Point*, Woodlawn
<b>Human Resource Services Cluster Completer Programs</b>	School to Career Supervisor Business Education Supervisor
Homeland Security and Emergency Preparedness	Chesapeake*, Dundalk, Overlea, Patapsco, Perry Hall, Pikesville
Teacher Academy of Maryland	Catonsville, Eastern*, Franklin, Kenwood, Lansdowne, Loch Raven, Milford Mill, Owings Mills, Parkville, Patapsco, Perry Hall, Towson, Woodlawn,
<b>Information Technology Cluster Completer Programs</b>	Business Education Supervisor
Information Technology: Computer Science	Carver*, Catonsville, Chesapeake*, Hereford, Loch Raven, Milford Mill Academy, New Town, Parkville, Overlea, Owings Mills, Perry Hall, Pikesville, Sollers Point*, Sparrows Point, Western*, Woodlawn
Information Technology: Artificial Intelligence	Carver*, Sollers Point*, Western*
Information Technology: Networking	Eastern*, New Town, Parkville, Sollers Point*, Western*
<b>Manufacturing Engineering &amp; Technology Cluster Completer Programs</b>	Technology Education Supervisor
Engineering Careers	Eastern*
Pathways in Technology Early College High School (P-TECH)	Dundalk**, Owings Mills**
Project Lead the Way: Engineering	Catonsville, Chesapeake*, Dulaney, Dundalk, Owings Mills, Parkville*, Perry Hall, Pikesville, Woodlawn*
<b>Transportation Technology Cluster Completer Programs</b>	Technical Programs Supervisor Technology Education Supervisor
Automotive Service Technology	Milford Mill*, Sollers Point*, Western*
Aviation Technology	Hereford, Kenwood, Lansdowne
Diesel Truck and Power Systems Technology	Sollers Point*
<b>School-to-Career Transition Completer Programs</b>	School-to-Career Supervisor
Apprenticeship Maryland	All High Schools; please check with school
College-Career Research and Development	All Comprehensive High Schools
Internship	All High Schools
<b>Junior Reserve Officers' Training Corps-JROTC Leadership Programs</b>	JROTC Facilitator
Army JROTC	Lansdowne*, Patapsco
Air Force JROTC	Kenwood
Navy JROTC	Dundalk, Randallstown, Woodlawn
Marine Corps JROTC	Franklin, Parkville
<b>Technology Education</b>	Technology Education Supervisor
Required and Advanced Technology Education	Course offerings vary by school

\* A CTE program of study is a sequence of courses in a specific career pathway. All CTE programs of study are approved by the Maryland State Department of Education (MSDE) and meet MSDE graduation requirements.

\* Denotes a magnet program at a comprehensive school; applications may be required.

\*\* Denotes a program requiring separate application.

## CTE: Computer Science, Engineering, or Technology Education

To comply fully with the MSDE, COMAR, and state curriculum requirements for Computer Science, Engineering, or Technology Education, Baltimore County Public Schools has implemented a program of course work based on student performance levels. The goal of this program is to develop students who are technologically literate. The International Technology & Engineering Educators Association defines technological literacy as “the ability to use, manage, understand, and assess technology.”

**The following is a listing of courses approved to meet the Maryland Technology Education Graduation Requirement. Note: [H] denotes Honors Level - [GT] denotes Gifted & Talented Level**

Course Number	Course Title	Credit	Notes
55.1250.0	Foundations of Engineering	1	Designed for Grade 9 -12 students
55.3500.4	Engineering Principles and Applications [H]	1	Designed for Grade 10 -12 students enrolled in Chemistry and Geometry or above
55.3500.5	Engineering Technology [GT]	1	Designed for Grade 11 or 12 students enrolled in Physics and College Algebra or above
56.0200.4	Introduction to Engineering Design PLTW [H]	1	Offered only at: Catonsville, Chesapeake, Dulaney, Dundalk, Owings Mills, Parkville, Perry Hall, Pikesville, Woodlawn
35.3500.4	Foundations of Computer Science	1	
35.3510.6	AP Computer Science Principles	1	
35.3520.6	AP Computer Science A	1	Prior programming experience highly recommended.

## Advanced Technology Courses and Graduation Options

**NOTE:** This section applies to students entering the **9th grade class in the 2020-21** school year or earlier. This graduation option is no longer available for students entering the 9th grade class in the 2021-22 school year and beyond.

## WHAT ARE ADVANCED TECHNOLOGY EDUCATION COURSES?

Advanced technology education is an instructional program in which students develop advanced skills and understandings related to the use, assessment, design, and production of technological systems. It is a series of course offerings that meet Maryland's high school graduation pathway for advanced technology education.

Advanced technology education courses provide expectations and opportunities for students to:

- Work independently at an accelerated pace.
- Engage in more rigorous and complex content and processes.
- Develop authentic products that reflect students' understanding of key concepts

Courses involve accelerated and enriched learning experiences that require abstract and higher order thinking skills. Completion of two or more advanced technology education credits enables students to achieve an enhanced level of technological literacy where students are intrinsically engaged with the community and advocate for technology at defined levels of society. Advanced technology education courses prepare students for further education in the areas of science, technology, engineering, or mathematics (STEM).

## Courses Meeting the Advanced Technology Education Pathway

The following is a listing of Baltimore County Public Schools' courses approved to meet the Maryland Advanced Technology Education Graduation credit requirement for **students entering the 9th grade class in the 2020-21 school year or earlier ONLY.**

Course	Course Title	Credit
55.1600.0	Advanced Design Applications	1
55.1500.0	Advanced Technological Applications	1
55.8500.4	Engineering Design [H]	1
55.8500.5	Engineering Design [GT]	1

## TECHNOLOGY EDUCATION COURSES

**Note: [A] = Meets Advanced Technology Education Credit: [T] = Meets Basic Technology Education Credit Requirement**

### Foundations of Engineering

**Course Number:** 55.1250.0

**Prerequisite:** None

**Credit:** 1 [T]

Foundations of Engineering prepares students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in creating ideas, developing innovations, and engineering practical solutions. Technology and engineering content, resources, and laboratory/classroom activities apply student applications of science, mathematics, and other school subjects in authentic situations.

## Engineering Principles and Applications

**Course Number:** 55.3500.4 (H)

**Prerequisites:** Successful completion or concurrent enrollment in Chemistry and Geometry are recommended before enrollment in this course.

**Credit:** 1 [T] (H)

This Grade 10-12 course is designed to complement and support the development of skills and knowledge in the areas of science, technology, engineering, and math. Geometry and chemistry content are integrated into this course through the examination of molecular models, biotechnology, beam, bridge, and barge engineering design challenges. This course is intended to provide the basic technology education course credit experience required for graduation.

## Engineering Technology

**Course Number:** 55.3500.5 (GT)

**Prerequisites:** Successful completion or concurrent enrollment in Physics and College Algebra or above are recommended before enrollment in this course.

**Credit:** 1 [T] (GT)

This Grade 11-12 course is intended to provide the basic technology education course credit experience required for graduation. It is designed to complement and support the development of skills and knowledge in the areas of science, technology, engineering, and mathematics. This course covers topics in a variety of engineering disciplines. It examines the methods and processes used in the civil, surveying, construction, biotechnical, electrical, mechanical, and other engineering fields. Topics include soil mechanics, project management, technical organization, and measurement equipment.

## Advanced Design Applications

**Course Number:** 55.1600.0

**Prerequisites:** Completion of Basic Technology Education credit courses are required.

**Credit:** 1 [A]

**Note:** Elective for Grades 10-12.

This course is designed to develop students' technological literacy by employing teaching and learning strategies that enable students to explore and deepen their understanding of "big ideas" in manufacturing, construction, energy/power, and transportation technologies. The use of hands-on activities provides students with opportunities to participate in a range of problem solving and critical thinking activities.

## Advanced Technological Applications

**Course Number:** 55.1500.0

**Prerequisites:** Completion of Basic Technology Education credit course is required.

**Credit:** 1[A]

This course is designed to develop students' technological literacy as they study five components of the Designed World: Engineering Design Graphics and Spatial Skills, Cybersecurity, Biotechnology, Information Technology and Robotics. Students demonstrate their learning through hands-on learning experiences that promote problem solving and critical thinking.



## Engineering Design

**Course Numbers:** 55.8500.4 (H) 55.8500.5 (GT)

**Prerequisites:** Completion of Engineering Principles and Applications, Engineering Technology, or Advanced Design Applications is required.

**Credit:** 1[A]

This course focuses on how engineers apply their creativity, resourcefulness, mathematical, scientific, and technical knowledge and skills in the creation or refinement of technological products and systems. Students will solve authentic engineering tasks and problems by employing sequential and iterative design and development processes.

## CTE: Junior Reserve Officers Training Corps (JROTC)

The following program is an MSDE-approved 3-course CTE-completer sequence. Completion of Levels 1, 2, and 3 meet the completer graduation requirements. Participation in the Level 4 course is encouraged as Senior Cadets provide student leadership within the program. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree.

Note: Program availability is limited. Each school's School to Career Transition teacher or counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines.

PROGRAMS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Air Force</b>	Air Force JROTC I	Air Force JROTC II	Air Force JROTC III	Air Force JROTC IV
<b>Army</b>	Army JROTC I	Army JROTC II	Army JROTC III	Army JROTC IV
<b>Marine Corps</b>	Marine Corps JROTC I	Marine Corps JROTC II	Marine Corps JROTC III	Marine Corps JROTC IV
<b>Navy</b>	Navy JROTC I	Navy JROTC II	Navy JROTC III	Navy JROTC IV

## MISSION

The mission of the Junior Reserve Officers Training Corps (JROTC) is to instill a value of citizenship, service to the United States, personal responsibility, and a sense of accomplishment. It does not seek any commitment to the military. The JROTC program strengthens character, teaches discipline, promotes an understanding of the requirements for national security, encourages self-discipline, and develops respect for authority.

## PREREQUISITES

Students must be enrolled and attending regular courses of instruction at the school hosting the JROTC program; be physically qualified to participate in physical education; be selected by the JROTC instructor with the approval of the principal; must be meeting graduation and academic requirements; must display acceptable standards of conduct; must be willing to meet the standards of military grooming. Fees may be required.

JROTC is a CTE program of study that satisfies graduation requirements. JROTC is designed to improve the students' interpersonal skills by developing self-discipline, character, and communication skills. Throughout this program, students will gain an understanding of their rights, privileges, and responsibilities as American citizens. For students seeking postsecondary education, this program may provide scholarship opportunities.

Students who choose to enter the armed forces and have successfully completed this program and earned their high school diploma, may be given up to a two pay-grade advancement at the time of enlistment. Students enrolled in JROTC are under no obligation to join the armed forces. Also, membership in the JROTC program is not a guarantee of one's eligibility to enter the armed forces after graduation. All JROTC Leadership Education courses address leadership education; citizenship; personal growth and responsibility; career exploration and public service; and general military subjects.

The JROTC program is conducted only in a limited number of carefully selected high schools and academies in the United States. Its primary goal is to familiarize student cadets with basic military and traditions of the Armed Forces, without incurring any obligation of future military service or recruitment for any specific service.

