High School Program of Study
Anne Arundel County Public Schools
Introduction

This High School Program of Study booklet is intended to provide valuable information to allow students and parents to make selections that will best prepare for future success. It has been designed to explain the rich variety of challenging and rigorous courses available.

The additional demands of high school course work for students throughout the state make the expectations for graduation far more difficult for students than in past years. In anticipation of meeting these demands, Anne Arundel County Public Schools offers complexity in course work as well as electives to help to diversify each high school experience.

Students are encouraged to work with their teachers and counselors to make decisions appropriate for achieving individual goals. AACPS continues to explore ways to introduce more rigor, relevancy, diversity, and specialization to all high school course offerings and counselors will be able to fully explain courses that are implemented after the printing of this booklet.

How students spend their time in school will only make their future better and their goals more attainable. All members of AACPS urge each student to take full advantage of the courses that are provided in this booklet as well as in the classroom. Student success is the district’s greatest achievement, and Anne Arundel County Public Schools is committed to students’ continued development.

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Please Note:
Although deemed accurate when printed, information in this booklet may change during the year as BOE policies and regulations are updated. For the most current version of this booklet, visit the AACPS website:
www.aacps.org/html/studt

To see Board Policies and Regulations, visit:
www.aacps.org/html/BoardOfEducation
4 Steps to Graduation

A student shall satisfactorily complete four years of approved study beyond the eighth grade, unless an alternative plan is approved by the Superintendent of Schools.

1. Credits
   *Earn a minimum of...*
   
   **26 Credits**

2. Assessments
   *Pass state-mandated assessments in...*
   
   - Algebra
   - Biology
   - English
   - Government

3. Service Learning
   *Complete...*
   
   **75 Hours**
   
   *...of Service Learning in grades 5–11*

4. Completer Program Paths

   *Choose a completers...*

   - **College Completer**
     
     University System of MD
     
     *Post secondary education after High School*

   - **Career Completer**
     
     Career Path
     
     *Employment and/or post secondary education after High School*

(See page 2)
(See page 4)
(See page 3)
(See page 7)
High School Graduation Requirements

State-Mandated Assessments
Students are required to pass the High School Assessment (HSA) in Biology. Students entering grade 9 in 2013–2014 and thereafter are required to pass the High School Assessment in U.S. Government, as well. As Maryland transitions to the Common Core State Standards, students will be taking the new Partnership for Assessment of Readiness for College and Careers (PARCC) assessments. Only students enrolled in Algebra 1, Algebra 2 and English 10 will take these assessments. Please check with your school counselor to discuss possible options to meet these high school assessment requirements.

World and Classical Language Requirement
Students may elect to take two credits of a classical language rather than two credits of an advanced technology or a career completer program. The World and Classical Language option meets one of the criteria for qualifying the student for the University System of Maryland. It is recommended that students who elect the World and Classical Language option continue in the program beyond the second level. Some specialized programs, as well as many colleges and universities, require additional credits in world and classical language. Check with your school counselor for details.

Advanced Technology Requirement
Students may elect to take two credits of advanced technology rather than two credits of World and Classical Language or a career completer program. A student with the required math courses and two credits of advanced technology will qualify as a University System of Maryland Completer. The student, however, must verify the admissions requirements for each University System of Maryland institution to determine if the advanced technology courses meet the institution’s admission requirements.

Service Learning Requirement
MSDE requires students to complete 75 hours of Service Learning for graduation. Anne Arundel County Public Schools integrates this requirement into existing subjects or courses starting in grade 5. Students complete service-learning projects and activities from grades 5 through 11 so that each student, upon completion of grade 11, should have met the service learning graduation requirement.

* Students seeking admission to a University System of Maryland institution should review details of math elective requirements with a school counselor

+ Note: Magnet, and Signature programs may require 3, 4, or 5 credits of Science and of World and Classical Language.
Service Learning Implementation in AACPS

Students in grade 5 will complete service-learning projects through social studies activities for 5 hours.

Students in grades 6 through 8 will complete service-learning projects for 10 hours in each grade level for a total of 30 hours.

Students in grades 9 through 11 will earn the following service learning hours through service-learning projects in the following courses:

• U.S. Government: 10 hours
• Science (grade 10): 10 hours
• English 11: 10 hours
• Health: 10 hours

Seniors are not exempt from completing the service learning graduation requirement and will complete service learning hours based on a prorated schedule.

Courses like H20, Child Development 1, may be used to meet this requirement for service learning.

All students transferring into an Anne Arundel County public high school from a non-Maryland public school must complete 40 hours of service learning to meet the Maryland State Department of Education (MSDE) graduation requirement at the high school level. All students transferring into an Anne Arundel County public school from within the state of Maryland must have documentation for 40 hours of service learning from their previous school(s) or complete the balance for a total of 40 hours on a prorated scale:

• Grade 12 (2nd semester): 5 hours
• Grade 12 (1st semester): 10 hours
• Grade 11: 20 hours
• Grade 10: 30 hours

High School Credit Earned in Middle School

Students may earn high school credit for Arabic, American Sign Language, Chinese, French, German, Italian, Spanish, Turkish, and Algebra 1 taken while in the middle school.

Maryland state law requires that to earn credit, middle school students must have:

• Earned a final passing course grade, and
• Passed the final examination (D or higher).

In the case of Algebra 1, if a middle school student failed the Algebra 1 final examination but passed both the course and the Algebra 1 state-mandated assessment, the student will receive credit.

Credit will be awarded upon entering ninth grade. The grade for the course will be calculated in the student’s GPA in the same manner as other high school courses, including courses with weighted grades. Failure to pass the course and/or the final examination will result in a failing grade and negative impact on the student’s high school GPA.

<table>
<thead>
<tr>
<th>Procedures for Promotion</th>
</tr>
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<tbody>
<tr>
<td>Promotion from one grade level to the next is based on the number and types of credits earned as follows:</td>
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<tr>
<td>To be promoted to grade:</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
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<tr>
<td>12</td>
</tr>
</tbody>
</table>

To be considered a senior, a student must:

• have completed at least three years in high school,
• have successfully earned 20 appropriate credits, and
• be enrolled in a program that allows them to meet all graduation requirements by June of the same academic year.
Assessment is an important part of instruction. Students take a variety of tests during their years in public school, including state mandated achievement tests, county benchmarks, ability tests, and assessments required for grade promotion and graduation from high school. Students may also take college level exams related to Advanced Placement studies, International Baccalaureate Diploma Programme, and scholastic aptitude tests required for college admission. A student's academic performance is based on more than test results; however, test and assessment results are vital to monitoring student progress, as well as evaluating and improving instruction and curricula to ensure student success. The state mandated assessments provide educators, parents, and the public valuable information about student, school, school system, and state performance.

Contact the Testing Office, 410-222-5147 or your local school counseling office for details on the following tests. Additional information about the results of these assessments can be found at: www.mdreportcard.org.

**Partnership for Assessment of Readiness for College & Careers (PARCC)**

The Partnership for Assessment of Readiness for College and Career (PARCC) assessments are anchored in College and Career readiness; provide comparability across states; and are able to assess and measure higher-order thinking skills such as critical thinking, communication, and problem-solving. Developed by a number of states working together, the PARCC assessments will measure whether students are on track to be successful in college and their careers. The high quality, computer-based assessments in English/Language Arts (ELA) and Mathematics will give teachers, schools, students, and parents better information on whether students are on track in their learning for success after high school. The assessments will also provide valuable information and tools to help teachers customize learning to meet the needs of students.

Students in high school will take the assessments in Algebra I, Algebra II, and English 10 while enrolled in the corresponding course. The Algebra I and English 10 assessments will replace the High School Assessments in Algebra I and English 10 as graduation requirements.

The Performance-Based Assessment (PBA) is administered after approximately 75% of instruction. The English PBA will focus on writing effectively when analyzing text. The Mathematics PBA will focus on applying skills, concepts, and understandings to solve multi-step problems requiring abstract reasoning, precision, perseverance, and strategic use of tools.

The End-of-Year Assessment (EOY) is administered after approximately 90% of instruction. The English EOY will focus on reading comprehension. The Mathematics EOY will call on students to demonstrate further conceptual understanding of the major content of the grade/course.

**High School Assessments (HSA)**

The High School Assessments (HSA) consist of two tests—one each in Biology and U.S. Government. Students taking high school level courses, take each exam after completing the corresponding course. The High School Assessment in Biology also fulfills the requirement under No Child Left Behind (NCLB) that high school students be administered an assessment in science once in high school.

Intended to raise expectations for all high school students, the HSAs measure achievement in the Core Learning Goals that have been set by the Maryland State Board of Education. Currently, students must take these tests as a requirement for high school graduation. Students, beginning with the graduating class of 2009 and beyond, are required to earn a passing score on the HSA in order to earn a Maryland High School Diploma. Individual student results are shared with the parent/guardian. Please check with your school’s Counseling Office on additional means to meet the High School Assessment requirements.

**The Bridge Plan for Academic Validation**

The Bridge Plan for Academic Validation provides a process for earning graduation status helping to ensure that all students have a fair opportunity to demonstrate their knowledge and skills when traditional testing has not been an effective measure for them. Please see your school counselor for further information. In schools where enrollment demands, a non-credit Bridge Class may be offered.

**National Center & State Collaborative Alternate Assessment (NCSC)**

The National Center and State Collaborative (NCSC) Alternate Assessment is Maryland’s assessment program for students with the most significant cognitive disabilities who meet specific eligibility criteria. The NCSC measures a student’s progress on attainment of reading and mathematics skills in grades 3-8 and 10. A student who participates in NCSC is pursuing a Maryland Certificate of Program Completion and may not be eligible for a high school diploma if they continue to participate in the alternate assessment program. The decision for the student to participate in the NCSC must be made annually.

**ACCESS: The English Language Proficiency Test (ELPT)**

ACCESS, an English Language Proficiency Test, has been developed to meet the requirements in NCLB for assessing English learners on their English proficiency in listening, speaking, reading, and writing. Annually, all English learners from K–12 take this test. Individual student results are shared with the parent/guardian. For additional information on the English Language Proficiency Test, please contact the English Language Acquisition Office at 410-222-5416.
Advanced Placement (AP) Exams

Students enrolled in AP courses have the opportunity to sit for the corresponding exam. Colleges and universities use the AP results to determine college preparedness, student motivation, and placement. Students may have the opportunity to earn credit or advanced standing at many of the nation's colleges and universities. High school students are urged to take the Advanced Placement (AP) exams in specific subjects such as English, world and classical languages, chemistry, history, calculus, psychology, biology, physics, economics, computer science, environmental sciences, statistics, and fine arts. Except for AP Studio Art, which is a portfolio assessment, each AP exam contains a free response section (either essay or problem solving) and a section of multiple choice questions. The modern language exams also have a speaking component, and the AP Music Theory Exam includes an optional sight singing task. Each AP Exam is given an overall score of 1, 2, 3, 4, or 5, with 5 indicating a student who is extremely well qualified to receive college credit and/or advanced placement based on an AP Exam grade. Check with the colleges and universities to which you are applying for credits they may award. A fee is required to take each exam. Financial assistance may be offered based on student need. Check with your local high school counseling office for more information on the Advance Placement courses, exams or fees or contact the high school test coordinator. You can also visit the College Board website at www.collegeboard.com/student/testing/ap/about.html. Summer assignments may be required in AP Courses.

Preliminary Scholastic Aptitude Test (PSAT)
National Merit Scholarship Qualifying Test (NMSQT)
Scholastic Aptitude Test (SAT 1)

In addition to the state mandated assessments, high school students may opt to take a number of different tests offered by the College Board. The Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) is co-sponsored by the College Board and National Merit Scholarship Corporation. High school students take the PSAT/NMSQT which can qualify juniors for scholarships and prepare them for the SAT 1. All eligible students in grades 9, 10, and 11 take the PSAT/NMSQT in October. This test measures student performance in language usage, writing, reading, and mathematics.

The SAT 1 is used by colleges as one of several admissions requirements. It is normally taken by college-bound students in grades 10, 11, or 12. The SAT 1 is an aptitude test that measures critical reading, writing, and mathematical reasoning skills students have developed over time. It is characterized as the best available independent, standard-ized measure of a student’s college readiness. Check with your local high school counseling office for PSAT and SAT 1 testing dates and locations. Go to www.collegeboard.org for more information. Please note that a preparatory course for the SAT 1 is currently offered in all high schools.

ACT Exam

The ACT is also a college entrance exam accepted by all four-year institutions. It is nationally administered and is used to help colleges evaluate applicants. The ACT is an achievement test with four core sections (English, Math, Reading, Science) and an optional Writing section. Some students earn higher scores on the ACT. Because many colleges will accept the ACT test, check with the colleges and universities to which you may apply. See your school counselor for additional information. Go to act.org for more information.
Programs of Choice

The AACPS Programs of Choice initiative offers a range of specialized fields of study to increase excellence and opportunity for all secondary students.

Signature Programs
Signature Programs offer students a series of courses designed to connect classroom instruction with real-world situations and workforce skills relevant to each school’s local community. Each high school in Anne Arundel County will offer unique Signature-related courses that students can register for during their annual student scheduling. If you are interested in your school’s Signature program, visit our website (www.aacps.org/signature) or call the Advanced Studies and Programs Signature Office at 410-590-5119.

Magnet Programs
Magnet Programs offer motivated and academically able students the opportunity to engage in a specialized course of study or emphasis on instruction that differs from the traditional curriculum offered in AACPS. There are currently five High School Magnet Programs available (see below). Admission to all Magnet Programs is by formal application. If you are interested in any of our Magnet Programs, visit our website (www.aacps.org/magnet) or call the Advanced Studies and Programs Magnet Office at 410-222-5391 x1.

BioMedical Allied Health (BMAH)
The BioMedical Allied Health program is offered at Glen Burnie High School for students interested in exploring the fields of the health-care industry. Through partnerships with major hospitals and institutions in the Baltimore-Washington Professional Corridor and through partnerships with local colleges and universities, BMAH students will participate in regular job shadows and internship opportunities to gain real-world experience in the biomedical and allied health fields.

Centers for Applied Technology (CAT)
The Centers for Applied Technology, offered at CAT North and CAT South, provide students with technical and academic skills needed for community involvement, continuing education, and career opportunities. CAT students have the chance to apply theory and knowledge towards skills proficiency in the classroom and to develop employable skills through hands-on, real-world experience. (see page 81)

International Baccalaureate Middle Years and Diploma Programme (IB MYP/DP)
The International Baccalaureate Middle Years and Diploma Programme is offered at Annapolis, Meade, and Old Mill High Schools for students interested in taking an active role in their local and global communities and connecting their education with the world around them. Through the internationally recognized IB program, students will learn to prepare for success in post-secondary education and as 21st century visionary leaders. The IB MYP prepares students in grades 9 and 10 for the IB DP in grades 11 and 12.

Performing and Visual Arts (PVA)
The Performing and Visual Arts program is offered at Annapolis and Broadneck High Schools for serious arts students interested in building their artistic skill and gaining real-world experience to prepare for higher education or a career in the arts. Through an arts-intensive curriculum, PVA students have the opportunity to foster their artistic passions both in front of an audience and behind the scenes through premiere arts venues and exhibitions.

Science, Technology, Engineering, & Mathematics (STEM)
The Science, Technology, Engineering, and Mathematics program is offered at North County and South River High Schools for students interested in a relevant and hands-on education focused on the STEM fields of science, technology, engineering, and math. Through partnerships with local colleges, universities, and STEM professionals, students will develop strong research skills, explore STEM careers, and gain real-world experience through internship opportunities.

Taking Advanced Courses

Advanced Placement (AP) and International Baccalaureate (IB)
Students may sometimes face a considerable challenge in rigorous AP and IB courses. After an initial period of adjustment, perhaps with additional support from the instructor, they discover they can handle the course requirements successfully. With the intention of giving students time to adjust to these challenges, withdrawal from these courses will not be considered until the end of the first marking period. A decision to drop to a lower level or withdraw from the course completely would come after consultation between the student, teacher, parent, counselor and administration.
Completer Program Paths

The Maryland School Performance Program (MSPP) requires that high school students enroll in courses that prepare them for postsecondary education, gainful employment, or both. These courses are offered at the high schools and both Centers of Applied Technology, and are approved by the Maryland State Department of Education.

The three program completer options are:
- Career program completer,
- University System of Maryland completer, or
- Dual completer.

In addition to accumulating the required number of credits, students must meet the requirements of one of the following completer programs.

**Career Program Completer**

The student pursues a sequence of courses to develop skills in preparation for employment and/or post-secondary education upon high school graduation. These courses and programs are offered at both Centers of Applied Technology or at the high schools through Business Education, Family and Consumer Sciences, and Technology Education. These career completer programs are approved by the Maryland State Department of Education, and allow students to earn industry certifications and/or college credit while in high school.

Students can select from 38 programs to gain a combination of technical and academic expertise that can be utilized for immediate employment or they can continue their education in colleges, universities, technical schools, or apprenticeship programs. Registration for courses is made through an online program application.

**University System of Maryland Completer**

The student pursues a sequence of courses in preparation for postsecondary education upon high school graduation. Minimum requirements include two years of the same World and Classical Language or two credits in advanced technology courses, and credit for Algebra 1, Geometry, and Algebra 2.

Students with a 9th grade entry date of 2012-2013 or later are required to take 4 courses of rigorous mathematics and to be enrolled in Algebra 2 or beyond during senior year. Approved courses for the senior year University Completer program are: Algebra 2, Pre-Calculus, Foundations of College Algebra, Statistical Analysis, AP Calculus AB/BC, AP Statistics, Linear Algebra and Calculus 3.

Students entering 9th grade in 2014 or later are required to take 4 courses of rigorous math in high school (COMAR 740) and to be enrolled in Algebra 2 or beyond during senior year for the University System of Maryland Completer.

Each University System of Maryland institution has guidelines for evaluating applicants who have not completed all the required courses for admission. In some cases, students who lack a required course are permitted to take it their freshman year in college. In other instances, students are permitted to demonstrate their competency in a given field as an alternative to passing a required high school course. While these represent the minimum high school course requirements for entry into University System of Maryland institutions listed above, individual campuses and programs may have additional admission requirements. Students should seek out these requirements by writing to the admissions director at the campus of choice.

**Dual Completer**

The student pursues courses that fulfill both Career and University System of Maryland requirements.

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**University System of Maryland Required Coursework**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Year-long Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics (Algebra 1, Geometry, Algebra 2)</td>
<td>4</td>
</tr>
<tr>
<td>The same World and Classical Language or Advanced Technology Credit</td>
<td>2</td>
</tr>
<tr>
<td>Academic Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

**University System of Maryland Colleges and Universities**

Bowie State University  
Coppin State College  
Frostburg State University  
Salisbury University  
Towson University  
University of Baltimore

University of Maryland Campuses:
- Baltimore
- Baltimore County
- College Park
- Eastern Shore
- University College

Anne Arundel Community College

In addition to the above University System of Maryland institutions, Anne Arundel County Public Schools enjoys an excellent working relationship with Anne Arundel Community College (AACC). AACC is an open door institution which admits those who may benefit from postsecondary education in both transfer and career programs. To help students succeed in college, AACC has established policies and procedures to evaluate and assess their academic abilities.
Graduation Certificates

Maryland High School Certificate
This certificate may be awarded to students with disabilities who do not meet the requirements for a diploma but who meet one of the following criteria.

• The student is enrolled in a special education program for at least four years beyond grade 8, or its age equivalent, and is determined by an Individualized Educational Program Team (IEP Team), with agreement of the student’s parents/guardians, to have developed appropriate skills for the individual to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life. The world of work includes but is not limited to gainful employment, supported employment, or sheltered workshops.

• The student has been enrolled in a special education program for four years beyond grade 8, or its age equivalent, and has reached age 21.

Anne Arundel County Public Schools Citation
An Anne Arundel County Public Schools citation for completion of a four-year high school program may be awarded at graduation ceremonies, if approved by the IEP team, to certain students with specific developmental disabilities who have not completed their individual high school program of studies and will be leaving the high school and entering an alternative AACPS program (i.e. Vocational Citation Program, O-Campus Transition Program). The student will be awarded the Maryland High School Certificate upon completion of the alternative program.

Advanced Placement Diploma Endorsement
Anne Arundel County Public Schools believe that students who engage in rigorous programs should be recognized for their efforts. To provide this recognition, Anne Arundel County Public Schools has developed an AP Diploma Endorsement.

In order to earn an AP Diploma Endorsement, a student must:

• Earn a minimum of five AP credits, in four of the five domains:
  - languages
    (English and/or World or Classical Language)
  - social studies
  - mathematics
  - natural sciences
  - computer science and/or fine arts

• Earn grades of C or better, and
• Sit for a minimum of 5 AP exams.

Scheduling

It is the responsibility of the student to evaluate carefully and select courses and obtain help from appropriate teachers, school counselors, or administrators. Parental approval of course selection is required for all students younger than 18 years of age. Students have the right to participate in any part of the curriculum in accordance with nondiscriminatory practices.

• Academic credits are defined as courses offered in the program areas of English, mathematics, science, social studies, World and Classical Languages, advanced placement, and computer science.

• The prior approval of the principal is required for a student to take more than four non-academic credits during a school year.

• Students are limited to a maximum of two physical activity classes per semester.

• All high school students have the opportunity to earn up to one elective credit per year in the Alternative Credit Programs.

Technical Preparation Programs
The TECHnical PREParation courses offered at the Centers of Applied Technology, provide students with the skills to obtain and maintain employment in the trades of technical areas. While pursuing a course of study at the centers, students combine a technical/theory classroom component with a hands-on lab experience. After completing the 11th grade, most students can participate in the Internship Program, working at jobs for which they have been trained, while attending academic classes at the comprehensive high schools in the morning. Registration for a course is made through the home school; however, an application must be made to the Centers of Applied Technology North or South. Most students enter a course of study in the 10th grade.

Courses Outside the Home School
Students may participate in curriculum offerings in any county public school provided that the course is not available at the assigned school, that there is space available in the course, and that the students provide their own transportation. Permission to exercise this option must be obtained from the principals or designees of the affected schools and from the parents or legal guardians. Parental approval for taking courses outside of the home school is not required for students 18 years of age or older.
Additional Ways to Earn or Recover Credit

In addition to earning credits during the regular school day and year, credits may be earned, at the discretion of the local school system, through various other programs. **No student, however, may earn credit more than once for the same course.** Additional ways to earn credit include:

**Summer School**

The secondary summer school program offers students a number of secondary school courses and provides students the opportunity to make up work in which they were unsuccessful, to improve grade averages in sequential subjects, and to earn credits to meet high school graduation requirements. Credit may be given for acceptable summer study offered by approved public and nonpublic institutions in or outside of Maryland, if the principal of the student’s own school authorizes the study in advance.

**Evening High School**

The Evening High School Program offers students who are currently attending a daytime high school the opportunity to make up credits or take additional courses. For those students, over 16 years old, who have not completed high school, Evening High School offers an opportunity to complete their high school education and earn a high school diploma.

**Twilight School**

The Twilight Program is an opportunity for ninth grade students to take a class for remedial credit. The class is taken after school at the comprehensive high school. Twilight School is offered second semester for those students who did not receive credit for a first semester class. Second semester seniors may participate in Twilight School offerings in order to complete necessary credits for graduation.

**Home & Hospital Teaching**

Extenuating circumstances may necessitate the assistance of home and hospital teaching for certain students. However, home and hospital teaching should be considered only after all the resources of the school system have been used fully and when it is felt that the best interests of the students are being served. If home teaching is recommended by the school and approved by the school system for credit to be applied toward minimum graduation requirements, then the teacher, the program of study, and examination shall be financed by the local school system.

**AACPS Maryland Virtual Learning Opportunities (MLVO) Online Campus**

With prior consent of the principal, high school students may enroll in online MVLO courses for high school credit. Courses conducted online with the teacher physically separated from the students expand the range of learning opportunities offered to students for which teachers communicate with students online and via telephone. Students may be scheduled during the school day to work independently on course requirements. The local high school assigns an online support teacher who monitors student progress and communicates with the student, parents, and online teacher as needed. For information, contact your school counseling office. Fees may apply.

**Credit by Examination**

Credit toward high school graduation may be earned in grades 9–12 by passing an examination that assesses student demonstration of locally established curricular objectives. According to COMAR 13A.03.02.05, students who have completed all requirements for the Maryland High School Diploma except for credit in either English 12 or Algebra 2 may earn credit by exam. To earn credit for English 12, the student must take two tests: SAT and SAT Subject Test in Literature and the writing portion of the SAT with a minimum combined score of 1080 on the SAT Subject Test in Literature with a minimum of 520 on the writing portion of the SAT. To earn graduation credit for Algebra 2 the student must achieve a minimum of 1150 on the American Diploma Project Algebra 2 exam. When selecting this option, please contact interested colleges and universities to review entrance requirements for English 12 and Algebra 2.

**Independent Study Programs**

Independent Study is an opportunity for the student with strong self-discipline, special talents, and interests to undertake an individual project of exceptional depth, breadth, or pace. The student and the sponsoring teacher design a syllabus to specify outcomes, content, a work plan, and performances for assessment. The program includes regularly scheduled student-teacher conferences and assessments of progress. All sequential coursework in a particular curriculum discipline must have been successfully completed by the student prior to submitting an application for Independent Study. Credit for Independent Study will be assigned on a semester basis and students shall be awarded an unweighted grade of Satisfactory or Unsatisfactory. Guidelines and procedures have been established by the Anne Arundel County Public Schools Office of Curriculum and Instruction. An AACPS common Independent Study application must be completed at the home school and approved by the Coordinator for the subject of the specific course at least two weeks prior to the first day of the requested semester.
Early College Access Program (ECAP)

Anne Arundel County Public Schools and Anne Arundel Community College are joint sponsors of the Early College Access Program (ECAP) which includes Dual Credit and Jump Start programs. ECAP is designed to allow authorized high school students to explore college-level coursework in a variety of academic areas. This college level coursework can complete the academic day for approved high school students who are progressing toward high school graduation and/or provide the opportunity to study subject matter not otherwise available through the traditional secondary school curriculum.

Receiving Credit for ECAP Courses
Designated courses may meet the criteria for both college and high school credit. Prior written consent from the school principal or designee, after advisement with the school counselor, is required. For dual credit courses, students receiving an AACC grade of ‘A,’ ‘B,’ ‘C,’ or ‘D’ will receive an AACPS grade of ‘S.’ An AACC grade of ‘F,’ ‘FX,’ or ‘I’ will receive an AACPS grade of ‘U.’ On the high school transcript, students are awarded high school credit with the S designation. These courses do not calculate towards a student’s AACPS grade point average.

Costs and Financial Assistance
The cost of participating in ECAP is the responsibility of the student/parent/guardian, as defined by the Career and College Readiness and College Completion Act of 2013.
- Students who are eligible in AACPS for Free and Reduced Meals, are eligible to attend AACC at a reduced cost. Registration, lab, parking, activity, and other miscellaneous fees are the responsibility of the parent/guardian or eligible student.
- All fees must be paid at the time of registration. A separate bill for the tuition will be sent by AACC on behalf of AACPS.
- Qualified ECAP participants may apply for financial assistance through the AACC Financial Aid Office.

ECAP Enrollment Requirements
Student must be at least 16 years old to be approved by the secondary school to participate in ECAP and must demonstrate their academic readiness for specific courses by:
- being enrolled in a minimum of two half credit classes each semester at the high school having senior status with a minimum of 20 credits and in good standing.
- maintaining a 2.0 high school grade point average.
- meeting AACC course prerequisites.
- meeting required acceptable performance levels on the College’s English/Reading and/or Math Accuplacer assessment or nationally recognized standardized test such as the American College Test (ACT) or Scholastic Aptitude Test (SAT).

Students wishing to participate in ECAP must:
- complete the Early College Access Program Application neatly and accurately. (An electronic fillable version of the application is available at www.aacps.org/student-services/earlycollege.pdf.)
- provide their own transportation.
- attend a new student orientation program to become familiar with AACC policies and procedures.

If you have questions, or would like more information, please contact your child’s school counselor. A list of courses eligible for dual credit can be found at www.aacps.org/html/studt/ecap.asp.
Alternatives to 4-Year Enrollment

In recognition of the fact that 4-year enrollment in a public high school may not serve the best interests of some students, the following alternatives shall be made available.

Early Graduation

The student chooses to apply for a waiver of the fourth year of high school and earn a high school diploma by the end of grade 11. All required credits, competency prerequisites, high school assessments, and student service requirements must be met prior to the start of the fourth year of high school and the Regional Assistant Superintendent must determine that the waiver is in the best interest of the student. Students should see the school counselor in the spring of their sophomore year to begin the application process.

Early Admission to an accredited college or vocational, technical or post-high school

The student chooses to be a full-time student at an accredited college or approved vocational, technical, or other post-high school rather than attend a fourth year of high school. The student must have met all state competency prerequisites, high school assessments, and service learning requirements prior to the fourth year. The student must develop a curricular plan which assures that the content of the graduation ‘specified courses’ fulfills the credit requirement and also meets the standards for graduation in the first year of postsecondary study. A written request by the student and parent must be approved by the principal first. Then the student and parent send a letter asking for a waiver of the fourth year attendance requirement for approval by the superintendent of schools or designee, with the curricular plan, early admission acceptance letter, and principal’s approval attached. At the conclusion of a full year of study, students must submit a written request for the high school diploma to the superintendent or designee together with an official transcript or letter from the post-secondary school indicating that the student has successfully completed a full year of post-high school work.

Other Programs

GED: General Educational Development Testing
A Maryland High School Diploma may be awarded for satisfactory performance on approved general educational development tests provided that the student meets those requirements as defined in Education Article §7-205, Annotated Code of Maryland and COMAR 13.03.03.01.

Maryland Adult External High School Diploma
A Maryland High School Diploma may be awarded for demonstrating competencies in general life skills and individual skills on applied performance tests provided that the student meets those requirements as defined in COMAR 13A.03.03.02.
Advanced/Co-Curricular Programs

The Advanced Co-Curricular Programs Office offers a variety of services to students. Some involve outside organizations while others are maintained within the confines of the individual schools or Anne Arundel County Public Schools.

Adjunct Programs
Adjunct programs augment the instructional program outside the regular school day. They provide an enriching complement to a student’s regular education experience. Anne Arundel County Public Schools is fortunate to have strong partnerships with organizations in the community that comprise unparalleled resources, including the Naval Academy, the National Security Agency, St. John’s College, and Maryland Hall for the Creative Arts. Here, you will find a brief description of after-school, weekend or summer program options. Participation in these adjunct programs affords students the opportunity to enrich and extend their current program studies. Both student aptitude and interest should be considered when registering for these programs.

AACPS Scholarship Program for Maryland Hall for the Creative Arts
Maryland Hall for the Creative Arts in Annapolis offers after-school and Saturday courses in the creative and performing arts. Twenty percent of the enrollment each year is provided tuition-free to students of financial need from Anne Arundel County Public Schools. Sculpting, painting, jewelry design, classical ballet and acting are just some of the classes offered for ages five to seventeen. Scholarship applications and course offering booklets are distributed in schools for fall, winter/spring, and summer sessions.

A course catalog with application form is available through the main office at each school or on-line at the Advanced Co-Curricular Programs Adjunct Web site (www.aacps.org/cocurricular). For further information, contact Maryland Hall for the Creative Arts directly at 410-263-5544 or visit their website.

www.marylandhall.org

United States Naval Academy (USNA) Advanced Studies Program
The Advanced Study Program is sponsored and funded by the Advanced Co-Curricular Programs Office. Only public school students may attend during the fall and spring semesters of the school year. During the summer session, the program is also open to non-public school students for a fee. The program consists of advanced studies in mathematics, computer applications, humanities, and the sciences for grades six through twelve. In addition to the regular classes, the Advanced Studies Program at the USNA also offers several Saturday morning “hands-on” physics lab demonstrations during the school year. Parents and teachers are welcome to attend with their students.

A course catalog with application form is available through the main office at each school or on-line at the Advanced Co-Curricular Programs Adjunct Web site.

www.aacps.org/cocurricular

St. John’s Seminar
The Office of Advanced Studies and Programs, English and Social Studies Offices, in collaboration with St. John’s College, invites Advanced Placement and Honors classes in English and Social Studies to participate in seminar classes led by St. John’s tutors. Students will also be guests of the college for lunch and a tour of the campus. The instructional format of a Socratic seminar is such that the number of participants must not exceed 20 per seminar and be either all English, all social studies or a mixture of both classes of students.

Topics in the past have included short works, papers, poetry or drama from Shakespeare, Machiavelli, Yeats, Sophocles, or Chaucer, as well as historical works such as the Constitution, the Gettysburg Address and the Federalist’s Papers.

MSDE Maryland Summer Center
The Maryland Summer Center Program, in partnership with public and nonpublic agencies, provides Maryland’s diverse gifted and talented population with advanced rigorous, experiential learning opportunities that nurture these students’ talents and abilities within unique learning environments.

One to three weeks in duration, these residential or non-residential summer courses cover a wide range of interests from computer sciences, to history, to fine arts to STEM.

For further information, contact the MSDE Summer Center at 410-767-4821 or log on to their website.

www.marylandpublicschools.org/summercenters

Activities and Competitions
Co-curricular programs augment the instructional program outside the regular school day. They provide an enriching complement to a student’s regular educational experience. Next, you will find a brief description of before-school, during school, after-school, weekend and/or summer program options for students. Some take place with face-to-face contact while others are on-line requiring remote access. Participation in these activities or competitions affords students the additional opportunities to enrich their current program of studies. Contact your school to obtain specific information and offerings. For more information, visit the program’s website.

AVID Enrichment Club
Students extend the opportunity to apply skills and techniques learned in AVID courses. Enrichment options may be selected.
The culmination of the year is a series of Tournaments, where through the National History Day contest, students in grades 6 – 12 engage in discovery and interpretation of historical topics related to an annual theme. In the process, they hone their talents and produce creative and scholarly projects in the form of exhibits, documentaries, historical papers, performances, or web site. After a series of district and state contests, the program culminates with a national competition held in conjunction with the Language Arts/English Department and the AP/College Prep Office, advanced language arts students are invited to participate in an on-line book club during the school year. They will need internet access in order to join a blackboard discussion group. A final project or special culminating activity is designed for each book at each grade level.

Destinations

**Mock Trial**
Mock Trial is an activity in which students learn the principles of trial advocacy and then apply those principles as they try a fictitious case. Involvement in Mock Trial fosters increased self-confidence, improved analytical and speaking skills and the ability to work well with others. Students participating in Mock Trial learn how to conduct a trial from start to finish. They are trained in how to plan, draft and present opening statements, direct examinations, cross examinations and closing arguments. Mock Trial also teaches students how to argue objections intelligently, as well as how to handle various courtroom procedures like entering an exhibit into evidence and impeaching a witness. Aside from the technical aspects of trial advocacy, students learn how to think creatively when dealing with matters of trial strategy.

**Integrated Arts or Fine Arts Club**
Students participating in this enrichment club incorporate a variety of fine arts in their extension activity. They explore topics in a project-based, real-world application environment where elements of the visual arts, music, performing arts and dance may co-exist with current technology.

**MD (National) History Day**
Through the National History Day contest, students in grades 6 – 12 engage in discovery and interpretation of historical topics related to an annual theme. In the process, they hone their talents and produce creative and scholarly projects in the form of exhibits, documentaries, historical papers, performances, or web site. After a series of district and state contests, the program culminates with a national competition at the University of Maryland in College Park each June.

**On-line Book Club Hybrid**
Held in conjunction with the Language Arts/English Department and the AP/College Prep Office, advanced language arts students are invited to participate in an on-line book club during the school year. They will need internet access in order to join a blackboard discussion group. A final project or special culminating activity is designed for each book at each grade level.

**Robotics Club or FIRST LEGO League**
The FIRST LEGO League (FLL) is a global program created to introduce students (ages 9–14, up to 16 outside of the U.S. and Canada), to science, technology, and engineering. Students use elements such as sensors, motors, and gears to gain hands-on experience in engineering and computer programming principles as they construct and program their unique robot inventions. The cornerstones of the pro-
gram are its core values, which emphasize contributions of others, friendly sportsmanship, learning, and community involvement to share their experiences and receive recognition for their efforts.

www.firstlegoleague.org

SEAPerch—Underwater Robotics [STEM related]
This engineering design course focuses on design, development and building of a underwater remotely operated vehicle (ROV). Students will learn the principles of engineering in a fun-filled project based club environment. Sea Perch Underwater Robotics Competitions will be held locally, regionally, and nationally.

Signature-Based Co-Curricular Clubs
Each of the 12 AACPS high schools has its unique Signature Program. In order to enrich its Signature curriculum area, schools have developed various opportunities for students to enhance the study of their unique programs. For activities specific to your high school, check with the designated signature support person at the high school or contact the AACPS Signature Office.

Stock Market Game
The Stock Market Game gives students the chance to invest a hypothetical $100,000 in a real-time portfolio. As students buy and sell investments in their fantasy portfolios, they make practical use of cross-curricular skills and knowledge in areas such as math, history, civics, and language skills. They learn economic concepts in context, such as the value of investing and saving for the future. AACPS School teams are requested to alert the Co-Curricular Advanced Programs Office of their participation. Several teachers have requested substitute time to attend year end awards ceremonies with their winning teams. Materials, resources and registration are available online.

www.smgyww.org

World Language and Culture Club
Students are given an opportunity to learn a new language and culture. Schools that have access to the Rosetta Stone Software are encouraged to use it as part of the club. This club is usually outside of the regular French, Spanish, German or Russian clubs high schools offer and is funded by the ASP office.
## Course Descriptions

<table>
<thead>
<tr>
<th>Course ID#</th>
<th>Title of Course</th>
<th>SCED Code/State Subject Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>(for internal use)</td>
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The course description is an overview of the content of the course and may contain additional information, such as student expectations, class assignments, and details about exams and certifications.

**Prerequisites:** Requirements needed before a student can take this class.

### Possible Credits and Class Length

- **0.5sem** — A one semester class. A student can earn a maximum of 0.5 credit.
- **0.5/sem** — A class that can be taken for more than one semester. A student can earn 0.5 credit for each semester that the course is taken.

This course meets the requirements of specific programs:

- **CTE** — Career and Technology Education Program
- **NCAA** — National Collegiate Athletic Association *(see page 16)*
- **DUAL** — Anne Arundel Community College Dual Enrollment *(see page 10)*
- **ADVT** — Advanced Technology Course

### Contents

- **NCAA Eligibility** ............................................... 16
- **Weighted Grading** ............................................... 16
- **Course Fees** ....................................................... 16
- **Art** ................................................................. 17
- **Career & Technology** ........................................ 19
  - Business • 19
  - Computer Science • 21
  - Family & Consumer Sciences • 22
  - Technology • 24
- **Dance** .............................................................. 27
- **English** ............................................................... 28
- **ESOL** ................................................................. 32
- **Health** ............................................................... 34
- **Mathematics** ...................................................... 35
- **Music** ................................................................. 38
- **Physical Education** ............................................. 42
- **Science** .............................................................. 45
- **Social Studies** .................................................... 49
- **World & Classical Languages** ......................... 53
- **Certificate of Completion Courses** .................. 57
- **Interdisciplinary Courses** ................................ 58
- **Programs of Choice** ........................................... 60
  - **AVID** • 60
  - **BMAH** • 61
  - **CAT** • 61
  - **IB** • 63
  - **PVA** • 67
  - **STEM** • 74
- **Signature Courses** ............................................... 78
- **Completer Programs** .......................................... 81
- **Scheduling Worksheet** ....................................... 92
Course Information

<table>
<thead>
<tr>
<th>NCAA Division I</th>
<th>— 16 Core-Course Rule —</th>
<th>NCAA Division II</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>English</td>
<td>3</td>
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<tr>
<td>3</td>
<td>Mathematics (Algebra 1 or higher)</td>
<td>2</td>
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<tr>
<td>2</td>
<td>Natural/Physical Science (one year of lab if offered by high school)</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>Additional English, Mathematics or Natural/Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Social Science</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Additional courses</td>
<td>4</td>
</tr>
</tbody>
</table>

(from any area above, foreign language or non-doctrinal region/philosophy)

NCAA Eligibility

National Collegiate Athletic Association

Students who intend to participate in intercollegiate athletics in a Division I or Division II college or university must register with the NCAA Initial-Eligibility Clearinghouse to determine whether the student is a “qualifier” and can practice, compete, and receive athletic scholarships as a freshman.

Students are strongly encouraged to see their counselors to receive more complete information on NCAA eligibility requirements. For more information, see www.ncaa.org or www.eligibilitycenter.org

What are the NCAA course requirements?

Students enrolling full-time in an NCAA Division I or Division II college or university must complete 16 core courses (seven before senior year) in the subjects in the table above. Beginning August 1, 2016, NCAA Division I will require 10 core courses to be completed prior to the seventh semester (seven of the ten must be a combination of English, math or natural or physical science that meet the distribution requirements). These 10 courses become ‘locked in’ at the start of the seventh semester and cannot be retaken for grade improvement. All other students should check with their counselor for course requirements.

What determines whether or not a student can practice, compete, and receive athletic scholarships as a college freshman?

Division 1 schools use a sliding scale to determine a student’s eligibility. The required SAT or ACT score is based on a student’s GPA (for the 16 required core courses). The higher the student’s GPA, the lower the required SAT or ACT score. However, a student must earn a minimum 2.000 GPA average in order to qualify to practice, compete, and receive scholarships. In order to also be eligible to compete, the minimum GPA is 2.300.

Division 2 schools require a student earn a minimum of a 2.000 GPA for the 16 required core courses and earn a specified score on the SAT or ACT in order to be eligible to practice, compete, and receive scholarships.

Which courses qualify?

Courses that are NCAA approved are designated in this list of courses. The approved list of courses changes every spring. Students should work with their school counselor to make sure that the courses they choose are still accepted by the NCAA.

What about ESOL courses?

English as a Second Language (ESOL) courses are not acceptable as NCAA Courses. However, advanced ESOL courses may be used, but must be reviewed on a case-by-case basis. Any student who wishes to have advanced ESOL courses considered when determining his or her initial eligibility must contact the college or university he or she will be attending in order to begin the approval process.

Weighted Grading

Students who earn an ‘A’, ‘B’, or ‘C’ in an Honors, Advanced Placement (AP), or International Baccalaureate course are awarded additional quality points, known as “weighted grading,” as follows:

- An additional 0.5 quality points for an Honors or IB MYP course.
- An additional 1.0 points for an AP or IB DP course.
- No additional points are awarded for grades of ‘D’ or ‘E’.

For example, an ‘A’ received in a regular course is worth 4 points toward a students GPA. An ‘A’ received in an Honors or MYP course is worth 4.5 points and in an AP or IB DP course is worth 5 points. These courses may require pre-course assignments as preparation for accelerated classroom learning.

Honors Courses

These courses are distinguished by greater sophistication of content presented, skills developed, and products expected.

IB Middle Years Programme (IBMYP)

The IB Middle Years Programme is a program of choice offered at Annapolis, Meade, and Old Mill High Schools. Students in grade 9 IB MYP are enrolled in Honors level English, American Government, Biology, Algebra 1, Geometry or Algebra 2, French or Spanish Level 2, and elective offerings. Students in MYP 10 are enrolled in Honors level English, AP Modern European History, Chemistry, Geometry, Algebra 2 or Pre-Calculus, French or Spanish 3 and elective offerings.

International Baccalaureate Diploma Programme (IBDP)

The IBDP is a rigorous and challenging program of studies for students in grades 11 & 12. The IB program and Diploma are recognized by school systems, colleges and universities throughout the world. Many colleges grant advanced standing and/or college credit on the basis of performance in the IB Diploma assessments.

Advanced Placement Courses (AP)

Advanced Placement courses are demanding and challenging courses intended for students who demonstrate potential for college level work. The College Board sponsors the Advanced Placement Program, and it develops, administers, and grades examinations for each advanced placement course. Many universities and colleges grant advanced standing and/or college credit on the basis of how well a student performs on the Advanced Placement test. Information regarding advanced placement courses and examinations are available from the counseling office in each high school. Students are not required to take an advanced course in order to be eligible to sit for an advanced placement examination. It should be noted that a student’s report card grade for an Advanced Placement course is determined by the classroom teacher. It is not a reflection of the results of the Advanced Placement test.

Other Advanced Courses

Some courses are as challenging and rigorous as AP courses, but are not sanctioned by the College Board. These courses receive the same weighted grading as AP courses.

Course Fees

Please be aware that some courses may have fees attached to them. If these fees would prevent you from taking the course, please see your school counselor for assistance.
Art

The Anne Arundel County High School art program is designed to offer all students personal enrichment as well as provide a high quality, sequential program of studies for students who are planning an art or art-related career. Art courses offer opportunities to learn, explore, and concentrate on the visual arts concepts while including activities in all major areas of art. The inquiry-based curriculum fosters the creative potential in each student. Critical thinking and expression of ideas in art forms will help students to appreciate the value of art in meeting 21st Century challenges, relate art to life, social and community issues. All art courses are offered on an elective basis.

Design elements and principles will be stressed along with two- and three-dimensional activities — painting, drawing, printmaking, sculpting, photography, and crafts — at all levels. Many materials, tools and processes are used to make art so that students will: develop a knowledge of design as the basis for art work; identify design qualities in natural and man-made forms; apply skills while making art objects; judge art qualities; develop a knowledge of how to use materials, tools and techniques; and become familiar with the important role of art in the history of humankind.

Fine Arts Graduation Requirement — 1 Credit

Courses that meet the Fine Arts requirement can be found in the Art, Dance, English and Music program sections.

G19 | Foundations of Studio Art 0.5sem
This course provides the foundation for the visual arts high school program of study. Students will experience a variety of media and processes while exploring two and three dimensional art problems in drawing, painting, printmaking, sculpture and crafts. Critical and creative thinking skills will be integrated into all studio experiences.

05154/0100

G30 | Drawing for Fashion 1 0.5sem
The course will prepare students for further study in the area of fashion design, fashion illustration, textile design, and marketing while developing an understanding of the connection between design and drawing. Students will produce individual sketchbooks/breadth of their media experience, design concepts related to fashion design, and their growth in the drawing of the human figure. Students will be exposed to varied aspects of the fashion industry, including fashion design and related career opportunities.

Recommended: Foundations of Studio Art

05156/0100

G31 | Drawing for Fashion 2 0.5sem
The student will explore more advanced aspects of fashion illustration, fashion design, textile design, and marketing using visual arts media. Students will expand development of sketchbooks and portfolios related to fashion design and the drawing of the human figure. The resulting portfolio will show evidence of personal development through studio work, outside experiences, and sketchbook/journals. Students will be encouraged to make artistic choices that have been influenced by outstanding fashion designers leading to an individual style based on personal aesthetic criteria.

Prerequisites: Drawing for Fashion 1

05156/0100

G35 | Photo & Digital Processes 1 0.5sem
Photography and Digital Processes 1 is the introductory class for the study of photographic processes. Use of the digital camera/device and/or analog camera and the manipulation of student generated images on the computer will serve as a basis for exploring various media. The class is structured around creating photographic or digital imaging emphasizing visual arts principles. It will introduce the student to the principles of contemporary media as a visual and visual means of communication in today’s society. Students will be challenged to solve art problems by studying the work of master photographers and digital artists. A sketchbook/journal will serve as a resource for technical information, processes, idea generation, and written commentary.

Prerequisites: Foundations of Studio Art

DUAL 05162/0100

G36 | Photo & Digital Processes 2 0.5/sem
Photography and Digital Processes 2 courses builds upon skills, concepts, and techniques developed in Photography and Digital Processes 1. Through experimentation, observation, and teacher direction, students will be challenged to create expressive works influenced by master contemporary photographers, digital artists, and other career connections. Students will expand their repertoire of software, styles, and techniques. Student's original photographs serve as a source of ideas. All digital imaging should come from student generated artwork/photography or family archival photographs. Further exploration of the Adobe Creative Suite is part of the photographic process of the course. The curriculum is aligned with the MD State Dept. of Education Essential Learner Outcomes while embedding 21st century skills.

05162/0100

G37 | Honors Photo & Digital Processes 3 0.5/sem
Photography and Digital Processes 3 builds upon skills, concepts, and techniques developed in Photography and Digital Processes 2. Students will solve different kinds of non-familiar problems in both conventional and innovative ways. Students will maintain a portfolio to include a concentration, and depth and breadth sections. Emphasis is placed on developing a personal vision and voice in their work. Students will continue to expand their repertoire of software, styles, and techniques as well as exploring other digital imaging devices. The curriculum is directly aligned with the MD State Dept. of Education Essential Learner Outcomes while embedding 21st century skills. Students will develop and demonstrate knowledge of content specific, academically based, and cross-curricular vocabulary and themes.

05162/0100

G45 | Studio 1: 2D Art 0.5sem
This course is the introductory course to two dimensional art processes: drawing, painting, printmaking, crafts and mixed-media. Students will be challenged to develop a personal style by creating expressive works of art based on a variety of artists, art movements, and techniques. A process portfolio and sketchbooks/journals will reflect personal aesthetic choices in the development of a body of work.

Prerequisites: Foundations of Studio Art

DUAL 05155/0100
G46 | **Studio 2: 2D Art** 0.5sem
In this course students will solve problems that focus on ways to approach two dimensional design. Activities will include painting and drawing from life, ways to represent the human figure from observation, portraiture, printmaking on and off the press and contemporary crafts. Emphasis is placed on creative problem solving, use of the sketchbook/journal and the influence of master artists and cultural exemplars.
**Prerequisites:** Studio 1: Two Dimensional Processes
05155/0100

G47 | **Honors Studio 3: 2D Art** 0.5/sem
The emphasis of this course is on developing a body of related two-dimensional works (drawing, painting, printmaking, crafts, mixed media), based on a personal idea or theme. The resulting portfolio will show evidence of personal development through studio work, influences by master artists, outside experiences and sketchbook/journals.
**Prerequisites:** Studio Art 2: Two Dimensional Art Processes
05155/0100

G48 | **AP Studio Art 2D Design** 0.5/sem
Students in this course develop their 2-D Design Portfolio according to the requirements of the College Board’s Advanced Placement Program. Portfolios will be developed that demonstrate a concentration, breadth and quality. Students will be encouraged to submit a portfolio for Advanced Placement credit.
05171/0100

G55 | **Studio 1: 3D Art** 0.5sem
This course is the introductory course to three dimensional art processes: ceramics, sculpture, crafts and mixed-media. Through experimentation, observation and teacher direction, the student will be challenged to develop a personal style by creating expressive works of art based on a variety of artists, art movements and techniques. A process portfolio and sketchbooks/journals will reflect personal aesthetic choices in the development of a body of work.
**Prerequisites:** Foundations of Studio Art
DUAL 05158/0100

G56 | **Studio 2: 3D Art** 0.5sem
In this course students will solve problems and focus on three-dimensional art forms. Design solutions are explored in sculpture, contemporary crafts and ceramics in traditional and non-traditional ways. The sketchbook/journal issued for recording ideas, influences from master artists and cultural exemplars, working out solutions to problems, and reflecting on results.
**Prerequisites:** Studio 1: Three Dimensional Art Processes
DUAL 05158/0100

G57 | **Honors Studio 3: 3D Art** 0.5/sem
The emphasis of this course is on developing a body of related three-dimensional works (ceramics, sculpture, crafts, mixed media) based on a personal idea or theme. The resulting portfolio will show evidence of personal development through studio work, outside experiences and sketchbook/journals. Students will be encouraged to make artistic choices that have been influenced by master artists leading to an individual style based on personal aesthetic criteria.
**Prerequisites:** Studio 2: Three Dimensional Art Processes
DUAL 05158/0100

G61 | **AP Studio Art Drawing** 0.5/sem
The AP Studio Art Program is designed for highly motivated students who are seriously interested in the study of art. Portfolios will be developed that demonstrate a concentration, breadth and quality. Students will be encouraged to submit a portfolio for Advanced Placement credit.
05172/0100

G62 | **Seminar: AP Art History** 0.5/sem
Seminar: AP Art History provides students with the assistance they need to successfully complete their coursework.
**Prerequisites:** Concurrent enrollment in AP Art History
22005/2000

G637 | **Honors Art Portfolio Development & Studio Practices** 0.5/sem
This course is designed for students who have received continuous instruction in visual arts. This course offers a creative environment which is structured to facilitate students as they continue working in the arts and are preparing to enter colleges and art schools. Through the assembly of a portfolio, students examine a body of work created through creative problem solving that includes personal aesthetic choices and variety of media. Students’ analysis skills are developed through critiques, as they articulate the aesthetic characteristics and meaning of personal, peer, and master artworks.
**Prerequisite:** Foundations of Studio Art
05170/0100

G638 | **AP Studio Art 3D Design** 0.5/sem
Students in this course develop their 3-D Design Portfolio according to the requirements of the College Board’s Advanced Placement Program. Portfolios will be developed that demonstrate a concentration, breadth and quality. Students will be encouraged to submit a portfolio for Advanced Placement credit.
05173/0100

G637 | **Honors Art Portfolio Development & Studio Practices** 0.5/sem
This course is designed for students who have received continuous instruction in visual arts. This course offers a creative environment which is structured to facilitate students as they continue working in the arts and are preparing to enter colleges and art schools. Through the assembly of a portfolio, students examine a body of work created through creative problem solving that includes personal aesthetic choices and variety of media. Students’ analysis skills are developed through critiques, as they articulate the aesthetic characteristics and meaning of personal, peer, and master artworks.
**Prerequisite:** Foundations of Studio Art
05170/0100

G64 | **AP Art History** 0.5/sem
This college level course involves the study of art history from prehistoric times to the present day. The content of the course will allow students to be able to analyze elements of artwork, become familiar with media and techniques or art production and the ability to recognize and identify periods and styles. Additionally, analytical comparative essays will explore themes, styles and purposes of art. This course culminates in the Advanced Placement Art History test to earn college credit.
**Prerequisites:** Foundations of Studio Art
05153/0100

G62 | **Seminar: AP Art History** 0.5/sem
Seminar: AP Art History provides students with the assistance they need to successfully complete their coursework.
**Prerequisites:** Concurrent enrollment in AP Art History
22005/2000

G87 | **Department Aide—Art** No credit
Fine and Performing Arts Aide courses offer students the opportunity to assist instructors in preparing and organizing course curricula. Students may provide tutorial or instructional assistance to other students.
05995/0100
Career & Technology

Career and Technology Education courses are designed to provide challenging opportunities for students to develop knowledge and skills in a career field. Students may use this acquired knowledge for entry-level employment and/or further education at a college, technical or business school, or an apprenticeship program. The courses are offered at the high schools and at the Centers of Applied Technology.

For information about the Centers of Applied Technology, see pages 62 and 81.

Business

Business Education offers students an opportunity to explore real world problems and challenges that exist globally, and develop cross-curriculum skills through team-based and independent work. Subject matter may include accounting, business management, entrepreneurship, finance, international business, information technology and interactive media production. These courses prepare students for further education and encourage internships. Many of the Business Career Completers offer proficiency credits allowing students to earn college credit.

Q01 | Computerized Accounting 1 0.5/sem
Students are introduced to accounting through manual and computer processes in the basic accounting cycle, including accounting for payroll, merchandising, special procedures, and partnerships. Excel spreadsheets, internet connection activities, and/or accounting software with QuickBooks are used to reinforce learned concepts.
Prerequisites: Computer Skills for Academic Success
CTE DUAL 12104/0203

Q02 | Honors Computer Accounting 2 0.5/sem
Students applying accounting methods to partnerships and corporations. QuickBooks software and simulations are included for students to apply accounting principles and procedures. Students taking this course are eligible to participate in a paid or unpaid internship.
Prerequisites: Computerized Accounting 1
CTE 12141/0203

Q03 | Honors Computer Accounting 3 0.5/sem
This is an advanced course using a college textbook. This course builds on skills acquired in Computerized Accounting 2. Students use manual and computerized (QuickBooks) accounting methods to practice and apply accounting skills and competencies to business activities.
Prerequisites: Computerized Accounting 2
CTE 12142/0203

Q11 | Personal Law 0.5sem
This course examines the legal relationship between principals and their agents, the competing interests of creditors and debtors, the forms of business organization, the legal consequences of marriage and divorce, the transfer of real property, the principal types of insurance, and the main features of retirement plans and estate planning.
Recommended: Computer Skills for Academic Success
CTE 04163/1704

Q12 | Business Law 0.5sem
This course provides coverage of legal topics including the sources of law, the judicial system, criminal law, civil (tort) law, the formation and performance of contracts, the Uniform Commercial Code (sales transaction), competing interests of buyers and sellers (consumer law), and the ownership and transfer of personal property. Current issues such as ethics, workplace issues, and computer crime are discussed.
CTE DUAL 04164/1704

Q20 | Principles of Business A 0.5sem
Students will study the organization of business, applications of business laws and theory, historical perspectives on business, business terminology, management functions and career pathways in business. This course is required to become a Career Research and Development completer.
Recommended: Computer Skills for Academic Success
CTE DUAL 12001/0203

Q21 | Principles of Business B 0.5sem
Students will study communication in the workplace, networking skills, human diversity, employee recruitment and retention skills, interviewing skills, time management skills and workplace ethics. This course is required to become a Career Research and Development completer.
Recommended: Computer Skills for Academic Success
CTE DUAL 12001/0203

Q22 | Career Research & Development 0.5/sem
This course includes project-based challenges encountered on the job as well as consumer education as it applies to students. Seniors selecting this course must successfully complete an internship to fulfill the program requirements.
Prerequisites: Principles of Business A & B Concurrent enrollment in Career Research and Development Internship
CTE DUAL 22161/0203

Q70 | Professional Career Experience 1.0/sem
Experiences in careers are an important element of the development process. This course is not the same as a short-term job; it has structured learning goals, provided supervision and offers an experiential learning component that can strengthen a resume. Career Experiences can expand knowledge of oneself and provide students with insight to the career fields that interest them. Students will also gain marketable skills related to the field and make important contacts. This course allows students to apply classroom knowledge in the workplace. A minimum of 135 hours required.
Prerequisites: Teacher recommendation and approval from Internship Coach. Student must provide their own transportation.
22163/0204
Q25 | Managing Your Personal Resources 0.5sem
Students will examine aspects of financial literacy through Virtual Business Simulations, the Stock Market Game and Standard and Poor’s research project. The course will include an overview of financial issues aligned with the National Standards for Business Education as well as the Maryland State Curriculum for Personal Financial Literacy. Students will have the opportunity to test their skills by competing online with other students in the National Financial Literacy Challenge.

CTE DUAL 02157/1200

Q30 | Honors Marketing 1 0.5/sem
Students will develop marketing plans by analyzing customer needs and the market environment. They will learn advertising and promotion planning; as well as how to distribute products and conduct marketing research. Managerial skills will be acquired and implemented, in many cases through the operation of a school store. Marketing students will also acquire valuable leadership skills through their participation in DECA.

CTE DUAL 12168/0208

Q31 | Marketing 2 0.5/sem
Advertising, display, sales promotions, marketing, and operations are emphasized in this course. The economics of distribution, market research, and data processing in marketing and management occupations are included. Seniors may also participate in a paid or unpaid internship.

Prerequisites: Marketing 1

CTE DUAL 12169/0208

Q34 | Honors Entrepreneurship 0.5sem
Students will develop a marketing/business plan and apply economic concepts when making decisions for an entrepreneurial venture. They will assess the role entrepreneurship plays in the free enterprise system.

Recommended: Computer Skills for Academic Success

CTE DUAL 12053/0203

Q35 | E-Commerce and the Global Market 0.5sem
Course content focuses on the buying and selling of goods and services on the Internet. Students will learn about the ethical, legal and social responsibilities of e-commerce and explore security concerns. They will analyze web sites, develop an E-Commerce business and learn to market products globally in the digital world.

CTE DUAL 12056/0203

Q40 | Honors Administration Services Management 0.5/sem
This course provides students with the study of information systems. Students develop managerial and technical skills for business support operations while incorporating problem solving techniques. Students will develop interpersonal teamwork and leadership skill through business simulations to develop a high level work ethic. Students can elect to test for the Microsoft Certified Application Specialist (MCAS) exams for certification. Seniors taking this course are eligible to participate in an internship learning experience.

Prerequisites: Software Applications, Advanced Applications: Word/PowerPoint, Advanced Applications: Excel/Access

CTE DUAL 12003/0203

Q50 | Software Applications 0.5sem
This course focuses on Key Applications which is one of the three required sections of the Internet and Computing Core Certification (IC3) exam. Students will explore the concepts of word processing, databases, spreadsheets, graphics and introductory presentations and the common features of all applications.

Prerequisites: Computer Skills for Academic Success Provides two of the three sections of the Internet and Computing Core Certification (IC3) exam

CTE DUAL 10004/0300

Q53 | Honors Visual Basic 1 0.5sem
Students will learn the basics of programming including variables, constants, selection and repetition structures. There is an emphasis on the actual development of the code that is basic to the language.

Prerequisites: Algebra 1.

Recommended for Completers: Computer Skills for Academic Success

CTE DUAL 10153/0300

Q54 | Honors Visual Basic 2 0.5sem
Students will learn advanced concepts of programming including sequential and random access files, dialog boxes, database access and advanced applications.

Prerequisites: Visual Basic 1

CTE 10153/0300

Q61 | Honors Business Management 0.5sem
This course includes a broad view of business objectives. It specifically emphasizes phases of organizing, financing, establishing, operating and managing a business. Management simulations and internet research activities are incorporated into this class.

CTE DUAL 12055/0203

Q62 | Honors Legal Studies 0.5sem
This course presents an overview of law and the legal environment. The areas covered include: careers, ethics, regulation, pretrial preparation, trial procedures, criminal law, administrative law, legal interviewing, legal investigation, the use of computers in legal work, and legal research and writing. Students will deal with text, cases, videotapes, scenarios, and practical situations concerning the law.

Prerequisites: Personal Law and Business Law

CTE 12054/0203

Q63 | Business Finance Using Software 0.5sem
This course enables students to use software as they make informed financial decisions both personally and in the business world. They will participate in the National Financial Literacy Challenge at the end of the course.

CTE 02155/1200

Q64 | Advanced Applications (xls/dbf) 0.5sem
This course provides students with advanced skills using spreadsheets and database software. Using Microsoft Office Spreadsheets and Access, students will think analytically, manipulate Information and use the computer as productivity tool. Competencies are based on the Microsoft Certified Application Specialist (MCAS) Exams. Students can elect to sit for the MCAS exams for certification.

Prerequisites: Software Applications

CTE DUAL 10004/0300
Q65 | **Computer Skills for Academic Success** 0.5sem
This course provides students with the skills they need to excel in both business and academia, emphasizing the touch method with emphasis on proper techniques and keyboarding skills. It includes internet ethics, developing a power point presentation and formatting college papers. It focuses on two of the three required sections of the Internet and Computing Core Certification (IC3): Computing Fundamentals — covers a foundational understanding of computing, and Living Online — covers skills for working In an internet or networked environment. It is recommended for business education programs.

**CTE DUAL 12005/0203**

Q71 | **Advanced Applications (doc/ppt)** 0.5sem
This course provides students with advanced skills using word processing and business presentation software. Using Microsoft Office Word and PowerPoint, students will think analytically, manipulate information and use the computer as a productivity tool. Competencies are based on the Microsoft Certified Application Specialist (MCAS) Exams. Students can elect to sit for the MCAS exams for certification.

**Prerequisites:** Software Applications

**CTE 10004/0300**

Q77 | **Web Page Design** 0.5sem
Students will create and edit a web page, create a web site with links, tables, image maps, frames, and forms. Programming will be taught using Web-based tools such as HTML, and JavaScript.

**Recommended:** Computer Skills for Academic Success or Software Applications

**CTE DUAL 10201/0300**

Q78 | **Advanced Web Page Design 1** 0.5sem
Students will work with programs such as Adobe Design Premium CS4, which includes Dreamweaver, Flash, Fireworks and Illustrator, to develop more complex web pages and web sites.

**Prerequisites:** Web Page Design

**CTE DUAL 10201/0300**

Q79 | **Honors Advanced Web Page Design 2** 0.5sem
Students will continue web design development concentrating on Flash and topics such as Javascripting and web site management.

**Prerequisites:** Students must have successfully completed Advanced Web Page Design 1

**CTE 10201/0300**

Q87 | **Department Aide — Business** No credit
Business Aide courses offer students the opportunity to assist instructors in preparing and organizing course curricula. Students may provide tutorial or instructional assistance to other students.

10995/2000

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**Computer Science**

Students interested in careers in computer science, the sciences and engineering, or interested in studying programming languages, should consider enrolling in one or more of the computer science programming courses. Students interested in taking Computer Science courses are encouraged to start with a semester of Visual Basic followed by a semester of Java Programming. College level computer science courses include AP Computer Science A followed by the Computer Science Data Structures course. Students also have an opportunity to achieve Oracle Certified Associate (OCA) status by taking Database Design and Programming along with the Database Application Development classes and passing the associated certification exams.

R05 | **Computer Science Publishing** 0.5sem
This course will focus on the use of computers for desktop publishing. Students will learn basic design principles and gain experience in the use of programs such as Publisher, or InDesign. Students create printed materials such as flyers, newsletters, pamphlets, brochures, magazines, booklets, and newspapers.

**Recommended:** Introduction to Computers or proficiency in word processing

**DUAL 10156/0300**

R10 | **Honors Database Design/Programming (SQL)** 0.5/sem
This course lays the foundation for students understanding relational databases and designs. Students become proficient business analysts and experts in structured query language (SQL). This course prepares students for the Introduction to Oracle 9i-SQL Certification Exam.

**Prerequisites:** Visual Basic 1 and acceptance into the Oracle Academy

**CE 10006/0300**

R11 | **Honors Database Application Development (PL/SQL)** 0.5/sem
Students create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Students develop online database applications using an online development environment (HTML-DB). Students who successfully pass this and the previous (SQL) certification exams achieve Oracle Certified Associate (OCA) status.

**Prerequisites:** Students must have successfully completed the SQL course

**CE 10006/0300**

R18 | **Honors Computer Science Programming—Java** 0.5sem
This rigorous programming course is an introduction to the object-oriented computer language Java. Algorithm analysis and steps in designing, implementing, testing and maintaining a program will be emphasized. It is highly recommended this course be taken before taking an AP level programming course and preferably taken in the spring semester just preceding the AP Computer Science Programming course.

**Prerequisites:** Algebra 1 and Geometry (C or better in both)

**CTE DUAL 10155/0300**

R20 | **AP Computer Science A** 0.5/sem
This college level course involves the study of a computer language (Java) and programming practices and procedures. Topics to be covered will include fundamentals of the Java programming language, input
22 | Career & Technology

and output, flow of control features, data structures and searching and sorting algorithms. Program design and analysis will be emphasized. The course is intended to prepare students for the A Level AP Computer Science Exam for college credit.

Prerequisites: Algebra 2 (1 credit, B or better) or concurrent enrollment in Algebra 2 Highly Recommended: Computer Science Programming – Java

10157/0300

R21 | Computer Science A/B Data 0.5/sem
This intense college level course involves the detailed study of a computer language (Java) and programming practices and procedures. This course is differentiated from the AP Computer Science (A Level) course by additional attention to data structures and operations. Program design and analysis will be heavily emphasized.

Prerequisites: Algebra 2 (1 credit, B or better) and AP Computer Science (A Level R20)

10251/0300

R22 | C++ with Gaming 0.5/sem
This is an advanced computer programming class which will introduce students to the similarities and differences between C++ and Java. Students will get hands on experience in using the language to develop games. Students will also become familiar with the software design and development standards.

Prerequisites: AP Computer Science

10154/0300

Family & Consumer Sciences

Family and Consumer Sciences courses prepare students for the work required in family life and careers based on family and consumer sciences skills. All courses are part of the elective offerings and are open to all students.