### AIR FORCE JROTC (KN)

#### **Air Force JROTC I**

**Course Number:** 86.5110.0

**Prerequisite:** None

**Credit:** 1

#### **Air Force JROTC II**

**Course Number:** 86.5210.0

**Prerequisite:** Leadership Education I

**Credit:** 1

#### **Air Force JROTC III**

**Course Number:** 86.5310.4 (Honors)

**Prerequisite:** Leadership Education II

**Credit:** 1

#### **Air Force JROTC IV**

**Course Number:**

86.5410.4(Honors)

**Prerequisite:** Leadership Education III

**Credit:** 1

### ARMY JROTC (LN, PT)

#### **Army JROTC I**

**Course Number:** 86.6110.0

**Prerequisite:** None

**Credit:** 1

#### **Army JROTC II**

**Course Number:** 86.6210.0

**Prerequisite:** Leadership Education I

**Credit:** 1

#### **Army JROTC III**

**Course Number:** 86.6310.4 (Honors)

**Prerequisite:** Leadership Education II

**Credit:** 1

#### **Army JROTC IV**

**Course Number:** 86.6410.4 (Honors)

**Prerequisite:** Leadership Education III

**Credit:** 1

## **MARINE CORPS JROTC (CH, FH, PR)**

**Marine Corps JROTC I**  
**Course Number:** 86.3110.0  
**Prerequisite:** None  
**Credit:** 1

**Marine Corps JROTC II**  
**Course Number:** 86.3210.0  
**Prerequisite:** Leadership Education I  
**Credit:** 1

**Marine Corps JROTC III**  
**Course Number:** 86.3310.4 (Honors)  
**Prerequisite:** Leadership Education II  
**Credit:** 1

**Marine Corps JROTC IV**  
**Course Number:** 86.3410.4 (Honors)  
**Prerequisite:** Leadership Education III  
**Credit:** 1

## **NAVY JROTC (DN, RA, WD)**

**Navy JROTC I**  
**Course Number:** 86.4110.0  
**Prerequisite:**  
None  
**Credit:** 1

**Navy JROTC II**  
**Course Number:** 86.4210.0  
**Prerequisite:** Leadership Education I  
**Credit:** 1

**Navy JROTC III**  
**Course Number:** 86.4310.4  
(Honors)  
**Prerequisite:** Leadership Education II  
**Credit:** 1

**Navy JROTC IV**  
**Course Number:** 86.4410.4  
(Honors)  
**Prerequisite:** Leadership Education III  
**Credit:** 1

## **CTE: SCHOOL-TO-CAREER TRANSITION COURSES**

### **Capstone Work Experience and Internships**

## **CAPSTONE WORK EXPERIENCE (CWE), PROGRAM-BASED LEARNING EXPERIENCES**

A Capstone Work Experience is a work-based learning experience that is the culmination of a CTE program, allowing students to apply their CTE-program learning in an industry-specific workplace setting under the guidance of a mentor. See cluster/completer program/course listings. Fees and transportation may be required. Prerequisite: participation in a CTE program. Specific requirements are listed with program CWE course descriptions.

### **Internships**

This elective program provides students with the opportunity to extend and apply their career-based classroom learning under the supervision of a mentor. With direction from their supervisors/mentors, student interns will observe, explore, and discover solutions to authentic problems in the workplace. Students will maintain a reflective journal of their experiences and develop a portfolio that includes an enrichment project related to their career placements. Students may complete career-field-related projects under the direction of their mentors.

**Prerequisite:** None  
**Credits:** ½ to 2

## **Intern Math/ Science/ Engineering**

**Course Number:** 86.9710.4 (H) **Course Number:** 86.9710.5 (GT/AA) **Credit:** ½  
**Course Number:** 86.9410.4 (H) **Course Number:** 86.9410.5 (GT/AA) **Credit:** 1  
**Course Number:** 87.0220.4 (H) **Course Number:** 87.0220.5 (GT/AA) **Credits:** 2

## **Intern Arts/ Humanities**

**Course Number:** 86.9720.4 (H) **Course Number:** 86.9720.5 (GT/AA) **Credit:** ½  
**Course Number:** 86.9420.4 (H) **Course Number:** 86.9420.5 (GT/AA) **Credit:** 1  
**Course Number:** 87.1220.4 (H) **Course Number:** 87.1220.5 (GT/AA) **Credits:** 2

## **Intern Business/ Finance**

**Course Number:** 86.9730.4 (H) **Course Number:** 86.9730.5 (GT/AA) **Credit:** ½  
**Course Number:** 86.9430.4 (H) **Course Number:** 86.9430.5 (GT/AA) **Credit:** 1  
**Course Number:** 87.3220.4 (H) **Course Number:** 87.3220.5 (GT/AA) **Credits:** 2

## **Intern Health/ Human/ Public Services**

**Course Number:** 86.9740.4 (H) **Course Number:** 86.9740.5 (GT/AA) **Credit:** ½  
**Course Number:** 86.9440.4 (H) **Course Number:** 86.9440.5 (GT/AA) **Credit:** 1  
**Course Number:** 87.4220.4 (H) **Course Number:** 87.4220.5 (GT/AA) **Credits:** 2

## **Intern Computer Science/ Info Tech**

**Course Number:** 86.9750.4 (H) **Course Number:** 86.9750.5 (GT/AA) **Credit:** ½  
**Course Number:** 86.9450.4 (H) **Course Number:** 86.9450.5 (GT/AA) **Credit:** 1  
**Course Number:** 87.5220.4 (H) **Course Number:** 87.5220.5 (GT/AA) **Credits:** 2

# **CTE: ALL CAREER CLUSTERS**

## **COLLEGE-CAREER RESEARCH AND DEVELOPMENT COMPLETER PROGRAM**

The following program is an MSDE-approved CTE-completer sequence. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree.

Note: Program availability is limited. Each school's School-to-Career Transition teacher or counseling office should be contacted for enrollment, application, and course information.

## COLLEGE-CAREER RESEARCH AND DEVELOPMENT (CCRD)

### all comprehensive schools

This three-credit CTE career-completer program prepares students with academic, technical, and workplace readiness skills that will enable further education and/or employment in a career field upon graduation from high school. The CCRD program consists of two in-school courses, a portfolio development project, and a mentored work-based learning experience with a focus on workplace readiness skill development.

Students will identify a career pathway of interest and determine steps to achieve their education and career goals. Financial literacy and independence planning are essential components of the CCRD program. Students who successfully complete the program may earn three articulated college credits with CCBC. Fees may be required.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Note that courses may be taken concurrently if necessary for students to complete the program.

	<b>Introduction to College-Career Research and Development</b>	<b>Advanced College-Career Research and Development</b>	<b>CCRD Work-Based Learning Experience</b>
<b>Plan A</b>	Grade 10	Grade 11	Grades 11 and/or 12
<b>Plan B</b>	Grade 11	Grade 12	Grade 12
<b>Plan C</b>	Grade 12	Grade 12	Grade 12
<b>Plan D</b>	Grade 9	Grades 11 or 12	Grades 11 and/or 12

OR Intro to CCRD can be taken as two half-credit courses to align to other half-credit offerings including Health.

<b>College-Career Research &amp; Development with the ½-credit option for Intro</b>					
	<b>Option 1</b>	<b>Option 2</b>		<b>Option 3</b>	
<b>Year 1</b>	Intro CCRD 1 credit	Intro CCRD A ½ credit	Health 9/10 ½ credit	Intro CCRD A ½ credit	Intro CCRD B ½ credit
<b>Year 2</b>	Advance CCRD 1 credit	Advance CCRD 1 credit		Advance CCRD 1 CREDIT	
<b>Year 3</b>	WBL 1 or 2 credit	Intro CCRD B ½ credit	Opt. WBL ½ credit	WBL 1 or 2 credit	
<b>Year 4</b>	Elective 1 credit or no additional course needed	WBL 1 credit		Elective 1 credit or no additional course needed	

## Introduction to College-Career Research and Development

**Course Number: 86.1110.0** 1 credit  
**Course Number: 86.1120.0-A** ½ credit  
**Course Number: 86.1130.0-B** ½ credit

This course provides students with instruction in Maryland's Career Development Framework, including self-awareness, career awareness and exploration, workplace readiness, career satisfaction, and financial literacy. Students will begin a portfolio to document their career goals, skills, interests, and pathway planning. This course may be used as an elective course for students who are seeking other completers.

## Advanced College-Career Research and Development

**Course Number: 86.1210.0** 1 credit  
**Course Number: 86.1220.0-A** ½ credit  
**Course Number: 86.1230.0-B** ½ credit

This course requires students to apply their career development knowledge to further their career preparation. The course explores all aspects of a career, including transitions, advancements, and job satisfaction. Advanced financial literacy, including personal budgeting is taught. Students continue to develop their portfolios. Advanced CCRD is recommended to be taken concurrently with Work- Based Learning Experience to provide the opportunity for students to apply classroom learning in a workplace setting.

## CCRD Work-Based Learning Experience

**Course Number: 86.1290.4 (H)** 2 credits  
**Course Number: 86.1270.4 (H)** 1 credit

**Prerequisite:** Concurrent enrollment in College-Career Research and Development coursework; 16 years of age.

This course requires students to apply their career development knowledge to work experience in a career area of their choice. Students' skill development is measured by an individualized learning plan and related reflections. Emphasis is placed on workplace readiness skill development. Some students may become registered as apprentices. The completer requires one credit of work-based learning. Students are required to average five or more workplace hours per week for the duration of the experience. A minimum number of hours are required by MSDE for graduation. Note: Students are not permitted to use service learning or court-ordered hours for WBL.

## APPRENTICESHIP MARYLAND PROGRAM

The Apprenticeship Maryland Program is coordinated through a partnership between the Maryland State Department of Education (MSDE) and the Maryland Department of Labor. The program, for students ages 16 and up, is designed to lead to sustainable employment and further education in career pathways. The program is based on partnerships among employers/mentors, BCPS, students, and parents.

Eligible employers, who must be approved by the Maryland Apprenticeship Training Council (MATC), hire high school juniors and seniors to work in eligible career track occupations. Students also receive training in employability, interpersonal, and social skills. The program consists of one credit of related classroom instruction and a paid workplace experience of at least 450 hours.

## Introduction to Apprenticeship

**Course Number:** 56.0600.0

**Prerequisite:** Varies by apprenticeship

**Credit:** 1

In addition to general workplace readiness skill development, the content of this course is dependent upon the requirements of the industry in which the student is going to apprentice. This content is determined through a state-approved agreement between the apprenticeship employer and BCPS.

## Apprenticeship Work-Based Learning (WBL) Experience 1

**Course Number:** 56.9100.4 (H)

**Prerequisite:** Intro to Apprenticeship (may also be concurrent)

**Credit:** 1

## Apprenticeship Work-Based Learning (WBL) Experience 2

**Course Number:** 56.9200.4 (H)

**Prerequisite:** Intro to Apprenticeship/WBL 1 (may also be concurrent)

**Credit:** 1

## Apprenticeship Work-Based Learning (WBL) Experience 3

**Course Number:** 56.9300.4 (H)

**Prerequisite:** Intro to Apprenticeship/WBL 1 and 2 (may also be concurrent)

**Credit:** 1



"Girl" by Anning C. at Dulaney High School, Grade 12

## **CTE: ARTS, MEDIA, AND COMMUNICATION CLUSTER**

### **Graphic/Print Communication, Interactive Media Production**

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

Note: Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

<b>COMPLETER PROGRAMS</b>	<b>GRADE 9</b>	<b>GRADE 10</b>	<b>GRADE 11</b>	<b>GRADE 12</b>
<b>Graphic/Print Communication</b>	Graphic Comm 1	Graphic Comm 2	Graphic Comm 3	(Optional) Graphic Comm CWE Or (Optional) Graphic Comm 4
<b>Interactive Media Production</b>	Interactive Media 1	Interactive Media 2	Interactive Media 3 and 4 Or Interactive Media 3	(Optional) Interactive Media CWE Or Interactive Media 4

### **GRAPHIC/PRINT COMMUNICATION TECHNOLOGY (KN, WST)**

The three-credit Graphic/Print Communication Technology program will provide students with the fundamental workplace, technical application, and interpersonal skills necessary to succeed in the diverse career area of graphic/print communications. Artistic expression, computer operations, graphics, and imagery software applications (Adobe Creative Suite), electronic publishing, mechanical art, digital photography, image assembly, offset and screen-printing processes, and communication/teamwork skills will provide students with the knowledge needed to enter the workplace directly, to receive on-the-job training, and/or to seek postsecondary education.

Partnerships with Printing & Graphics Association MidAtlantic and CCBC are available; national certification through PrintED may be obtained. Students who successfully complete the program may earn articulated college credits with CCBC. Fees may be required.



## Graphic Communication Technology 1

**Course Number:** 62.5010.0

**Prerequisite:** None

**Credit:** 1

Students receive an overview of graphic design and printing production processes as well as an introduction to career options and required skills within the graphic communication industry. Students will learn to create documents for printing and digital production while learning about the impact of industry on society. The course focuses on safety, copyright, efficiency, and types of printing. Using industry software and equipment, students will apply their knowledge of basic design principles to various printing processes and file preparation.

## Graphic Communication Technology 2

**Course Number:** 62.5020.0

**Prerequisite:** Graphic Communication Technology 1

**Credit:** 1

With a focus on how the elements and principles of design enhance communication, students will learn to create and edit vector and raster graphics. This course covers binding and finishing for several types of products. Students will use industry software and equipment to create logos, flyers, and other products to meet client needs.

## Graphic Communication Technology 3

**Course Number:** 62.5030.4(H)

**Prerequisite:** Graphic Communication Technology 2

**Credit:** 1

Students will explore typography, focusing on the influence of typestyle on design. Students will design a logo, style guide, and business package to create a corporate identity. Variable data, personalization, and distribution methods are explored as well as the economic impact of design choices. Students learn skills required to be successful in the graphic communications business, including workflow, invoicing, ethics, and efficiency.

## Graphic Communication Technology 4

**Course Number:** 62.5040.4 (H)

**Prerequisite:** Graphic Communication Technology 3

**Credit:** 1

Students will apply their knowledge of all aspects of the graphic communications industry to complete a variety of live jobs for clients.

## Graphic Communication Technology CWE

**Course Number:** 62.5080.4 (H) 1 credit 62.5090.4 (H)

**Credit:** 2

**Prerequisite:** Graphic Communication Technology 1-2

The CWE course is available to 11th and 12th grade students. **NOTE:** This course is optional but strongly encouraged for students who are seeking a career in the graphic communications industry.

## **INTERACTIVE MEDIA PRODUCTION (CC, CH, CT, DN, ET, FR, NT, PK, PI)**

This four-credit program provides students with experience in web site development, internet technology, computer graphics, digital media and entertainment production, and project management. Courses emphasize experimentation in a variety of media, using the computer to produce multimedia works of art. Students will develop skills in photo/video imagery, animation, non-linear video editing software, web page design, basic game development, and mobile/handheld application development. The program emphasizes the completion of a professional portfolio in the multimedia arts which can be used to apply for AP programs, art scholarship competitions, employment, and continuing education programs. National certification as an Adobe Certified Associate (ACA) may be obtained. Students who successfully complete the program may earn articulated college credits with CCBC. Fees may be required.

### **Interactive Media Production 1**

**Course Number:** 62.6000.4 (H)

**Prerequisite:** None

**Credit:** 1

Students receive an overview of interactive media and design processes and are introduced to the Adobe Creative Suite. Students will learn to communicate themes visually while learning about the impact of digital arts on society. Using industry software and equipment, students will apply their knowledge of design to create original works and learn to effectively manage their workflow.

### **Interactive Media Production 2**

**Course Number:** 62.6010.4 (H)

**Prerequisite:** Interactive Media Production 1

**Credit:** 1

With a focus on how the elements and principles of design enhance communication, students will develop basic skills for audio, video, and film production, as well as basic coding for web design. Students will use industry standard software to build portfolio elements which demonstrate workflow management while effectively communicating through visual arts. The course also includes an introduction to career options and required skills within the arts, media, and communications cluster.

### **Interactive Media Production 3**

**Course Number:** 62.6020.5 (GT/AA)

**Prerequisite:** Interactive Media Production 2

**Credit:** 1

Students will explore the relationship between design professionals and their clients and develop their own brand as designers. Students will design a logo, style guide, and other media to meet a clients' needs. Projects include typography, 3-D modeling, animation, and video production. Students learn skills required to be successful in the media production industry while further developing proficiency in the Adobe Creative Suite.

### **Interactive Media Production 4**

**Course Number:** 62.6030.5 (GT/AA)

**Prerequisite:** Interactive Media Production 3

**Credit:** 1

Students will apply their knowledge of all aspects of interactive media production to projects that include advanced website and basic video game design. Students will demonstrate proficiency with the Adobe Creative Suite through successful completion of the Adobe Certified Client Associate industry certification exam. Projects created throughout the program will be combined into a digital portfolio.

### **Interactive Media Production CWE**

**Course Number:**62.6050.4 (GT/AA)

**Credit:** 1

**Course Number:**62.6070.4 (GT/AA)

**Credit:** 2

**Prerequisite:** Interactive Media Production 1-2

The CWE course is available to seniors, providing opportunities to apply specific skills they have learned in IMP courses in a trade-specific work-based learning experience.

## **CTE: BUSINESS, MANAGEMENT, AND FINANCE & INFORMATION TECHNOLOGY CLUSTERS**

**Business Management, Administrative Services, Marketing, IT: Computer Science, and  
IT: Networking (Cisco)**

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

Note: Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Three credit Completer programs will need to have the student take an additional elective course to meet graduation requirements. See the front of this guide, BCPS Graduation Requirements, for more information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

COMPLETER PROGRAMS	GRADE 9	GRADE 10	GRADE 11	GRADE 12
<b>Business Management</b> 3 credit POS	Principles of Business, Administration, and Management (1)	Accounting I (1) or Principles of Accounting (1)	Advanced Business Management (1)	<u>OPTIONAL ELECTIVES:</u> Macro and Micro AP Economics (1) or Internship or College Business Course
<b>Administrative Services</b> 4 credit POS	Principles of Business, Administration, and Management (1)	Accounting I (1) or Principles of Accounting (1)	Information Systems Management I (1)	Information Systems Management II (1)
<b>Marketing</b> 3 credit POS	Principles of Business, Administration, and Management (1)	Accounting I (1) or Principles of Accounting (1)	Marketing I (1)	<u>OPTIONAL ELECTIVES:</u> Marketing II (1) or Macro and Micro AP Economics (1) or College Business Course
<b>Information Technology— Computer Science</b>  3 credits POS-but you may not double dip on the Tech Ed credit.	Foundations of Computer Science (1)	AP Computer Science Principles (1)	AP Computer Science A (1)	<u>OPTIONAL ELECTIVES:</u> Linux Essentials (1) or C++ Programming or Internship or College Computer Course  (If counting FOCS or AP CSP as the Tech Ed credit, then an additional CS course needs to be taken.)
<b>Information Technology Cisco Networking</b> 4 credit POS	Network Completer 1 (Intro to Networks) (1)	Network Completer 2 (Switching, Routing, and Wireless Essentials) (1)	Network Completer 3 (Cyber Security Essentials) (1)	Network Completer 4 (Network Security) (1)  Additional Electives May Be Offered
<b>Information Technology Artificial Intelligence</b> 3 credit POS	AP Computer Science Principles (1) (as the Tech. Ed. credit)	Artificial Intelligence 1 (1)	AP Computer Science A (1)	Artificial Intelligence 2 (1)  Recommended Elective Artificial Intelligence Capstone (1)

## CTE: Business, Management, and Finance Cluster Programs

### ADMINISTRATIVE SERVICES (SP and MMA)

This pathway is designed to help students develop managerial and technical skills in a state-of-the-art office. The courses model a company, with the teacher assuming the role of the employer. The courses will provide MOS (Microsoft Office Specialist) certification opportunities which set a global standard for desktop productivity in corporations, academic institutions, staffing agencies, training organizations, and individuals by using Microsoft Office applications.

Technology is viewed and taught as a tool for problem solving and decision-making. Students are encouraged to analyze, synthesize, and evaluate situations at home, school, or work and apply technology to complete tasks efficiently and effectively. Coursework articulates into the community college courses.

## BUSINESS MANAGEMENT

This pathway focuses on management. Most jobs are created by small businesses started by entrepreneurially minded individuals, many of whom go on to create big businesses. People exposed to business education frequently express that they have more opportunity to exercise creative freedom, have higher self-esteem, and an overall greater sense of control over their own lives. As a result, many experienced businesspeople, political leaders, economists, and educators believe that fostering a robust entrepreneurial culture will maximize individual and collective economic and social success on a local, national, and global scale. Few subjects can provide more valuable knowledge and insight into career opportunities. Coursework articulates into community college course.

## MARKETING

This pathway provides students with in-depth, comprehensive, project-based learning opportunities. Students will apply their understanding of consumer buying behavior and relationships; the tools and techniques used by organizations that identify the factors that influence marketing strategy decisions; market segmentation and target marketing; the elements of the marketing mix (product, price, promotion, and place); as well as pricing strategies to create a written professional marketing plan. Students will integrate their knowledge of legal issues, ethics, diversity, and social responsibilities in developing their marketing plan. Coursework articulates to the community college.

## Information Technology (IT) Cluster Programs

### IT: ARTIFICIAL INTELLIGENCE (GW C, SPT, WST)

IT-Artificial Intelligence provides students opportunities to learn about the theory and development of computer systems that can perform tasks that normally require human intelligence. Students will learn coding and will explore the “5 Big Ideas of Artificial Intelligence”: Perception—Computers perceive the world using sensors; Representation and Reasoning—Agents maintain representations of the world and use them for reasoning; Learning—Computers can learn from data; Natural Interaction—Intelligent agents require many kinds of knowledge to interact naturally with humans; and Societal Impact—Artificial Intelligence can impact society in both positive and negative ways.

### IT: CISCO NETWORKING (ET, NT, PR, SPT, WST)

Cisco views the Networking Academy as a small part of an individual's path to lifelong learning. After completing coursework, students may choose to start a job, continue their education, or both. The curriculum also provides a computer science/networking background for students who plan to pursue a post-secondary or advanced degree in computer science or engineering. This program prepares students for advanced study in IT and for industry certification. Students learn how to install and configure switches and routers in multi-protocol networks using local and wide area networks; provide troubleshooting services; and improve network performance and cyber security. Students advance their understanding of IT Networking through the Cisco Academy with the opportunity for a range of industry certifications, such as CompTIA (A+), Security+, and Cisco CCT.” (MSDE) Coursework articulates to the community college. Coursework in this program is continually being updated to match the pace of industry.

## IT: Computer Science

This program prepares students for further study and careers in the field of Computer Science. Students complete a sequence of courses, starting with an overview of the Computing and Information Technology field and progressing through a more in-depth study of computer science. Throughout the program, students will learn all aspects of Computer Science including programming, hardware design, networks, graphics, databases and information retrieval, cyber security, software design, programming languages, logic, programming paradigms, translation between levels of abstraction, artificial intelligence, the limits of computations, applications in information technology and information systems, and social issues (internet security, privacy, and intellectual property). Students may sit for the AP Computer Science Principles and the AP Computer Science A exams.

## CTE COURSES IN BUSINESS AND IT CLUSTERS

### Accounting I H

**Course Number:** 35.2010.4

**Prerequisite:** Principles of Business, Administration, and Management recommended

**Credit:** 1

This course emphasizes basic accounting principles. Students learn how to interpret business forms and how to prepare a simple set of accounting records, journals, ledgers, and financial statements. This course is aligned with the MSDE State Curriculum.