Courses that prepare students for careers fall into one of the following categories:
1. Required courses that are part of a prescribed sequence for a career completer program
2. Elective courses that are highly recommended as part of various career completer programs

H10 | Honors Art/Science of Nutrition—A 0.5sem
Students will study the science of nutrition as it relates to individual food choices that maximize healthy behaviors, and public health. Topics include the six major nutrient components of food along with wellness, obesity, eating disorders, sports nutrition, and prevention of chronic diseases. Issues facing society will include food safety, technology, use of supplements and botanicals. Students will understand the concepts they are learning in their classroom lessons while perfecting skills in the art of producing edible and nutritious recipes. Practical lessons will involve lab work. Students who successfully complete the Art and Science of Nutrition A & B and pass the final exam with at least a C may earn articulated credit in the Dietetics Program while enrolled at the University of Maryland Eastern Shore. Lab fee charged.

CTE | DUAL 19052/0206

H11 | Honors Art/Science of Nutrition—B 0.5sem
Students continue to build on the skills and healthy food preparation techniques developed in Art and Science of Nutrition A. Topics include digestion and absorption of nutrients, vitamins, and mineral requirements. The role of nutrition in various phases of the life cycle and the psychological and sociological implications of food are discussed. Emphasis is placed on dispelling common nutrition myths and on questioning nutrition information presented in the media. Students will understand the concepts they are learning in their classroom lessons while perfecting skills in the art of producing edible and nutritious recipes. Students who successfully complete the Art and Science of Nutrition A & B and pass the final exam with at least a C may earn articulated credit in the Dietetics Program while enrolled at the University of Maryland Eastern Shore. Lab Fee charged.

Prerequisites: Art and Science of Nutrition A

16054/0206

H15 | Creative Fashion Technology A/B 0.5/sem
Creative Fashion Technology A/B is designed for students to develop their own personal creativity using digital and graphic resources. Students will learn the skills and techniques in fashion design technology while extending their creativity. Students will understand the role of technology in the fashion design industry along with the technological skills required to compete in the design room and in the marketplace. Students will learn and utilize the software application, Adobe Photoshop as it functions in the fashion design industry.

10008/0300

H20 | Child Development 1 0.5/sem
Learn about children ages three to six and work with preschoolers in the lab. Study the stages of growth and development, the role of play in children’s learning, and positive guidance practices and techniques.

CTE | DUAL 19052/0206

H21 | Child Development 2 0.5/sem
Study preschoolers in greater depth and learn the developmental milestones for school age children from ages five to six. Learn how to implement learning activities by planning lessons and teaching in the lab.

Prerequisites: Child Development 1 (C or better)

CTE | DUAL 19052/0206

H22 | Honors Child Development 3 0.5/sem
Learn about the growth and development of children from birth to age six. This course is designed for students who wish to pursue a career in the early childhood professions. While continuing to teach in the preschool, the student will learn about the administrative responsibilities of operating a child care center.

Prerequisites: Child Development 2 (C or better)

CTE 19052/0206

H25 | Decisions for Responsible Parenting 0.5sem
Learn about one of the most important jobs you will ever have — being a parent. Learn about parenting from the prenatal stage through adolescence.

Recommended: Grades 10–12 only.

CTE 22204/0206

16054/0206
**Career & Technology | 23**

**H26 | Childhood Internship | 1.0sem**
Seniors who desire an experience to fulfill the requirements of the Early Childhood completer program may apply for an internship to prepare for post-secondary education, gainful employment, or both in a setting outside the school. Students seeking an Early Childhood Career Internship must have excellent attendance and the child development teacher’s recommendation.

**Prerequisites:** Child Development 3, Approved curricular goals and outcomes and the permission of the administration and the child development teacher.

**CTE** 19098/0206

**H30 | Fashion Design 1 | 0.5sem**
This course introduces students to designing and making simple garments and accessories. Individualized projects will be used to further develop the students skills. Lab fee charged.

19203/0206

**H31 | Fashion Design 2 | 0.5sem**
This course introduces students to the intermediate techniques associated with fashion design and the principles of clothing construction and accessories. Individualized projects will be used to further develop the students skills. Lab fee charged. Articulation with Stevenson University is available.

**Prerequisites:** Successful completion of Fashion Design 1

19203/0206

**H61 | Business of Fashion A | 0.5sem**
Explore the history and scope of the fashion industry, including buying and selling, fashion cycles and fashion coordination. Students will also have the opportunity to form a fashion company.

12153/0203

**H62 | Business of Fashion B | 0.5sem**
The Business of Fashion B builds on the information and skills introduced in The Business of Fashion A. Students will have the opportunity to learn how to start an online fashion business.

**Prerequisites:** Business of Fashion A

12153/0203

**H73 | Nutrition Science | 0.5sem**
Students learn the science of nutrition and the relationship of nutrition to health and disease. Students apply the principles of biology and chemistry to their learning. Lab fee charged.

**Prerequisites:** One credit of Biology

**DUAL** 22203/0206

**H74 | Prostart WBL | 1.0/sem**
Seniors who have completed the required courses Culinary Skills & Hospitality Management 1 and 2 must complete this 400 hour internship in the hospitality industry to meet the ProStart completer requirements. Students seeking an internship experience must have excellent attendance and the recommendation of the ProStart teacher.

**Prerequisites:** Culinary Skills & Hospitality Management 1 & 2 ProStart Completer

**CTE** 16067/0206

**H77 | Honors Culinary, Hospitality Management 1 | 0.5/sem**
Students are introduced to careers in the Food Service and Hospitality industry. Students will learn and apply basic skills and knowledge needed for success in a Food Service and Hospitality career while working with a mentor in the field. Lab fee charged. ProStart Certificate of Merit test fee.

**Prerequisites:** Art and Science of Nutrition A, or Nutrition Science

**CTE DUAL** 16065/0206

**H78 | Honors Culinary, Hospitality Management 2 | 0.5/sem**
This course is a continuation of CSHM 1 with more in-depth skills and knowledge of the Food Service and Hospitality profession. Students will be introduced to many of the behind the scenes activities necessary for a professional and successful Food Service and Hospitality establishment. Prepares students for ProStart certification. Lab fee charged. ProStart Certificate of Merit test fee.

**Prerequisites:** Culinary Skills & Hospitality Management 1

**CTE DUAL** 16066/0206

**H80 | Your Finances | 0.5sem**
Students will study the importance of personal financial preparedness. Students will be able to make decisions on managing their money, banking, credit and taxes. Students will apply their knowledge and develop a plan for attaining goals while juggling multiple roles as a young adult.

**Recommended:** Grades 10–12

22210/0206

**H81 | Introduction to Teaching Profession | 0.5/sem**
This career course is designed to introduce students to the Teaching Profession. Students will be introduced to teaching strategies, human growth and development and technology in the classroom. Students will have a variety of internship opportunities at different grade levels.

**CTE DUAL** 19152/0206

**H87 | Department Aide—FACS | No credit**
Family and Consumer Science Aide courses offer students the opportunity to assist instructors in preparing and organizing course curricula. Students may provide tutorial or instructional assistance to other students.

22245/0206
Technology

Technology education is an applied education program that relies on project-based learning to prepare students to be technologically literate. Through participation in “hands-on” experiences in various technical environments students will see the connection that exists between technology, math, science, and engineering concepts. They will also utilize the design process to effectively solve “real-world” problems. Technology education courses are both required and elective. One basic technology education credit is required for graduation. The program is composed of introductory courses and advanced courses. Some courses are only offered at specific high schools. Students can become eligible to receive college credits upon successful completion of required coursework in the Technology Education program.

M09 | Advanced Technology Systems 0.5/sem
This course is intended to provide in-depth experience with a variety of technology areas. Students gain insight into engineering related careers as they learn the basics of electronics and robotics. Students learn to apply principles of physics, mathematics, and computational science to solve technological problems through hands-on experimentation and simulation.
ADVT 21053/0207

M10 | Communication Technology 1 0.5sem
This course develops skills and knowledge in the use of information and communication technology. Course topics include: graphic arts design, screen printing, Digital photography, corporate & desktop publishing, media production, computer graphics & imaging.
Prerequisites: Foundations of Technology A & B or Principles of Engineering
CTE ADVT 11001/0207

M11 | Communication Technology 2 0.5sem
This course focuses on more advanced communication technology by building upon what was learned in CT 1 to refine and enhance a variety of technical communication skills. Skills and understandings developed in CT 1 will be expanded to incorporate still/video camera equipment as well as systems, processes and other devices used in the telecommunications industry.
Prerequisites: Communications Technology 1
ADVT 11001/0207

M13 | Technology Design 1 0.5sem
Students experience exciting activities in the areas of entertainment, recreation and information technologies. Students work in engineering teams to apply technology, science, and mathematics concepts and skills to solve design problems and create innovative designs. Students will use criteria such as design effectiveness, public safety, and ethics to evaluate their designs.
Prerequisites: Foundations of Technology A & B or Principles of Engineering
ADVT 21003/0207

M14 | Technology Design 2 0.5sem
This course provides the student with the opportunity to use the engineering design process to solve complex issues in the areas of medical and biotechnology fields. Working in teams, students will identify the problem, engineer a solution and report findings. The activities allow students to choose their place on an engineering team and contribute their talents to accomplish the ultimate goal.
Prerequisites: Technology Design 1
ADVT 21003/0207

M16 | Introduction to Robotics 0.5sem
The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on robots and illustrations of current state of the art research and applications. Course information will be tied to lab experiments; students will work in teams to build and test increasingly more complex VEX-based robots, culminating in an end of semester robot contest. This course introduces fundamental concepts in robotics. In this course, basic concepts will be discussed, including sensors, path planning, kinematics, feedback, stressing the importance of integrating sensors, effectors, and control.
ADVT 21009/0207

M18 | Power/Energy/Transportation 0.5sem
This course develops a depth of understanding about a wide array of energy sources and controls by engaging students in hands-on, project-based activities in mechanical power, fluid power, and electrical power. Students will construct and test a variety of transportation systems, participate in reverse engineering activities, and developing skill working with the tools, equipment, and measurement devices used by engineers and technologists.
Prerequisites: Foundations of Technology A & B or Principles of Engineering
ADVT 21001/0207

M20 | Engineering Drawing/CAD 1 0.5sem
In this course, students will learn how technical drawing techniques & symbolism are used to convey ideas in the language of engineering. Students will create drawings by both traditional board drawing and computer aided design software. Instrument usage, measurement & computational accuracy, visualization & perception, problem solving and technical communication skills will be developed.
Prerequisites: Foundations of Technology A & B or Principles of Engineering
CTE DUAL ADVT 21006/0207

M21 | Engineering Drawing/CAD 2 0.5sem
This course is intended to continue the development of the student’s competencies in the language of engineering but with an increased emphasis on developing an in-depth understanding of specialty topics such auxiliary representation, intersections & development, threads & fasteners, assembly drawing, charts, graphs & diagrams. Although instrument drawing will continue, increased understanding of CAD operations & techniques will be developed.
Prerequisites: Engineering Drawing/CAD 1
CTE ADVT 21006/0207

M22 | Architect Design/Development 1 0.5sem
This course provides students with an opportunity to develop skill in the preparation of architectural drawings using traditional technical drawing equipment as well as computer aided design (CAD) applications such as ArchiCad and Google Sketchup. This course is an advanced level course for those students that are interested in a technology-based career path such as civil engineering, architecture, construction, construction supervision, and technical design.
Prerequisites: Foundations of Technology A&B or Principles of Engineering
Recommended: CAD 1
DUAL ADVT 21011/0207
M23 | Architect Design/Development 2  
0.5/sem
This course is intended to continue the development of competencies learned in ADT 1 while refining and enhancing their drawing skills through continued practice and more rigorous experiences with CAD software and content specific to detail drawing, pictorial rendering, and model building. Students that complete Engineering Drawing & Design 1 & 2 and complete ADT 1 & 2 with at least a B average may qualify to receive Anne Arundel Community College credit.

**DUAL** ADVT 21011/0207

M25 | Honors Principles of Engineering  
0.5/sem
This course provides an overview of engineering and engineering technology and includes the development of problem-solving skills used to solve real-world engineering problems. The course of study includes: Overview & Perspective of Engineering, Design Process, Communication & Documentation, Engineering Systems & Manufacturing Processes, Materials & Materials Testing, Thermodynamics, Engineering for Quality & Reliability, and Dynamics. Glen Burnie, Meade, Severna Park and South River High Schools only.

**Recommended**: Algebra 2

**Prerequisites**: Principles of Engineering

**ADVT** 21033/0207

M26 | Honors Engineering Design  
0.5/sem
This course is part of the PLTW pre-engineering program of study and is a course that develops student’s problem-solving skills, with emphasis on visualization and communication skills using AutoCAD Inventor 3-D solid modeling software. Units of study include: Introduction to Design, Student Portfolio Development, Sketching & Visualization, Geometric Relationships, Modeling, Assembly Modeling, Model Analysis & Verification, Model Documentation, Presentation, Production, and Marketing. Glen Burnie, Meade, Severna Park and South River High Schools only.

**Prerequisites**: Principles of Engineering

21026/0207

M27 | Honors Digital Electronics  
0.5/sem
This course is the third course of a pre-engineering completer program known as Project Lead the Way. In this course, students investigate topics in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices. Glen Burnie, Meade, Severna Park and South River High Schools only.

**Prerequisites**: Principles of Engineering

21028/0207

M28 | Honors Computer Integrated Manufacturing  
0.5/sem
This is a Project Lead the Way (PLTW) course that applies principles of robotics and automation. The course builds on computer solid modeling skills developed in Introduction to Engineering Design. Students use CNC equipment to produce actual models for their three dimensional designs. Meade High School only.

**Prerequisites**: Principles of Engineering, Introduction to Engineering Design, and Digital Electronics

21030/0207

M29 | Honors Biotech Engineering  
0.5/sem
Students in this course will apply biological and engineering concepts to design materials and processes that directly measure, repair, improve, and extend living systems.

**Prerequisites**: Principles of Engineering and Introduction to Engineering Design

21014/0207

M30 | Honors Aerospace Engineering  
0.5/sem
This is a Project Lead the Way (PLTW) course that will introduce students to the world of aeronautics, flight, and engineering. Students will apply scientific and engineering concepts to design materials and process that directly measure, repair, improve, and extend systems in different environments. The curriculum sequence includes experiences from the diverse fields of Aeronautics, Aerospace Engineering and related areas of study such as aerospace information systems, star sailing or astronautics rocketry, propulsion, and the physics of space science, space life sciences (BioSpace), principles of aeronautics, structures and materials, and systems engineering. Meade, Severna Park, and South River High Schools only.

**Recommended**: Algebra 2

**Prerequisites**: Principles of Engineering

21033/0207

M32 | Technology of Flight  
0.5/sem
This course provides the student with a study of the core technologies used in the aviation and aerospace enterprise. Students will follow the engineering design, process to design, build, and test a number of aircraft and rockets.

**Prerequisites**: Foundations of Technology A & B or Principles of Engineering

**ADVT** 21003/0207

M42 | Manufacturing & Construction Technology  
0.5/sem
This course focuses on hands-on, problem-based activities to introduce manufacturing and construction concepts related to the Standards for Technological Literacy. During each Learning Unit, students are asked to use a four phase learning cycle to develop plausible solutions to related Primary Challenges. Designing a Custom Family Home for a Client is one example of a Primary Challenge experienced in this course.

**Recommended**: Foundations of Technology A & B or Principles of Engineering

**ADVT** 21052/0207

M44 | Honors Engineering Design & Development  
0.5/sem
Students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a community mentor. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year. Glen Burnie, Meade, Severna Park and South River High Schools only.

**Prerequisites**: Principles of Engineering, Introduction to Engineering Design, and Digital Electronics

21027/0207

M49 | Honors Civil Engineering & Architecture  
0.5/sem
Students apply what they learn about various aspects of civil engineering and architecture to the design and development of a property. Working in teams, students explore hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. This course is designed for 11th or 12th grade students.

**Prerequisites**: Principles of Engineering

21012/0207

M52 | Marine Technology  
0.5/sem
This course provides the student with an in-depth study of the core technologies while investigating topics that include: Historical Perspective, Design, Hydrodynamics, Hydrostatics, Propulsion Systems,
Materials, Electronics, Navigation Systems, and Careers. Students will experience the engineering design process as they design, construct, test, and analyze a propeller driven watercraft. Both computer simulations and hands-on experiences are an integral part of this course.

Prerequisites: Foundations of Technology A & B or Principles of Engineering

ADVT 20111/0207

M69 | Foundations of Technology A 0.5sem
This section of the course explores the history of technology and its impacts. It helps students develop an understanding of the relationships among technologies and the connections with other fields of study. The engineering design process is also applied to effectively solve various problems by systematic means.

21001/0207

M70 | Foundations of Technology B 0.5sem
This section of the course teaches students how to use systems thinking to research, examine data, evaluate inferences, and make predictions about technologies in the areas of communications, manufacturing, and construction.

Prerequisites: Foundations of Technology A strongly recommended

21001/0207

M35 | Honors Principles of Biomedical Science 0.5/sem
This course provides an introduction to the biomedical sciences through exciting hands-on projects and problems. Student work involves the study of human medicine, research processes and an introduction to bio-informatics. Key biological concepts including: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease are embedded in the curriculum. Engineering principles including: the design process, feedback loops, fluid dynamics, and the relationship of structure to function are incorporated in the curriculum where appropriate. Glen Burnie High School only.

Prerequisites: Principles of Engineering

CTE 14261/0207

M36 | Honors Human Body Systems 0.5sem
This course will engage students in the study of basic human physiology, especially in relationship to human health. Students will use a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Glen Burnie High School only.

Prerequisites: Principles of Biomedical Sciences

CTE 14262/0205

M37 | Honors Medical Interventions 0.5/sem
This course will engage students in the study of basic human physiology, especially in relationship to human health. Students will use a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Glen Burnie High School only.

Prerequisites: Principles of Biomedical Sciences

CTE 14263/0205

M87 | Department Aide—Technology Education No credit
Technology Education Aide courses offer students the opportunity to assist instructors in preparing and organizing course curricula. Students may provide tutorial or instructional assistance to other students.

21995/0207
In Anne Arundel County all dance courses are offered on an elective basis for Fine Arts credit, Physical Education credit or General Elective credit based on the student’s academic needs. Dance courses include study in the major areas of dance — technique, history, creating original dance movement, the choreographic process, aesthetic criticism, and performance. The National High School Dance Standards are the basis for the high school dance curriculum. Creative thinking, expression through movement, and appreciation for the art form are integral parts of the program.

All Dance students perform in semester dance concerts. Students learn to appreciate the arts as a valuable aspect of life, become a knowledgeable arts audience, and have opportunities to work cooperatively to create and produce dance.

Students enrolled in Dance Education are expected to wear appropriate dance attire.

There are three dance tracks:

**Dance 1–4 classes**
- for students, beginners through advanced, who are interested in dance. No audition is required.

**Dance for Athletes 1–4 classes**
- for those wishing to use dance training techniques to enhance athletic performance. No audition is required.

**Dance Company 1–4 classes**
- for serious dance students who are selected by audition. Dance Company is co-curricular. Students have both an academic class and an after school rehearsal and performance obligation.

**Fine Arts Graduation Requirement — 1 Credit**

*Courses that meet the Fine Arts requirement can be found in the Art, Dance, English, and Music program sections.*
English

Essential to any society are its language and literature. They define and connect us as a people. They enable us to preserve traditions, to create and maintain community, and to envision the future. Strong literacy skills in reading, writing, listening, and speaking are critical to career and college success in the 21st century. The program of studies in English is designed to cultivate in each of our students proficiency in and appreciation of language and literature. Texts selected for study reflect a variety of genres, cultures, and time periods. Texts are selected based on complexity and literary merit. Some texts may contain mature language, content, and/or themes.

Students must earn a minimum of four credits in English in order to graduate. The English program further provides a rich array of electives that develop individual talent and opens opportunities to study special areas such as theatre, journalism, media, and all aspects of publication. Students are encouraged to participate in a rigorous program of required English courses and English electives.

Through their experiences in the English classroom, students develop voice, refine the knowledge and skills necessary for achieving high standards, participate in a community of learners, and expand the scope of their lives.

**English Graduation Requirements — 4 Credits**

- English 9
- English 10
- English 11 (or an AP English)
- English 12 (or an AP English)

**Required Assessments**

All students must take and pass the state high school assessment in English 10.

*Please check with your school counselor for the different opportunities to meet the high school assessment requirement.*

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A99 | Daily English 9 w/ Reading 0.5 English & 0.5 Elective/sem
This daily course (meeting both A and B days) is designed for students who need additional reading support. The course builds upon students’ prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and includes the four aspects of language use (reading, writing, speaking, and listening) enhanced with research-based reading strategies for comprehension and fluency practice.

NCAA 01001/0801

A090 | English 9 0.5/sem
English 9 builds upon students’ prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and includes the four aspects of language use: reading, writing, speaking, and listening. This course introduces and defines various genres of literature, including world literature, from a spectrum of time periods with writing linked to reading selections.

NCAA 01001/0801

A097 | Honors English 9 0.5/sem
Honors English 9 builds upon students’ prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and includes the four aspects of language use: reading, writing, speaking, and listening. This course introduces and defines various genres of literature, including world literature, from a spectrum of time periods with writing linked to reading selections. Honors English 9 challenges students to apply analytic and critical skills to more complex texts and more rigorous assignments. Students may be assigned reading over the preceding summer.

NCAA 01001/0801

A109 | Daily English 10 w/ Reading 0.5 English & 0.5 Elective/sem
This daily course (meeting both A and B days) is designed for students who need additional reading support. Students learn about the alternate aims and audiences of written compositions by writing argumentative, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, including world literature, from a spectrum of time periods, students can improve their reading comprehension and develop the skills to determine the author’s intent and theme and to recognize the techniques used by the author to deliver his or her message. Students receive additional support for reading that includes research-based reading strategies and comprehension and fluency practice.

NCAA 01002/0801

A10 | English 10 0.5/sem
English 10 offers a balanced focus on composition and literature. Students learn about the alternate aims and audiences of written compositions by writing argumentative, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, including world literature, from a spectrum of time periods, students can improve their reading comprehension and develop the skills to determine the author’s intent and theme and to recognize the techniques used by the author to deliver his or her message.

NCAA 01002/0801
In Honors English 10 students apply critical theories and rhetoric to literature and composition using challenging texts to practice critical reading; analyze themes, structures and details; apply grammar, and use research for oral and written compositions. Texts represent a variety of genres of literature, including world literature, from a spectrum of time periods. Students receive preparation for AP English courses, including timed writing opportunities with actual AP questions. Students may be assigned reading over the preceding summer.

A107 | Honors English 10 | 0.5/sem

In English 11 students continue to develop reading and writing skills. Students read a variety of genres of literature, primarily American, from a spectrum of time periods. Emphasis is placed on literary conventions and stylistic devices. Through frequent writing and research assignments based upon the reading, students strengthen skills in logical writing patterns, word choice, usage, and techniques of using evidence from research.

A110 | English 11 | 0.5/sem

In Honors English 11 students read and analyze challenging texts representing a variety of genres of literature, primarily American, from a spectrum of time periods. Emphasis is placed on literary conventions, stylistic devices, and critical analysis. Through frequent writing and research assignments based upon the reading, students strengthen skills in logical writing patterns, word choice, usage, and techniques of using evidence from research. Students may be assigned reading over the preceding summer.

A117 | Honors English 11 | 0.5/sem

English 12 blends composition and literature into a cohesive whole as students write multi-paragraph critical and comparative analyses of selected literature, including contemporary works, continuing to develop their writing and language skills. Students demonstrate increasing independence in reading, writing, research, speaking, and listening.

A120 | English 12 | 0.5/sem

Honors English 12 blends composition and literature into a cohesive whole and continues to develop students’ skills in writing, research, language, speaking, and listening. Students demonstrate increasing independence in critical and comparative analyses of selected challenging literature, including contemporary works, and in applying writing and language skills to develop multi-paragraph essays and presentations based on their reading and research. Students may be assigned reading over the preceding summer.

A127 | Honors English 12 | 0.5/sem

In this culminating, college-level English course, students apply critical and analytical skills to classical and contemporary works of romance, comedy, tragedy, and satire/irony. Students learn through close reading, explication, comparative analysis, seminar, and extensive writing about literature. Students are required to complete outside reading during the preceding summer. AP English Literature and Composition prepares students for success on the AP exam and for effective reading and writing in college and beyond.

Prerequisites: English 10

A136 | Seminar: AP English Literature & Composition | 0.5sem

This course prepares those students who require additional practice, guidance, and experiences beyond those available in their AP English Language and Composition course, preparing them for success on the AP English Literature and Composition exam and for effective reading and writing in college and beyond. Students receive intensive assistance in the concepts and skills tested by the AP English Literature and Composition exam.

Concurrent enrollment: AP English Literature & Composition 22005/2000

A14 | Journalism 1 | 0.5sem

Students explore the role of journalists in a free society in terms of journalistic philosophy, ethics, law, and history. They participate and reflect upon all the components of journalism such as design and opinion. This is the foundation course for Newspaper 1 and Yearbook 1.

A17 | Creative Writing | 0.5sem

Creative Writing offers students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. Students study exemplary writing from various genres to obtain a fuller appreciation of the form and craft. Using reading and journal keeping as sources of ideas, students pursue individual interests and develop their talents.

A208 | AP English Language & Composition | 0.5/sem

Students take this course in junior or senior year to study rhetoric, composition, and grammar at the university level. Students analyze authors’ language, detail, style, audience, and patterns of rhetoric. Students complete required reading during the preceding summer. The reading and writing skills honed in this course complement the skills required in AP English Literature and Composition. This course prepares students for the AP exam and for effective reading and writing in college and beyond.

Prerequisites: English 10

A206 | Seminar: AP English Language & Composition | 0.5/sem

This course prepares students who require additional practice, guidance, and experiences beyond those available in their standard AP English Language and Composition course. Students receive assistance in analysis and interpretation of rhetoric, composition, and research, for mastery of language and grammar, and for self-evaluation of their reading and writing. Students also receive additional preparation for the AP exam.

Concurrent enrollment: AP English Language & Composition 22005/2000
A21 | **Academic Writing** 0.5sem

Students learn and practice modes of writing most common to AP and college courses: exposition, argument, on demand, and documented writing. Through frequent practice and guided revision, students improve the unity, coherence, and emphasis in their writing while continuing to develop their mastery of word choice, sentence fluency, and conventions. This course is intended as a preparation or companion course for any AP course.

0102/0801

A06 | **Theatre Arts 1** 0.5sem

This course is a one or two semester elective introduction to theatre as a collaboration among actors, directors, producers, and technicians. It focuses on the process of theatrical production both on and backstage. Students develop body movement, voice, and character; direction; set, costume, light and sound design; and other theatrical skills and knowledge. By applying creative dramatics, using multi-media, performing, and creating a design portfolio, students demonstrate and extend their theatrical skills.

DUAL 05051/0500

A07 | **Theatre Arts 2** 0.5sem

Students specialize in areas of interest and apply this specialty working on production teams to design and perform excerpts from Lapine and Sondheim's Into the Woods. Students form theatre companies within the class to apply their skills to a complete, student-selected, musical script within the class, and to participate in a full production at their school. Theatre Arts 2 meets and exceeds the State of Maryland Essential Learner Outcomes for Theatre.

Prerequisites: Theatre Arts 1

05052/0500

A08 | **Theatre Arts 3** 0.5sem

Theatre Arts 3 allows students to expand their understanding of theatre beyond improvisation and script reading, which are the focuses of Theatre Arts 1 and Theatre Arts 2. In this class students explore the historical aspects of theatre, examine the business side of theatrical production, build portfolios, and prepare for auditions. This class prepares students for the world of theatre beyond acting.

Prerequisites: Theatre Arts 1 and 2

05053/0500

A29 | **Media Production 1** 0.5sem

Media Production 1 surveys the field of television and introduces students to basic studio operations. Students participate in both the business and creative sides of television production: soliciting projects and funding, acting, directing, producing, and applying audio and video techniques.

11103/0802

A30 | **Media Production 2** 0.5sem

Media Production 2 extends and applies knowledge gained in Media Production 1, especially in extending the course beyond television where possible, focusing on media projects, film study, and career exploration.

Prerequisites: Media Production 1

11051/0802

A35 | **Newspaper 1–4** 0.5/sem

Students publish a school newspaper by collaboratively learning and applying the following aspects of production: national criteria, codes of ethics, coverage, writing and editing, graphics, design, publishing software, organization of staff and resources, business operations, and budgeting. Students who elect to take the course more than once refine and expand their knowledge and skills, accept increasing responsibility for production, and assume leadership roles.

Prerequisites: Journalism

DUAL 1102/0801

A40 | **Yearbook 1–4** 0.5/sem

Students publish a yearbook by collaboratively learning and applying the following aspects of production: technology, theme, design, layout, graphics, writing and editing, photography, organization of staff and resources, business operations, and budgeting. They analyze publications using national criteria and develop a code of ethics. Students who elect to take the course more than once refine and expand their knowledge and skills, accept increasing responsibility for production, and assume leadership roles.

Prerequisites: Journalism

11104/0802

A45 | **Literary Magazine 1–4** 0.5/sem

Students study/apply design fundamentals and advanced publishing techniques to create a schoolwide literary magazine with a thematic concept. They evaluate a variety of professional and student media, develop and apply a code of ethics, and create plans to ensure diversity and wide participation. Students who elect to take the course more than once refine and expand their knowledge and skills, accept increasing responsibility for production, and assume leadership roles.

Recommended: Journalism

11104/0801

A51 | **Speech & Debate 1–2** 0.5/sem

Students perform informative and persuasive speaking, practice extemporaneous and oral interpretation skills, collect evidence from authoritative sources, and analyze arguments and strategies as preparation for interscholastic competition culminating in debate. Students develop leadership skills and initiative in competitive speaking. Speech and Debate provides strong background for careers in public relations, law, politics, or communications. Students who elect to take the course for a second semester enhance and deepen their skills in expressive and persuasive speaking.

NCAA 01153/0801

A747 | **Honors Contemporary Voices** 0.5sem

College-bound juniors and seniors analyze issues, perspectives, and author's craft in a range of multicultural works through guided and independent study, seminar and writing. While the subjects may be historical, the voice of each author is decidedly contemporary in that it gives full expression to a frank examination of human sexuality, of violence, and of social and economic status; therefore parents must give written permission to register a student in this course.

Prerequisites: Written Parent Permission, 'Proficient' or 'Advanced' on English HSA, and a "C" or better in English 10

NCAA DUAL 01065/0801
AH1 | **Passing English HSA** 0.5sem
This course provides support and remediation for students who have earned credit for English 9 and English 10, but have not achieved a passing score on the English High School Assessment.

**Prerequisites:** Passing Grades in both English 9 & English 10 plus a non-proficient score on the English HSA

22002/2000

A00 | **English 10 Bridge** No credit
This non-credit course offers students an opportunity to create projects to meet state testing requirements in the areas of Biology, English 10, US Government, and Algebra. Students must meet established criteria to participate in Bridge.

22002/0801

A87 | **Department Aide—English** No credit
English Aide courses offer students the opportunity to assist instructors in preparing and organizing course curricula. Students may provide tutorial or instructional assistance to other students.

01995/2000

W80 | **Read 180 A** 0.5/sem
Read 180/System 44 is a highly differentiated reading intervention that accelerates instruction and allows struggling readers to experience success. The program directly addresses individual needs through adaptive and instructional software, high-interest literature, and direct instruction in reading, writing, and vocabulary skills. This reading intervention is provided for students who have been identified as needing focused and intensive reading instruction in addition to their regular English class. Students are placed in this program only after testing or evaluation.

01066/0803

W82 | **Read 180 B** 0.5/sem
In this course, students continue their work in the Read 180/System 44 program, a highly differentiated reading intervention that directly addresses individual needs through adaptive and instructional software, high-interest literature, and direct instruction in reading, writing, and vocabulary skills. This reading intervention is provided for students who have been identified as needing focused and intensive reading instruction in addition to their regular English class. Students are placed in this program only after testing or evaluation.

01066/0803
English for Speakers of Other Languages (ESOL) courses are designed for English language learners at the newcomer, entering, beginning, and developing, expanding and bridging levels of English proficiency. By incorporating language with content, students are taught, and have ample practice with, the skills they need to meet grade-level standards while being introduced to the academic language needed for school success.

English as a Second Language (ESL) or Speakers of Other Languages (SOL) courses are not acceptable as NCAA Courses; however, advanced ESL or SOL courses may be used, but must be reviewed on a case-by-case basis. Any student who wishes to have advanced ESL courses considered when determining his or her initial eligibility must contact the institution he or she will be attending in order to begin the approval process. Please see your school counselor for assistance.

ESOL and English Course Sequence

- ESOL Levels 1, 2, 3, and/or 4
- English 9
- English 10
- English 11 or 12

ESOL 1 Newcomer 0.5/sem
Newcomer English learners focus on acquisition of social and academic language. Students learn reading and writing strategies and build their oral and listening comprehension skills in English. Additionally, students learn the conventions of basic grammar and punctuation and read a variety of fiction and nonfiction.

Prerequisites: ESOL teacher recommendation
01008/0900

ESOL 1 1.0/sem
Entering or Beginning students are introduced to the basic structures of reading, writing, speaking and listening in English. Students learn to use English appropriately in a range of academic and social situations. They also develop basic reading and writing strategies, expand oral comprehension, and learn initial conventions of grammar and punctuation.

Prerequisites: ESOL Teacher Recommendation
01008/0900

ESOL 2 1.0/sem
English learners in the Developing or Expanding levels focus on the expanding social and academic language skills in listening, speaking, reading and writing. Students become more independent in the writing process by developing narrative, descriptive, technical, and persuasive writing. They also apply reading strategies to a variety of fiction and nonfiction and engage in research activities.

Prerequisites: Completion of ESOL Level 1 or its equivalent
01008/0900

ESOL 3 1.0/sem
English learners in the Expanding or Bridging levels focus on developing proficiency in listening, speaking, reading and writing. Students expand their academic language and examine authentic literature, including novels, short stories, plays, poetry, narratives, and biographies. They also engage in the writing process to develop narrative, descriptive, technical, and persuasive writing. Instruction will expand their use of technology to engage in research.

Prerequisites: Completion of ESOL Level 2 or its equivalent
01008/0900

ESOL 4 0.5/sem
Students focus on mastering the four Language Domains of listening, speaking, reading and writing. Students will receive instruction on the acquisition of social and academic language based on the five WIDA Standards (The Social and Instructional Language, The Language of Language Arts, The language of Mathematics, The Language of Science and The Language of Social Studies). This course also supports and enhances literacy and listening skills necessary for success in the Language Arts, Mathematics, Science and Social Studies content areas. This course is correlated with the Common Core State Standards in conjunction with the WIDA Standards in order to meet high academic standards in content areas. In addition, students will focus on non-fiction reading comprehension and the application of academic language in a variety of content areas. Instruction includes a focus on academic writing, application of research and study skills including the use of technology to complete research projects.

01008/0900
This course is for Level 1 proficiency English learners. ESOL Social Studies 1 is a hands-on, background building Social Studies and language development course for students new to the United States. Students will become familiar with the geography, history, and government of the United States while comparing and contrasting with other countries as well. Content is focused on creating equivalent background knowledge to students who attended elementary and middle school in the United States, and as preparation for U.S. History and Government courses, as well as the Government HSA. This course provides an opportunity to build the capacity of students to understand and share experiential information from both their familial and community backgrounds, as well as build their academic language.

01008/0900

This course is for Level 2 proficiency English learners. ESOL Social Studies 2 is a hands-on, background building Social Studies and language development course for students new to the United States. Students will become familiar with the geography, history, and government of the United States while comparing and contrasting with other countries as well. Content is focused on creating equivalent background knowledge to students who attended elementary and middle school in the United States, and as preparation for U.S. History and Government courses, as well as the Government HSA. This course provides an opportunity to build the capacity of students to understand and share experiential information from both their familial and community backgrounds, as well as build their academic language.

01008/0900
Health Education courses in Anne Arundel County are focused on building health literate students. Health literacy refers to the ability to obtain, interpret, and understand basic health information and services. These courses prepare students to become health literate 21st Century learners as responsible members of society; self-directed learners, effective communicators, critical thinkers and problem solvers.

Core health concepts include: mental and emotional health, alcohol, tobacco and other drugs, personal and consumer health, family life and human sexuality*, safety and injury prevention, nutrition and fitness, and disease prevention and control. Health skills include: analyzing influences, accessing information, communicating effectively, decision making, practicing health-enhancing behaviors, goal setting and advocacy.

Health Graduation Requirement — 0.5 Credit

* A student may be excused from the Human Sexuality Unit upon parental written request. Alternative instructional lessons will be provided for the student.
Mathematics

After completing the required courses of Algebra 1 and Geometry, students may choose from a set of rigorous courses such as Integrated Topics, Algebra 2, Foundations of College Algebra, Pre-Calculus, Advanced Placement Statistics, Advanced Placement Calculus and/or Linear Algebra. The selection of the appropriate mathematics course for each student should be based on individual needs and educational goals.

Mathematics Graduation Requirements — 4 Credits

- Algebra 1
- Geometry
- 2 additional Mathematics courses

Note: A student must be enrolled in a mathematics class each of their high school years. See page 7.

Required Assessments

All students must take and pass the state high school assessment in Algebra.

Please check with your school counselor for the different opportunities to meet the high school assessment requirement.

D00 | Algebra Bridge
---|---
No credit

This non-credit course offers students an opportunity to create projects to meet state testing requirements in the areas of Biology, English 10, US Government, and Algebra. Students must meet established criteria to participate in Bridge.

D09 | Passing the HSA: Algebra 1
---|---
0.5sem

This course provides support and remediation for students who earned credit in Algebra 1 and have not earned a passing score on the Algebra 1/Data Analysis High School Assessment.

D18 | Algebra 1
---|---
0.5 Math & 0.5 Elective/sem

This high school graduation requirement course serves as the gateway for advanced mathematical courses by providing a complete foundation of the topics in exponential equations, data analysis and modeling, quadratic functions and equations, and critical analysis and understanding of functions in comparison to linear functions. Instructional emphasis is placed on connecting the multiple representations of functions and interpreting the representations through applications. Students are required to pass the Maryland High School Assessment for Algebra/Data Analysis at the completion of this course if they have not already successfully fulfilled this requirement in their middle school sequence. Graphing calculator is required. Students will actively engage in hands-on project based learning experiences throughout the course.

Prerequisites: All students registered for this course, must have previously taken Algebra 1 and not earned credit.

D27 | Algebra 1
---|---
0.5/sem

This high school graduation requirement course serves as the gateway for advanced mathematical courses by providing a complete foundation of the topics in exponential equations, data analysis and modeling, quadratic functions and equations, and critical analysis and understanding of functions in comparison to linear functions. Instructional emphasis is placed on connecting the multiple representations of functions and interpreting the representations through applications. Students are required to pass the Maryland High School Assessment for Algebra/Data Analysis at the completion of this course if they have not already successfully fulfilled this requirement in their middle school sequence. Graphing calculator is required. Students will actively engage in hands-on project based learning experiences throughout the course.

Prerequisites: All students registered for this course, must have previously taken Algebra 1 and not earned credit.

D280 | Geometry
---|---
0.5/sem

This course serves as the second course in the advanced mathematical sequence. Students will formalize their geometry experiences from elementary and middle school, using more precise definitions and developing careful proofs; represent problem situations with geometric models; classify figures in terms of congruence and similarity; deduce properties of and relationships between figures from given assumptions; and translate geometric figures to an algebraic coordinate representation and algebraic models; apply right triangles and trigonometry. Through the use of dynamic software, students will gain an understanding of the relationships among mathematical figures and become active participants in the inductive and deductive processes of thinking. Students will actively engage in hands-on project based learning experiences throughout the course. The graphing calculator is used throughout the course.

Prerequisites: Algebra 1

NCAA 02072/1200
This course will review beginning algebra topics such as solving and graphing linear equations and inequalities, manipulation, graphing, and solving quadratic functions. These concepts are imbedded in a variety of real-life situations. This course is designed to serve as a bridge course from Algebra 1 to Algebra 2 by reinforcing concepts and skills necessary for success in Algebra 2.

Prerequisites: Algebra 1 and Geometry credit or concurrent enrollment in Geometry.

Recommended: This course is sequenced between Geometry and Algebra 2.

This course will expand students' knowledge of functions to include polynomial, rational and radical functions. Students will work with expanding features of the functions and draw connections with the experiences of linear, quadratic, and exponential functions. Students will model situations to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Students will build on their experiences to work with trigonometric ratios and functions. This course also has a focus on data and probability distributions. Honors students will be introduced to advanced topics. Graphing calculator is required. Students will actively engage in hands-on project based learning experiences throughout the course.

Recommended: Algebra 1 (C or better) and Geometry credit or concurrent enrollment in Geometry.

This course reviews and extends intermediate and advanced algebra concepts through rigorous manipulation of mathematical concepts. Concepts include systems of equations, polynomial, rational, exponential and logarithmic functions. This course is designed to prepare students for success in the first credit bearing mathematics course in post secondary educational settings.

Recommended: Algebra 2 or Integrated Math

This course will expand students' knowledge of functions to include polynomial, rational and radical functions. Students will work with expanding features of the functions and draw connections with the experiences of linear, quadratic, and exponential functions. Students will model situations to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Students will build on their experiences to work with trigonometric ratios and functions. This course also has a focus on data and probability distributions. Honors students will be introduced to advanced topics. Graphing calculator is required. Students will actively engage in hands-on project based learning experiences throughout the course.

Recommended: Algebra 1 (C or better) and Geometry credit or concurrent enrollment in Geometry.

This course will expand students' knowledge of functions to include polynomial, rational and radical functions. Students will work with expanding features of the functions and draw connections with the experiences of linear, quadratic, and exponential functions. Students will model situations to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Students will build on their experiences to work with trigonometric ratios and functions. This course also has a focus on data and probability distributions. Honors students will be introduced to advanced topics. Graphing calculator is required. Students will actively engage in hands-on project based learning experiences throughout the course.

Recommended: Algebra 1 (C or better) and Geometry credit or concurrent enrollment in Geometry.

This course integrates the study of trigonometry, analytic geometry, and advanced algebraic topics into a logical approach to the solution of real-world problems. This course is a prerequisite for Advanced Placement Calculus. Graphing calculator required. Honor students will be introduced to advanced topics.

Recommended: Algebra 2, C or better

This college level course is the study of differential and integral calculus based on further development of properties and graphs of relations and functions. Students who successfully complete this course will be prepared for the AP Calculus AB test and may be awarded up to one semester of college credit with a successful score. Graphing Calculator required.

Recommended: Algebra 1 (C or better) and Geometry credit or concurrent enrollment in Geometry.
D598 | AP Calculus BC 0.5/sem
This college level course is the study of differentiation and techniques, sequences and series, and vector calculus. Students who successfully complete this course will be prepared to take the AP Calculus BC test and may be awarded up to two semesters of college credit with a successful score. Graphing calculator required.

NCAA 02125/1200

D608 | AP Calculus AB and BC Combined 1.0/sem
AP Calculus AB is a college level course studying differential and integral calculus based on further development of properties and graphs of relations and functions. Through inquiry based learning, students will develop mathematical critical thinking and reasoning skills. AP Calculus BC is a college level course studying differentiation and techniques, sequences, and series, and vector calculus. Through inquiry based learning, students will develop mathematical critical thinking and reasoning skills.

Prerequisites: Successful completion of Pre-Calculus.

NCAA 02125/1200

D315 | Linear Algebra 0.5/sem
This course is the study of finite dimensional vector spaces. Topics include: the solution of systems of linear equations, matrices (inverses, equivalence, rank of symmetric, diagonal and orthogonal), determinants, introduction to vector spaces, linear independence, linear transformations, change of basis, eigenvalues and eigenvectors.

Prerequisites: AP Calculus AB/BC credit with a 3 or higher on the AP Calculus BC exam. Face to face or online in alternate (even school years).

NCAA DUAL 02111/1200

D628 | AP Statistics 0.5/sem
This college level course is a study of the major concepts and tools for collecting, analyzing, and interpreting data. Students who successfully complete this course will be prepared to take the AP Statistics test and may be awarded at least one semester of college credit with a successful score. Graphing calculator required.

NCAA 02203/1200

D626 | Seminar: AP Statistics 0.5/sem
Students will develop their ability to function as independent learners in the AP Statistics course. This course is recommended for students who require additional practice, guidance and experiences beyond those available in the standard AP Statistics course.

22005/1200

D63 | Calculus 3 0.5/sem
Multivariable Calculus presents the main concepts and computational tools of higher dimensional calculus. It is equivalent to a third semester calculus course. The topics include vectors in Euclidean space, vector analysis, analytic geometry of three dimensions, curves in space, partial derivatives, optimization techniques, multiple integrals, vector fields, Green’s theorem, Divergence theorem, and Stokes’ theorem.

Prerequisites: AP Calculus AB/BC credit with a 3 or higher on the AP Calculus BC exam. This course is through Broadcast online learning only offered every other year (odd school years).

NCAA DUAL 02126/1200

D77 | Statistical Analysis 0.5/sem
This project-based course will provide students with real-life experiences with data. Topics include: basic probability models, statistical estimation and testing, descriptive statistics, methods of sampling, sampling distributions, and misleading statistics.

NCAA 02201/1200

D80 | Transition Math 9-12 0.5/sem
High School Transitional Math is a math course to address the gaps in mathematics background for students with interrupted or limited formal education. Key mathematic concepts from grades 2 – Algebra including numbers, operations, decimals, fractions, ratios, percents, number theory, integers, statistics, graphs, tables, and algebraic thinking are embedded with math language development and discourse instruction. Only ESOL students scoring below Algebra readiness on the International Math Assessment are to be scheduled for this course. Students may take this course repeatedly during high school, but only the first two instances of passing this course will count toward math graduation requirements.

02001/1200

D87 | Department Aide—Math No credit
Mathematics Aide courses offer students the opportunity to assist instructors in preparing and/or organizing. Students may provide tutorial or instructional assistance to other students.

02995/2000
Music

The Anne Arundel County high school music program is comprehensive in scope and breadth and is offered for all levels and all interests of students in music. In a world where much importance is being attached to 21st century skills, high school music courses are ideal laboratories for the development and broadening of those skills. Music classes are both rigorous and stimulating and offer students many opportunities for creative, innovative thinking that encourages problem solving and collaboration.

Students are required to earn at least one full credit in Fine Arts by the end of the senior year. Most students begin their high school music study with a performance based course, such as band, orchestra, chorus, vocal ensemble, musical theater, jazz band, guitar, or piano. These performance courses are then offered in subsequent years, with increased rigor and performance opportunities for each level and with an honors option in the student's final year. Music for Life is a broad-based course, designed to focus on the function and value of music in people's lives across cultures. Students will also find the opportunity to explore the science of music and music's unique contribution to history and civilization in Music Theory, Music History and Literature, and Advanced Placement Music Theory. Students may also choose from elective courses like Music Technology and Vocal Technique; classes which extend and reinforce core learning in music.

Students enrolled in their appropriate school performance ensemble have the opportunity to participate in organizations such as All County Ensembles, All State music experiences, solo and ensemble festivals, and other enrichment musical activities.

**Fine Arts Graduation Requirement — 1 Credit**

Courses that meet the Fine Arts requirement can be found in the Art, Dance, English, and Music program sections.

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**DUAL 05108/1300**

**Guitar 1**

This is a performance emphasis course with acoustic guitar as the primary medium. Comprehensive activities in reading, creating and listening to music are included. Students will perform a variety of music literature and styles in ensemble and solo performance. The course title indicates year enrolled. Students will be expected to advance to the next appropriate level of ability in Guitar 1–4.

**DUAL 05108/1300**

**Guitar 2–4**

This course builds on skills learned in Guitar 1 and is a performance emphasis course with acoustic guitar as the primary medium. Comprehensive activities in reading, creating and listening to music are included. Students will perform a variety of music literature and styles in ensemble and solo performance.

**DUAL 05107/1300**

**Piano & Keyboard 1**

This is a performance emphasis course that includes additional comprehensive activities in reading, creating, and listening to music as well as developing an understanding of history, terms, structure and symbols. Students will play a wide repertoire of keyboard music literature alone and in ensembles. Opportunities for public solo or group performance will be available. The course title indicates year enrolled. Students will be expected to advance to the next appropriate level of ability in Piano and Keyboards 1–4.

**DUAL 05107/1300**

**Piano & Keyboard 2–4**

This course builds on skills learned in Piano 1 is a performance emphasis course that includes additional comprehensive activities in reading, creating, and listening to music as well as developing an understanding of history, terms, structure and symbols. Students will play a wide repertoire of keyboard music literature alone and in ensembles. Opportunities for public solo or group performance will be available.

**DUAL 05110/1300**

**Chorus Mixed 1–3**

This course will include individual concepts of vocal production as well as choral techniques appropriate for a large ensemble. A wide repertoire of choral music and experiences will be used for the development of comprehensive musicianship. The course designation indicates year enrolled. Students will be expected to advance to the next appropriate level of ability in Chorus and Vocal Instruction. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

**DUAL 05110/1300**

**Honors Chorus Mixed 4**

This course continues to build on skills learned in Chorus Mixed 1-3 and will include individual concepts of vocal production as well as choral techniques appropriate for a large ensemble. A wide repertoire of choral music and experiences will be used for the development of comprehensive musicianship. The course designation indicates year enrolled. Students will be expected to advance to the next appropriate level of ability in Chorus and Vocal Instruction. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

05110/1300
This course will stress correct vocal production and techniques involving solo singing. It will include sight-singing, the basic fundamentals of music and a wide repertoire of vocal music emphasizing comprehensive musicianship. Students will be expected to master at least one appropriate level in Chorus and Vocal Instruction. Opportunities for performance will be available based on the student’s ability.

F24 | Honors Vocal Ensemble 0.5/sem
This course emphasizes correct vocal production and the choral techniques of ensemble singing. Comprehensive musicianship will be emphasized through a varied vocal repertoire. Students will be expected to master at least one appropriate level in Chorus and Vocal Instruction. Public musical performances will be expected.

F25 | Honors Vocal Instruction 0.5/sem
This course will stress correct vocal production and techniques of solo singing. It will include sight-singing, the basic fundamentals of music and a wide repertoire of vocal music emphasizing comprehensive musicianship. Students will be expected to master at least one appropriate level in Chorus and Vocal Instruction. Public musical performances will be expected.

F26 | Chorus—Female 0.5/sem
This course will stress correct vocal production and techniques involving the female voice. Comprehensive musicianship will be emphasized through a study of varied repertoire appropriate to female voice ranges. Students will be expected to master at least one appropriate level in Chorus and Vocal Instruction. Public musical performances will be expected.

F27 | Chorus—Male 0.5/sem
This course will stress correct vocal production and techniques involving the male voice. Comprehensive musicianship will be emphasized through a study of varied repertoire appropriate to male voice ranges. Students will be expected to master at least one appropriate level in Chorus and Vocal Instruction. Public musical performances will be expected.

F50 | Instrumental Instruction: Strings 0.5/sem
Small group instruction is provided for students desiring to acquire skill in playing string instruments. Good tone production, instrumental techniques, sight-reading, and basic fundamentals of music are emphasized. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F51 | Instrumental Instruction: Woodwind 0.5/sem
Small group instruction is provided for students desiring to acquire skill in playing woodwind instruments. Good tone production, instrumental techniques, sight-reading, and basic fundamentals of music are emphasized. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F52 | Instrumental Instruction: Brass 0.5/sem
Small group instruction is provided for students desiring to acquire skill in playing brass instruments. Good tone production, instrumental techniques, sight-reading, and basic fundamentals of music are emphasized. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F53 | Instrumental Instruction: Percussion 0.5/sem
Small group instruction is provided for students desiring to acquire skill in playing percussion instruments. Good tone production, instrumental techniques, sight-reading, and basic fundamentals of music are emphasized. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F54 | Instrumental Instruction: Mixed 0.5/sem
Small group instruction is provided for students desiring to acquire skill in playing string, woodwind, brass, and percussion instruments. Good tone production, instrumental techniques, sight-reading, and basic fundamentals of music are emphasized.

F59 | Instrumental Instruction: Mixed 0.5/sem
Small group instruction is provided for students desiring to acquire skill in playing string, woodwind, brass, and percussion instruments. Good tone production, instrumental techniques, sight-reading, and basic fundamentals of music are emphasized.

F60 | Instrumental Ensemble: Strings 0.5/sem
This course emphasizes good tone production, balance, and interpretation of music within a small group. Comprehensive musicianship is emphasized through a study of varied instrumental repertoire. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F61 | Instrumental Ensemble: Woodwind 0.5/sem
This course emphasizes good tone production, balance, and interpretation of music within a small group. Comprehensive musicianship is emphasized through a study of varied instrumental repertoire. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F62 | Instrumental Ensemble: Brass 0.5/sem
This course emphasizes good tone production, balance, and interpretation of music within a small group. Comprehensive musicianship is emphasized through a study of varied instrumental repertoire. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

F63 | Instrumental Ensemble: Percussion 0.5/sem
This course emphasizes good tone production, balance, and interpretation of music within a small group. Comprehensive musicianship is emphasized through a study of varied instrumental repertoire. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.
This course provides an opportunity for students who have reached the necessary degree of maturity in playing an orchestral, string, wind, or percussion instrument to perform in a group. Development of comprehensive musicianship will be emphasized through a wide repertoire of original string and orchestra literature, transcriptions, and arrangements. The course title indicates the year enrolled. Students will be expected to advance to the next appropriate level of ability in Performance Competencies for Instrumental Music: Strings. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

05104/1300

This course provides an opportunity for students who have reached the necessary degree of maturity in playing a wind or percussion instrument to perform in a group and as a soloist. Development of comprehensive musicianship will be emphasized through a wide repertoire of original band literature, transcriptions, and arrangements. The course title indicates the year enrolled. Students will be expected to advance to the next appropriate level of ability in Performance Competencies for Instrumental Music. After school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year varies by school.

05101/1300

This course will provide students with an introduction and study of basic music technology applications. Students will be introduced to the creative use of music technology and the fundamentals of music using synthesizers, computers, Musical Instrumental Digital Interface (MIDI) keyboards, sequencers, and the appropriate software. The course will be taught within a hands-on framework and will allow students to allow students to create their own compositions. Students will also develop skills with sequencing, recording, notation, and other music software.

05149/1300
This high school course is offered to students who wish to pursue the study of music theory in a course equivalent to a college introductory course in music theory. This is a college level course designed to earn college level credit for those students scoring at an acceptable level on the College Board Examination. Students will study all interval, scale, and triad forms, notation, simple acoustics, tuning and temperament, and structures of music. Students will study part-writing and harmonic progressions in tonal music with a strong emphasis given to listening skills, particularly those involving recognition and comprehension of compositional techniques. Sight singing, ear training, and creating through composing and arranging are also components of the course.

Prerequisites: Honors Music Theory

Department Aide—Music

Fine and Performing Arts Aide courses offer students the opportunity to assist instructors in preparing and/or organizing. Students may provide tutorial or instructional assistance to other students.

Fine and Performing Arts Aide courses offer students the opportunity to assist instructors in preparing and/or organizing. Students may provide tutorial or instructional assistance to other students.
Physical Education

Physical education classes provide opportunities for students to improve lifelong health, fitness, and activity related skills. Physical education presents information that challenges students to improve personal fitness levels and to participate in individual and team activities. All courses focus on the development and the maintenance of a healthy and actively fit individual which can be measured by the Healthy Fitness Zone component of Fitnessgram. Physical education is an essential component in the education of the whole child by linking cognitive knowledge to physical activity and social interaction.

Students are required to earn at least one full credit of physical education course by the end of their senior year. Fitness for Life, the required high school physical education class, is the foundation of individual lifetime fitness information. Additional courses are offered to support and extend individual fitness goals and interests. Personal fitness elective courses include aerobics, strength and conditioning, and walking. Sport oriented elective courses are offered in lifetime and team sports. A variety of dance courses also satisfy the physical education requirements for graduation (see Dance).

All students are expected to wear appropriate uniform attire during physical education classes for the purpose of ensuring the safety and hygiene of each participant. This practice continues to be an important component of the physical education program.

Physical Education Graduation Requirements — 1 Credit

- Fitness for Life
- Physical Education or Dance Elective

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>L01</td>
<td>Adaptive Physical Education</td>
<td>0.5sem</td>
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<tr>
<td></td>
<td>These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.</td>
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<tr>
<td>08007/1500</td>
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<tr>
<td>L07</td>
<td>Gymnastics 1</td>
<td>0.5/sem</td>
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<td></td>
<td>Gymnastics courses are designed to help students develop knowledge and skills in gymnastics, stunts, and tumbling while emphasizing safety. Floor gymnastics may be supplemented by the use of gymnastic equipment such as balance beam, uneven bars, parallel bars, rings, and so on. Gymnastic courses may include other components such as the history of gymnastics and conditioning.</td>
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<tr>
<td>08008/1500</td>
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<tr>
<td>L08</td>
<td>Gymnastics 2–4</td>
<td>0.5/sem</td>
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<td>Gymnastics 2, 3, 4 continues the development of tumbling skills and use of gymnastics apparatus with an emphasis on routines for performance to reflect skill, innovation, and creativity. Self-evaluation of performance also increases. Knowledge of related anatomical, physiological, and biomechanical concepts is enhanced. Includes more advanced tumbling and apparatus skills.</td>
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<tr>
<td>08008/1500</td>
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<tr>
<td>L14</td>
<td>Lifetime Sports 1</td>
<td>0.5/sem</td>
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<td></td>
<td>Recreation sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one recreational sport or outdoor pursuit (such as adventure activities, croquet, Frisbee, wall climbing, bocce ball, fishing, hiking, cycling, and so on).</td>
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<tr>
<td>08004/1500</td>
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<tr>
<td>L15</td>
<td>Lifetime Sports 2–4</td>
<td>0.5/sem</td>
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<td></td>
<td>Lifetime Sports 2, 3, 4 extends student experiences in leisure activities throughout life and allows the their to refine skills in multiple sport offerings. Students increase knowledge and proficiency in all sport and leisure activities.</td>
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<td>08004/1500</td>
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<tr>
<td>L35</td>
<td>Recreation &amp; Leadership Training</td>
<td>0.5sem</td>
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<td></td>
<td>This course includes activities and training to equip students for employment in recreational areas. It includes games, arts and crafts, child growth and development, officiating techniques and tournament organization. The course could lead to a career in physical education, recreation, or athletics.</td>
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<tr>
<td>08055/1500</td>
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<tr>
<td>L37</td>
<td>Team Sports 1</td>
<td>0.5/sem</td>
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<td></td>
<td>Students will learn rules, terms, historical background and basic skills for a variety of sports. The student will be able to understand team strategy in a competitive situation.</td>
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<tr>
<td>08002/1500</td>
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<tr>
<td>L37--1</td>
<td>Team Sports Baseball 1</td>
<td>0.5/sem</td>
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<td></td>
<td>Students will learn rules, terms, historical background and basic skills of baseball. The student will be able to understand team strategy in a competitive situation.</td>
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<tr>
<td>08013/1500</td>
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</tbody>
</table>
Students will learn rules, terms, historical background and basic skills of basketball. The student will be able to understand team strategy in a competitive situation.

08013/1500

Students will learn rules, terms, historical background and basic skills of football. The student will be able to understand team strategy in a competitive situation.

08013/1500

Students will learn rules, terms, historical background and basic skills of lacrosse. The student will be able to understand team strategy in a competitive situation.

08013/1500

Students will learn rules, terms, historical background and basic skills of soccer. The student will be able to understand team strategy in a competitive situation.

DUAL 08013/1500

Students will learn rules, terms, historical background and basic skills of volleyball. The student will be able to understand team strategy in a competitive situation.

08013/1500

Students will improve their knowledge of game rules and basic skills of football through the refinement of participation and increase depth of knowledge team strategies. Students will increase their experience in teamwork through competitive situations in addition to experiencing coaching and officiating opportunities.

08013/1500

Students will improve their knowledge of game rules and basic skills of lacrosse through the refinement of participation and increase depth of knowledge team strategies. Students will increase their experience in teamwork through competitive situations in addition to experiencing coaching and officiating opportunities.

08013/1500

Students will improve their knowledge of game rules and basic skills of soccer through the refinement of participation and increase depth of knowledge team strategies. Students will increase their experience in teamwork through competitive situations in addition to experiencing coaching and officiating opportunities.

08013/1500

Students will improve their knowledge of game rules and basic skills of volleyball through the refinement of participation and increase depth of knowledge team strategies. Students will increase their experience in teamwork through competitive situations in addition to experiencing coaching and officiating opportunities.

08013/1500

This course is an introduction to the life-time wellness activity of walking. It will provide students with an understanding of the importance that nutrition and exercise has on the pursuit of healthy living. Students will log their effort. Various activities are embedded throughout the course which engage the learner and increase participation.

08002/1500

This course extends the student’s opportunity for participating in the life-time wellness activity of walking. It increases the distances required to satisfy the curriculum and provides students with nutritional information consistent with healthy living. It provides students with goals that require a commitment to physical fitness in pursuit to healthy living.

08005/1500

Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

DUAL 08052/1500
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits/SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>L57</td>
<td><strong>Aerobics and Personal Fitness 2</strong></td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>This course provides students with opportunities to develop optimal levels of physical fitness and to acquire knowledge of the physical fitness components.</td>
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<td>08052/1500</td>
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<tr>
<td>L58</td>
<td><strong>Strength &amp; Conditioning 1</strong></td>
<td>0.5/sem</td>
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<td></td>
<td>Students are engaged in an individualized program designed to incorporate physical fitness components and improve physical condition. Weight room procedures and safety precautions are stressed in this beginning level course. Students will focus on technique rather than the amount of weight lifted.</td>
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<td>[DUAL] 08009/1500</td>
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<tr>
<td>L59</td>
<td><strong>Strength &amp; Conditioning 2–4</strong></td>
<td>0.5/sem</td>
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<td></td>
<td>Students will continue a systematic training program to refine techniques for strength and conditioning. Students will have an opportunity to develop greater strength and to design, with instructor assistance, an individualized strength and conditioning program.</td>
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<td>08009/1500</td>
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<tr>
<td>L72</td>
<td><strong>Sports Medicine</strong></td>
<td>0.5sem</td>
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<td>Sports Medicine emphasizes multi-sensory activities, problem solving, interdisciplinary linkages, and provides knowledge of the impact and significance of health and physical education technology in a modern world. Sports Medicine incorporates awareness and exploration of careers in health, sports, and recreational technology.</td>
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<td>[DUAL] 08055/1500</td>
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<tr>
<td>L82</td>
<td><strong>Fitness for Life</strong></td>
<td>0.5sem</td>
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<td>Students beginning their high school physical education experience will be introduced to the components of fitness and shown the relationship of physical fitness to total well being. Students will discover a variety of activities which can be pursued during high school and throughout their lifetime.</td>
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<td>08001/1500</td>
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<tr>
<td>L87</td>
<td><strong>Department Aide—Physical Education</strong></td>
<td>No credit</td>
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<tr>
<td></td>
<td>Physical Education Aide courses offer students the opportunity to assist instructors in preparing and organizing course curricula. Students may provide tutorial or instructional assistance to other students.</td>
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<td>08995/2000</td>
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Science

Scientific literacy has become a necessity. Everyone needs to use scientific information to make choices that arise in everyday life. In the workplace, jobs demand advanced skills, requiring people to learn, reason, think critically, make decisions, and solve problems. Understanding science and the processes of science contributes to students learning these skills in an essential way (National Research Council, 1996).

Students who have successfully completed Algebra 1 in grade 8 can enroll in Honors Biology in grade 9. Students who have successfully completed STEM Math 8, earned an A or B in Science, and Language Arts and scored Advanced in the corresponding MSA or PARCC assessments may enroll in Standard Biology in grade 9. After successful completion of Biology, students should enroll in the core lab-based courses (Chemistry, Earth/Space Science, and Physics). Students may also choose from elective courses, which have a particular science focus and extend and reinforce core learning.

AACPS offer a full complement of advanced placement science courses—AP Biology, AP Chemistry, AP Physics 1, AP Physics 2, AP Physics C and AP Environmental Science. Students do not need an introductory physics course to enroll in AP Physics 1. Students may go directly to AP Physics 1 as their first physics course in high school if the math requirements have been satisfied.

Following the College Board Recommendations, Advanced Placement Physics 1 and 2 have been added to the course options. AP Physics 1 is equivalent to a first-semester college course in algebra-based physics. AP Physics 2 is equivalent to a second-semester college course in algebra-based physics. (See the course descriptions for more detail.)

Dissection is one of the many instructional methods that may be used in high school science. Students may request one of the alternatives to dissection in these classes. Alternatives may include such materials as videotapes, charts, diagrams, and textbook overlays.

Science Graduation Requirements — 3 Credits

- One credit in Biology
- Two laboratory science credits in the areas of Chemistry, Earth Space Science, or Physics

Required Assessments

All students must pass the state High School Assessment (HSA) in Biology.

Please check with your school counselor for the different opportunities to meet the High School Assessment requirement.