### Artificial Intelligence 1 H (GW Carver, Sollers Point, and Western Tech only)

**Course Number:** 35.1200.4 (1 credit)

**Prerequisite:** AP Computer Science Principles

**Credit:** 1

This course provides a history of artificial intelligence, defines, and compares artificial intelligence and machine learning, exposes students to careers in AI, and begins to emerge them in coding and application-based activities.

### Artificial Intelligence 2 H (GW Carver, Sollers Point, and Western Tech only)

**Course Number:** 35.1300.4 (1 credit)

**Prerequisite:** AP Computer Science Principles, Artificial Intelligence 1 H, AP Computer Science A

**Credit:** 1

This course builds on content learned in AP Computer Science Principles, Artificial Intelligence 1, and AP Computer Science A. This course will consider the content provided for introductory level college courses such as “applying AI techniques such as natural language processing, machine learning, multi-agent, and intelligent tutoring to a variety of applications including knowledge management (knowledge acquisition, filtering, organization, and reuse, etc.), text mining, information extraction, ontology development, and Web-based learning.”

### Advanced Business Management H

**Course Number:** 35.0510.4

**Prerequisite:** Principles of Business, Admin. & Mgt.

**Credit:** 1

This course provides students with 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, human relations), business law and ethics, and business communications. This course is aligned with the MSDE State Curriculum.

## AP Computer Science A

(College Board approved teachers)

**Course Number:** 35.3520.6 (AP)

**Prerequisite:** None; AP Computer Science Principles and strong interest in Computer Programming, preferred.

**Credit:** 1

This course is designed to provide students with a learning experience equivalent to that of an introductory college course in computer science. AP Computer Science A emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and includes the study of data structures, design, and abstraction. This course is the last course in the Computer Science program of study. It may now count as a Technology Education Credit, but it is not recommended for students who have not taken AP Computer Science Principles or have a strong background in programming. ***Students may not “double dip” on their Technology Education credit.***

## AP Science Principles

(College Board approved teachers)

**Course Number:** 35.3510.6

**Prerequisite:** None

**Credit:** 1

This course provides students with an understanding of the technical aspects of computing including programming and algorithm design, computer system organization and operation, and data representation and information organization. This course includes the use of several programming languages, based on the specific project or problem students must solve. This course may also count as the Technology Education Graduation Requirement. Students may not “double dip” on their Technology Education credit.

## Foundations of Computer Science H

**Course Number:** 35.3500.4

**Prerequisite:** None

**Credit:** 1

This course is the first course in the Computer Science program of study. This course is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve problems. This course may also count as the Technology Education Graduation Requirement. Students may not “double dip” on their Technology Education credit.

## Information Systems Management I GT (SP and MMA)

**Course Number:** 35.2690.5 (GT)

**Prerequisite:** None

**Credit:** 1

Information Systems Management is designed to help students develop managerial and technical skills in a state-of-the-art technological office. Strong technical skills and Microsoft Office skills will be emphasized. Students will develop soft skills and learn managerial skills.

## Information Systems Management II GT (SP and MMA)

**Course Number:** 35.2670.5 (GT)

**Prerequisite:** Information Systems Management I

**Credit:** 1

Information Systems Management II is designed to help students further develop managerial and technical skills in a state-of-the-art technological office. The program models a company, with the teacher assuming the role of the employer. This course will prepare students for MOS (Microsoft Office Specialist) certification, which sets a global standard for desktop productivity in corporations, academic institutions, staff agencies, training organizations, and individuals by using Microsoft Office applications.

## Linux Essentials H

**Course Number:** 35.3530.4

**Prerequisite:** Foundations of Computer Science, AP Computer Science Principles, and AP Computer Science A or any Cisco Networking course.

**Credit:** 1

The Linux Essentials course, developed by Cisco NetAcad partner NDG, teaches students the fundamentals of the Linux operating system and command line, and basic open-source concepts. It is designed for students who want a comprehensive introduction to the Linux operating system.

This course uses a "learn by doing" approach. Each learner has hands-on access to the Linux virtual machine to practice, explore, and test Linux command-line concepts. From the fourth chapter on, the course provides step-by-step labs to help students build knowledge progressively and learn Linux commands that require practice to master. This course is for students in Computer Science or Cisco Networking programs. It is offered at sites that have a Cisco Networking program or as a Blended Learning class for non-Cisco sites.

## Marketing I H

**Course Number:** 35.4100.4

**Prerequisite:** None

**Credit:** 1

This course introduces students to areas of marketing, distribution, and entrepreneurship. Classroom instruction, combined with the high school's DECA activities, enables the students to gain a basic understanding of distribution as well as career opportunities. Activities include guest speakers, competitive events, projects, and student research based on individual occupational goals.

## Network Completer 1 H (ET, NT, PR, SPT, WST)

**Course Number:** 35.3730.4



**Prerequisite:** None

**Credit:** 1

This course is for students enrolled in the Cisco networking program of study. This course is the Cisco Net Academy's Introduction to Networks (ITN) course. It is the first course in the Cisco CCNA Routing and Switching curriculum teaching students the architecture, structure, functions and components of the Internet and other computer networks. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

## **Network Completer 2 H (ET, NT, PR, SPT, WST)**

**Course Number:** 35.3740.4

**Prerequisite:** Network Completer I

**Credit:** 1

This course is for students enrolled in the Cisco networking program of study and have successfully completed Network Completer 1. This course is the Cisco Net Academy's Routing and Switching Essentials course. The curriculum focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLANs) and security concepts. Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify, and mitigate LAN security threats, and configure and secure a basic WLAN.

## **Network Completer 3 H (ET, NT, PR, SPT, WST)**

**Course Number:** 35.3750.4

**Prerequisite:** Network Completer 1 and Network Completer 2

**Credit:** 1

This course is for students enrolled in the Cisco networking program of study and have successfully completed Network Completer 1 and 2. This course is the Cisco Net Academy's Cyber Security Essentials course and offers in-depth coverage of the current risks and threats to an organization's data, combined with a structured way of addressing the safeguarding of these critical electronic assets. The course provides a foundation for those responsible for protecting network services, devices, traffic, and data. It prepares students for further study in other specialized security fields.

## **Network Completer 4 H (ET, NT, PR, SPT, WST)**

**Course Number:** 35.3760.4

**Prerequisite:** Network Completer 1, Network Completer 2, and Network Completer 3

**Credit:** 1

This course is for students enrolled in the Cisco networking program of study and have successfully completed Network Completer 1, 2, and 3. This course uses the Cisco Net Academy's Network Security course and introduces students to the core security concepts and skills needed to configure and troubleshoot computer networks and help ensure the integrity of devices and data. Students may sit for Cisco and CompTia certifications such as the Security + exam.

## **Principles of Accounting GT**

**Course Number:** 35.2000.5

**Prerequisite:** Principles of Business, Admin, and Management recommended

**Credit:** 1

Accounting principles are emphasized in this course which uses a college level text. The course is designed for students who want to major in business administration in college. Note: Approval by the department chair is recommended.

## Principles of Business, Administration, and Management

**Course Number:** 35.0310.0

**Prerequisite:** None

**Credit:** 1

The Principles of Business, Administration, and Management course provides students with knowledge of the types of businesses, as well as various applications, laws, and theories of business. Along with a brief historical perspective, business terminology and principles will be emphasized. Students will learn to analyze the functions of business through evaluating, planning, organizing, and controlling. Students will develop the communication skills that will be necessary for success in the workplace and college.

## CONSTRUCTION AND DEVELOPMENT CLUSTER

**Building and Construction Technology, Carpentry, Construction, Design & Manufacturing,  
Electrical Careers, HVAC, Mechanical Construction/Plumbing**

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

Note: Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Building and Construction Technology</b>	<i>Students are encouraged to start in Grade 9</i>	Building and Construction Technology 1 and 2	Building and Construction Technology 3 and 4	Building and Construction Technology CWE
<b>Carpentry</b>	<i>Students are encouraged to start in Grade 9</i>	Carpentry 1 and 2	Carpentry 3 and 4	Carpentry CWE
<b>Construction, Design and Management</b>	Introduction to Construction, Design and Management	Principles of Construction Design	Advanced Design and 3D Modeling	Advanced Construction Management

<b>Electrical Careers</b>	<i>Students are encouraged to start in Grade 9</i>	Electrical 1 and 2	Electrical 3 and 4	Electrical CWE
<b>HVAC</b>	<i>Students are encouraged to start in Grade 9</i>	HVAC 1 and 2	HVAC 3 and 4 HVAC Appliance Repair	HVAC CWE
<b>Mechanical Construction/ Plumbing</b>	<i>Students are encouraged to start in Grade 9</i>	Mechanical Construction/ Plumbing 1 and 2	Mechanical Construction/ Plumbing 3 and 4	Mechanical Construction/ Plumbing CWE

## BUILDING AND CONSTRUCTION TECHNOLOGY (ET, MM, SPT)

Building and Construction Technology provides students with knowledge and principles of carpentry, plumbing, electrical, and HVAC systems. This hybrid construction program involves the construction of modular units, with a high degree of completion of interior elements, and presents the construction side of the manufactured construction industry. Additional curriculum modules, covering project management and project supervision as it relates to all areas of Construction Trades, are offered as supplemental resources.

Students who successfully complete the program are eligible for certification through National Craft Assessment and Certification (NCCER) and Occupational Safety and Health Administration (OSHA). Students completing the program successfully may be eligible for advanced placement and/or testing opportunities through union or non-union apprenticeship programs and/or receive college credit at a postsecondary institution through an articulation agreement with CCBC. Upon graduation students can enter employment, complete journeyman apprenticeship, and/or earn a degree at a two-year or four-year college. *Fees may be required.*

### Building and Construction Tech 1

**Course Number:** 62.8000.0

**Prerequisite:** None

**Credit:** 1

### Building and Construction Tech 2

**Course Number:** 62.8010.0

**Prerequisite:** Building and Construction Tech 1

**Credit:** 1

### Building and Construction Tech 3

**Course Number:** 62.8020.4 (H)

**Prerequisite:** Building and Construction Tech 2

**Credit:** 1

### Building and Construction Tech 4

**Course Number:** 62.8030.4 (H)

**Prerequisite:** Building and Construction Tech 3

**Credit:** 1

### Building and Construction Tech 5

**Course Number:** 62.8040.4 (H)

**Prerequisite:** Building and Construction Tech 4

**Credit:** 1

### Building and Construction Tech CWE

**Course Number:** 62.8080.4 (H)

**Prerequisite:** Varies by school offerings. Credit: 1

**Course Number:** 62.8090.4 (H) Credit: 2

## CARPENTRY CAREERS (CC, KN, LN, OM, PH)

Students in the carpentry careers program acquire information and experience related to residential and commercial construction. Safety, hand, and power tools, leveling instruction, foundation layout, floor and wall construction, roof construction, blueprint reading, forming, and job estimating are units of instruction emphasized for carpentry students. Carpentry students will complete the National Center for Construction Education and Research (NCCER) Core Learning and Carpentry Level One certification exams.

Students completing the program successfully are eligible for advanced placement in first year apprenticeship in the Associated Builders and Contractors (ABC) Apprenticeship Program. They may also be eligible for advanced placement and/or testing opportunities through other union or non-union apprenticeship programs and/or receive college credit at a postsecondary institution through an articulation agreement with CCBC. Upon graduation students can enter employment, complete journeyman apprenticeship, and/or earn a degree at a two-year or four-year college. Fees may be required.

### Carpentry Careers 1

**Course Number:** 61.9100.0

**Prerequisite:** None

**Credit:** 1

### Carpentry Careers 2

**Course Number:** 61.9110.0

**Prerequisite:** Carpentry 1

**Credit:** 1

### Carpentry Careers 3

**Course Number:** 61.9120.4 (H)

**Prerequisite:** Carpentry 2

**Credit:** 1

### Carpentry Careers 4

**Course Number:** 61.9130.4 (H)

**Prerequisite:** Carpentry 3

**Credit:** 1

### Carpentry Careers 5

**Course Number:** 61.9140 (H)

**Prerequisite:** Carpentry 4

**Credit:** 1

### Carpentry Careers 6

**Course Number:** 61.9150.4 (H)

**Prerequisite:** Carpentry 5

**Credit:** 1

### Carpentry Careers CWE

**Course Number:** 61.9160.4 (H)

**Prerequisite:** Varies by school offerings.

**Credit:** 1

**Course Number:** 61.9170.4 (H)

**Credit:** 2

## **CONSTRUCTION, DESIGN AND MANAGEMENT (CDM) (FH, MM, OV, SP)**

Construction, Design, and Management (CDM) is a four-course project-based Career and Technical Education Program of Study that prepares students for careers in Architecture and Construction Management fields, along with other related design, engineering, construction, and manufacturing fields.

Students will develop an understanding of the principles behind architecture, construction, and the design process and how they relate to residential and commercial buildings. Using industry software, such as Autodesk AutoCAD and Autodesk Revit, students hone their technical skills by creating building drawings to meet design criteria. Throughout the program, students will create and maintain a portfolio of their work and resume.

### **CDM 1: Introduction to Construction, Design and Management**

**Course Number:** 56.1510.4 (H)

**Prerequisite:** None

**Credit:** 1

### **CDM 2: Principles of Construction Design**

**Course Number:** 56.1520.4 (H)

**Prerequisite:** CDM 1

**Credit:** 1

### **CDM 3: Advanced Design and 3D Modeling**

**Course Number:** 56.1530.4 (H)

**Prerequisite:** CDM 2

**Credit:** 1

### **CDM 4: Advanced Construction Management**

**Course Number:** 56.1540.4 (H)

**Prerequisite:** CDM 3

**Credit:** 1

## **ELECTRICAL CAREERS (LN)**

Students receive instruction in the procedures required for the installation and repair of wiring and control systems for residential and commercial systems. Instruction includes basic electrical theory, circuitry, circuit protection, installation of lighting and power circuits (both commercial and residential), and the use of electrical test equipment. Theory taught in the instructional portion of this program follows the requirements established by the National Electrical Code.

Students completing the program successfully are eligible for advanced placement in apprenticeship in the ABC apprenticeship training program. They may also be eligible for advanced placement and/or testing opportunities through other union or non-union apprenticeship programs and/or receive college credit at a postsecondary institution through an articulation agreement. Upon graduation, students can enter employment, complete journeyman apprenticeship, and/or earn a degree at a two-year or four-year college. Students who complete the program successfully may earn articulated college credits with CCBC. Fees may be required.

## Electrical Careers 1

**Course Number:** 62.4000.0

**Prerequisite:** None

**Credit:** 1

## Electrical Careers 2

**Course Number:** 62.4010.0

**Prerequisite:** Electrical 1

**Credit:** 1

## Electrical Careers 3

**Course Number:** 62.4020.4 (H)

**Prerequisite:** Electrical 2

**Credit:** 1

## Electrical Careers 4

**Course Number:** 62.4030.4 (H)

**Prerequisite:** Electrical 3

**Credit:** 1

## Electrical Careers 5

**Course Number:** 62.4060.4 (H)

**Prerequisite:** Varies by school offerings

## Electrical Careers CWE

**Course Number:** 62.4060.4 (H)

**Prerequisite:** Varies by school offerings.

**Credit:** 1

**Course Number:** 62.4070.4 (H)

**Credit:** 2



"Denial" by Mya J. at Randallstown High School, Grade 11

## HEATING VENTILATION AND AIR CONDITIONING (HVAC) CAREERS (DL)

The HVAC program is a comprehensive program that prepares students with related academic, workplace readiness, technical, and lifelong learning skills that are needed in the modern workplace. The program will introduce students to the latest climate control systems with hands-on training on central air, heat pumps, oil and gas furnaces, and most light commercial units being used today. Senior level summer and capstone work experience may also allow credit for HVAC apprenticeship work experience standards.

Students successfully completing the program and who obtain a state apprenticeship license will receive credit for one year of their state apprenticeship. They may be eligible for advanced placement in first year apprenticeship in the ABC apprenticeship training program and may also be eligible for advanced placement and/or testing opportunities through other union or non-union apprenticeship programs. Upon graduation, students can enter employment, complete journeyman apprenticeship, and/or earn a degree at a two-year or four-year college. Students who complete the program successfully may earn articulated college credits with CCBC. **Fees may be required.**

### HVAC Careers 1

**Course Number:** 62.4200.0

**Prerequisite:** None

**Credit:** 1

### HVAC Careers 2

**Course Number:** 62.4210.0

**Prerequisite:** HVAC 1

**Credit:** 1

### HVAC Careers 3

**Course Number:** 62.4220.4 (H)

**Prerequisite:** HVAC 2

**Credit:** 1

### HVAC Careers 4

**Course Number:** 62.4230.4 (H)

**Prerequisite:** HVAC 3

**Credit:** 1

### HVAC Welding

**Course Number:** 62.4260.4 (H)

**Prerequisite:** HVAC 4

**Credit:** 1

### HVAC Appliance Repair

**Course Number:** 62.4250.4 (H)

**Prerequisite:** HVAC 4

**Credit:** 1

### HVAC Careers CWE

**Course Number:** 62.4270.4 (H)

**Prerequisite:** Varies by school offerings.

**Credit:** 1

**Course Number:** 62.4280.4 (H)

**Credit:** 2

## MECHANICAL CONSTRUCTION/PLUMBING CAREERS (WST, KN)

The program prepares students to install and maintain water supply systems, waste removal systems, and various fixtures that provide for personal comfort in the home or commercial business setting. Students learn and freely use the tools of the trade along with blueprint reading, residential plumbing, joining cast-iron pipe, making flare and compression joints, commercial plumbing drain and waste piping, venting, and faucet/fixture repair installation.

Students may be eligible for first-year apprenticeship in the ABC apprenticeship training program and may also be eligible for advanced placement and/or testing opportunities through other union or non-union apprenticeship programs. Upon graduation, students can enter employment, complete journey person apprenticeship, and/or earn a degree at a two-year or four-year college. Students who complete the program successfully may earn articulated college credits with CCBC. ***Fees may be required.***

### Mechanical Construction/Plumbing 1

**Course Number:** 62.4110.0

**Prerequisite:** None

**Credit:** 1

**Credit:** 1

### Mechanical Construction/Plumbing 2

**Course Number:** 62.4120.0

**Prerequisite:** Mechanical Construction/Plumbing 1

**Credit:** 1

### Mechanical Construction/Plumbing 4

**Course Number:** 62.4140.4 (H)

**Prerequisite:** Mechanical Construction/Plumbing 3

**Credit:** 1

### Mechanical Construction/Plumbing 3

**Course Number:** 62.4130.4 (H)

**Prerequisite:** Mechanical Construction/Plumbing 2

### Mechanical/Plumbing CWE

**Course Number:** 62.4160.4 (H)

**Prerequisite:** Varies by school offerings

**Credit:** 1

**Course Number:** 62.4170.4 (H)

**Credit:** 2

## CONSUMER SERVICES, HOSPITALITY, AND TOURISM CLUSTER

Cosmetology, Culinary Arts and Baking & Pastry, Culinary Arts and Restaurant Management,  
Food and Beverage Management (ProStart)

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

**Note:** Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Cosmetology Careers</b>	Students are encouraged to start in Grade 9	Cosmetology 1, 2, 3	Cosmetology 4, 5, 6	Cosmetology 7, 8, 9 and/or Cosmetology Extension or
<b>Culinary Arts - Baking &amp; Pastry (ACF)</b>	Students are encouraged to start in Grade 9	Baking and Pastry 1 and 2	Baking and Pastry 3 and 4	Baking and Pastry CWE (Internship)
<b>Culinary Arts and Restaurant Management (ACF)</b>	Students are encouraged to start in Grade 9	Culinary Arts 1 and 2	Culinary Arts 3 and 4	Culinary Arts CWE Culinary Arts Elective
<b>Food and Beverage Management (ProStart)</b>	Students are encouraged to start in Grade 9	Foods Professional 1	Foods Professional 2	Foods Professional Internship (2 credits)

### COSMETOLOGY CAREERS (CC, MM, SPT, WST)

The cosmetology careers program prepares individuals to care for and beautify hair, nails, and skin. The primary purpose of the program is to train the students in the basic manipulative skills, safety judgments, proper work habits, and desirable attitudes necessary to obtain licensure and for competency in entry-level positions in cosmetology or a related career field.

Hair techniques taught include giving shampoos, rinses, and scalp treatments; styling, setting, cutting, hair coloring and lightening, permanent waving, and relaxing; skin techniques include facials and make-up; nail techniques include manicures, pedicures, artificial nail techniques, and hand and arm massages.



Emphasis is placed on hygiene, sanitation, decontamination, and infection control. Related areas of instruction include bones, muscles, nerves, chemistry, electricity, computer imaging, product knowledge, customer relations, and salon management. Students may further their education and acquire more practical experience by working in a private salon or enrolling in a business management program at the community college level.

Fifteen hundred hours of instruction qualifies the student to sit for the operators' licensing examination in Maryland in the senior year of high school. Students must complete an assessment process for program selection. Students are required to apply for and sit for the State of Maryland Board of Cosmetology license examination prior to graduation to qualify for completer status. Fees may be required.

<b>Cosmetology 1</b> <b>Course Number:</b> 61.7010.0 <b>Prerequisite:</b> None <b>Credit:</b> 1	<b>Cosmetology 6</b> <b>Course Number:</b> 61.7060.4 (H) <b>Prerequisite:</b> Cosmetology 5 <b>Credit:</b> 1
<b>Cosmetology 2</b> <b>Course Number:</b> 61.7020.0 <b>Prerequisite:</b> Cosmetology 1 <b>Credit:</b> 1	<b>Cosmetology 7</b> <b>Course Number:</b> 61.7070.4 (H) <b>Prerequisite:</b> Cosmetology 6 <b>Credit:</b> 1
<b>Cosmetology 3</b> <b>Course Number:</b> 61.7030.0 <b>Prerequisite:</b> Cosmetology 2 <b>Credit:</b> 1	<b>Cosmetology 8</b> <b>Course Number:</b> 61.7080.4 (H) <b>Prerequisite:</b> Cosmetology 7 <b>Credit:</b> 1
<b>Cosmetology 4</b> <b>Course Number:</b> 61.7040.4 (H) <b>Prerequisite:</b> Cosmetology 3 <b>Credit:</b> 1	<b>Cosmetology 9</b> <b>Course Number:</b> 61.7090.4 (H) <b>Prerequisite:</b> Cosmetology 8 <b>Credit:</b> 1
<b>Cosmetology 5</b> <b>Course Number:</b> 61.7050.4 (H) <b>Prerequisite:</b> Cosmetology 4 <b>Credit:</b> 1	<b>Cosmetology Extension</b> <b>Course Number:</b> 61.7100.4 (H) <b>Prerequisite:</b> Varies by school program <b>Credit:</b> 1

## Cosmetology CWE

**Course Number:** 61.7110.4 (H)

**Prerequisite:** Varies by school offerings. Credit: 1

**Course Number:** 61.7130.4 (H) Credit: 2

## CULINARY ARTS: BAKING AND PASTRY PROGRAM (SPT)

The baking and pastry program provides students with instruction in advanced bakery production of breads and desserts, basic food and bakeshop production, service skills, and human relations skills utilizing the ProStart program developed by the National Restaurant Association Education Foundation and materials developed by the American Culinary Federation (ACF).