C00 | Biology Bridge
No credit
This non-credit course offers students an opportunity to create projects to meet state testing requirements in the areas of Biology, English 10, US Government, and Algebra. Students must meet established criteria to participate in Bridge.
22002/2000

C01 | Honors Pre-Engineering
0.5/sem
In engineering students apply the principles of physics to everyday life. Students use mathematics to study motion, forces, energy and other concepts of physics. This program is available at the Centers of Applied Technology North and South.
Prerequisites: Algebra 1 and Biology
03153/1607

C09 | Passing HSA: Biology
0.5/sem
This course is for students who earned credit in Biology but did not pass the Biology High School Assessment. It is designed to help students pass the HSA.
03994/1601

C24 | Matter and Energy
0.5/sem
Students learn the composition and behavior of matter, and how matter and energy are related. Students develop projects to understand how science applies to the real world. Matter and Energy is a foundation for all science courses.
NCAR 03159/1606

C260 | Biology
0.5/sem
Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. Project-based learning allows students to connect learning to the real world. Biology is a graduation requirement for all students. Students enrolled in Biology must take and pass the High School Assessment in Biology.
NCAR 03051/1601

C264 | Biology (Daily)
0.5 Science & 0.5 Elective/sem
Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. Project-based learning allows students to connect learning to the real world. The Biology curriculum incorporates the Essential Knowledge and Performance Expectations described by the College Board to prepare students for success in Advanced Placement Biology. In Biology, students complete a research project, either independently, or as part of a team in order to gain additional experience with the practices of science. Biology is a graduation requirement for all students. Students enrolled in Biology must take and pass the High School Assessment in Biology.
NCAR 03051/1601

C267 | Honors Biology
0.5/sem
Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. Project-based learning allows students to connect learning to the real world. The Honors Biology curriculum incorporates the Essential Knowledge and Performance Expectations described by the College Board to prepare students for success in Advanced Placement Biology. In Honors Biology, students complete a research project, either independently, or as part of a team in order to gain additional experience with the practices of science. Biology is a graduation requirement for all students. Students enrolled in Biology must take and pass the High School Assessment in Biology.
NCAR 03051/1601
C30 | Earth/Space Systems Science 0.5/sem
Earth and Space Science courses introduce students to the study of the earth from a local and global perspective. Earth/Space Systems Science is a study of Earth—a complex and dynamic 4.6-billion-year-old system of rock, water, air, and life. A partnership with the NASA Goddard adds richness to the learning activities.
Prerequisites: Biology
NCAA 03008/1603

C33 | Forensic Science: CSI 0.5sem
Students use the principles of science, technology, and mathematics to investigate crime scenes. Students collect and analyze physical evidence. This course builds on a basic knowledge of biology, physical science, and computer technology. Because of the mature nature of crime scene subject matter, this course is recommended for upper classmen.
Prerequisites: Biology
NCAA 15053/0210

C36 | General Botany 0.5sem
Botany courses provide students with an understanding of plants, their life cycles, and their evolutionary relationships. Students study the specialized structures unique to plants. The lab portion emphasizes plant production and cultivation.
Prerequisites: Biology
NCAA DUAL 03058/1604

C41 | Honors Zoology 0.5/sem
Zoology courses provide students with an understanding of animals, the niche they occupy in their environment or habitat, their life cycles, and their evolutionary relationships to other organisms. In this course, students study the organisms of the animal kingdom. Students study animal systems through dissection and comparative analysis. Students who are opposed to laboratory dissection should consider choosing an alternate science course.
Prerequisites: Biology and concurrent enrollment in Chemistry
NCAA 03061/1603

C428 | AP Biology 0.5/sem
In AP Biology students develop a framework for biology and study biology by using the processes of science. This course focuses on broad concepts of biology and lab investigation. It is the equivalent of an introductory college biology course and prepares students for the Advanced Placement Test in Biology and the opportunity to earn college credit.
Prerequisites: Biology and Chemistry
NCAA 03056/1601

C426 | Seminar: AP Biology 0.5/sem
Students focus on enhancing the science skills and concepts that will support success in AP Biology, AP Chemistry, or AP Physics. This course is for students who need additional practice in the methods of scientific inquiry and mathematics to analyze core science concepts or for students taking an AP Science course for the first time. Students take the seminar course that corresponds to their specific AP course.
NCAA 22005/2000

C40 | Human Anatomy Physiology 0.5/sem
This course presents an in-depth study of the human body and examines all major systems, tissues, and muscle groups in the human body to help students understand how these systems interact and their role in maintaining homeostasis. In this rigorous course, students build on prior knowledge of the human body to investigate the role of systems from a chemical and physical perspective. Activities may involve animal dissection.
Prerequisites: Biology
NCAA DUAL 03051/1604

C450 | Chemistry 0.5/sem
Chemistry courses involve studying the composition, properties, and reactions of substances. Students learn how atoms combine to create all matter in the Universe. Students learn about states of matter and the structure of the atom. Each Chemistry unit ends with a project to allow students to apply their learning to how chemistry is used in the real world. Students use mathematics practices and computation to analyze chemical processes.
Prerequisites: Algebra 1 and Biology
NCAA 03010/1602

C457 | Honors Chemistry 0.5/sem
Chemistry courses involve studying the composition, properties, and reactions of substances. Students learn how atoms combine to create all matter in the Universe. Students learn about states of matter and the structure of the atom. Honors Chemistry uses Essential Knowledge and Performance Expectations from the College Board Standards to prepare students for Advanced Placement Chemistry. Each Chemistry unit ends with a project to allow students to apply their learning to how chemistry is used in the real world. Students use mathematics practices and computation to analyze chemical processes. Students enrolled in Honors Chemistry complete an independent or team research project based on science or engineering practices and the cross-cutting concepts that apply across all science disciplines.
Prerequisites: Algebra 1 and Biology
NCAA 03010/1602

C498 | AP Chemistry 0.5/sem
AP Chemistry is the equivalent of a general chemistry course taken the first year of college. Students learn chemical principles and use mathematics to solve chemistry problems. AP Chemistry prepares students for the Advanced Placement Test in chemistry and the opportunity to earn college credit.
Prerequisites: Chemistry, Concurrent enrollment in Algebra 2
NCAA 03010/1602
Students focus on enhancing the science skills and concepts that will support success in AP Biology, AP Chemistry, or AP Physics. This course is for students who need additional practice in the methods of scientific inquiry and mathematics to analyze core science concepts or for students taking an AP Science course for the first time. Students take the seminar course that corresponds to their specific AP course. Concurrent enrollment in the related AP science course

2005/2000

Students use the scientific method to solve problems. Students develop skills in designing experiments, collecting, and analyzing data. Students work individually or as part of a team to complete a research project and enter the project in a science competition.

Prerequisites: Concurrent enrollment in Honors Biology or successful completion of Biology

NCAA 03211/1604

This course continues independent research in Science with a focus on Engineering. Students will work in a small group to design a new or technology according to the ExploraVision competition.

Prerequisites: Science Research 1

NCAA 03211/1604

Students complete an off-campus research project in an academic, government, or corporate laboratory during the spring of the junior year or the summer between the junior and senior year. Students will do research in a lab working on their project during spring and summer. Each student will seek a mentor to guide his or her research project. The mentorship will be in a STEM area. Students should take this course in the fall of their junior year.

Prerequisites: Science Research 2

NCAA 03211/1604

Students return to school as seniors prepared to write a scientific paper based on the work completed in the laboratory mentorship. Students will enter one or more available STEM competitions to share their research with peers and community members.

Prerequisites: Science Research 3

NCAA 03211/1604

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. Students use the instruments of science and principles of mathematics to learn how matter and energy behave. Topics include forces, electricity and magnetism, heat, waves, and theories of modern physics. Each unit concludes with a real world project to help students make connections between what they study and how physics applies in the real world.

Prerequisites: Algebra 1 and Biology

NCAA 03151/1607
C598 | **AP Physics C** 0.5/sem

Students learn the principles of physics equivalent to a second-semester college course in calculus-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. This course prepares students for the Advanced Placement Tests in AP Physics C and the opportunity to earn college credit.

**Prerequisites:** Calculus or concurrent enrollment in Calculus

C596 | **Seminar: AP Physics C** 0.5/sem

Students focus on enhancing the science skills and concepts that will support success in AP Biology, AP Chemistry, or AP Physics. This course is for students who need additional practice in the methods of scientific inquiry and mathematics to analyze core science concepts or for students taking an AP Science course for the first time. Students take the seminar course that corresponds to their specific AP course.

**Prerequisites:** Concurrent enrollment in the related AP science course

C65 | **Environmental Science** 0.5sem

Environmental Science courses examine the mutual relationships between organisms and their environment. This course answers the question, how do living things in an ecosystem get the materials and energy they need? Students learn about the impact of living things on the environment and the impact of the environment on living things.

**Prerequisites:** Biology

C668 | **AP Environmental Science** 0.5/sem

In this course students evaluate environmental issues, and examine alternative solutions for resolving and/ or preventing them. This course prepares students for the Advanced Placement Test in Environmental Science and the opportunity to earn college credit.

**Prerequisites:** Biology and Concurrent enrollment in Chemistry

C75 | **Oceanography** 0.5sem

In this course students use the principles of chemistry and physics to study the oceans. Students investigate the materials and physical processes that have shaped oceans.

**Prerequisites:** Biology

C80 | **Astronomy** 0.5sem

Astronomy courses offer students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. Students learn about the large-scale structure of the universe, the history of the universe, and what scientists think will be the fate of the universe.

**Prerequisites:** Biology

C81 | **Marine Biology** 0.5sem

Students use scientific skills and processes to study the marine world. Students analyze marine organisms and their environment, including the Chesapeake Bay and its tributaries.

**Prerequisites:** Biology

C87 | **Department Aide—Science** 0.5/sem

Science Aide courses offer students the opportunity to assist instructors in preparing and/or organizing. Students may provide tutorial or instructional assistance to other students.

03995/2000
Social Studies courses draw upon the wealth of information and insight to be found in anthropology, history, psychology, economics, geography, political science, and sociology. The curriculum encourages students to apply the lessons of the past to the problems of the present, and to utilize investigation and problem-solving techniques to become vital participants in shaping and directing the future of our local, national, and world communities.

Social Studies Graduation Requirements — 3 Credits

- History of the United States or AP United States History
- World History or AP World History
- U.S. Government or AP U.S. Government and Politics

Required Assessments

All students, upon completion of U.S. Government or AP U.S. Government and Politics must take the HSA in Government.

Students who entered grade 9 in 2013-14 or later must pass the HSA in Government.

B00 | US Government Bridge
--- | ---
No credit
This non-credit course offers students an opportunity to create projects to meet state testing requirements in the areas of Biology, English 10, US Government, and Algebra. Students must meet established criteria to participate in Bridge.

22002/2000

B01 | Maryland History
--- | ---
0.5sem
Students will examine political, economic and social events of Maryland from the colonial period to the present. This course is recommended for students interested in exploring American studies in detail.

NCAA 04105/1703

B09 | Passing the HSA: U.S. Government
--- | ---
0.5/sem
This course is for students who earned credit in U.S. Government but did not pass the U.S. Government HSA. It is designed to help students pass the high school assessment.

0000/1704

B11 | Honors Humanities
--- | ---
0.5sem
Students will study the art, literature, music and philosophy of European culture from the Classical Age through the Modern Era. Students will examine major works from the performing arts, fine arts, literature and philosophy and consider how these works were influenced by their historical, political and economic settings. This course is recommended for students interested in exploring global studies in detail.

NCAA 04063/1706

B201 | History of the US
--- | ---
0.5/sem
Students will concentrate on the historical period from the Reconstruction to the present. Students will use problem solving and critical thinking skills to identify major issues of the period and analyze their importance to us today. Topics of special interest will include the Depression, the Civil Rights Movement, the changing role of women, Vietnam, Watergate and Reaganomics, and the end of the Cold War. In this course, students will be expected to read and analyze primary source documents, including works of art, literature and music.

NCAA DUAL 04103/1703

B207 | Honors History of the US
--- | ---
0.5/sem
Students will concentrate on the historical period from the Reconstruction to the present. Students will use problem solving and critical thinking skills to identify major issues of the period and analyze their importance to us today. Topics of special interest will include the Depression, the Civil Rights Movement, the changing role of women, Vietnam, Watergate and Reaganomics, and the end of the Cold War. In this course, students will be expected to read and analyze primary source documents, including works of art, literature and music.

NCAA 04103/1703

B290 | World History
--- | ---
0.5/sem
Students will explore significant historical events and cultures in world history with an emphasis on understanding themes and analyzing historical evidence found among and between world civilizations. In order to understand the dynamics of modern world history and current global events, students will develop an understanding of how people have historically interacted economically, politically, culturally and militarily. Students will be expected to read and analyze primary source documents including works of art, literature and music in this course.

NCAA 04051/1703
Students will explore significant historical events and cultures in world history with an emphasis on understanding themes and analyzing historical evidence found among and between world civilizations. In order to understand the dynamics of modern world history and current global events, students will develop an understanding of how people have historically interacted economically, politically, culturally, and militarily. Students will be expected to read and analyze primary source documents including works of art, literature, and music in this course.

**NCAA 04051/1703**

**B318 | AP World History** 0.5/sem

Students will develop greater understanding of the evolution of global processes and interaction through their study of world history from 1 C.E./A.D. to the present. The course highlights the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. This course prepares students for the Advanced Placement exam in World History. The successful completion of this course will meet the graduation requirement for world history. This course is recommended for students interested in exploring global studies in detail.

**NCAA 04057/1703**

**B316 | Seminar: AP World History** 0.5/sem

Students will develop their ability to function as independent learners in the Advanced Placement World History course. This course is recommended for students who require additional practice, guidance, and experiences beyond those available in the standard AP World History course or for students taking an AP Social Studies course for the first time.

**22005/2000**

**B328 | AP U.S. Government & Politics** 0.5/sem

This course provides students with an analytical perspective on government and politics of the United States. This course will prepare students for the Advanced Placement exam in U.S. Government and Politics. Students may take this course to meet the graduation requirement in U.S. Government and the opportunity to earn college credits. This course is recommended for students interested in exploring government, law, and leadership and American studies in detail.

**NCAA 04157/1704**

**B326 | Seminar: AP U.S. Government & Politics** 0.5/sem

Students will develop their ability to function as independent learners in the Advanced Placement U.S. Government and Politics course. This course is recommended for students who require additional practice, guidance, and experiences beyond those available in the standard AP U.S. Government and Politics course or for students taking an AP Social Studies course for the first time.

**22005/2000**

**B380 | US Government** 0.5/sem

Students will study the structure and functions of government and politics in the United States, analyze the role of the U.S. government in world affairs, and how democratic principles and practices have evolved by studying Supreme Court cases, and civil and criminal law. They will investigate critical public issues, and apply what they have learned about government to the solving of real-world problems in their community-earning 20 hours toward their service learning graduation requirement.

**NCAA 04151/1704**

**B387 | Honors US Government** 0.5/sem

Students will study the structure and functions of government and politics in the United States, analyze the role of the U.S. government in world affairs, and how democratic principles and practices have evolved by studying Supreme Court cases, and civil and criminal law. They will investigate critical public issues, and apply what they have learned about government to the solving of real-world problems in their community-earning 20 hours toward their service learning graduation requirement.

**NCAA 04151/1704**

**B41 | Honors Social Issues** 0.5sem

Students will analyze the causes of social problems which impact United States society. Issues of special concern will include the role of the family, crime, poverty, healthcare, and civil rights.

**NCAA DUAL 04259/1707**

**B42 | AP Comparative Government & Politics** 0.5/sem

Students will examine the models used to interpret political relationships and institutions found in national politics around the world in order to apply them to specific countries and their governments. This course will prepare students for the AP examination in Comparative Government and Politics and the opportunity to earn college credits. This course is recommended for students interested in exploring government, law, and leadership and American studies in detail.

**NCAA 04158/1704**

**B43 | Honors Constitutional History & Law** 0.5sem

Students will study significant Supreme Court cases in U.S. history for a better understanding of how the Constitution protects the liberties and rights of the people. Current issues being heard by the Supreme Court will be analyzed. This course is recommended for students interested in exploring government and law in detail.

**NCAA 04166/1703**

**B45 | Criminal Justice** 0.5sem

In this course, students will investigate issues of crime and justice, the police, the courts, corrections, and juvenile justice. This course is recommended for students interested in exploring government, law, and leadership in detail.

**NCAA 15051/1707**

**B498 | AP European History** 0.5/sem

Students will study the achievements and accomplishments of European civilization. Students will be expected to analyze issues in class and to be able to express their thoughts in a logical manner, both orally and in writing. This course will prepare students for the Advanced Placement exam in European History and the opportunity to earn college credits. This course is recommended for students interested in exploring global studies in detail.

**NCAA 04056/1703**

**B496 | Seminar: AP European History** 0.5/sem

Students will develop their ability to function as independent learners in the Advanced Placement Modern European History course. This course is recommended for students who require additional practice, guidance, and experiences beyond those available in the standard AP European History course or for students taking an AP Social Studies course for the first time.

**22005/2000**
Students will study United States history from the colonial period to the present. Students will be expected to analyze issues in class and to be able to express their thoughts in a logical manner both orally and in writing. The successful completion of this course will meet the graduation requirement for United States History. This course will prepare students for the Advanced Placement exam in U.S. History and the opportunity to earn college credits.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>B508</td>
<td>AP US History</td>
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</table>

In this course, students study the behavior of human beings. This includes the facts, principles, and phenomena associated with each of the major subfields in psychology. Students are expected to analyze issues in class and to be able to express their thoughts in a logical manner, both orally and in writing. This course will prepare students for the Advanced Placement exam in Psychology and the opportunity to earn college credits.

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>B61</td>
<td>AP Psychology</td>
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</tbody>
</table>

Students will develop their ability to function as independent learners in the Advanced Placement United States History course. This course is recommended for students who require additional practice, guidance and experiences beyond those available in the standard AP United History course or for students taking an AP Social Studies course for the first time.

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<tbody>
<tr>
<td>B506</td>
<td>Seminar: AP US History</td>
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</table>

Macroeconomics includes the study of national income and price determination, and economic performance measures, economic growth, and international economics. Students will be expected to analyze issues in class and to be able to express their thoughts in a logical manner both orally and in writing. This course will prepare students for the Advanced Placement Examination in Macroeconomics and the opportunity to earn college credits.

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<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>B51</td>
<td>AP Economics—Macro</td>
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</table>

Microeconomics includes the study of the principles of economics that apply to the functions of individual decision-makers, both consumers and producers, within the larger economic system; and the role of government in promoting greater efficiency and equity in the economy. Students will be expected to analyze issues in class and to be able to express their thoughts in a logical manner both orally and in writing. This course will prepare students for the Advanced Placement Examination in Microeconomics and the opportunity to earn college credits.

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<tr>
<td>B52</td>
<td>AP Economics—Micro</td>
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Students will study the principles of economics, including the concept of choice, supply and demand and the relationship of labor and management. Students will also develop an understanding of the role of government and international economic interdependence.

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<tr>
<td>B56</td>
<td>Honors Economics</td>
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Students will learn the research methods in psychology used to understand human behavior and development. They will learn about the physical systems of the body and how they affect emotions and behaviors as well as learning theories and social interaction.

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<tr>
<td>B59</td>
<td>General Psychology</td>
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Students will study people and their interactions with others. They will discuss self concept, develop an understanding of how people function as individuals and as members of groups, and understand the impact of social institutions.

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<th>Course</th>
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<tbody>
<tr>
<td>B60</td>
<td>Psychology of the Individual</td>
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Prerequisites: General Psychology

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<tbody>
<tr>
<td>B69</td>
<td>Honors Comparative Religions</td>
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</table>

This course is for students with a strong interest in world affairs. Students will examine the actions of nations and analyze responses to these actions. Students will also recognize that decision-making is based on accurate information and knowledge of how to deal with particular world situations. This course is recommended for students interested in exploring global studies in detail.

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<tr>
<td>B70</td>
<td>Honors International Relations</td>
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</table>

Students will study the beliefs of the world’s five major religious groups: Judaism, Christianity, Buddhism, Hinduism and Islam. They will analyze similarities and differences among the beliefs and practices of these world religions. Students will be required to read primary source material, including religious texts, in this course. This course is recommended for students interested in exploring global studies in detail.

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<th>Course</th>
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<tbody>
<tr>
<td>B718</td>
<td>AP Human Geography</td>
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Students investigate the nature, perspective and methods of geography, population, cultural patterns and processes, use maps and spatial data sets; define regions and evaluate the regionalization process; and characterize and analyze changing interconnections among places. This course will prepare students for the Advanced Placement exam in Human Geography and the opportunity to earn college credits. This course is recommended for students interested in exploring global studies in detail.

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<tr>
<td>B716</td>
<td>Seminar: AP Human Geography</td>
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Seminar courses vary widely, but typically offer AP Human Geography students the opportunity to improve research and investigatory skills, presentation skills, interpersonal skills, group process skills, and problem-solving and critical-thinking skills.

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Prerequisites: General Psychology

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<td>B716</td>
<td>Seminar: AP Human Geography</td>
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</tbody>
</table>
B75 | Honors Women's History 0.5sem

Students will examine the changing roles of women in United States history. They will analyze the social, marital, economic, and legal-political status of women in different eras in U.S. history. Students will also investigate the causes and consequences of issues that affect women in contemporary American society (e.g., violence, poverty, education, equal opportunity). In this course, students will be expected to be able to read and analyze primary source documents, including works of art, literature and music. This course is recommended for students interested in exploring American studies in detail.

NCAA DUAL 04108/1703

B77 | Honors African American History 0.5sem

Through the investigation of local and national historic events, students will examine the achievements of African Americans in their struggle for political, economic, and social equality throughout American history. Students will also examine the achievements of African Americans in their struggle for political, economic, and social equality. Students will also investigate the causes of issues that continue to face African Americans in society today. Throughout the course students will read and analyze primary sources. This course is recommended for students interested in exploring American studies in detail.

NCAA DUAL 04107/1703

B87 | Department Aide—Social Studies No credit

Social Studies Aide courses offer students the opportunity to assist instructors in preparing and/or organizing. Students may provide tutorial or instructional assistance to other students.

04995/2000
World & Classical Languages

The changing nature of our society has placed greater demands on students. In order to succeed in the twenty-first century, they will be required to acquire new communication skills. The acquisition of other languages will enable students to communicate across cultures and gain knowledge of other cultures in order to interact effectively within the community and global marketplace.

All students are encouraged to elect one or more world languages in the course of their total education. Extended language study is strongly recommended.

The goals of the World and Classical Languages Program are:

• To develop students’ language skills to enable them to communicate effectively in a language other than English.
• To develop respect for other cultures.
• To develop a clearer understanding of their own linguistic and cultural heritage.
• To expose students to authentic resources to further develop and increase their ability to read, listen, speak, and write in the target language.

World & Classical Language Graduation Requirements

Students seeking to qualify for admission to Maryland colleges and universities must complete a minimum of two credits of the same World or Classical Language.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Value</th>
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<tbody>
<tr>
<td>E01</td>
<td>American Sign Language 1</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>Designed to introduce students to American Sign Language, American Sign Language 1 courses enable students to communicate with deaf persons through finger spelling, signed words, and gestures. Course topics may include the culture of and issues facing deaf people.</td>
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<tr>
<td>NCAA</td>
<td>DUAL 06801/1006</td>
<td></td>
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<tr>
<td>E02</td>
<td>American Sign Language 2</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>American Sign Language 2 courses build upon skills developed in American Sign Language 1, extending students’ ability to understand and express themselves in American Sign Language and increasing their vocabulary and speed. Typically, students learn how to engage in discourse for informative or social purposes and to comprehend the language when signed slowly.</td>
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<tr>
<td>NCAA</td>
<td>DUAL 06802/1006</td>
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<tr>
<td>E03</td>
<td>Honors American Sign Language 3</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>American Sign Language 3 courses focus on having students express increasingly complex concepts while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when viewing the language signed at normal rates and conversing easily within limited situations.</td>
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<tr>
<td>NCAA</td>
<td>06803/1006</td>
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<tr>
<td>E04</td>
<td>Honors American Sign Language 4</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>American Sign Language 4 courses focus on advancing students’ skills and abilities to sign and understand the language so that they can maintain simple conversations with sufficient vocabulary and in an acceptable pace and have sufficient comprehension skills to understand the language when signed at a normal pace.</td>
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<tr>
<td>NCAA</td>
<td>06804/1006</td>
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<tr>
<td>E11</td>
<td>French 1</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>Designed to introduce students to French language and culture, French 1 emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people.</td>
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<tr>
<td>NCAA</td>
<td>DUAL 06121/1001</td>
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<tr>
<td>E12</td>
<td>French 2</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>French 2 courses build upon skills developed in French 1, extending students’ ability to understand and express themselves in French and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of French-speaking people to deepen their understanding of the culture(s).</td>
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<tr>
<td>NCAA</td>
<td>DUAL 06122/1001</td>
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<tr>
<td>E13</td>
<td>Honors French 3</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>French 3 courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.</td>
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<tr>
<td>NCAA</td>
<td>06123/1001</td>
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<tr>
<td>E14</td>
<td>Honors French 4</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>French 4 courses focus on advancing students’ skills and abilities to read, write, speak, and understand the French language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.</td>
<td></td>
</tr>
<tr>
<td>NCAA</td>
<td>06124/1001</td>
<td></td>
</tr>
<tr>
<td>E15</td>
<td>AP French Language</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>Designed to parallel third-year college-level courses in French Composition and Conversation, AP French Language courses build upon prior knowledge and develop students’ ability to understand others and express themselves (in French) accurately, coherently, and fluently. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.</td>
<td></td>
</tr>
<tr>
<td>NCAA</td>
<td>06132/1001</td>
<td></td>
</tr>
</tbody>
</table>
AP Chinese courses extend students' facility with the language so that speech spoken at a normal pace, read uncomplicated but authentic passages, and conversing easily within limited situations.

NCAA 06408/1009

E21 | **Chinese 1**  1.0sem

Designed to introduce students to Chinese language and culture, Chinese 1 courses emphasize basic syntax, simple vocabulary, written characters, and spoken tones so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Chinese culture is introduced through the art, literature, customs, and history of Chinese-speaking people.

NCAA DUAL 06401/1009

E22 | **Chinese 2**  0.5/sem

Chinese 2 courses build upon skills developed in Chinese 1, extending students’ ability to understand and express themselves in Chinese and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and phrasing, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Chinese-speaking people to deepen their understanding of the culture(s).

NCAA DUAL 06402/1009

E23 | **Honors Chinese 3**  0.5/sem

Chinese 3 courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

NCAA 06403/1009

E24 | **Honors Chinese 4**  0.5/sem

Chinese 4 courses focus on advancing students’ skills and abilities to read, write, speak, and understand the Chinese language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of language rules and a strong vocabulary.

NCAA 06404/1009

E25 | **AP Chinese Language**  0.5/sem

AP Chinese courses extend students’ facility with the language so that they are able to understand, initiate, and sustain general conversations on topics beyond basic survival needs. Reading and writing tasks will usually include all normal verb tenses (present, past, and future).

NCAA 06405/1009

E31 | **Latin 1**  0.5/sem

Latin 1 courses expose students to the Latin language and culture, emphasizing basic grammar and syntax, simple vocabulary, and the influence of Latin on current English words. Students will be able to read and write in Latin on a basic level.

NCAA DUAL 06301/1003

E32 | **Latin 2**  0.5/sem

Latin 2 courses enable students to expand upon what they have learned in Latin 1, increasing their skills and depth of knowledge through the practice of structures, forms, and vocabulary. Reading materials reflect Roman life and culture.

NCAA DUAL 06302/1003

E33 | **Honors Latin 3**  0.5/sem

Latin 3 courses build students’ knowledge of the Latin language and culture, typically focusing on having students express increasingly complex concepts in writing and comprehend and react to original Latin texts.

NCAA 06303/1003

E34 | **AP Latin Vergil**  0.5/sem

Designed to parallel advanced college-level courses in Latin studies, AP Latin courses build upon and increase knowledge of Latin, enabling students to read the language with comprehension, to accurately translate Latin into English, and to appreciate the stylistic literary techniques used by the authors. AP Latin courses also include study of the political, social, and cultural background of the literary works and their authors, as well as their influence on later literature.

NCAA 06313/1003

E41 | **German 1**  0.5/sem

Designed to introduce students to German language and culture, German 1 courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.

NCAA DUAL 06201/1002

E42 | **German 2**  0.5/sem

German 2 courses build upon skills developed in German 1, extending students’ ability to understand and express themselves in German and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of German-speaking people to deepen their understanding of the culture(s).

NCAA DUAL 06202/1002

E43 | **Honors German 3**  0.5/sem

German 3 courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

NCAA 06203/1002
### German Language Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>E44</td>
<td>Honors German 4</td>
<td>0.5/sem</td>
</tr>
<tr>
<td>E45</td>
<td>AP German Language</td>
<td>0.5/sem</td>
</tr>
</tbody>
</table>

- **E44 | Honors German 4** 0.5/sem
  - German 4 courses focus on advancing students' skills and abilities to read, write, speak, and understand the German language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

- **E45 | AP German Language** 0.5/sem
  - Designed to parallel third-year college-level courses in German Language, AP German Language courses build upon prior knowledge and develop students' ability to understand spoken German in various conversational situations, to express themselves (in German) accurately and fluently, and to have a command of the structure of the German language. Students develop a vocabulary large enough to understand literature, magazine/newspaper articles, films and television productions, and so on.

### Italian Language Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>E48</td>
<td>Italian 1</td>
<td>0.5/sem</td>
</tr>
<tr>
<td>E49</td>
<td>Italian 2</td>
<td>0.5/sem</td>
</tr>
</tbody>
</table>

- **E48 | Italian 1** 0.5/sem
  - Designed to introduce students to Italian language and culture, Italian 1 emphasizes basic grammar and syntax, simple vocabulary and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Italian culture is introduced through the art, literature, customs, and history of the Italian-speaking people.

- **E49 | Italian 2** 0.5/sem
  - Italian 2 courses build upon skills developed in Italian 1, extending students' ability to understand and express themselves in Italian and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of appropriate people to deepen their understanding of the culture(s).

### Spanish Language Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>E50</td>
<td>Honors Italian 3</td>
<td>0.5/sem</td>
</tr>
<tr>
<td>E51</td>
<td>Honors Italian 4</td>
<td>0.5/sem</td>
</tr>
</tbody>
</table>

- **E50 | Honors Italian 3** 0.5/sem
  - Italian 3 courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

- **E51 | Honors Italian 4** 0.5/sem
  - Italian 4 courses focus on advancing students' skills and abilities to read, write, speak, and understand the Italian language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.
Spanish courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Arabic culture is introduced through the art, literature, customs, and history of the Arabic-speaking people.

E64 | Honors Spanish 4 0.5/sem

Spanish 4 courses focus on advancing students’ skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal rate, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

E65 | AP Spanish Language 0.5/sem

Designed by the College Board to parallel third-year college-level courses in Spanish Composition and Conversation, AP Spanish Language courses build upon prior knowledge and develop students’ ability to understand others and express themselves (in Spanish) accurately, coherently, and fluently in both formal and informal situations. Students will develop a vocabulary large enough to understand literary texts, magazine/newspaper articles, films and television productions, and so on.

E66 | AP Spanish Literature 0.5/sem

Designed by the College Board to parallel college-level Introduction to Hispanic Literature courses, AP Spanish Literature courses cover representative works from the literatures of Spain and Spanish America, encompassing all genres. The courses build students’ Spanish language proficiency so that they are able to read and understand moderately difficult prose and express critical opinions and literary analyses in oral and written Spanish (an ability equivalent to having completed a third-year college-level Spanish Language course).

E67 | Arabic 1 0.5/sem

Designed to introduce students to Arabic language and culture, Arabic 1 courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Arabic culture is introduced through the art, literature, customs, and history of the Arabic-speaking people.

E68 | Arabic 2 0.5/sem

Arabic 2 courses build upon skills developed in Arabic 1, extending students’ ability to understand and express themselves in Arabic and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Arabic-speaking people to deepen their understanding of the culture(s).

E69 | Honors Arabic 3 0.5/sem

Arabic 3 courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

E70 | Honors Arabic 4 0.5/sem

Arabic 4 courses focus on advancing students’ skills and abilities to read, write, speak, and understand the Arabic language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal rate, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

E80 | Spanish for Native Speakers 1 0.5/sem

Spanish for Native Speakers courses support, reinforce, and expand students’ knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Spanish for Native Speakers courses often move faster than do regular Spanish foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

E81 | Spanish for Native Speakers 2 0.5/sem

Spanish for Native Speakers courses support, reinforce, and expand students’ knowledge of their own tongue. Because students understand at least the rudiments and structure of the language and have a working vocabulary (to a greater or lesser degree), Spanish for Native Speakers courses often move faster than do regular Spanish foreign language courses and emphasize literary development (with a study of literature and composition). These courses may also include the culture or history of the people and introduce translation skills.

E87010 | Department Aide—Foreign Language No credit

Foreign Language and Literature Aide courses offer students the opportunity to assist instructors in preparing, organizing or delivering course curricula. Students may provide tutorial or instructional assistance to other students.
Certificate of Completion Courses

The following courses are designed to provide students with disabilities with individualized instruction in English, math, science, social studies and vocational programs. These courses are designed to meet the Individualized Education Program (IEP) needs of students with disabilities and to provide credits toward graduation.

Maryland High School Certificate Requirements

Students must meet one of the following standards:

1. The student is enrolled in an education program for at least four years beyond grade eight, or its age equivalent, and the Individualized Education Program Committee determines that the student with disabilities has developed appropriate skills to enter the world of work, act responsibly as a citizen, and enjoy a fulfilling life. The world of work shall include, but not be limited to: gainful employment, work activity centers, sheltered workshops, and supported employment.

2. The student has been enrolled in an education program for four years beyond grade eight or its age equivalent and has reached age twenty-one.

The Functional Life Skills Program

The Functional Life Skills Program is designed to provide instructional activities and real life experiences to prepare students with significant disabilities for adult life. The following courses are designed to provide these students with individualized instruction in English, science, social studies, and vocational programs. These courses are modified and designed to meet the Individualized Education Program (I.E.P.) needs of students with disabilities and to provide credits towards graduation.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N19</td>
<td>English/Reading 9–12</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>This course will develop skills in listening, speaking, reading, and writing, as specified in the Individualized Education Program for each student enrolled to fulfill course requirements for graduation. Students in grades 11–12 focus on listening, speaking, reading, and writing as it relates to the transition to adulthood.</td>
<td></td>
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<tr>
<td></td>
<td>01156/1803</td>
<td></td>
</tr>
<tr>
<td>N29</td>
<td>Mathematics 9–12</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>This course will develop skills in basic mathematical concepts and real world problem solving as specified in the Individualized Education Program for each student enrolled to fulfill course requirements for graduation.</td>
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<tr>
<td></td>
<td>02002/1803</td>
<td></td>
</tr>
<tr>
<td>N39</td>
<td>Social Studies 9–12</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>Students will study information related to history, economics, geography, and government.</td>
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<tr>
<td></td>
<td>04161/1803</td>
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<tr>
<td>N40</td>
<td>Science 9–12</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>Students will study the relationship of organisms to other organisms in their environment. Students will study scientific skills, processes, and concepts of Biology using modified texts and materials.</td>
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<tr>
<td></td>
<td>03202/1803</td>
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<tr>
<td>N61</td>
<td>Coping Skills</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>This course teaches students the social skills needed for independent functioning within the community. Topics may include self-control, self-expression, obeying rules, decision-making, appropriate situational behavior, interacting with others, and maintaining relationships. Students may develop independence, self-confidence, and self-reliance.</td>
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<tr>
<td></td>
<td>22253/1803</td>
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<tr>
<td>N62</td>
<td>Learning Strategies</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td>This course prepares students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. This course may also include exercises designed to generate organized, logical thinking and writing.</td>
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<tr>
<td></td>
<td>22003/1803</td>
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<tr>
<td>N730</td>
<td>Community Skills 9–12</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>This course provides students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses often emphasize goal setting, decision-making, and setting priorities; money and time management; relationships; and the development of self.</td>
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<tr>
<td></td>
<td>22206/1803</td>
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<tr>
<td>N950</td>
<td>Community Vocational Program 11–12</td>
<td>No Credit</td>
</tr>
<tr>
<td></td>
<td>This course provides students with work experience in a field related to their interests. Goals are typically set cooperatively with teacher, student, and employer. This course may include classroom activities as well, involving further discussion regarding experiences that students encounter in the workplace.</td>
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<td></td>
<td>22998/1803</td>
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</tbody>
</table>
## Interdisciplinary Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>X01</td>
<td>Office Aide</td>
<td>No Credit</td>
<td></td>
</tr>
<tr>
<td>X02</td>
<td>Media Aide</td>
<td>No Credit</td>
<td></td>
</tr>
<tr>
<td>X04</td>
<td>Guidance Aide</td>
<td>No Credit</td>
<td></td>
</tr>
<tr>
<td>X20</td>
<td>Alternative Credit</td>
<td>0.5/sem</td>
<td></td>
</tr>
<tr>
<td>X21</td>
<td>Gifted &amp; Talented Mentorship</td>
<td>0.5/sem</td>
<td></td>
</tr>
<tr>
<td>X40</td>
<td>PSAT/SAT Preparation</td>
<td>0.5sem</td>
<td>Algebra 1, Geometry, Biology, Algebra 1, Geometry, Biology</td>
</tr>
<tr>
<td>X41</td>
<td>Preparing for the ACT</td>
<td>0.5sem</td>
<td>Algebra 1, Geometry, Biology</td>
</tr>
<tr>
<td>X42</td>
<td>Student Leadership 1/2/3</td>
<td>0.5/sem</td>
<td></td>
</tr>
<tr>
<td>X43</td>
<td>Financial Literacy</td>
<td>0.5sem</td>
<td></td>
</tr>
<tr>
<td>X44</td>
<td>Student Seminar 9/10/11/12</td>
<td>0.25/sem</td>
<td></td>
</tr>
<tr>
<td>X45</td>
<td>Student Seminar 9/10/11/12</td>
<td>0.5/sem</td>
<td></td>
</tr>
<tr>
<td>X46</td>
<td>Student Seminar 9/10/11/12</td>
<td>0.5/sem</td>
<td></td>
</tr>
<tr>
<td>X50</td>
<td>Navy Junior ROTC 1</td>
<td>0.5/sem</td>
<td></td>
</tr>
</tbody>
</table>

### Office Aide
Office Aide courses offer students the opportunity to assist in preparing, organizing or delivering materials to teachers and/or students.