Students may earn industry certification and credit toward becoming a Certified Pastry Culinarian (CPC). Upon completion of the program, they may earn articulated college credits. **Fees may be required.**

## Professional Baking and Pastry 1

**Course Number:** 61.8210.0

**Credit:** 1

## Professional Baking and Pastry 2

**Course Number:** 61.8220.0

**Credit:** 1

## Professional Baking and Pastry 3

**Course Number:** 61.8310.4 (H)

**Credit:** 1

## Professional Baking and Pastry 4

**Course Number:** 61.8320.0

**Credit:** 1

## Professional Baking and Pastry Internship 1

**Course Number:** 61.8410.5 (GT/AA)

**Credit:** 1

## Professional Baking and Pastry Internship 2

**Course Number:** 61.8420.5 (GT/AA)

**Credit:** 1



"Untitled" by Edwin M.A. at Parkville High,  
Grade 11

## CULINARY ARTS & RESTAURANT MANAGEMENT (ET, CC, SPT, WST)

This program partners with the American Culinary Federation (ACF) to prepare students for successful careers in professional cooking. The program includes hands-on education in food production, while developing professionalism and proficiency in cooking, baking, cost control, nutrition, sanitation, and food marketing.

Students in this program gain practical experience through clinical experiences through school-based enterprises and/or work-based learning in the culinary industry. Students may be eligible to earn ACF's Certified Fundamentals Cook (CFC) credential along with ServSafe certification. The course titles and sequences for the culinary arts program vary by school. See the individual school matrix for the course sequence by school. ***Fees may be required.***

### Culinary Arts 1

**Course Number:** 61.8010.0

**Prerequisite:** None

**Credit:** 1

### Culinary Arts 2

**Course Number:** 61.8020.0

**Prerequisite:** Culinary Arts 1

**Credit:** 1

### Culinary Arts 3

**Course Number:** 61.8030.4 (H)

**Prerequisite:** Culinary Arts 2

**Credit:** 1

### Culinary Arts 4

**Course Number:** 61.8040.4 (H)

**Prerequisite:** Culinary Arts 3

**Credit:** 1

### Culinary Arts 5

**Course Number:** 61.8050.4

(H)

**Prerequisite:** Culinary Arts 4

**Credit:** 1

### Culinary Arts 6

**Course Number:** 61.8060.5 (GT/AA)

**Prerequisite:** Varies by school offerings.

**Credit:** 1

### Culinary Arts CWE

**Course Number:** 61.8090.4 (H)

**Prerequisite:** Varies by school offerings.

**Credit:** 1

**Course Number:** 61.8170.4 (H)

**Credit:** 2

## FOOD AND BEVERAGE MANAGEMENT (ProStart) (CT, DL, KN, LN, MM, NT, OV, PA, PT, PH, RA, SP, WD)

The program provides students with a challenging and diverse curriculum in one of the world's fastest growing fields. Students explore job opportunities and career pathways included in the food service industry by utilizing the ProStart program developed by the National Restaurant Association Education Foundation. Instruction includes basic food and bakeshop production, nutrition, and management training. Service skills, human relations skills, and menu development are included in the restaurant management curriculum.

Students completing the sanitation course successfully qualify to take the ServSafe certification examination for national certification. Students must complete practical work experience in the industry to obtain ProStart certification. Postsecondary advancement is available with culinary colleges and universities, apprenticeships, and community pathways. The course titles and sequences for the program vary by school. See the individual schools for the course sequence. ***Fees may be required.***

### Foods Professional 1

**Course Number:** 61.8510.0

**Prerequisite:** None

**Credit:** 1

### Foods Professional 2

**Course Number:** 61.8520.4 (H)

**Prerequisite:** Foods Professional 1

**Credit:** 1

### Foods Professional Internship 1

**Course Number:** 66.9110.4

**Prerequisite:** Foods Professional 2

**Credit:** 1

## Foods Professional Internship 2

**Course Number:** 66.9120.4

**Prerequisite:** Foods Professional Internship 1

**Credit:** 1

## Foods Professional Internship CWE

**Course Number:** 66.0330.4

**Prerequisite:** Foods Professional 2

**Credit:** 2

## CTE: ENVIRONMENTAL, AGRICULTURE, AND NATURAL RESOURCES CLUSTER

### Agriscience, Environmental Technology

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

**Note:** Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

Completer Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Curriculum for Agricultural Education (CASE)</b>	Introduction to Agriculture, Food, and Natural Resources (CASE AFNR)	Principles of Agricultural Science – Animal (ASA) or Principles of Agricultural Science – Plant (ASP)	Animal and Plant Biotechnology	Agricultural Business, Research, and Development
<b>Environmental Technology</b>	Students are encouraged to start in Grade 9	Environmental Tech 1 and 2	Environmental Tech 3 and 4	Environmental Tech CWE

## CURRICULUM FOR AGRICULTURE SCIENCE EDUCATION (CASE) (HH)

Curriculum for Agricultural Science Education (CASE) is an ambitious project started by the National Council for Agricultural Education in 2007. The project goal is to implement a national curriculum for secondary agricultural education that provides a high level of educational experiences to enhance the rigor and relevance of agriculture, food, and natural resources (AFNR) subject matter.

Besides elevating the rigor of AFNR knowledge and skills, CASE provides purposeful enhancement of science, mathematics, and English language understanding. CASE curriculum utilizes science inquiry, and concepts are taught using activity-, project-, and problem-based instructional strategies. Fees may be required.

### **Agriculture Science CASE/Intro to Natural Resources**

**Course Number:** 61.6100.0

**Prerequisite:** None

**Credit:** 1

### **Agriculture Science CASE/Principles of Animal Science**

**Course Number:** 61.6330.4 (H)

**Prerequisite:** AgSci CASE Intro to Natural Resources

**Credit:** 1

### **Agriculture Science CASE/Principles of Plant Science**

**Course Number:** 61.6340.4 (H)

**Prerequisite:** AgSci CASE Intro to Natural Resources

**Credit:** 1

### **Agriculture Science CASE/Animal and Plant Biotechnology**

**Course Number:** 61.6330.4 (H)

**Prerequisite:** AgSci CASE Intro to Natural Resources

**Credit:** 1

### **Agriculture Science CASE/Agricultural Research and Development**

**Course Number:** 61.6300.4 (H)

**Prerequisite:** AgSci CASE Intro to Natural Resources

**Credit:** 1

### **Agriculture Science CWE**

**Course Number:** 61.6380.4 (H)

**Prerequisite:** two or more credits in Agriculture Science

**Credit:** 1

## **ENVIRONMENTAL TECHNOLOGY (WST)**

Environmental technology is a career field that utilizes the principles of science, engineering, and computer technology to protect and enhance the environment and human health. This program emphasizes the application of environmental sciences using technology, hands-on projects, and field activities. A sequence of courses that cover natural resources, water, land and air systems, environmental sampling and analysis, pollution prevention and control, waste management, and Geographic Information Systems.

Student projects include construction and maintenance of an aquaculture system, wetland creation and management, habitat assessment, landscaping, native plant horticulture, soil, and water quality monitoring, and mapping environmental data. During their senior year, students who qualify are encouraged to undertake a school-to-work transition experience such as an internship or work study position. Many of the careers in this field require two or four years of postsecondary training and education. Students who complete the program successfully may earn articulated college credits with CCBC. Fees may be required.

### Environmental Tech 1

**Course Number:** 61.6410.0

**Prerequisite:** None

**Credit:** 1

### Environmental Tech 2

**Course Number:** 61.6420.0

**Prerequisite:** Environmental Tech 1

**Credit:** 1

### Environmental Tech 3

**Course Number:** 61.6430.4 (H)

**Prerequisite:** Environmental Tech 2

**Credit:** 1

### Environmental Tech 4

**Course Number:** 61.6440.4 (H)

**Prerequisite:** Environmental Tech 3

**Credit:** 1

### Environmental Tech GIS

**Course Number:** 61.6450.4 (H)

**Prerequisite:** Environmental Tech 1

**Credit:** 1

### Environmental Tech CWE

**Course Number:** 61.6470.4 (H)

**Prerequisite:** Environmental Tech 3 or 4

**Credit:** 1

**Course Number:** 61.6480.4 (H)

**Credit:** 2



"Flowers" by Nusaibah M. at Pikesville High School, Grade 10

## CTE: HEALTH AND BIOSCIENCES CLUSTER

### Academy of Health Professions (AoHP)

#### Project Lead the Way: Biomedical Sciences

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

Note: Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Academy of Health Professions (AoHP)</b>	Students are encouraged to start in Grade 9	AoHP 1, AoHP 2	AoHP 3, AoHP 4, or Specialty AoHP Course(s)	AoHP 5, AoHP CWE
<b>Project Lead the Way: Biomedical Sciences</b>	Principles of the Biomedical Sciences	Human Body Systems	Medical Interventions	Biomedical Innovation PLTW Biomed CWE

### ACADEMY OF HEALTH PROFESSIONS (ET, OV, RA, SPT, WST)

This program provides students with project and problem-based learning, clinical and internship experiences, and classroom and lab instruction related to the field of healthcare. Students are introduced to healthcare knowledge and skills through two foundation courses: Foundations of Medicine and Health Science and Structure and Functions of the Human Body.

Students may then choose from several course combinations to complete the four-course sequence. Students may participate in a supervised clinical experience course, design, and participate in an internship, and/or enroll in a pre-requisite college course. Depending upon the location, students may have the opportunity to apply what they are learning to real-life healthcare situations in a medical specialty course, such as Certified Nursing Assistant, Dental Assistant, and Pharmacy Technician.

Students may earn state and/or nationally recognized credentials after passing licensure examinations. Course offerings, internship opportunities and articulated college credit may vary at program locations. Fees may be required.

### Acad of Health Professions 1

**Course Number:** 63.4200.0

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions 2

**Course Number:** 63.4210.0

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions Pharmacy Technician HON

**Course Number:** 63.5140.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions CNA 3 HON

**Course Number:** 63.4230.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions Dental Assisting 3 HON

**Course Number:** 63.1130.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions Physical Rehabilitation 3 HON

**Course Number:** 63.1110.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions 3 HON

**Course Number:** 63.5120.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions 4 HON

**Course Number:** 63.5130.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions Dental Assisting 4 HON

**Course Number:** 63.1240.4

**Prerequisite:** None

**Credit:** 1

### Acad of Health Professions Physical Rehabilitation 4 HON

**Course Number:** 63.1210.4

**Prerequisite:** None

**Credit:** 1



## Acad of Health Professions CNA 5 HON

**Course Number:** 63.5050.4

**Prerequisite:** None

**Credit:** 1

## Acad of Health Professional Internship CWE HON

**Course Number:** 63.4348.4

**Prerequisite:** None

**Credit:** 1

## Acad of Health Professional Internship CWE HON

**Course Number:** 63.4350.4

**Prerequisite:** None

**Credit:** 2

## PROJECT LEAD THE WAY: BIOMEDICAL SCIENCES (FH, LN, LR, MM, NT, PH, PT, WD)

This program is designed to meet the needs of more employees who are qualified science and health professionals. Biomedical sciences is a broad field encompassing many different medical and healthcare disciplines. This program will give students the foundation skills to prepare for high skill, high wage positions in biomedical sciences. The Project Lead the Way Biomedical Sciences program is based on the National Standards for Science, Mathematics, and English Language Arts, and the Accountability Criteria for the National Health Care Cluster Foundation Standards. The biomedical science courses include Principles of Biomedical Science, Human Body Systems, Medical Interventions, and Biomedical Innovation. Fees may be required.