### Media Aide
Media Aide courses offer students the opportunity to assist in preparing, organizing or delivering materials to teachers and/or students.

### Guidance Aide
Guidance Aide courses offer students the opportunity to assist in preparing, organizing or delivering materials to teachers and/or students.

### Alternative Credit
This offering includes all individual work-study programs and experiences occurring outside the school which award credit towards graduation but do not result in money payment to the student. Plans for alternative credit experiences can originate with the student, teacher, a community group or individual. Alternative credit experiences of particular note are those leading to community service and accelerated research study through the Gifted/Talented Mentorship Program. Community service credit may be used to meet the one credit Practical Arts requirement. Alternative credit is elective in nature and usually awarded as alternative credit in a particular content area. It is important that these experiences match well with the student's general education plan and interests. Students interested in alternative credit should seek the advice of a counselor.

### Gifted & Talented Mentorship
Tutoring Practicum courses provide students with the opportunity to offer tutorial assistance to their peers or to younger students. After an initial training period during which students learn how to work with other students and how to make use of the available resources (e.g., staff, written material, audiovisual aids, and so on), students engage in tutoring and assisting others who need or request help.

### PSAT/SAT Preparation
Students in grades 10-12 prepare for the New PSAT and the SAT by developing and applying strategies to strengthen critical reading, writing, and mathematical abilities and test-taking skills. Through focused instruction, practice with actual test items, and independent activities, students diagnose their individual needs and implement a program to improve their immediate scores and their greater academic performance in high school and beyond.

Prerequisites: Algebra 1
The Naval Junior Reserve Officers Training Corps (NJROTC) program is offered to students in grades 9–12. These courses, available at Annapolis High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as maritime heritage, the significance of sea power, and naval topics such as navigation and meteorology. All uniforms, texts, insignia, and training materials are provided.

X52 | Navy Junior ROTC 3  0.5/sem

The Naval Junior Reserve Officers Training Corps (NJROTC) program is offered to students in grades 9–12. These courses, available at Annapolis High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as maritime heritage, the significance of sea power, and naval topics such as navigation and meteorology. All uniforms, texts, insignia, and training materials are provided.

X53 | Navy Junior ROTC 4  0.5/sem

The Naval Junior Reserve Officers Training Corps (NJROTC) program is offered to students in grades 9–12. These courses, available at Annapolis High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as maritime heritage, the significance of sea power, and naval topics such as navigation and meteorology. All uniforms, texts, insignia, and training materials are provided.

X55 | Army Junior ROTC 1  0.5/sem

The Army Junior Reserve Officers Training Corps (AJROTC) program is offered to students in grades 9–12. These courses, available at Meade High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as fitness, first aid, wellness, geography, map skills, environmental awareness, and American Government and History. All uniforms, texts, insignia, and training materials are provided.

X56 | Army Junior ROTC 2  0.5/sem

The Army Junior Reserve Officers Training Corps (AJROTC) program is offered to students in grades 9–12. These courses, available at Meade High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as fitness, first aid, wellness, geography, map skills, environmental awareness, and American Government and History. All uniforms, texts, insignia, and training materials are provided.

X57 | Army Junior ROTC 3  0.5/sem

The Army Junior Reserve Officers Training Corps (AJROTC) program is offered to students in grades 9–12. These courses, available at Meade High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as fitness, first aid, wellness, geography, map skills, environmental awareness, and American Government and History. All uniforms, texts, insignia, and training materials are provided.

X58 | Army Junior ROTC 4  0.5/sem

The Army Junior Reserve Officers Training Corps (AJROTC) program is offered to students in grades 9–12. These courses, available at Meade High School, prepare students for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as American citizens. The courses consist of three areas of emphasis: Leadership, Education, and Training as well as fitness, first aid, wellness, geography, map skills, environmental awareness, and American Government and History. All uniforms, texts, insignia, and training materials are provided.
AVID, Advancement Via Individual Determination, is a college readiness system for elementary through higher education that is designed to increase school-wide learning and performance. Although AVID serves all students, the AVID elective focuses on the least-served students in the academic middle who have the desire to go to college and the willingness to work hard. AVID pulls these students out of their unchallenging courses and puts them on the college track: acceleration instead of remediation. The formula is simple — raise expectations of students and, with the AVID support system in place, they will rise to the challenge. At the secondary grade levels (6th–12th grades), AVID is an academic elective course taken during the school day. Students are usually selected to enroll in an AVID class after an application process. Students learn organizational and study skills, work on critical thinking and asking probing questions, get academic help from peers and college tutors, and participate in enrichment and motivational activities that make college seem attainable. Students enrolled in AVID are typically required to enroll in at least one of their school’s toughest classes, such as honors or Advanced Placement, in addition to the AVID elective.

Students may wear an AVID cord during graduation if the following requirements are met.

1. Take an AP exam.
2. Take the SAT or ACT.
3. Complete the senior AVID data and submit it to the AVID Center on time.
4. Spend at least three high school years in the AVID elective. These do not need to be consecutive, but your third year must be your senior year.
5. Apply and be accepted into at least one four-year college.
6. Have an unweighted GPA of at least 2.75.

### AVID Tutor 1-2

The AVID (Advancement Via Individual Determination) academic elective class utilizes trained tutors to guide the AVID students toward academic and personal excellence. Tutors are active participants in the learning, growth, and personal development of the AVID students. Juniors and seniors may apply to become AVID Tutors by meeting with the AVID Site Coordinator and completing a request for alternative credit.

### AVID 9

The AVID elective provides a strong, relevant writing and reading curriculum, study skills, assistance with organization and time management, college research, and tutoring. Students will develop their organizational skills using the AVID Binder, participate in rigorous tutorials aimed at improving inquiry and collaboration techniques, and improve their knowledge of subject matter in all academic classes through the use of Cornell notes. AVID 9 serves as a transition from middle school to high school where students will continue their focus on acceptance into a four year college or university of their choice. Students in AVID 9 are expected to prepare for a rigorous high school schedule that includes challenging honors and AP courses.

### AVID 10

The AVID elective provides a strong, relevant writing and reading curriculum, study skills, assistance with organization and time management, college research, and tutoring. Students will develop their organizational skills using the AVID Binder, participate in rigorous tutorials aimed at improving inquiry and collaboration techniques, and improve their knowledge of subject matter in all academic classes through the use of Cornell notes.

### AVID 11

The AVID elective provides a strong, relevant writing and reading curriculum, study skills, assistance with organization and time management, college research, and tutoring. AVID 11 builds upon the skills and techniques developed in AVID 6-10, by working towards the ultimate goal of college acceptance. To this end, students receive support preparing for their SAT/ACT tests, finding and narrowing down their best fit colleges, writing their college essay, and preparing for senior year. Students also receive support for their honors and Advanced Placement courses and skills and strategies to prepare for the academic rigors of college as well as support selecting appropriate courses to best prepare students for college.

### AVID 12

The AVID elective provides a strong, relevant writing and reading curriculum, study skills, assistance with organization and time management, college research, and tutoring. AVID 12 builds upon the skills and techniques developed in AVID 6-11, by working towards the ultimate goal of college acceptance. To this end, students receive support filling out college applications, building resumes, finding scholarships, and preparing for the transition from high school to college. Students also receive support for their honors and Advanced Placement courses and acquire skills and strategies to prepare for the academic rigors of college. Students in AVID 12 are expected to apply to four-year colleges or universities, find and apply to scholarships, and research possible majors and careers.
# Magnet Programs

Magnet courses are available only to students enrolled in a Magnet Program.

The Magnet Programs in Anne Arundel County support the shared Programs of Choice vision to offer all students and families choice in their education.

Students apply online to participate in a Magnet Program and if selected and accepted, attend school at their Magnet School, located at one of the public schools in the county. The Magnet School is determined by program and students’ home school. In 2014–15, students entering grade 9 for high school may apply for one of the following Magnet Programs in AACPS:

- BioMedical/Allied Health (BMAH) at Glen Burnie High School;
- Centers for Applied Technology (CAT) at CAT-North and CAT-South;
- International Baccalaureate Programme (IB/MYP) at Annapolis High School, Old Mill High School, and Meade High School;
- Performing and Visual Arts (PVA) at Annapolis High School and Broadneck High School;
- Science Technology Engineering and Mathematics (STEM) at North County High School and South River High School.

## BMAH

### BioMedical Allied Health

Glen Burnie High School

The BMAH Magnet program is an educational choice for highly motivated and academically eligible students that are interested in exploring career and research opportunities across the healthcare spectrum. In conjunction with excellent coursework options, students will work with medical and allied health professionals both in and out of the classroom through relevant and hands-on problem/project based modules, job shadows and internship opportunities.

The BMAH Magnet Program offers five pathways that students may pursue: Project Lead the Way Bioengineering, Project Lead the Way Bioscience, Aging and Wellness, Health, Information, and Technology, and Public and International Health. Juniors and seniors will have the opportunity to attend Anne Arundel Community College for dual enrollment, allowing students to gain college credit towards a degree, certificate, or letter of recognition while still completing their high school graduation requirements. Upon graduation, students will be ready to enter the healthcare workforce directly or to continue their education along their chosen allied health pathway or other healthcare major at a four-year college or university. BMAH courses are only available to students enrolled in the BMAH Magnet Program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>C155</td>
<td>BMAH Public/Intern Health 1</td>
<td>0.5sem</td>
</tr>
<tr>
<td>C156</td>
<td>BMAH Public/Intern Health 2</td>
<td>0.5sem</td>
</tr>
<tr>
<td>C17</td>
<td>Honors BMAH Aging/Wellness 1</td>
<td>0.5sem</td>
</tr>
<tr>
<td>C18</td>
<td>BMAH Aging/Wellness 2</td>
<td>0.5sem</td>
</tr>
</tbody>
</table>

BMAH Public & International Health 1 is an 11th grade BMAH Pathway 2 course for the Advanced Learner in the BMAH Magnet program. It is the first in a series of three courses in the Public and International Health Pathway. In this course, students will explore how the public health sector works to improve human health through the development and application of knowledge that prevents disease, protects the public from harm, and promotes health throughout the state, nation, and the world. Immersed in problem-based learning and critical thinking, students in this first of three one-semester courses, will develop and apply knowledge from multiple disciplines to explore the origins of public health, public health policies, the agencies involved in the public health sector, and local, national and global issues with a focus on Nutrition and Social Behavior.

BMAH Public & International Health 2 is an 11th grade BMAH Pathway 2 course for the Advanced Learner in the BMAH Magnet program. It is the second in a series of three courses in the Public and International Health Pathway. In this course, students will explore how the public health sector works to improve human health through the development and application of knowledge that prevents disease, protects the public from harm, and promotes health throughout the state, nation, and the world. Immersed in problem-based learning and critical thinking, students in this second of three one-semester courses, will develop and apply knowledge from multiple disciplines to explore the financial issues in health services and public health systems, explore the legal and ethical issues involving race, ethnicity, and poverty related to health disparities, evaluate the planning and marketing of health safety and preparedness in the public health sector regarding local, national and global issues with a focus on Epidemics and Health Systems.

Students will analyze literature and conduct research on the genetic, biological, clinical, behavioral, social, psychological, and economic aspects of aging. Aging populations’ health issues affected by race, ethnicity, gender, socioeconomic status (SES), age, education, occupation, and other, as yet unknown, lifetime and lifestyle differences will be studied. Students will use research insights and advances to influence policy on the health, wellness, economic status, and quality of life of all aging adults. Immersed in problem-based learning and critical thinking, students will develop and apply knowledge from multiple disciplines to explore the event of aging, common illnesses, physiological problems, and the mental and social aspects involved in aging. Students will also explore how the health system engages with aging populations.

Students will continue to analyze literature and conduct research on the genetic, biological, clinical, behavioral, social, psychological, and economic aspects of aging. Aging populations’ health issues affected by race, ethnicity, gender, socioeconomic status (SES), age, education, occupation, and other, as yet unknown, lifetime and lifestyle differences will be studied. Students will use re-search insights and advances to influence policy on the health, wellness, economic status, and quality of life of all aging adults. Immersed in problem based learning and critical thinking, students will develop and apply knowledge from multiple
disciplines to explore the event of aging, common illnesses, physiological problems, and the mental and social aspects involved in aging. Students will also explore how the health system engages with aging populations.

**14251/0205**

**C20 | BMAH Capstone Research**

0.5/sem

BMAH Research/Data Analysis (Capstone) is a STEM/BMAH Capstone course for seniors and is designed to support student exploration and research in an area of the student's choosing. This may be a continuation of, extension of, and/or inspired by problems and/or projects explored via Problem Based Learning 3: Community Challenge and/or Internship experience. Students will be expected to write and submit a professional paper (White Paper), create and present a Scientific Poster, and formally present their experience and/or findings. Students will develop project management skills as they apply to their year-long endeavor, with daily updates and modifications to their plan. In this interdisciplinary course, students will have the opportunity to receive mentoring from professional BMAH-ists, support from a BMAH teacher.

**NCAA 14077/0205**

**Q60 | Honors BMAH Health Information Systems**

0.5/sem

This course is paired with Health Database Management to complete the BMAH Pathway 1 year course. Health Information Systems is a tool for collecting and processing vital data from multiple sources and is used to make policy and manage healthcare services. In this course, students will work in teams on analyzing the Health Information Systems that exist in developed versus developing countries. Students will use real-world data available from such resources as the World Bank, Organization for Economic Cooperation and Development—Health Statistics and the World Health Organization—Data and Statistics. Students will analyze the impact of Health Information Systems on a country's educational, financial, and political status. Students will design and use database structures to produce data-based briefs, data-driven arguments and presentations related to targeted health issues.

**CTE 10199/0205**

**X13 | Medical Rounds 1 (BMAH)**

0.25/sem

Students will work with BMAH business and higher-education partners on three, six, or nine week problem/project-based modules focused on a current BMAH topic or project that is relevant in today's workplace. This course will introduce students to the main philosophical pillars of the BMAH program: Problem/Project based learning (open-ended projects with real-world connections), Socratic Dialogue (strategic way of communicating to better understand what others are thinking), and collaborative teamwork.

**14151/2000**

**X14 | Medical Rounds 2 (BMAH)**

0.25/sem

Students will work with BMAH business and higher-education partners on three, six, or nine week problem/project-based modules focused on a current BMAH topic or project that is relevant in today's workplace. This course will continue to expose students to the main philosophical pillars of the BMAH program: Problem/Project based learning, Socratic Dialogue, and collaborative teamwork

**Prerequisites:** Medical Rounds 1

**CTE 14151/2000**

**M39 | Biomedical Innovations**

0.5/sem

**CTE 14264/0205**

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**R64 | Honors Database Management (BMAH)**

0.5/sem

In this course students will study how the health care industry, government organizations, and associated organizations use information technology to research and analyze healthcare patient data as well as local, regional, national, and international health data trends and patterns. Students will work in teams on real world healthcare issues, using multiple software programs to collect, collate, and analyze data. Databases from the World Health Organization (WHO), National Institutes of Health (NIH), Centers for Disease Control (CDC), Organization for Economic Co-Operation and Development (OECD), and the United Nations International Children's Emergency Fund (UNICEF) provide the rich healthcare datasets from which the students will do their project-based/problem-based work.

**CTE 00000/0205**

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**CAT**

**Centers of Applied Technology**

Center of Applied Technology North & South

The CAT Magnet program is an educational choice that allows students to be both career and college ready. Students have the opportunity to add value to their overall education by earning industry-recognized certifications and college credit while still in high school. Students who complete a CAT program fulfill the completer path needed for graduation. Additionally, since most of the CAT magnet programs are two year programs, many students complete coursework necessary to be career completers as well college completers (DUAL completers).

The CAT centers offer 25 different Career and Technology Education (CTE) programs which are guided by industry standards and are embedded in a framework of career clusters key to Maryland’s economy.

**Arts, Media and Communication**

- Honors Interactive Media Production
- Graphic Design
- Printing Technology

**Construction and Development**

- Building Maintenance and Business Support
- Carpentry
- Drafting/CAD
- Electricity
- Heating, Ventilation, and Air Conditioning (HVAC)
- Masonry
- Plumbing
- Welding

**Consumer Services, Hospitality and Tourism**

- Honors Baking and Pastry
- Cosmetology
- Honors Culinary Arts
Environmental, Agriculture, and Natural Resources
- Honors Environmental Resource Management

Health and Biosciences
- Honors Academy of Health Professionals
- Honors Dental Assisting

Information Technology
- Honors Cisco Academy
- Honors Network Systems Administration

Manufacturing, Engineering and Technology
- Honors Precision Machining

Transportation Technology
- Automotive Collision Repair/Refinishing
- Automotive Technology
- Diesel Power Technology
- Marine Repair Technology
- Motorcycle Repair

CAT Students may be selected for National Technical Honor Society membership which recognizes excellence in Career and Technology Education.

CAT Students may join SkillsUSA, a national leadership organization for CTE students. Members have the opportunity to develop leadership skills and to compete in program related skill areas at the regional/state/national level.

CAT graduates are focused on their future. They have the skills and training needed to enter the workforce, but they also have a clear picture of how continuing education beyond high school will lead to advancement within their chosen career field.

For specific program details see the completer program section beginning on page 81.

IB

The International Baccalaureate Program
Annapolis, Meade, and Old Mill High Schools

The International Baccalaureate is a globally-recognized educational foundation committed to creating a better world through education. Its teaching methodology promotes student-centered inquiry, critical thinking, and effective communication while challenging students to consider their role in both local and global communities. Annapolis, Meade, and Old Mill High Schools are all authorized by the IB Organization.

Students attend the IB Middle Years Programme (MYP) in grades 9 and 10. Students who have applied and been accepted into the IB Diploma Programme (DP) will complete the IB DP course of studies in grades 11 and 12. IB Diploma students will complete a Theory of Knowledge course, an Extended Essay of 4,000 words, and approximately of Creativity, Action, and 150 Service (CAS) hours as well as six subjects. Students who meet all of these requirements and successfully complete all IB assessments and examinations will be eligible for the IB Diploma, recognized by colleges and universities in 140 countries around the world. Upon graduation, all IB students will be prepared to continue their studies at a four-year institution of higher learning.

IB MYP courses are available to all students at Annapolis, Meade, and Old Mill High Schools. IB DP courses are only available to students enrolled in the IB DP Magnet Program.

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<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>I11</td>
<td>Honors IBMYP English 9</td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td></td>
<td>Students apply a four-stage journey to their study of literature, language, and composition, and to themselves as entering high school students and emerging adults. Students practice critical reading, analyze themes, structures, and details, apply grammar, and use research for oral and written compositions. MYP sections are assigned reading during the preceding summer. Students in MYP 9 English receive early comprehensive preparation for success in subsequent IB English courses.</td>
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<td>Prerequisites: Placement in the high school IB Middle Years Programme</td>
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<tr>
<td></td>
<td>NCAA 01007/0801</td>
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<tr>
<td>I12</td>
<td>Honors IBMYP English 10</td>
<td>0.5/sem</td>
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<td>Students explore America’s literary themes, including works by Hawthorne, Twain, and Miller, through these essential questions: How do you form a free society? How do you reform a free society? Students develop portfolios, set goals, extend their ability to research and write, and reflect on their development. MYP sections are assigned reading during the preceding summer. During the second semester, tenth grade students complete ten required hours of service learning. Students in MYP 10 English receive early comprehensive preparation for success in subsequent IB English courses. English 10 prepares students for the end-of-course Maryland English High School Assessment.</td>
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<td></td>
<td></td>
<td>Prerequisites: Placement in the high school IB Middle Years Programme</td>
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<tr>
<td></td>
<td>NCAA 01007/0801</td>
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<tr>
<td>I13</td>
<td>IB English 1</td>
<td>0.5/sem</td>
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<tr>
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<td>Students apply critical and analytical skills to works of traditional and contemporary world authors. Because the themes of the literature explore values and issues of the world-wide culture, the voice of each author may give frank examination of the human condition. Students complete all internal and external assessments as required.</td>
</tr>
<tr>
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<td>NCAA 01007/0801</td>
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<tr>
<td>I14</td>
<td>IB English 2</td>
<td>0.5/sem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students apply critical and analytical skills to works of traditional and contemporary world authors. Because the themes of the literature explore values and issues of the world-wide culture, the voice of each author may give frank examination of the human condition. Students complete all internal and external assessments as required.</td>
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<tr>
<td></td>
<td></td>
<td>Prerequisites: Placement in the IB Diploma Programme and successful completion of IB English 1</td>
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<td>NCAA 01007/0801</td>
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</table>
This course is designed to encourage students to examine theatre in its diversity of forms from around the world. Theatre Arts emphasizes the importance of working individually and as a member of an ensemble. Students are encouraged to develop the organizational and technical skills needed to express themselves creatively. A further challenge for students taking this course is for the to become aware of their own perspectives and biases and to learn to understand the values of others.

The course also seeks to develop values and attitudes that will enable students to consider and reflect on human end-goals and values. This course encourages students to develop international perspectives, and analyze their importance to us today. Topics of special interest will include the Depression, the Civil Rights Movement, the changing role of women, Vietnam, Watergate, Reaganomics, and the end of the Cold War. In this course, students will be expected to read and analyze primary source documents, including works of art, literature, and music. Students will receive early comprehensive preparation for success in subsequent IB History courses.

This course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability. The ethical dimensions involved in the application of economic theories and policies permeate throughout the economics course as students are required to consider and reflect on human end-goals and values. This course encourages students to develop international perspectives, fosters a concern for global issues, and raises students' awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

Obligatory for every IB degree candidate, TOK courses aim to stimulate critical self-reflection of students’ knowledge and experiences. Course content generates questions regarding the bases of knowledge and their verification in the disciplines of mathematics, natural sciences, human sciences, and history, with an awareness of moral, political, and aesthetic judgments and biases. Students learn to appreciate the strengths and limitations of various kinds of knowledge; to related studied subjects to one another, general knowledge, and living experiences; to formulate rational arguments, and to evaluate the role of language in knowledge and as a way to convey knowledge.

Students will concentrate on the historical period from the late 19th century to the present. Students will use problem solving and critical thinking skills to identify major issues of the period and analyze their importance to us today. Topics of special interest will include the Depression, the Civil Rights Movement, the changing role of women, Vietnam, Watergate, Reaganomics, and the end of the Cold War. In this course, students will be expected to read and analyze primary source documents, including works of art, literature, and music. Students will receive early comprehensive preparation for success in subsequent IB History courses.

Students will concentrate on the historical period of the United States from the late 19th century to the present. Students will use problem solving and critical-thinking skills to identify major issues of the period and analyze their importance to us today. Topics of special interest will include the Depression, the Civil Rights Movement, the changing role of women, Vietnam, Watergate and Reaganomics, and the end of the Cold War. In this course, students will be expected to read and analyze primary source documents, including works of art, literature and music. Students in MYP History of the United States receive an early comprehensive preparation for success in subsequent IB History courses.

IB Psychology 2 course prepares students to the International Baccalaureate Psychology exams at either the Subsidiary or Higher level. Course content includes developmental and social psychology, cognition and learning, and personality subject areas, which are approached from biological/physiological, behavioral, and humanistic points of view. This course may also include the study of research design and statistics and involve practical work in psychological research.
Honors IBMYP Biology 0.5/sem

Biology is the study of organisms and relationships of these organisms to other organisms and the environment. Students use the skills and processes of science to learn biological concepts with a strong emphasis on laboratory activities. Researching global and topical issues and focused investigations through collaboration are emphasized in this course. Biology is a graduation requirement for all students. Each May, students take the Maryland High School Assessment in Biology. Students in MYP Biology receive early and comprehensive preparation for future IB Science courses. This course is required for all IB students.

Prerequisites: Algebra 1 and Placement in the high school IB Middle Years Programme

NCAA 03057/1601

Honors IBMYP Chemistry 0.5/sem

Students will be able to develop the ability to use scientific skills and processes to explain the composition and interactions of matter. Mathematics helps students to predict and analyze the outcomes of chemical reactions and the interactions of matter and energy. Science skills and processes learned in this course build on those developed in biology and prepare students for continued development of scientific inquiry in other science disciplines. Research questions, current issues and focus on the environmental impact of global decisions are emphasized in this course. Students in this course receive early comprehensive preparation for subsequent IB Science courses.

NCAA 03107/1602

IB Biology 1 0.5/sem

IB Biology courses prepare students to take the International Baccalaureate Biology exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Biology promotes understanding of the facts, principles, and concepts of underlying the biological field; critical analysis, evaluation, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of biology and scientific advances in biology upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the materials of the environment, their properties, and their interaction. Laboratory experimentation is an essential part of this course.

NCAA 03057/1601

IB Biology 2 0.5/sem

NCAA 03057/1601

IB Physics 1 0.5/sem

IB Physics courses prepare students to take the International Baccalaureate Physics exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Physics promotes understanding of the facts, patterns, and principles underlying the field of physics; critical analysis, evaluation, and application of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of scientific advances in physics upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the fundamental laws of nature and the interaction between concepts of matter, fields, waves, and energy. Laboratory experimentation is essential; calculus may be used in some courses.

NCAA 03157/1607

IB Physics 2 0.5/sem

NCAA 03157/1607

IB Chemistry 1 0.5/sem

IB Chemistry courses prepare students to take the International Baccalaureate Chemistry exams at either the Subsidiary or Higher level. In keeping with the general aim of IB Experimental Sciences courses, IB Chemistry promotes understanding of the facts, patterns, and principles underlying the field of chemistry; critical analysis, evaluation, prediction, and generation of scientific information and hypotheses; improved ability to communicate scientific ideas; and an awareness of the impact of chemistry and scientific advances in chemistry upon both society and issues of ethical, philosophical, and political importance. Course content varies, but includes the study of the materials of the environment, their properties, and their interaction. Laboratory experimentation is an essential part of these courses.

NCAA 03107/1602

IB Chemistry 2 0.5/sem

03107/1602

IB Environmental Systems 0.5/sem

03208/1608

Honors IBMYP Geometry 0.5/sem

This high school graduation requirement course serves as the second in a series of advanced mathematical courses by providing a foundation of the geometry topics as defined by the Maryland High School Core Learning Goal 2. Students will represent problem situations with geometric models, classify figures in terms of congruence and similarity, and deduce properties of and relationships between figures from given assumptions. Graphing calculators recommended. Students in MYP Geometry receive early comprehensive preparation for success subsequent IB Math courses.

Prerequisites: Placement in the high school IB Middle Years Programme

NCAA 02131/1200

Honors IBMYP Algebra 2 0.5/sem

This course will expand students’ knowledge of functions to include exponential, logarithmic and power functions by examining real-world problems. Students will gain an understanding of the characteristics and transformation of function. Graphing calculators are required. Designing and researching projects with an international connection and exposure to the IB assessment criteria/rubrics are included in this course. Students in MYP Algebra 2 receive early comprehensive preparation for subsequent IB Math courses

Prerequisites: Placement in the high school IB Middle Years Programme

NCAA 02131/1200

IB Math 1 0.5/sem

IB Mathematical Studies courses prepare students to take the International Baccalaureate Mathematical Studies exam at the Standard level. Intended to provide students with the skills to cope with the mathematical demands of a technological society, course topics include linear, quadratic, and exponential functions, solutions, and graphs; skills in computation, estimation, and development of algorithms; data analysis, including collection, calculation, and presentation of statistics; set operations and logic; business techniques, including progressions and linear programming; and geometry and trigonometry.

NCAA 02131/1200
<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>I44</td>
<td><strong>IB Math 2</strong></td>
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<tr>
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<td>NCAA 02131/1200</td>
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<tr>
<td>I45</td>
<td><strong>IB Advanced Math</strong></td>
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<tr>
<td>I46</td>
<td><strong>IB Higher Math 1</strong></td>
<td>0.5/sem</td>
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<td>This course prepares students for the International Baccalaureate Mathematics exam at the Higher Level and caters to students with a good background in mathematics who are competent in a range of analytical and technical skills. The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Others may take this subject because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems.</td>
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<tr>
<td>I47</td>
<td><strong>IB DP Higher Math 2</strong></td>
<td>0.5/sem</td>
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<tr>
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<td>NCAA 02134/1200</td>
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<tr>
<td>I48</td>
<td><strong>IBMYP Chinese Level 2</strong></td>
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<tr>
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<tr>
<td>I49</td>
<td><strong>IB DP Chinese 1</strong></td>
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<tr>
<td></td>
<td>NCAA 06411/1009</td>
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<tr>
<td>I50</td>
<td><strong>IB DP Chinese 2</strong></td>
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<td>NCAA 06411/1009</td>
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<tr>
<td>I51</td>
<td><strong>IBMYP French Level 2</strong></td>
<td>0.5/sem</td>
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<td>This course continues the development of the students' communicative competency and linguistic accuracy while expanding the students' awareness and appreciation within the Francophone culture. Classes are conducted in French. Students in an MYP Level 2 language receive early comprehensive preparation for success in subsequent IB language courses.</td>
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<td>NCAA 06131/1001</td>
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<tr>
<td>I52</td>
<td><strong>Honors IBMYP French Level 3</strong></td>
<td>0.5/sem</td>
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<td>This course is expands and refines the students' linguistic accuracy and increases their ability to function appropriately within the Francophone culture. Emphasis is on developing the students' ability to use their French language skills to make decisions, solve problems, investigate topics and create new products in real life situations. Students receive early comprehensive preparation for subsequent IB Language courses. Interaction with the IB assessment criteria and increasing oral discourse are emphasized in this course. Classes are conducted in the target language.</td>
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<tr>
<td></td>
<td>NCAA 06131/1001</td>
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<tr>
<td>I53</td>
<td><strong>IB DP French 1</strong></td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>NCAA 06131/1001</td>
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<tr>
<td>I54</td>
<td><strong>IB DP French 2</strong></td>
<td>0.5/sem</td>
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<td>NCAA 06131/1001</td>
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<tr>
<td>I55</td>
<td><strong>IBMYP Spanish Level 2</strong></td>
<td>0.5/sem</td>
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<tr>
<td></td>
<td>NCAA 06111/1005</td>
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<tr>
<td>I56</td>
<td><strong>Honors IBMYP Spanish Level 3</strong></td>
<td>0.5/sem</td>
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<tr>
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<td>NCAA 06111/1005</td>
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<tr>
<td>I57</td>
<td><strong>IB DP Spanish 1</strong></td>
<td>0.5/sem</td>
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<td>I58</td>
<td><strong>IB DP Spanish 2</strong></td>
<td>0.5/sem</td>
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<td>NCAA 06111/1005</td>
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<tr>
<td>I59</td>
<td><strong>IB DP Language B Italian 1</strong></td>
<td>0.5/sem</td>
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<td>IB DP Language B Italian 1 is an additional language-learning course designed for students who studied Italian and have successfully completed level 3 or higher, and who are admitted in the IB Diploma Programme. It may be studied at either Standard Level (SL) or Higher Level (HL). The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written and spoken material. Such material will extend from everyday oral exchanges to literary texts, and should be related to the culture(s) concerned. The material should be chosen to enable students to develop mastery of language skills and intercultural understanding. It should not be intended solely for the study of specific subject matter or content.</td>
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<td>NCAA 06151/1010</td>
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<tr>
<td>I60</td>
<td><strong>IB DP Language B Arabic 1</strong></td>
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<td>IB DP Language B Arabic 1 is an additional language-learning course designed for students who have studied Arabic and successfully completed levels 3 or higher, and who are admitted in the IB Diploma Programme.</td>
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<td>NCAA 06731/1008</td>
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<tr>
<td>I61</td>
<td><strong>IB Music 1</strong></td>
<td>0.5/sem</td>
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<td>IB Music courses prepare students to take the International Baccalaureate Music exam at either the Standard or Higher level. IB Music courses develop students’ knowledge and understanding of music through training in musical skills (listening, performing, and composing); exposure to music theory; and formulation of an historic and global awareness of musical forms and styles. Historical, theoretical, and practical studies are suggested by the IB Curriculum Board.</td>
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<tr>
<td>I62</td>
<td><strong>IB Music 2</strong></td>
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Consistent with the educational philosophy of the IB, the Diploma Programme dance curriculum aims for a holistic approach to dance, and embraces a variety of dance traditions and cultures. Performance, creative, and analytical skills are mutually developed and valued whether the students are writing papers or creating/performing.

IB Dance 2
0.5/sem

IB Art 1
0.5/sem

IB Art courses prepare students to take the International Baccalaureate Art/Design exams at either the Standard or Higher level. IB Art/Design courses help develop students' aesthetic and creative faculties, offer training in awareness and criticism of art, and enable students to create quality works of art of their own. Students perform both studio and research work; the research component is designed to investigate particular topics or concepts of interest in further detail.

IB Art 2
0.5/sem

IB Information Technology 1
0.5/sem

Information Technology in a Global Society is the study and evaluation of the impact of information technology (IT) on individuals and society. It explores the advantages and disadvantages of the use of digitized information at the local and global levels. ITGS provides a framework for the student to make informed judgments and decisions about the use of IT within social contexts. Projects and a portfolio, along with successful completion of the Inter-national Baccalaureate ITGS exam at the Standard or Higher Level, are required.