## PLTW BioMed Principles of Biomedical Science

**Course Number:** 63.5200.4 (H)

**Prerequisite:** None

**Credit:** 1

## PLTW BioMed Human Body Systems

**Course Number:** 63.5210.4 (H)

**Prerequisite:** Concurrent enrollment or prior enrollment in Principles of BioMed

**Credit:** 1

## PLTW BioMed Medical Interventions

**Course Number:** 63.5220.5 (GT/AA)

**Prerequisite:** Concurrent enrollment or prior enrollment in Human Body Systems

**Credit:** 1

## PLTW BioMed Biomedical Innovations

**Course Number:** 63.5230.5 (GT/AA)

**Prerequisite:** Concurrent enrollment or prior enrollment in Medical Interventions

**Credit:** 1

## PLTW BioMed Research and Development CWE

**Course Number:** 63.5240.5 (GT/AA)

**Credit:** 1

**Prerequisite:** Concurrent enrollment or prior enrollment in Biomedical Innovations

**Course Number:** 63.5270.5 (GT/AA)

**Credit:** 2

## CTE: HUMAN RESOURCE SERVICES CLUSTER

### Child Care Services, Homeland Security and Emergency Preparedness, Teacher Academy of Maryland

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

**Note:** Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

Completer Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Childcare and Early Childhood Education</b> NO NEW ENROLLMENTS IN THIS PROGRAM FOR 23-24 AS PROGRAM IS BEING PHASED OUT.				Child Development Internship- 2 credits AVAILABLE ONLY TO STUDENTS WHO HAVE PREVIOUSLY COMPLETED CD1 AND 2.
<b>Homeland Security and Emergency Preparedness</b>	Foundations of Homeland Security and Emergency Preparedness	Admin of Justice I	Admin of Justice II	Homeland Security Internship (Capstone) or College HSEP Course
<b>Teacher Academy of Maryland</b>	Teaching as a Profession	Child and Adolescent Development	Foundations of Curriculum & Instruction	Education Academy Internship

### CHILDCARE AND EARLY CHILDHOOD EDUCATION (CT, KN, LN, MM, NT, PR, PT)

This instructional program prepares students to work in fields related to the education and care of young children from birth to age eight in early childhood settings, such as day care centers, pre-school programs, and kindergarten. Developmental stages of children, learning theories, and methods and materials of teaching young children are included in this program. Application of skills continues through working in a child development lab. The 90-hour childcare certificate issued by the state of Maryland may be earned through successful completion of this program.

Students who successfully complete the program may earn articulated college credits at CCBC. **NOTE:** This program is being phased out and is not available for students to begin in the 22-23 school year. Students who have enrolled in the program in 21-22 and earlier are able to complete the program.

## Child Development I

**Course Number:** 66.0200.4 (H)

**Prerequisite:** None

**Credit:** 1

## Child Development II

**Course Number:** 66.0210.4 (H)

**Prerequisite:** Successful completion of Child Development I

**Credit:** 1

## Child Development Internship (2 credits required)

**Prerequisite:** Successful completion of Child Development I and II.

**Course Number:** 66.0240.4 (H)

**Credit:** 1

**Course Number:** 66.0250.4 (H)

**Credit:** 2

## HOMELAND SECURITY AND EMERGENCY PREPAREDNESS (CH, DN, OV, PA, PH, PK)

The Homeland Security and Emergency Preparedness program of study is a Career and Technical Education (CTE) instructional program which integrates government, academia, and private sector training/educational initiatives to help students understand how the United States and its interests worldwide are protected against threats to public safety, both natural and manmade through effective communication, preparedness, detection, prevention, response, and recovery.

The program provides rigorous and relevant instruction of homeland security and criminal justice topics that are aligned with state and national standards. HSEP works closely with its post-secondary and government/industry partners to provide engaging experiences for all students. The Criminal Justice/Law Enforcement Pathway, also known as the “Administration of Justice Concentration” within the HSEP Program provides students with a broad background of the administration of justice in the United States. This program is for students in grades 9 through 12.

## Foundations of Homeland Security

**Course Number:** 66.1100.0

**Prerequisite:** None

**Credit:** 1

The Foundations course introduces students to the fields of homeland security and emergency management by providing a historical background to support an understanding of the growth and development of the fields. After presenting the historical context, the Foundations course covers the organization, framework, and roles of the federal, state, and local governments. It also covers the phases of homeland security, and some methodologies and systems that are relevant in the field.

## Administration of Justice 1

**Course Number:** 66.1210.4 (H)

**Prerequisite:** Foundations of Homeland Security

**Credit:** 1

This class introduces students to multiple aspects of law enforcement and the criminal justice system. Students explore the criminal process, forces that affect the enforcement of laws and the rights of citizens. Students in the Administration of Justice I course study the history of the legal system, the development of the court system, the criminal justice process, the various external forces that impact the justice systems, the rights of citizens, and the role of ethics in the justice system. This course provides students an overview of the United States legal system and the process of criminal justice.

## Administration of Justice 2

**Course Number:** 66.1220.4 (H)

**Prerequisite:** Foundations of Homeland Security and Administration of Justice 1

**Credit:** 1

The Administration of Justice II course focuses on law enforcement procedures, organized crime, street gangs, drug abuse, federal law enforcement agencies, the first responder role of law enforcement, corrections, the process of evidence collection and handling, and careers in the justice system. The students will recognize the everyday challenges and operations of law enforcement agencies with special attention to career potential and development.

## Internship (Capstone) in Homeland Security

**Course Number:** 66.1500.4 (H)

**Prerequisite:** Foundations of Homeland Security, Administration of Justice 1, and Administration of Justice 2

**Credit:** 1

This is a fourth course option in the Homeland Security completer. The Internship Capstone course is a seminar type course where students can explore a variety of HSEP, and Criminal Justice related topics. Students will have the opportunity to work on independent projects in areas of interest. Professionals in HSEP and Criminal Justice fields will share their experiences with students and help them to explore a variety of related careers. Students can also take online training through the Federal Emergency Management Agency (FEMA).

## Dual Enrollment

Homeland Security-Criminal Justice related college courses may also be taken as fourth course options in the Homeland Security program. Please see your school counselor for details.

## TEACHER ACADEMY OF MARYLAND – TAM (ET, FH, LR, OM, PH, PR, TW, WD)

The Teacher Academy of Maryland (TAM) completer program prepares students for postsecondary education and careers in the field of education. The program focuses on teaching as a profession, and includes information on human growth and development, learning theory, and curriculum and instruction. Students participate in internship experiences that include exposure to multiple age levels and subjects. Students who complete the program may earn articulated college credits.

## Child Development

**Course Number:** 66.0200.4

**Prerequisite:** None.

**Credit:** 1

## Child and Adolescent Development

**Course Number:** 66.0900.4

**Prerequisite:** None.

**Credit:** 1

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

Students will continue to develop the components of a working portfolio to be assembled upon completion of the internship.

## Teaching as a Profession

**Course Number:** 66.0910.4 (H)

**Prerequisites:** None

**Credit:** 1

This course focuses on the profession of teaching – its history, purposes, issues, ethics, laws and regulations, roles, and qualifications. Emphasis is placed on identifying the current, historical, philosophical, and social perspectives of American education, including trends and issues. Students will explore major approaches to human learning. Students will participate in activities to help them assess their personal interest in pursuing careers in this field and to identify effective learning environments. Students will begin to develop the components of a working portfolio to be assembled upon completion of the internship.

## Foundations of Curriculum and Instruction

**Course Number:** 66.0920.4 (H)

**Prerequisite:** Completion of Child Development or Child and Adolescent Development and Teaching as a Profession.

**Credit:** 1

This course explores curriculum delivery models in response to the developmental needs of all children. Emphasis is placed on the development of varied instructional materials and activities to promote learning, classroom management strategies, and a supportive classroom environment. Students will explore basic theories of motivation that increase learning. Students will participate in guided observations and field experiences to critique classroom lessons in preparation for developing and implementing their own. Students will continue to develop the components of a working portfolio.

## Education Academy Internship

**Prerequisite:** Successful completion of the preceding sequence of courses is required before taking this course.

**Course Number:** 66.0930.4 (H)

**Credit:** 1

**Course Number:** 66.0970.5 (GT/AA)

**Credit:** 2

The internship is the culminating course of the Education Academy Program. Students will have an opportunity to integrate content and pedagogical knowledge in an educational area of interest. They will have an opportunity to extend and apply their knowledge about teaching in a classroom setting under the supervision of a mentor teacher. The students will complete their working portfolio and present it for critique.

## **CTE: MANUFACTURING, ENGINEERING AND TECHNOLOGY CLUSTER**

### **Engineering Careers, Project Lead the Way (PLTW): Engineering**

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in their junior or senior years.

Note: Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

Below is a sample of how the courses may be offered. Course offerings are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.

<b>Completer Programs</b>	<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
<b>Engineering Careers</b>	Engineering Careers 1	Engineering Careers 2	Engineering Careers 3	Engineering Careers 4 Engineering Careers CWE
<b>Project Lead the Way: Engineering</b>	Introduction to Engineering Design-PLTW  <i>(IED-PLTW is the required Engineering / Technology Education credit for students completing the PLTW: Engineering program of study.)</i>	Principles of Engineering-PLTW	Aerospace Engineering-PLTW OR Civil Engineering and Architecture – PLTW OR Computer Integrated Manufacturing -PLTW	Engineering Design and Development - PLTW CWE (Concentrator)

## **ENGINEERING CAREERS (ET)**

The engineering careers program is designed for highly motivated students who intend to enter a college engineering program after high school. The program incorporates national standards and emphasizes the preparation of each student for the rigorous natural sciences, mathematics, and computer programming courses required for proficiency in an engineering curriculum. In addition, this program exposes students to the different disciplines of the profession.

This enables each student to test his or her decision to choose engineering and evaluate college engineering majors. Students will receive classroom and hands-on experiences in engineering disciplines with emphasis on mechanical, electrical/electronics, civil, architectural, and fluid engineering. Students who complete the program successfully may earn articulated college credits with CCBC. Fees may be required.