IB Information Technology 2
0.5/sem

IB Film 1
0.5/sem

At the core of the IB film course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement, and imaginative synthesis that is achieved through practical engagement in the art and craft of film. All students are encouraged to develop their creative and critical abilities and to enhance their appreciation and enjoyment of film.

IB Film 2
0.5/sem

Honors IB Research
0.5/sem

IB Advanced Independent Research and Creative Achievement is an Advanced Course for students participating in the International Baccalaureate Diploma Programme, who are committed to completing independent research and creative work. This course will provide opportunities for advanced research and engaging work with Creativity, Action and Service (CAS), both core components of the IB Diploma Programme. Students will conduct independent research at the college level, evaluate sources, and complete a 4000 word independent research paper. Students will also work to support their local and global communities through creative action and collaboration with their IB peers around the world. Students will create a portfolio that demonstrates their achievement of their CAS work. (Honors)

Prerequisites: Placement in IB Diploma Programme.

Honors IB Research
0.5/sem

Performing & Visual Arts

Annapolis and Broadneck High Schools

The PVA High School Magnet Program is an education choice for arts students who demonstrate artistic ability, interest and potential wishing to continue building their artistic skills and gaining real-world experience in the arts. A comprehensive curriculum designed to engage students in intense arts instruction that emphasizes the creative process through collaborative opportunities is facilitated by highly qualified teachers, professional artists and teaching artists. Students are able to focus their study in one of the Prime Arts Majors: Creative Writing, Dance, Film, Music (guitar, instrumental or vocal), Technical Production/Arts Management, Theatre, or Visual Arts (2-D studio art, 3-D studio art, digital media).

Upon graduation, students will be prepared to pursue a career in an arts field or to continue their artistic studies at an arts school, or conservatory, or four year institution of higher learning. PVA courses are only available to students enrolled in the PVA Magnet Programs.

PVA 21st Century Design
0.5/sem

PVA 21st Century Design explores the artistic and design process through interdisciplinary problem-based learning modules providing students with a global view of the creative process and the application in creative and collaborative thinking and design.

PVA 21st Century Design 2
0.5/sem

Designed to propel students into project-driven instruction offering students opportunities in design, creation, rehearsal, and/or studio time all leading to a fully student-produced, artist-facilitated event.

PVA Interdisciplinary Arts Exploration 1
0.25/sem

Students will explore the artistic performance process through local and regional arts performances and exhibitions. Students develop critique skills and techniques that are transformed into personal and collaborative performances that enhance the development of personal aesthetic values.
This course will enable students to continue their development of a writing style building upon the principles and experiences of PVA Creative Writing 1. Utilizing a variety of literary models, students will expand their capabilities for imaginative writing and deepen their understanding of successful creative writing traits. Students will explore literary genres in a more in-depth way to develop products, critique peer and professional writing and publish work in external publications.

01104/0801

This course will provide Performing & Visual Arts Magnet Program Dance Major students, with and without extensive training, the first year of modern dance instruction that is dedicated to a fundamental understanding of anatomically sound placement and movement. This course will establish the habits that will serve students throughout a long career in the field. The contrasting and specific schools of technique, such as Graham, Humphrey-Limon, Horton and Hawkins, simultaneously broaden each student’s level of technique while deepening their connection with the beginnings and style of the art form. This course is available only at Annapolis High School.

05001/0400

This course emphasizes choreography and performance based on modern dance forms. Students experience dance as a performing art and as a means of expression and communication. Designed to teach intermediate dancers the style and technique based on the principles of Cunningham, Nikolais, Humphrey-Weidman and other pioneers of American modern and post-modern dance. This course is available only at Annapolis High School.

05001/0400
In this course increased emphasis is placed on greater technical proficiency in modern dance. The advanced level challenges the student with more complex combinations. This course will explore the principles of "fall and recovery," symmetry/asymmetry, stage space, and ensemble work. This course is available only at Annapolis High School.

05001/0400

Dance students of the Performing and Visual Arts high school magnet program extend their knowledge of the art form by participating in improvisational dance. The dance students will formulate and use multiple sets of criteria to critique personal performances, improvised and choreographed, and the performances of others composing and choreographing dance pieces.

05003/0400

Students will participate in the non-performing aspects of dance through the creation, design and production of detailed elements (sets, costumes, properties, lighting, sound, marketing, publicity) based upon identified concert works, of quarterly in-class and informal performances to be produced in public venues. Technological literacy is paramount as design work is created, transferred and shared through various electronic media and applicable software. Students will collaboratively and communicate effectively through ongoing, internal production meetings and external marketing of the creative work.

05001/0400

Students will explore film making. Through the study and production of the filmmaking process, students will enhance their own filmmaking vocabulary, and techniques of filmmaking by watching films of various genres. Students will complete the process of film creation from concept to selection of theme to storyboard to production and final editing and screening; digitally recording film in order to produce exhibitions of their artwork(s).

05054/0500

Students will become familiar with the concepts, processes, materials and tools associated with music technology. Students will develop skills with sequencing, recording, and notation utilizing a variety of music software applications and programs, high-tech software, electronic instruments, and computer-based technologies.

05109/1300

PV03 | Honors PVA Modern Dance 3 0.5/sem
In this course increased emphasis is placed on greater technical proficiency in modern dance. The advanced level challenges the student with more complex combinations. This course will explore the principles of "fall and recovery," symmetry/asymmetry, stage space, and ensemble work. This course is available only at Annapolis High School.

05001/0400

P33 | Honors PVA Dance Composition/Repertory 0.5/sem
Students will explore film making. Through the study and production of the filmmaking process, students will enhance their own filmmaking vocabulary, and techniques of filmmaking by watching films of various genres. Students will complete the process of film creation from concept to selection of theme to storyboard to production and final editing and screening; digitally recording film in order to produce exhibitions of their artwork(s).

05054/0500

PV15 | Honors PVA Dance Production & Technology 1 1.0/sem
Students will participate in the non-performing aspects of dance through the creation, design and production of detailed elements (sets, costumes, properties, lighting, sound, marketing, publicity) based upon identified concert works, of quarterly in-class and informal performances to be produced in public venues. Technological literacy is paramount as design work is created, transferred and shared through various electronic media and applicable software. Students will collaboratively and communicate effectively through ongoing, internal production meetings and external marketing of the creative work.

05001/0400

PV16 | Honors PVA Dance Production & Technology 2 1.0/sem
Through applied education, students will partner to plan dance productions by preparing for a formal concert (lighting, flooring, front-of-house, marketing, etc.) The dance majors will further develop their technological skills to edit and annotate videos for the portfolio to document their work.

05001/0400

P37 | Honors PVA Film Elements 1 0.5/sem
Students will explore film making. Through the study and production of the filmmaking process, students will enhance their own filmmaking vocabulary, and techniques of filmmaking by watching films of various genres and various eras. Students will use state of the art computer-based technologies and equipment to learn and practice film-making techniques.

05054/0500

P53 | Honors PVA Film Studio 1 0.5/sem
PVA Film Studio 1 is a course designed to strengthen and refine the student’s artistic abilities and observational capabilities. Through observing and analyzing films of various genres and eras students will further their understanding and articulation of the concepts, vocabulary, and techniques of filmmaking by watching films of various genres and various eras. Students will use state of the art computer-based technologies and equipment to learn and practice film-making techniques.

05109/1300

P49 | Honors PVA Music History Styles & Composition 1 0.25/sem
PVA Honors Music Historical Styles & Composition is a course designed to introduce the student to selected masterpieces of Western music throughout major style periods, Medieval through 21st Century, and to lead the student to an understanding of the relationship of music to general culture and human development. The course will provide students with visual and aural identification of stylistic elements in various musical works, and the placement of those works in cultural and historical context.

05119/1300

P54 | Honors PVA Film Studio 2 0.5/sem
This course is designed to build upon knowledge and processes developed in PVA Film Studio I. Students continue in-depth exploration of a variety of film genres. This course includes creation of products based upon the principles of filmmaking and editing of both image and sound. This course is available only at Annapolis High School.

11055/0100

P55 | Honors PVA Film Studio 3 0.5/sem
This course introduces more challenging skills and strategies of less popularized genres of film including foreign, indie, and abstract filmmaking. Students will understand the concepts associated with Video Art and Installation, and how these differ from Filmmaking. This course is available only at Annapolis High School.

11055/0100

PV23 | PVA Film Production & Technology 1 0.5/sem
Students will identify, understand, and articulate the concepts, vocabulary, and techniques of filmmaking through the creation of films of various genres. Students will complete the process of film creation from concept to selection of theme to storyboard to production and final editing and screening; digitally recording film in order to produce exhibitions of their artwork(s).

05054/0500

P29 | Honors PVA Music Technology 1 0.25/sem
Students will become familiar with the concepts, processes, materials and tools associated with music technology. Students will develop skills with sequencing, recording, and notation utilizing a variety of music software applications and programs, high-tech software, electronic instruments, and computer-based technologies.

05109/1300

P50 | Honors PVA Music History Styles & Composition 2 0.5/sem
Students will strengthen and refine their guitar technique, with an emphasis on acoustic guitar. Development of comprehensive musicianship will be emphasized through a wide repertoire of original guitar literature, transcriptions, and arrangements. A variety of guitar techniques will be explored through diverse musical genres and styles.

05119/1300

P60 | Honors PVA Guitar 1 0.5/sem
This course is designed to expand upon the skills and techniques student will perform as a soloist, collaboratively with other guitarists and students with more advanced instruction in the development of guitar major with acoustic guitar as the primary medium. Development of advanced musicianship skills will be emphasized through a wide repertoire of original guitar literature, transcriptions, and arrangements.

**Honors PVA Guitar 2** 0.5/sem
Designed to build upon the earlier year of study providing the guitar major with more advanced instruction in all styles of guitar performance increase the robust and extensive performance skills and opportunities for the guitar major with acoustic guitar as the primary medium. Development of advanced musicianship skills will be emphasized through a wide repertoire of original guitar literature, transcriptions, and arrangements.

**Honors PVA Guitar 3** 0.5/sem
This course is designed to expand upon the skills and techniques developed in levels 1 and 2. The student will master the essential techniques for guitar performance in a variety of musical styles. The student will perform as a soloist, collaboratively with other guitarists and as a collaborative member of mixed vocal and instrumental ensembles.

**Honors PVA Ensemble Band 1** 0.5/sem
Is designed to strengthen and refine the band student’s musical technique. Wind and percussion students will be immersed in a variety of intensive performing, listening, creating, and evaluating experiences. Emphasis will place on a rigorous development of skills, particularly the ability to perform in an ensemble and as a soloist. Students will also engage in transcribing and arranging music. Development of comprehensive literacy will be emphasized through a repertoire that is robust, varied, and representative of diverse genres and cultures.

**Honors PVA Ensemble Band 2** 0.5/sem
Designed to build on the earlier year of study to further strengthen and refine the band student’s musical technique and expand their experiences in listening, creating, performing and evaluating a comprehensive repertoire of music. This course provides wind, percussion and brass students with more advanced instruction in the development of individual musical skills with emphasis on ability to perform in eclectic mixed ensemble and as a soloist in a variety of public venues.

**Honors PVA Ensemble Band 3** 0.5/sem
This course is designed to provide wind and percussion students the advanced concepts to enhance student’s musical techniques and refine their skills of interpretation, expression and musicality. This course continues to prepare students and provide opportunities for performance in eclectic mixed ensemble and as a soloist in a variety of public venues while expanding the student’s repertoire of various genres and cultures.

**Honors PVA Ensemble Strings 1** 0.5/sem
Students will strengthen and refine their musical technique by immersing themselves in a variety of intensive performing, listening, creating, and evaluating experiences. Emphasis will be placed on a rigorous development of skills, particularly the ability to perform in an ensemble and as a soloist. Students will also engage in transcribing and arranging music. Development of comprehensive literacy will be emphasized through a repertoire that is robust, varied, and representative of diverse genres and cultures.

**Honors PVA Ensemble Strings 2** 0.5/sem
Designed to build on the earlier year of study to further strengthen and refine the strings student’s musical technique and expand their experiences in listening, creating, performing and evaluating a comprehensive repertoire of music. This course provides violin, viola, bass and cello students with more advanced instruction in the development of individual musical skills with emphasis on ability to perform in eclectic mixed ensemble and as a soloist in a variety of public venues.

**Honors PVA Ensemble Strings 3** 0.5/sem
This course is designed to expand a student’s musical technique and diversify their repertoire. An emphasis is on portfolio development and audition preparation for conservatory and/or higher education opportunities. This course provides violin, viola, bass and cello students more advanced instruction in the development of individual musical skills with emphasis on ability to analyze cross cultural musical style influences, such as jazz, rap and hip-hop, on twenty-first century cinematic scores.

**Honors PVA Music Theory/Composition 1** 0.25/sem
Students will develop music composition skills and will craft the students' creative processes. Compositional techniques and comprehensive musical literacy will be developed through robust and diverse repertoire. Students will use state of the art computer-based technology to design and arrange musical compositions. They will compose and share their compositions with their peers, school and community.

**Honors PVA Vocal Music Performance 1** 0.5/sem
Students will strengthen and refine their musical technique by immersing themselves in a variety of intensive performing, listening, creating, and evaluating experiences. Emphasis will be placed on a rigorous development of skills, particularly the ability to perform in an ensemble and as a soloist. Students will also engage in transcribing and arranging music. Correct vocal production, diction, sight singing, and comprehensive musicianship will be emphasized through representative vocal repertoire from historical periods, musical styles and genres.

**Honors PVA Vocal Music Performance 2** 0.5/sem
Designed to continue to improve upon the students’ vocal music technique. Building upon fundamentals learned in PVA Vocal Music Performance 1, vocal students will continue to evaluate, create, listen to and perform musical selections. Diverse musical styles and genres as well as historical periods will continue to be presented to expand the vocal students’ repertoire.

**Honors PVA Vocal Music Performance 3** 0.5/sem
This course is designed to promote a student’s individual vocal performance skills and techniques while increasing their ability to memorize repertoire from a variety of diverse music genres. Building upon fundamentals learned in PVA Vocal Music Performance 2, vocal students will continue to evaluate, create, listen to and perform musical selections.

**Honors PVA Applied Musicianship 1** 0.5/sem
Students will strengthen and refine their artistic abilities through opportunities including master classes with professional musicians, private lessons, chamber groups and traditional and non-traditional ensembles. Students will be challenged to work independently and in teams to perform at a professional level.
Programs of Choice

PV36 | Honors PVA Applied Musicianship 2 0.5/sem
Designed to expand and reinforce student’s individual musical artistic abilities. Expansion of master classes with professional musicians, private lessons, chamber groups and mixed instrumentation ensembles.
05109/1300

PV55 | Honors PVA Drum Lab 0.25/sem
PVA Honors Drum Lab is a course designed to introduce the techniques and concepts of hand drumming and percussion. In this hands-on course students will learn hand-drumming basics: proper body and hand positioning, correct drumming technique, how breath, relax, and embrace rhythms. Students will learn the basic rhythmic foundation of the world’s most popular rhythms: reggae, samba, hiphop, funk, salsa, bellydance, rock n roll, African 6/8 and more. The course will incorporate ENSEMBLE playing: layering multiple interlocking rhythms in traditional and contemporary arrangements (Afro-Cuban Rumba, Bembe & Iyesa, Brazilian Samba & Afoxé, West African Kuku, American Funk and more).
05109/1300

P80 | Honors PVA Theatre History/Stagecraft 1 0.5/sem
Students will deepen their knowledge of the history of theatre and stagecraft throughout time. Students will study the origins and development of theatre from ancient civilizations through the Renaissance to Modern Theatre. Emphasis is placed on the development of dramatic forms through the reading of plays, the evolution of theatre architecture, and production in the western theatre.
05056/0500

P81 | Honors PVA Theatre History/Stagecraft 2 0.5/sem
05056/0500

P84 | Honors PVA Acting/Theatre Performance 1 0.5/sem
Students will improve their knowledge of historical themes through the study of various aspects of acting performance while honing their craft by layering principles of specific acting techniques which emphasize creativity, communication and collaboration. Instruction includes rigorous exercises that develop and strengthen the movement abilities, vocal agility and imagination of each student through creative problem-solving activities that require self-assessment and critical thinking.
05055/0500

P88 | Honors PVA Technical Design/Arts Management 1 0.5/sem
Students will create, design and produce detailed elements (sets, costumes, properties, lighting, sound, marketing, and publicity) based upon researched themes that enable quarterly in-class and informal, and quarterly performances to be presented in public venues. Technological literacy is paramount as design work is created, transferred and shared through various electronic media and applicable software. In this course, students work collaboratively and communicate effectively through ongoing, internal production meetings and external marketing of the creative work.
05057/0500

P89 | Honors PVA Technical Design/Arts Management 2 0.5/sem
In this course technological literacy is paramount as design work is created, transferred and shared through various electronic media and applicable software. Technical Design and Arts Management students work collaboratively and communicate effectively through ongoing, internal production meetings and external marketing of the creative work. This course is available only at Annapolis High School.
05057/0500

P90 | Honors PVA Technical Design/Arts Management 3 0.5/sem
In this course students will select specific disciplines within the Theatrical Design, Production and Management areas for intensive study. This will include subjects such as Scenic Design and Set Construction, Costume Design, Wardrobe Management and Costume Construction, Lighting Design and Electrics, Sound Design and Sound Engineering, Properties Design and Properties Construction, Stage Management, House Management, and Event Management. Students will focus on the specific skills, techniques, and best practices within the subject of their choosing. In addition, third year design students will train toward becoming “Lead Designers” for their area of specialization. This course is available only at Annapolis High School.
05057/0500

PV27 | PVA Theatre Production & Performance 1 1.0/sem
Students will strengthen and refine their theatrical abilities. In this extended day course students refine their craft as they create, design and produce both informal in-class performances and trimester performances to be presented in public venues. Students work collaboratively and communicate effectively through ongoing, internal production meetings and external marketing of the creative work.
05053/0500

PV28 | PVA Theatre Production & Performance 2 1.0/sem
Theatre Production and Performance is a course designed to strengthen and refine the student’s artistic theatrical abilities. In this extended day course, students refine their craft as they create, design, and produce both informal and trimester performances to be presented in public venues. Students work collaboratively and communicate effectively through ongoing, internal production meetings and external marketing of the creative work.
05053/0500

PV67 | Honors PVA Actor’s Instrument 0.5/sem
Theatre students of the Performing and Visual Arts magnet school deepen their knowledge of theatrical studies throughout the school year as they alternate units of study between movement and voice work. The movement units allow students to become aware of their bodies as instruments of communication. Students explore basic locomotor and stationary movement patterns through yoga and jazz dance, as well as historical musical theatre dance styles (i.e.—Charleston, Swing, Polka, Waltz and Tango) and stage combat. During classes focused on voice students begin to use different aspects of vocal communication. Issues are addressed such as correct vocal placement, diction, articulation, regional speech habits and pitch. Students apply their vocal knowledge to both spoken and sung repertoire.
05053/0500

P01 | Honors PVA Visual Arts/Portfolio Development 1 0.5/sem
PVA Visual Arts Critique and Portfolio Development 1 will enable students to begin to develop a body of work through creative problem solving that involves personal aesthetic choices and variety of media. Through the assembly of a portfolio, students will learn to value their work and examine artistic relationships based on personal criteria. Through critiques, students will articulate the aesthetic characteristics and meaning of personal, peer, and master artworks.
05170/0100

P02 | Honors PVA Visual Arts/Portfolio Development 2 0.5/sem
Designed to expand students analysis skills through examination of a body of work created through creative problem solving that involves personal aesthetic choices and variety of media. Adding to their
Through oral and written critiques, students will articulate the aesthetic characteristics and meaning of personal, peer, and master artworks. Students will be able to determine what they are trying to get from a work of art and what are trying to communicate through a work of art and express their analysis in artist’s statements and peer critiques.

P25 | Honors PVA Digital Media 1 0.5sem
PVA Digital Media 1 will provide experimentation with design theory and interpretation of themes into works of art in digital media. The student will study photography and digital design processes and then apply them to a variety of exciting and creative computer generated design projects. Students will work with state of the art software such as Adobe Creative Suite Master Collection, in order to develop professional digital skills.

05160/0100

P26 | Honors PVA Digital Media 2 0.5sem
Designed to expand and improve upon design theory and interpretation of themes into works of art in digital media. The student will study photography and digital design processes and then apply them to a variety of exciting and creative computer generated design projects. Students will continue the mastery of state of the art software such as the Adobe Creative Suite Master Collection, in order to develop professional digital skills.

05160/0100

P41 | Honors PVA Visual Arts Studio 1 1.0sem
Students will strengthen and refine their artistic abilities and observational capabilities. Students will be provided opportunities to experiment in a variety of media such as drawing, painting, sculpture, photography, and digital imaging. Emphasis will be placed on rigorous development of skills, especially design and composition concepts. Included will be experiences in working with artists in residence and museum resources. Sketchbooks and Visual Journals will be required to record ideas, research, and to document their step by step discovery process.

05169/0100

P92 | Honors PVA 2-D Design 1 0.5sem
PVA 2-D Design 1 is designed to improve student’s observational skills and bolster their confidence in visual expression through a sequence of studio assignments. Students will create artworks with traditional or non-traditional media exploring themes and styles through observational and imaginative portraits, figure drawing, abstract works, landscapes, and more. Students will conduct research and do a presentation form selection from a variety of production media on a given theme.

05155/0100

P93 | Honors PVA 2-D Design 2 0.5sem
Designed to expand and improve upon observational and artistic skills learned in the PVA Two-Dimensional Design 1. Students will produce art pieces exploring the themes and styles of observational and imaginative portraits, figure drawing, abstract works, landscapes, and more. Students will have a variety of studio experiences, conduct research and develop sketches or studies resulting in a presentation as well as production of art pieces. Additional themes beyond those in Two-Dimensional Design 1 will be explored.

05154/0100

P96 | Honors PVA 3-D Design 1 0.5sem
PVA 3-D Design 1 is designed to introduce and familiarize the student with concepts, processes, materials, and tools associated with the three-dimensional creation and development of a sculptural form. This course will enable students to begin to develop a personal style while cultivating their creativity.

05159/0100

P97 | Honors PVA 3-D Design 2 0.5sem
Designed to deepen understanding and creatively engage the student in a three-dimensional space and medium. This course will enable students to continue their development of a personal artistic style while cultivating their creativity. Students will utilize the three-dimensional creation process to create a variety of works based on the study of a variety of master and contemporary sculptures.

05159/0100

P31 | PVA Visual Arts Production & Technology 1 1.0/sem
Students will begin to assess a body of work through creative problem solving that involves personal aesthetic choices and variety of media. Students will organize series or selections of their work and/or the works of other students based on personal criteria. Students will complete the process of creation; selection of theme and venue; framing, hanging, installation, and digitally recording artworks in order to produce electronic and/or authentic exhibitions of their artwork(s).

05170/0100

P32 | PVA Visual Arts Production & Technology 2 1.0/sem
Designed to extend the students creation of body of artworks related to a variety of production media and concepts around particular contemporary themes. By engaging creative opportunities for self-expression, work will be published in an electronic portfolio and displayed in school and submitted to community and regional exhibitions. Expanded emphasis will be given to the connection between art production and technology.

05170/0100

P63 | Honors PVA Printmaking 0.25/qtr
PVA Printmaking is an honors course designed to introduce the techniques and concepts of traditional printmaking processes, including intaglio, relief, and monotype. Students will experiment with the tools, methods and materials for making printed artworks with particular focus on how manual printing and traditional techniques relate to contemporary concepts and individual art practice. This study includes the creation and utilization of various printmaking procedures and how to work in a professional print shop environment.

05170/0100

P7110 | Honors PVA Studio 2: Mixed Media 1.0sem
PVA Studio 2: Mixed Media is a course designed to strengthen and refine the student’s artistic abilities and observational capabilities. Students will be introduced to material, techniques and conceptual methods to further develop their art making practice. Emphasis will be placed on rigorous development of skills, concept development, choice-making, execution and presentation through a wide variety of medium. Students will consider their role as visual communicators with consideration of audience, artistic attitude and personal mission as they develop studio practice. Sketchbooks/Visual Journals will be required to record ideas, research, and to document their step by step discovery process.

0514/0100
PV79 | Honors PVA Creative Writing: Genre Studies 0.5/sem
Genre Studies designed for students in the third year of the PVA Magnet Program on the Creative Writing major. This course provides intensive study of four specific styles of creative writing: short stories and novels, poetry and lyrics, playwriting and screenwriting, and creative non-fiction. In depth analysis of classic and contemporary works from each genre leads to extensive research and development results in the production of original works to be published. Works written in this course will be further developed and produced in the Media Writers Workshop Level 3 course in which students are concurrently enrolled. This course is available only at Annapolis High School.
00000/0801

PV83 | Honors PVA Acting in the American Theatre 1.0/sem
Utilizing the acting fundamentals put into place by the previous two years of study, students will continue honing their craft by layering principles of specific acting techniques. Instruction focuses on specific acting techniques and their application to theatrical literature of 20th Century America. Instruction includes rigorous exercises that engage students in play exploration through reading, analysis, monologue and scene work. In the second semester, students are guided in directing projects that will result in an evening of one-acts. Several performances throughout each semester, as well as attendance at several student and professional productions (with assigned written analyses) are additional requirements of the course. This course is available only at Annapolis High School.
00000/0500

PV80 | Honors PVA Film: Genre Studies 0.5/sem
This course includes intensive study of the specific genres within the two main types of filmmaking: Narrative Archetype and Documentary Archetype. Examples within the Narrative Archetype are Hong Kong Cinema, Horror, Film Nair, Science-Fiction, Experimental Narrative, and Comedy. Examples within Documentary Archetype are Video Blogging, YouTube Channels, Experimental, Documentary, and Socio-Political Analysis will be explored and analyzed. This course is available only at Annapolis High School.
00000/0100

PV73 | PVA Anatomy and Figure Drawing 0.5/sem
PVA Anatomy and Figure Drawing is a course designed to develop skills in observation and drawing from life, a special emphasis will be placed on the understanding and application of structure, anatomy and the expressive human form. This course will offer an in depth study of the figure and the surface anatomy exploring a wide variety of media and techniques. This course is available only at Annapolis High School.
00000/0100

P57 | Honors PVA Art: Space & Time 0.5/sem
This course is designed to incorporate a variety of media including photography, drawing, painting, video, sound and sculptural materials in works that expand physical boundaries beyond the art object. Experimentation with different processes and media drive the student in considering sites for the installation of art pieces. Students verbally, visually and in written form document the process, development of ideas as they complete artist statements, critiques and presentations of their works. This course is available only at Annapolis High School.
00000/0100

P58 | Honors PVA Color Theory 0.5/sem
This course presents students with an in-depth exploration of color theory, including additive and subtractive color and its implications for the artist and designer. Color and its relationship to composition will be investigated through: interaction of color harmony and contrast; application to solve spatial problems; and thinking and information of color design for a variety of visual effects. With historical meanings as the frame, students will embrace the ever changing and ephemeral nature of color perception in contemporary design. This course is available only at Annapolis High School.
00000/0100

P23 | Honors PVA Junior Seminar 0.5/sem
In this course, students from all arts majors collaborate to design and implement cross-disciplinary works for public presentation facilitated by faculty and guest artists. Students work intensively in their specific arts major to create conceptually and thematically-driven works for public presentation. This course is available at Annapolis and Broadneck High School.
00000/2000

P747 | Honors PVA Production Practicum 0.5/sem
Production Practicum is designed to provide Performing & Visual Arts magnet students from all arts majors’ experiential learning in their chosen arts area supervised by arts faculty, guest artists and artist-in-residence. These supervised production labs and art studio experiences linked back to core arts courses taught during the day strengthen embodied learning in the field. Students will develop work under the guidance of a mentor artist/teacher. This course is available at Annapolis and Broadneck High School.
00000/2000

P37 | Honors PVA Dance Explorations 0.5/sem
Designed for all dance majors, this course extends their knowledge of the art form as they explore a range of other movement vocabularies including Tap, Jazz, African, and Musical Theatre. Through applied learning, dance students understand the origins of a specific dance style, its codification and how clear artistic standards act to uniquely define each style. This course is available only at Annapolis High School in the extended day program.
00000/0400

PV81 | Honors PVA Design Arts: Costume, Scenic, Lighting, Sound, Craft, Construction 0.5/sem
Students in the Technical Design and Arts Management magnet program concentrated study will explore the various areas of design: Costume, Scenic, Lighting, Sound, Craft and Construction. Application of design concepts are realized as students design, revise, and create costumes, construct sets, project lighting and run sound for performances and theatrical productions throughout each semester. Attendances at professional productions (with assigned written analyses of production designs) are additional requirements of the course. This course is available only at Annapolis High School.
00000/0500
## STEM

### Science Technology Engineering & Math

North County and South River High Schools

The STEM Magnet program is an educational choice for academically eligible and highly motivated students interested in exploring the importance of science, technology, engineering, and mathematics in all aspects of the world today. Through a project/problem based environment integrated with advanced STEM coursework, cutting-edge technology, STEM job shadow experiences, and research internships, STEM students will work collaboratively to solve real-world local and global problems with their peers, teachers, mentors, community partners, and STEM professionals.

The STEM Magnet Program offers five pathways that students may pursue: Earth & Space Systems, Green Technologies, Nanotechnology and Materials Science, Computer Science and Theoretical Applied Mathematics, and Engineering. Upon graduation, students will be ready to enter the STEM workforce directly or to continue their education at their chosen STEM pathway at a four-year college or university. STEM courses are only available to students enrolled in the STEM Magnet Program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C03</td>
<td><strong>Honors System Science A Biology (STEM)</strong> 0.25/sem</td>
</tr>
<tr>
<td>C04</td>
<td><strong>Honors System Science A Chemistry (STEM)</strong> 0.25/sem</td>
</tr>
<tr>
<td>C05</td>
<td><strong>Honors System Science A Physics (STEM)</strong> 0.25/sem</td>
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</tbody>
</table>

**B83 | Honors STEM Policy** 0.5sem

Students will work collaboratively to analyze current national and international STEM-related policies, study the role professional STEMists have in making these policies, review different perspectives on STEM-related public issues, and discuss the policy development process—including the role of the individual citizen—at the local, state, and federal levels. In this course students will create timelines, analyze reports and budgets, and interview stakeholders to research a contemporary local issue from a STEM perspective. Students will use their findings to collaboratively write an annotated executive STEM policy brief to be presented to a panel of experts.

**B84 | Honors STEM Policy** 0.25/qtr

Students will work collaboratively to analyze current national and international STEM-related policies, study the role professional STEMists have in making these policies, review different perspectives on STEM-related public issues, and discuss the policy development process—including the role of the individual citizen—at the local, state, and federal levels. In this course students will create timelines, analyze reports and budgets, and interview stakeholders to research a contemporary local issue from a STEM perspective. Students will use their findings to collaboratively write an annotated executive STEM policy brief to be presented to a panel of experts.

**C03 | Honors System Science A Biology (STEM)** 0.25/sem

This course is a two year program in which the Core Learning Goals of Honors Biology, Honors Chemistry and Honors Physics are integrated based on topic and common assessment limits. The course is implemented using the Problem-Project Based format based on the Buck Institute Model. In depth inquiry, student-driven research, and communication of results are interwoven into each module as appropriate. Nearly 40% of class time is spent in lab-based experiences. By immersing our students in this rigorous program based on relevant challenges, laboratory experience and projects, we are fostering students who are engaging in critical thinking, problem-solving, and collaboration. Each module affords itself to Differentiated Learning and Thinking Map implementation. The course is a pipeline at the end of the two years into AP Science programs. It is intended for advanced learners in the STEM Magnet Program.
This course is a two year program in which the Core Learning Goals of Honors Biology, Honors Chemistry and Honors Physics are integrated based on topic and common assessment limits. The course is implemented using the Problem-Project Based format based on the Buck Institute Model. In depth inquiry, student-driven research, and communication of results are interwoven into each module as appropriate. Nearly 40% of class time is spent in lab-based experiences. By immersing our students in this rigorous program based on relevant challenges, laboratory experience and projects, we are fostering students who are engaging in critical thinking, problem-solving, and collaboration. Each module affords itself to Differentiated Learning and Thinking Map implementation. The course is a pipeline at the end of the two years into AP Science programs. It is intended for advanced learners in the STEM Magnet Program.

03201/1604

This course is a two year program in which the Core Learning Goals of Honors Biology, Honors Chemistry and Honors Physics are integrated based on topic and common assessment limits. The course is implemented using the Problem-Project Based format based on the Buck Institute Model. In depth inquiry, student-driven research, and communication of results are interwoven into each module as appropriate. Nearly 40% of class time is spent in lab-based experiences. By immersing our students in this rigorous program based on relevant challenges, laboratory experience and projects, we are fostering students who are engaging in critical thinking, problem-solving, and collaboration. Each module affords itself to Differentiated Learning and Thinking Map implementation. The course is a pipeline at the end of the two years into AP Science programs. It is intended for advanced learners in the STEM Magnet Program.

03161/1604

This course is for seniors and is designed to support student exploration and research in an area of the student’s choosing. This may be a continuation of, extension of, and/or inspired by problems and/or projects explored via Problem Based Learning 3: Community Challenge and/or Internship experience. Students will be expected to write and submit a professional paper (White Paper), create and present a Scientific Poster, and formally present verbally their experience and/or findings. Students will develop project management skills as they apply to their year-long endeavor, with daily updates and modifications to their plan. This STEM Capstone course is for advanced learners in the STEM Magnet programs at both North County and South River High Schools. In this interdisciplinary course, students will have the opportunity to receive mentoring from professional STEM-ists, support from a STEM teacher, and time to carry out an experimental research project in a supportive setting.

Prerequisites: Successful completion of AP Environmental Science or AP Computer Science or AP Statistics, in addition to one STEM Pathway 2 course with advanced weighting.

03212/2000

This course is for advanced learners in the STEM Magnet programs at both North County and South River High Schools. In this interdisciplinary course, students will have the opportunity to receive mentoring from professional STEM-ists, support from a STEM teacher, and time to carry out an experimental research project in a supportive setting.