### Engineering Careers 1

**Course Number:** 56.0310.4 (H)

**Prerequisite:** None

**Credit:** 1

### Engineering Careers 2

**Course Number:** 56.0320.4 (H)

**Prerequisite:** Successful Completion of Engineering Careers 1

**Credit:** 1

### Engineering Careers 3

**Course Number:** 56.0330.4 (H)

**Prerequisite:** Successful Completion of Engineering Careers 2

**Credit:** 1

### Engineering Careers 4

**Course Number:** 56.0340.4 (H)

**Prerequisite:** Successful Completion of Engineering Careers 3

**Credit:** 1

### Engineering Careers CWE

**Course Number:** 56.0350.4 (H)

**Prerequisite:** Successful Completion of Engineering Careers 3

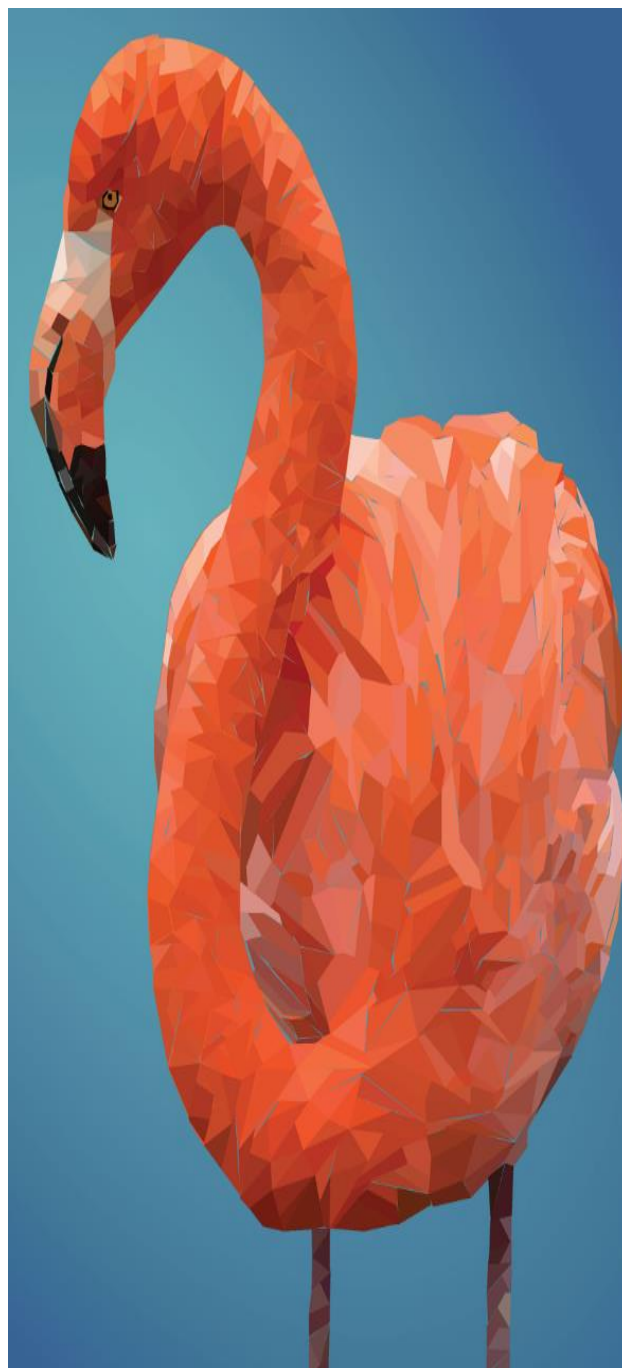
**Credit:** 1

**Course Number:** 56.0360.4 (H)

**Credit:** 2

**Course Number:** 56.0370.4 (H)

**Credit:** ½



"Flamingo" by Nihla I. at Randallstown High, Grade 10

## **PROJECT LEAD THE WAY (PLTW): ENGINEERING (CH, CT, DL, DN, OM, PK, PH, PR, WD)**

This CTE program of study is a sequence of courses which follows a proven hands-on, real-world problem-solving approach to learning. Throughout the program, students learn and apply the design process, acquire strong teamwork and communication proficiency, and develop organizational, critical-thinking, and problem-solving skills. The program prepares students for further education and careers in engineering and engineering technology. Students who complete the program successfully may earn articulated college credits with CCBC, UMBC, and other PLTW university partners.

Based on changes in MSDE program guidelines, beginning 2023-2024, the Project Lead The Way (PLTW): Engineering CTE Program of Study will consist of three courses beyond Introduction to Engineering Design-PLTW:

- Course 1: Principles of Engineering-PLTW
- Course 2: Engineering Specialization Area: Aerospace Engineering-PLTW, Civil Engineering and Architecture-PLTW, or Computer Integrated Manufacturing-PLTW
- Course 3: Engineering Design and Development-PLTW. This is now the concentrator course.

### **Introduction to Engineering Design–PLTW (CT, CH, DL, DN, OW, PR, PH, PK, WD)**

**Course Number:** 56.0200.4 (H)

**Credit:** 1 [T]

### **Principles of Engineering–PLTW (CT, CH, DL, DN, OW, PR, PH, PK, WD)**

**Course Number:** 56.0210.4 (H)

**Prerequisite:** Introduction to Engineering Design-PLTW

**Credit:** 1 [T]

### **Aerospace Engineering–PLTW (CT, CH, DN, OM)**

**Course Number:** 56.0240.5 (GT/AA)

**Prerequisites:** Intro to Engineering Design-PLTW and Principles of Engineering–PLTW  
**PLTW Credit:** 1

### **Civil Engineering and Architecture–PLTW (DL, PK, WD)**

**Course Number:** 56.0230.5 (GT/AA)

**Prerequisites:** Introduction to Engineering Design-PLTW and Principles of Engineering–PLTW  
**Credit:** 1

### **Computer Integrated Manufacturing–PLTW (DL, PR)**

**Course Number:** 56.0260.5 (GT/AA)

**Prerequisites:** Introduction to Engineering Design-PLTW and Principles of Engineering–PLTW  
**Credit:** 1

### **Engineering Design & Development–PLTW (CT, CH, DL, DN, OW, PR, PK, WD)**

**Course Number:** 56.0250.5 (GT/AA)

**Prerequisites:** Introduction to Engineering Design-PLTW and Principles of Engineering–PLTW

**Note:** Capstone course for Grade 12

**Credit:** 1



## Additional PLTW: Engineering Courses

Digital Electronics–PLTW (CT, CH, DL, DN, OW, PR, PK, WD)

**Course Number:** 56.0220.4 (H)

**Prerequisite:** Introduction to Engineering Design-PLTW

**Credit:** 1

Digital Electronics–PLTW may still be offered as an additional course outside of the program completer pathway. Schools are encouraged to make the determination based on their respective staffing and student interest.

## CTE: TRANSPORTATION TECHNOLOGY CLUSTER

### Automotive Service Technology, Aviation Technology, Diesel Truck & Power Systems

The following BCPS CTE-completer programs are approved by MSDE. Upon graduation, students will be able to enter employment, register for an apprenticeship, earn industry certification, and/or attend a postsecondary school to earn a certificate or degree. Capstone work experience (CWE) may be available to eligible students in the junior or senior years.

Note: Program availability is limited. Magnet schools and programs may require an application with specific requirements. Each school's counseling office should be contacted for enrollment, application, and course information.

*Below is a sample of how courses may be offered. Courses are subject to change based on MSDE program guidelines. Please see your school counselor for specific course numbers for your school and program.*

Completer Programs	Grade 9	Grade 10	Grade 11	Grade 12
<b>Aviation Technology</b>	Principles of Aviation and Aerospace	Exploring Aviation and Aerospace	Private Pilot Fundamentals or Unmanned Aircraft Systems	Aviation and Autonomous Systems Engineering CWE
<b>Automotive Service Technology</b>	Students are encouraged to start in Grade 9	Auto Service 1 and 2	Auto Service 3 and 4	Auto Service CWE
<b>Diesel Truck and Power Systems</b>	Students are encouraged to start in Grade 9	Diesel 1 and 2	Diesel 3, 4, and 5	Diesel CWE

## AVIATION TECHNOLOGY AND THE FUTURE (HH, KN, LN)

The Aviation Technology and the Future Program is a four-course program of study that helps students build career-ready skills while learning more about opportunities in aviation and aerospace. The program consists of four courses in two pathways – Private Pilot or Unmanned Aircraft Systems (UAS) - drones. During each course, students will apply engineering practices as they engage in hands-on activities and projects designed to reinforce aviation concepts.

Students in both tracks will use flight simulators and quadcopter devices to learn about aircraft systems, performance, flight planning and operations. Both devices provide an environment that allows students to learn and practice, while responding to external flight factors such as air density, turbulence, wind shear, and precipitation.

Upon completion of the third course, students in the Private Pilot pathway are prepared for the FAA Private Pilot Knowledge Test and students in the UAS pathway are prepared for the Part 107 Remote Pilot exam. Students who complete the program successfully may earn articulated college credits with CCBC.

## Principles of Aviation and Aerospace

**Course Number:** 56.1600.0

**Prerequisite:** None

**Credit:** 1

## Exploring of Aviation and Aerospace

**Course Number:** 56.1610.4 (H)

**Prerequisite:** Principles of Aviation and Aerospace

**Credit:** 1

## Unmanned Aircraft Systems

**Course Number:** 56.1620.5 (GT/AA)

**Prerequisite:** Exploring Aviation and Aerospace

**Credit:** 1

## Private Pilot Fundamentals

**Course Number:** 56.1630.5 (GT/AA)

**Prerequisite:** Exploring Aviation and Aerospace

**Credit:** 1

## Aviation and Autonomous Systems Engineering CWE

**Course Number:** 56.1640.5 (GT/AA)

**Prerequisite:** Unmanned Aircraft Systems or Private Pilot Fundamentals

**Credit:** 1

## **AUTOMOTIVE SERVICE TECHNOLOGY (MM, SPT, WST)**

The automotive service technology program introduces students to the career field of automotive service and repair. Students are required to perform selected manipulative activities as outlined in Automotive Service Excellence (ASE) requirements, using specialized tools and equipment on late-model vehicles. A variety of teaching methods are used to enhance the learning process by reinforcing critical thinking and academic skills which prepare students with electronic diagnosis, troubleshooting, and customer relations skills needed by today's automotive technicians.

Students can learn skills through computerized automotive simulators, shop demonstrations, diagnostic testing, and several hands-on activities performed on shop vehicles. Students who complete the program successfully may earn certification in maintenance and light repair, as well as articulated college credits with CCBC. ***Fees may be required.***

### **Automotive Service Tech 1**

**Course Number:** 62.4410.0

**Prerequisite:** None

**Credit:** 1

### **Automotive Service Tech 2**

**Course Number:** 62.4420.0

**Prerequisite:** Automotive Service Tech 1

**Credit:** 1

### **Automotive Service Tech 3**

**Course Number:** 62.4430.4 (H)

**Prerequisite:** Automotive Service Tech 2

**Credit:** 1

### **Automotive Service Tech 4**

**Course Number:** 62.4440.4 (H)

**Prerequisite:** Automotive Service Tech 3

**Credit:** 1

### **Automotive Service Tech 5**

**Course Number:** 62.4450.4 (H)

**Prerequisite:** Automotive Svc Tech 4

**Credit:** 1

### **Automotive Service Tech CWE**

**Course Number:** 62.4480.4 (H)

**Prerequisite:** Varies by school program

**Credit:** 1

**Course Number:** 62.4490.4 (H)

**Credit:** 1

## **DIESEL TRUCK AND POWER SYSTEMS (SPT)**

This program introduces students to the career field of automotive service and repair with a specific focus on diesel engines. Students are required to perform selected manipulative activities as outlined in Automotive Service Excellence (ASE) requirements, using specialized tools and equipment. A variety of teaching methods are used to enhance the learning process by reinforcing critical thinking and academic skills which prepare students with diagnosis, troubleshooting, and customer relations skills needed by today's diesel engine technicians.

Students can learn ASE skills through computerized simulators, shop demonstrations, diagnostic testing, and hands-on activities performed on shop vehicles. Students who complete the program successfully may earn certification in diesel engines, as well as articulated college credits with CCBC. Fees may be required.

### **Diesel Engine Tech 1**

**Course Number:** 62.4510.0

**Prerequisite:** None

**Credit:** 1

### **Diesel Engine Tech 2**

**Course Number:** 62.4520.0

**Prerequisite:** Diesel Tech 1

**Credit:** 1

### **Diesel Engine Tech 3**

**Course Number:** 62.4530.4 (H)

**Prerequisite:** Diesel Tech 2

**Credit:** 1

### **Diesel Engine Tech 4**

**Course Number:** 62.4540.4 (H)

**Prerequisite:** Diesel Tech 3

**Credit:** 1

### **Diesel Engine Tech 5**

**Course Number:** 62.4550.4 (H)

**Prerequisite:** Diesel Tech 4

**Credit:** 1

### **Diesel Engine Tech CWE**

**Course Number:** 62.4560.4 (H)

**Prerequisite:** Varies by school program

**Credit:** 1

**Course Number:** 62.4570.4 (H)

**Credit:** 1