Prerequisites: Successful completion of AP Environmental Science or AP Computer Science or AP Statistics, in addition to one STEM Pathway 2 course with advanced weighting.

03212/1604

This course is a Pathway 2 course, part of the STEM Earth and Space Systems Pathway, designed as a collection of 4-6 weeklong missions. Students will assume the roles of NASA Mission Scientists within teams as they work together to explore problem-based learning in various activities in a hybrid earth and space science learning environment. Earth mission modules include a focus on earthquakes, volcanoes, plate tectonics, weather, climate, and climate predictions. Space mission modules include topics such as rocky planets, gas giants, extra-solar planetary systems, the Milky Way, galaxies in the universe, and the Big Bang theory. In this course, students will attend weekly mission briefings, work online alongside scientists, and collect and analyze recent NASA data from the stream of current explorations. NASA technology support tools allow students to collect and analyze data, and present their findings using authentic methods of practicing scientists. This course is intended for advanced learners in the STEM Magnet Program.

Prerequisites: AP Environmental Science or Aeronautics 1 & 2 (SRHS only) AP Computer Science or AP Statistics (NCHS only)

03047/1603

This is a STEM Capstone course for students participating in the Science Technology Engineering Math (STEM) or BioMedical Allied Health (BMAH) Magnet programs and who have successfully completed course offerings in a STEM-related subject and who are committed to completing independent research and coursework that results in a project or product that could be published, eligible for a patent, presented at a national conference, and/or entered in a nationally or internationally recognized competition. Students must submit a proposal in an area of research and/or product development related to the Sciences (Physics, Chemistry, Biology, Earth Science, Environmental Science, Space Science, Oceanography, etc). The proposal must be accepted by appropriate school-based and STEM/ BMAH-Office-based personnel.

NCAA 03212/1604

This course builds upon skills and techniques developed in Photography and Digital Processes 1. Students will be challenged to create original, expressive works of art based on a variety of photographers, digital artists and photo/digital styles and techniques. A process portfolio and sketchbooks/journal will reflect personal aesthetic choices and design solutions in the development of a body of work.

05162/0100
### C60 | Materials Science (STEM) | 0.5 sem

Materials Science is a revolutionary science that pushes innovation and industry forward through the study of how materials (such as ceramics and polymers) work and how advances in technology will continue to improve these materials. Students in this course will use hands-on exploration and authentic challenges to study Chemistry, Physics, Engineering, Biology, and Medicine as these subjects relate to Materials Science. This course is paired with STEM Nanotechnology offered in the opposite semester.

03204/1604

### C61 | Nanotech Exploration (STEM) | 0.5 sem

This course is a one semester Pathway 2 course in the STEM Nanotechnology and Materials Science Pathway. This course engages students in the exploration of the impact of size on chemical and physical characteristics with an emphasis one depth of learning, cross-cutting STEM concepts, relevance to real world applications, and the hands-on practice of science and engineering through inquiry and design. As students explore the nano world, they gain an enduring understanding of the applicability of Nanotechnology to all areas of science and how this relativity young science is changing the way we view and interact with computing, environmental issues, materials design, engineering and medicine. This advanced course is paired with STEM Materials Science offered in the opposite semester to round out the Pathway 2 experience.

Prerequisites: AP Computer Science or AP Statistics (NCHS only)

01204/1604

### D09 | Advanced Independent Research — Math | 0.5 sem

Students will submit a proposal in an area of research and/or publication, could be presented at a national conference, and/or suitable for entrance in a national or international competition. Students will be paired with a mentoring STEM professional. At the end of the course, students will formally present their research to their mentor, STEM faculty, students, and community stakeholders.

02997/1200

### M03 | Honors Aeronautics (STEM) | 0.5 sem

This is a Pathway 1 course in the Earth & Space Systems Pathway. This course (SRHS only), year one of Pilot’s License Training Ground School, is designed to prepare students for the Federal Aviation Administration ground school exam. Through the use of flight simulator, text book assignments, and rich activities, students’ will gain the knowledge towards becoming a private pilot. There will be an opportunity to meet with guest speakers, including local flight school instructors. By involving aspects of science, technology, engineering, and mathematics, students will experience an inter-curricular method of teaching and learning which creates a deep relevancy to material learned in the classroom. Students completing this course, in addition to taking the FAA exam, are eligible to continue to study at a local pilot training school to complete flight hours at a licensed training facility to earn their pilot’s license. It is intended for the advanced learner in the STEM Magnet Program. NOTE: Students must enroll in both semesters in the same academic year.

21013/0207

### M05 | Mathematics/Science Model (STEM) | 0.5 sem

This is a one semester Pathway 2 course in the STEM Computer Science and Theoretical Applied Mathematics. This course provides an interactive environment for the study real world of problems through mathematical and scientific modeling. A model is a simple construct which unveils or describes important properties of a more complex system that a learner may want to understand more fully. Students learn about the nature and structure of scientific models, limitations of models, model strengths and weaknesses. Numerous technological modeling tools will be used to explore and study complex problems and challenges within an inquiry-based classroom setting. This course is paired with STEM Parallel Computing to round out the Pathway 2 experience and is intended for the Advanced Learner in the STEM Magnet Program.

Prerequisites: AP Computer Science

21007/0207

### M245 | Green Architecture/Urban Planning (STEM) S1 | 0.5 sem

Students will explore traditional architecture as it relates to green and sustainable practices, urban development, and urban rehabilitation. In the second semester of this capstone course, students will apply the concepts, skills, and experiences acquired during the first semester to draw, create, and construct a scale model of an original design that helps to address an environmental problem of their choice. Students will present their design to a panel of their peers and STEM community stakeholders. South River High School students only.

Prerequisites: AP Environmental Science and STEM Environment & Society

21012/2000

### M75 | Honors Unmanned Aerial Systems (STEM) | 0.5 sem

This course is a yearlong exploration of the field of Unmanned Aerial Systems. Students will be exposed to this exciting STEM career field that is poised to create more than 70,000 new American jobs in the first three years following the integration of unmanned aircraft systems (UAS) into U.S. national airspace system (NAS). Integration is scheduled to take place in 2015. Beyond the first three years, the study projects that more than 100,000 new jobs will be created by 2025. In this course students will build, program and operate an UAS, Unmanned Aerial System. Starting with the basics of what is a UAS and how they work and the tasks they can complete. Emphasis on systems components — parts, Theory of Control Loop automation, FC Software, Communications technologies, Ground Station Mission planning, Flight (Stabilize/Acro, Auto) and First Person View will be taught through presentations, demonstrations, laboratory work (build an ArduCopter UAS), flight training (simulator and actual) challenges, and a final flight mission challenge.

21013/0207

### R24 | Honors Computer Science 1 (STEM) | 0.5 sem

This course studies computer language (Java) and programming practices and procedures. Topics to be covered will include fundamentals of the Java programming language, input and output, flow of control features, data structures and searching and sorting algorithms through the lens of STEM.

10251/0300

### R01 | Parallel Computing (STEM) | 0.5 sem

This is a one semester Pathway 2 course in the STEM Computer Science and Theoretical Applied Mathematics. This course will prepare students for increasingly popular large-scale computing that takes place in the real world, such as search engines, social networking sites, and scientific computational needs. Parallel computing has historically played a key role in addressing the performance demands of high-end engineering
and scientific applications. It has now moved to center stage in light of current hardware trends and device power efficiency limits. All computer systems — embedded, game consoles, laptop, desktop, high-end supercomputers, and large-scale data center clusters — are being built using chips with an increasing number of processor cores, with little or no increase in clock speed per core. Unlike previous generations of hardware evolution, this shift will impact all segments of the IT industry and all areas of Computer Science. This course introduces students to the foundations of parallel computing and provide application project experience in collaboration with government and industry partners. This advanced course is paired with STEM Mathematical and Scientific Modeling to round out the Pathway 2 experience.

Prerequisites: AP Computer Science

10055/0300

X62 | **Project Based Learning 1 (STEM)** 0.5sem
Students will work with STEM business and higher-education partners on three, six, or nine week problem/project-based modules focused on a current STEM topic or project that is relevant in today's workplace. This course will introduce students to the main philosophical pillars of the STEM program: Problem/Project based learning (open-ended projects with real-world connections), Socratic Dialogue (strategic way of communicating to better understand what others are thinking), and collaborative teamwork.

03999/2000

X63 | **Project Based Learning 2 (STEM)** 0.5sem
Students will work with STEM business and higher-education partners on three, six, or nine week problem/project-based modules focused on a current STEM topic or project that is relevant in today's workplace. This course will continue to expose students to the main philosophical pillars of the STEM program: Problem/Project based learning, Socratic Dialogue, and collaborative teamwork.

03999/2000

X64 | **Honors Project Based Learning 3 (STEM)** 0.5sem
This is an 11th grade STEM course for the Advanced Learning in the STEM Magnet program and is modeled after the Honors Challenge at the University of California at Davis. Students are grouped and paired with a mentor who brings the students an authentic challenge on a local, national or global issue. This one semester course immerses students in professionalism, critical thinking, program solving, research, prototyping, revising, professional writing and collaboration as they consult on the topic/challenge/project given to them by their mentors (community stakeholders, business partners, higher education, local government agencies, etc.). In this Honors course, students engage in research, analysis, prototyping, etc. and complete a White Paper and Formal Presentation for mentors.

Prerequisites: Successful completion of PBL 1 and PBL 2

03999/2000

X54 | **Project Based Learning 2 (STEM)** 0.25/sem
Students will work with STEM business and higher-education partners on three, six, or nine week problem/project-based modules focused on a current STEM topic or project that is relevant in today's workplace. This course will continue to expose students to the main philosophical pillars of the STEM program: Problem/Project based learning, Socratic Dialogue, and collaborative teamwork.

03999/2000
Signature Courses

A Signature is a theme chosen by a school and its surrounding community, to connect classroom instruction with real-world situations and workforce skills. A Signature brings together educators with local business and community leaders to make classroom instruction relevant, interesting, and challenging for students with opportunities that connect to the 21st century workplace. Each of the 12 comprehensive high schools in Anne Arundel County offer a unique Signature Program. These programs align with AACPS goals to eliminate the achievement gap by providing all students with access to rigorous coursework.

There are multiple opportunities for students to participate in the school’s Signature Program. Signature specific classes will be available to all students on a space-available basis. Students who participate in the Signature are able to choose from specially designed courses, co-curricular and career opportunities enhanced with the school’s unique theme. These may include seminars with leaders in their field, internships, mentoring, technical and community college courses, online learning, and other real world experiences. Students may develop individual pathways and create a portfolio that demonstrates their unique skills and talents surpassing information found in a standard high school transcript.

Annapolis High School—Change Engineering

**X06--0 | Change Engineering Exploration 1**  0.5/sem

The Change Engineering Exploration Course provides a forum for students to connect, collaborate, solve and share knowledge toward innovating and improving the global transformation. Through a model driven approach, interactive projects and real life applications, students are challenged to identify, analyze, plan, implement and engineer change. Available at Annapolis High School only.

22161/2000

Arundel High School—Global Citizenship and Community Development

**X06--1 | Community Development/Global Citizenship 1**  0.5/sem

In the Community Development and Global Citizenship Explorations Course students will identify and discuss issues, events, and essential questions relevant to youth in a globalized society, consider the cultural and technological influences that have shaped our modern society, and consider how these impact the students social and professional options in the students’ future. Available at Arundel High School only.

22161/2000

**X07--1 | Community Development/Global Citizenship 2**  0.5/sem

Students will continue to explore career opportunities related to the Signature theme. This course will help students choose the appropriate programs of study to prepare for success in the 21st century workforce. Available at Arundel High School only.

22161/2000

Broadneck High School—Environmental Literacy

**X06--2 | Environmental Literacy Exploration 1**  0.5/sem

Through the Environmental Literacy Explorations course, students survey environmental issues related to sustainability and the connectedness of environmental awareness to personal and career opportunities. Available at Broadneck High School only.

22161/2000

**X07--2 | Environmental Literacy Exploration 2**  0.5/sem

The purpose of this course is to explore sustainability practice though local, regional, national, and global perspectives. Students will design and implement their own sustainability plan. Available at Broadneck High School only.

22161/2000

Chesapeake High School—Information Management

**X06--3 | Information Management Exploration 1**  0.5/sem

The introductory Signature course in Information Management will address the variety of methods used to collect, protect, manage, and finally, apply information personally, publicly, and privately. Available at Chesapeake High School only.

22161/2000

**X07--3 | Information Management Exploration 2**  0.5/sem

The study of the collection and management of information as it related across multiple disciplines. Available at Chesapeake High School only.

22161/2000

Glen Burnie High School—Public Service

**X06--4 | Public Service Exploration 1**  0.5/sem

The Public Service 1 course exposes students to aspects of service as provided by private, public, or non-government agencies, including topics such as infrastructure, ethics, the greater good, international relations, economics, and communications. Available at Glen Burnie High School only.

22161/2000

Meade High School—Homeland Security

**X06--5 | Homeland Security Exploration 1**  0.5/sem

The Homeland Security Explorations 1 and 2 courses incorporate technologies that are applied in practical work environments and related to homeland security and emergency management. We examine various policy measures and practices as they relate to democratic values, civil responsibilities and liberties. Available at Meade High School only.

22161/2000

**X07--5 | Homeland Security Exploration 2**  0.5/sem

The purpose of this course is designed to enhance emergency and disaster preparedness for students by providing training in the knowledge necessary for preparedness, mitigation, response, and recovery. This course provides an introduction to public health emergency preparedness, including natural disasters, unintended human acts, terrorism, and emerging threats such as a pandemic on the federal, state, local and personal levels. Available at Meade High School only.

22161/2000
This course provides an in-depth view of terrorism, transnational criminal enterprise, and the intelligence process. Students will explore social and economic issues, government policies in relation to terrorism and the role of law enforcement in counterterrorism. Topics will include a historical and contemporary study of domestic and international terrorism, psychological and sociological features of terrorism, and the impact of 9/11 on American security policies. Students will also examine the intelligence process and explore intelligence collection methodologies, intelligence tasking processes, and intelligence analysis practices. This course is available only at Meade High School.

Available at Meade High School only.

Students will be introduced to Geographic Information system (GIS) and Remote Sensing (RS) technology to study their local and regional communities. This course is open to all students and is the foundation of the STARS Entry-Level GIS Technician Certification. Available at Meade High School only.

Available at Meade High School only.

This MSDE approved course will help the student learn the skills required to work on and/or build a Geographic Information Systems/Remote Sensing project. Students and teachers will follow a course of hands-on instructions to learn skills ranging from introductory digital mapping to image analysis. In this second course on the path to STARS Entry-Level GIS Technician Certification, students are introduced to each skill with a real world application and led through the problem solving process. Follow-up applied practice application will direct the student to apply acquired skills to cases in the local community using the supplied data. This repetition will set the stage for further student driven projects. Available at Meade High School only.

Available at Meade High School only.

In GIS 3, students will learn to apply those skills. Students will learn and apply Spatial Analyst and 3D Analyst. The ArcGIS Spatial Analyst extension allows students to examine the spatial relationships within a specific area as well as study site suitability. The ArcGIS 3D Analyst extension allows students to gain a different perspective on their environment by modeling surfaces three dimensionally. Students will also learn methods of integrating external hardware in order to incorporate real time data from GPS units in order to accurately survey their community. Combined with a trouble-shooting unit and general review of skills acquired in Course 2, Course 3 can become an invaluable tool. Available at Meade High School only.

Available at Meade High School only.

In GIS 4, an MSDE approved course, students will learn and apply Spatial Analyst and 3D Analyst. The ArcGIS Spatial Analyst extension allows students to examine the spatial relationships within a specific area as well as study site suitability. The ArcGIS 3D Analyst extension allows students to gain a different perspective on their environment by modeling surfaces three dimensionally. Students will also learn methods of integrating external hardware in order to incorporate real time data from GPS units in order to accurately survey their community. Available at Meade High School only.

Available at Meade High School only.

Focusing on International Trade, Transportation and Tourism, the North County Signature Explorations course relies on small group problem-based projects to expose students not only to current issues in those industries but also to viable career pathways after high school. Available at North County High School only.

Available at North County High School only.

This course surveys the organization and operations of the commercial transportation industry and its impact on the bottom-line of today’s modern businesses. Course topics include the legal and regulatory environment, costing and pricing, major transportation options, managing transportation partnerships and the use of information and technology in the logistics sector. Available at Northeast High School only.

Available at Northeast High School only.

The Human Performance Exploration 1 Course will provide an introduction and overview for students to explore the how health, fitness, leisure, financial security, and environment influences quality of life among individuals and communities. In a project/problem based environment, integrated with human performance coursework, students solve real-world local and global problems with their peers using cutting-edge technology, job shadow experiences, and internships. Available at Northeast High School only.

Available at Northeast High School only.

Students will work with our community through collaborative learning opportunities in order to gain the skills and knowledge necessary to make informed decisions and positively contribute to global economics and finance as innovators and leaders in the 21st century. Available at Old Mill High School only.

Available at Old Mill High School only.
**Severna Park High School—**

**Business, Innovation, and Leadership**

X06--9 | **Business Innovation & Leadership Exploration 1** 0.5/sem

In the Business, innovation, & Leadership Signature Explorations course, Students will gain a basic understanding of business practices, roles, and systems, by designing innovative strategies and products. Through participation in case studies, students will investigate the world beyond their immediate environment and learn how to effectively communicate their ideas with diverse audiences. Available at Severna Park High School only.

22161/2000

X07--9 | **Business Innovation & Leadership Exploration 2** 0.5/sem

In the Business, Innovation, & Leadership Exploration 2 course, students will work collaboratively to analyze the organization of businesses, current national and international business policies and trends through case studies, field trips, and guest industry specialists. They will work in teams with a mentor from the Integrated Community Stakeholder partnership to solve an innovative project based business challenge. Students will formally present their idea to their mentor, community stakeholders, and students. Available at Severna Park High School only.

22161/2000

**South River High School—**

**Global Communication and Public Affairs**

X061-0 | **Global Communication & Public Affairs Exploration 1** 0.5/sem

The GCPA Exploration 1 Course will provide an introduction and overview for students to explore the interaction of business, government, and nongovernmental organizations affecting public policy on issues that impact people both locally and globally. In a project/problem based environment, integrated with advance GCPA coursework, students solve real-world local and global problems with their peers using cutting-edge technology, job shadow experiences, and internships. Available at South River High School only.

22161/2000

X071-0 | **Global Communication & Public Affairs Exploration 2** 0.5/sem

The GCPA Exploration 2 Course examines concepts, practices, institutions, and critical issues in public diplomacy. Students will explore the global debate on its meaning and scope in the context of today’s information environment and changes in the conduct of diplomacy and global policy. In a project/problem based environment, integrated with advance GCPA coursework, students solve real-world local and global problems with their peers using cutting-edge technology, job shadow experiences, and internships. Available at South River High School only.

22161/2000

**Southern High School—**

**Design: Preservation and Innovation**

X061-0 | **Design: Preservation & Innovation Exploration 1** 0.5/sem

Available at Southern High School only.

22161/2000

X071-0 | **Design: Preservation & Innovation Exploration 2** 0.5/sem

Available at Southern High School only.

22161/2000
Completer Programs

All students graduating from high school are expected to enroll in a sequence of courses that prepares them for college and/or employment. A series of Technical Preparation courses have been designed to prepare students in a variety of technical areas. Technical Preparation is defined as a sequence of study beginning in high school and continuing through at least two years of postsecondary education. Applied academics in mathematics, science, and communications form the academic foundation for Technical Preparation. These applied courses enable students to understand complex technologies and new skill requirements in work environments. Students are prepared for highly skilled technical occupations that allow either direct entry into the workplace after high school graduation and/or continuation of study at a business/technology school or college.

In addition to a wide variety of elective courses, Career Technology Education (CTE) provides high school students an opportunity to pursue a sequential technical and academic program of study leading to advancement in a career field. These careers require varying levels of education – from high school and postsecondary certificates, to apprenticeships, or two- and four-year college degrees. Students add value to their overall education by completing CTE programs of study that provide opportunities to earn industry-recognized credentials and college credit while still in high school.

510050 Academy of Health Professions .........................82
520354 Accounting & Finance ..................................82
520451 Administrative Services Management ..................83
470635 Auto Collision Technology/Repair .......................83
470645 Automotive Technician (NATEF) ...........................83
120550 Baking & Pastry (ACF) ....................................83
511150 Biomedical Sciences: Project Lead the Way ..........84
460401 Building/Property Maintenance & Management ......84
520251 Business Management ....................................84
860000 Career Research and Development ....................84
465200 Carpentry ....................................................85
010050 CASE—Curriculum for Agricultural Education ....85
521201 Computer Technology ....................................85
120450 Cosmetology ...............................................86
120550 Culinary Arts (ACF) ......................................86
110850 Database Academy (Oracle) ..........................86
510601 Dental Assisting ..........................................86
470655 Diesel Power Technology .................................87
481010 Drafting ....................................................87
200201 Early Childhood ..........................................87
465300 Electrical—Construction Trades .........................87
030103 Environmental Resource Management .............88
520955 Food & Beverage Management (Prostart) ..........88
480299 Graphic Design ............................................88
475200 Heating, Ventilating, Air Conditioning (HVAC) ....88
430350 Homeland Security Emergency Preparedness ....89
100150 Interactive Media Production ...........................89
110950 IT Networking Academy (CISCO) .....................89
490306 Marine Repair Technology ...............................89
521451 Marketing ..................................................90
465100 Masonry—Construction Trades .........................90
470606 Motorcycle Repair Technology ..........................90
520499 Network Systems Administration ......................90
465500 Plumbing—Construction Trades .........................90
480503 Precision Machining (Machine Tool Operation) ....91
480201 Printing Technology .......................................91
155000 Project Lead the Way (PLTW)—Pre-Engineering ....91
475300 Welding—Construction Trades ..........................91
**Academy of Health Professions**

The Academy of Health Professions 1 is a full year course designed for 11th grade students interested in health related professions. The primary areas of study include: foundations of medicine, health sciences, and structure & function of the human body. Students will also engage in processes and hands-on procedures that are used in the delivery of essential healthcare services. Field trips to explore health career opportunities will be provided. Students can become certified in CPR / First Aid and have the opportunity to earn Proficiency Credits from Anne Arundel Community College. Successful course completion is required to proceed to the Academy of Health Professions Level 2. The Academy of Health Professions 2 course prepares 12th grade students for employment and further post-secondary education. Emphasis is placed on expanding content knowledge and skills that relate to the roles of the Nursing Assistant and Medical Assistant. Hands-on experience in various clinical settings provides exposure to diverse career opportunities. Eligible students have the opportunity to earn Maryland State CNA (Certified Nursing Assistant) and GNA (Geriatric Nursing Assistant) certifications and are expected to take the proficiency exam.

**Prerequisites:** Biology

**Recommended:** Computer Skills for Academic Success, Chemistry (concurrent enrollment acceptable)

**Note:** Completion of AoHP 1 will satisfy the health education graduation requirement. Student must earn a grade of 70% or higher in Academy of Health Professions 1 to proceed to Level 2

**Accounting & Finance**

Upon completion of the Accounting and Finance Pathway and passage of the CLEP examination students will be able to demonstrate:

1) knowledge through the ability to recall and to make associations between accounting concept, terminology, procedures, and rules such as double entry accounting, the accounting cycle, forms of business, transaction analysis, accounting principles;

2) comprehension and application through the student’s ability to recognize, explain, and associate elements in an income statement;

3) analysis through a student’s ability to analyze data contained on a balance sheet such as depreciation/amortization/depletion, valuation of inventories, long term liabilities, cash and internal controls, retained earnings, preferred and common stock, liquidity/solvency/activity analysis;

4) analysis and synthesis through a student’s ability to analyze and utilize cash flow information such as operating, financing and investing and;

5) synthesis through a student’s ability to make predictions and/or propose actions based on investments and contingent liabilities.

**Program Connection:** Anne Arundel Community College

www.aacc.edu/business/default.cfm
CIP 520451 | **Administrative Services Management**

The Business Administrative Services Pathway provides students with knowledge of how to effectively utilize technology in the analysis, and communication of ideas; and the management, organization, and examination of information for strategic business decision making. Students are expected to think analytically; improve written and oral communication skills; enhance listening and questioning skills; learn and practice the art of conversation; broaden their awareness of career options; practice decision making and problem solving; learn the importance of communication skills in professional business practice; and utilize data to engender decisions. Upon completion of this program, students will be prepared to sit for the Microsoft Office Specialist (MOS) Certification exam, a globally recognized credential desired by academia and business.

**Program Connection:** Anne Arundel Community College  
(www.aacc.edu/business/default.cfm)

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CIP 470635 | **Auto Collision Technology/Repair**

Techniques and spray painting in the repair of automobile bodies is offered in this two to three year course. Technician and restorer positions are available in garages, shops, and dealerships. This program is ASE (Automotive Service Excellence) Certified by the National Automotive Technicians Education Foundation.

**Associated Certifications:** ASE Student Certification  
**Required:** T86 Technical Math (taught concurrently with Level 2) 0.5/sem

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CIP 470645 | **Automotive Technician (NATEF)**

An opportunity to learn how to inspect, repair, and adjust automobiles is provided in this two to three-year course. Positions as Specialist in alignment, engine tune up, fuel injection, brake, engine repair, trouble shooting, air conditioning and electrical systems are found in auto repair centers. This program is ASE (Automotive Service Excellence) Certified by the National Automotive Technicians Education Foundation. Students enrolled in Auto Technology 1 will be enrolled in C01 (Pre-Engineering).

**Associated Certifications:** ASE Student Certification  
**Required:** T86 Technical Math (taught concurrently with Level 2) 0.5/sem  
**Prerequisite:** Pre-algebra or completion or current enrollment in Algebra 1  
**Program Connection:** Catonsville Community College

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CIP 120550 | **Baking & Pastry (ACF)**

An opportunity to learn ingredients recognition, cost conversion, bake shop production, use of equipment, basic decorations, airbrush applications is provided in this course. Students may receive national sanitation certification and can have a job shadowing expe rience. Career opportunities include cake decorator, baker, caterer, consultant, food service manager. Students are eligible for college credit through Anne Arundel Community College upon successful completion of the program.

**Associated Certifications:** ACF  
**Required:** T86 Technical Math (taught concurrently with Level 2) 0.5/sem  
**Program Connection:** Anne Arundel Community College  
(www.aacc.edu/HCAT/credit)
**Completer Programs**

### Biomedical Sciences: Project Lead the Way

The goal of the program is to increase the number of students pursuing careers in the biomedical sciences, including healthcare. Students who complete the program are prepared for employment and further education at two- and four-year college levels. Stevenson University, the Maryland PLTW Biomedical Sciences Affiliate University, will offer four (4) transcripted credits for its first semester majors biology course (BIO 113). The credit will be offered for those students who complete the entire PLTW biomed sequence of courses and score at least 80% on each end-of-course assessment.

### Building/Property Maintenance & Management

This career education path is designed for those students who are interested in gaining a variety of skills needed to maintain and improve residential, commercial or industrial property. This program is open to juniors and seniors. It consists of six units: Building Maintenance, Floor Care, Painting, Floor Covering Installation, Fence Installation and Distribution and Warehousing. Students must have transportation for second semester senior year to be a completer in this program. The last semester will consist of a mandatory work experience or intern ship at a local business and will be supervised by the class instructor. Students are expected to take the NCCER Core Certification exam.

**Associated Certifications:** NCCER

**Required:** T86 Technical Math (taught concurrently with Level 2) ……….0.5/sem

### Business Management

A student who completes this program pathway will be able to develop a business plan for a small business. They will apply accounting, marketing, and management concepts to realistic business scenarios. All aspects of managing a business will be discussed in addition to the competencies learned in computer applications, business communications and financial management. The business management program of study recommends that students should have access to work study, mentorship, internship, and job shadow opportunities. Students will also benefit from involvement in national professional organizations such as DECA and the Future Business Leaders of America (FBLA). This program of study does have a credit by examination through the College Board CLEP exam. The student who completes this program will be prepared to work as a management trainee, manage a small business, and continue their education after graduation.

### Career Research and Development

Career Research and Development (CRD) is a CTE program that prepares students with the academic, technical and workplace skills necessary to seek further education and employment in a career field of their interest upon graduating high school.
Completer Programs  

**CIP 465200 | Carpentry**

An opportunity to learn to construct new buildings, handle work connected with remodeling, maintenance, and repair is provided in this two to three-year course. Positions as rough, finish or maintenance carpenter, inspector, home remodeling, project superintendent, and self-employment are included in the job opportunities. This program is certified by the National Center for Construction Education and Research (NCCER) and students may also be eligible to receive proficiency credits from Anne Arundel Community College.

**Associated Certification:** NCCER

**Required:** T86 Technical Math (taught concurrently with Level 2)----------0.5/sem

**Program Connection:** Anne Arundel Community College

(www.aacc.edu/architecture/ACH_Programs.cfm)

**CIP 010050 | CASE—Curriculum for Agricultural Education**

The CASE POS prepares students to be successful in numerous careers in the agricultural sciences as well as preparing them to further their education at the post-secondary level. This inquiry-based POS incorporates classroom learning, FFA leadership and career development, as well as outside of the classroom experiences through Supervised Agricultural Experiences (SAE) and other internship opportunities. In M53, Intro to Agriculture, Food, and Natural Resources with “hands-on” activities and projects. Students’ experiences will involve the study of communication, sciences of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Students will also explore career and postsecondary opportunities in each area of the course. Students’ experiences will involve the study of plant/human anatomy and physiology, classification, and the fundamentals of production and harvesting in M54 and M55. Finally, in the concentrated CASE courses, students will explore the science of biotechnology and its agricultural and societal implications. Students will work in teams through inquiry-based projects exploring biotechnology research methodology, DNA/ gene transfer, biofuels, micro propagation, embryo transfer, transgenic materials, and microbial biotechnology. As a foundation, biochemistry and the regulations, laws, and ethics governing biotechnology will be addressed.

**CIP 521201 | Computer Technology** (State name: Business Data Processing)

The Computer Technology program provides students with an understanding of desktop vs. web programming. Students will have demonstrated the ability to create web pages as well as desktop applications. Students will design, code, test, and debug programs using industry standard techniques involving decision structures, loop structures, exception handling, reiteration, arrays, database interaction and more.

**Minimum Credits: 4**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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</thead>
<tbody>
<tr>
<td>T22 Carpentry 1</td>
<td>1.0</td>
<td>1.0</td>
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<tr>
<td>T23 Carpentry 2</td>
<td>1.5</td>
<td>3.0</td>
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<td><strong>Extension</strong></td>
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<tr>
<td>T24 Carpentry 3</td>
<td>2.0</td>
<td>4.0</td>
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<tr>
<td>T701 Carpentry Work-Based Learning</td>
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</tbody>
</table>

**Availability:** CAT North, CAT South

**CIP 010050 | CASE—Curriculum for Agricultural Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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</thead>
<tbody>
<tr>
<td>M53 Introduction to AFNR (Agriculture, Food, and Natural Resources)</td>
<td>0.5</td>
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</tr>
<tr>
<td>M54 Principles of Agricultural Sciences/Plants -or- M55 Principles of Agricultural Sciences/Animal</td>
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</tr>
<tr>
<td>M56 Honors Animal &amp; Plant Biotechnology</td>
<td>0.5</td>
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</tr>
<tr>
<td>M58 Honors Agricultural Business Research &amp; Development (Capstone)</td>
<td>0.5</td>
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</tbody>
</table>

**Availability:** Phoenix Academy, Southern

**CIP 521201 | Computer Technology** (State name: Business Data Processing)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tbody>
<tr>
<td>Q65 Computer Skills for Academic Success</td>
<td>0.5</td>
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<tr>
<td>Q50 Software Applications</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Q77 Web Page Design</td>
<td>0.5</td>
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</tr>
<tr>
<td>Q53 Visual Basic 1</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Q54 Visual Basic 2</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>R18 Computer Science Programming-JAVA</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Q78 Advanced Web Page Design 1</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Q79 Honors Advanced Web Page Design 2</td>
<td>0.5</td>
<td>0.5</td>
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<tr>
<td><strong>Extension</strong></td>
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<td></td>
</tr>
<tr>
<td>S54 Computer Technology Work-Based Learning</td>
<td>1.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Availability:** All high schools
### CIP 120450 | Cosmetology

Cosmetology provides students an opportunity to learn hair shaping, manicuring, hairstyling, facial massage, make-up, hair coloring and salon management. Graduates of this 1500 hour/ three year program are required to sit for a state exam. Job opportunities include haircutting specialist, hair color or permanent wave technician, make-up artist, and owner-manager of a beauty salon.

**Associated Certification:** State Board of Cosmetology

**Required:** T86 Technical Math (taught concurrently with Level 2) .......... 0.5/sem

<table>
<thead>
<tr>
<th>Minimum Credits: 10.5</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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</thead>
<tbody>
<tr>
<td>T25 Cosmetology 1</td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td>T26 Cosmetology 2</td>
<td>1.5</td>
<td>3.0</td>
</tr>
<tr>
<td>T27 Cosmetology 3</td>
<td>2.25</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**Availability:** CAT North, CAT South

### CIP 120550 | Culinary Arts (ACF)

Students will learn the use of commercial equipment, purchase food, plan menus, provide banquet buffet service, management, cook, bake, and sanitation techniques, and may be eligible to receive sanitation certification. Career opportunities include dining room management or supervisor, food service management or supervisor, food service manager, purchasing agent, proprietor, host/hostess, consultant, dietitian, caterer or cook/chef. This program is certified by the American Culinary Federation Foundation.

**Associated Certification:** ACF

**Required:** T86 Technical Math (taught concurrently with Level 2) ..........0.5/sem

**Program Connection:** Anne Arundel Community College (www.aacc.edu/HCAT/credit)

<table>
<thead>
<tr>
<th>Minimum Credits: 4</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>T77 Honors Culinary Arts 1</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>T78 Honors Culinary Arts 2</td>
<td>1.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Extension**

<table>
<thead>
<tr>
<th>Minimum Credits:</th>
<th>Credits per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>T79 Honors Culinary Arts 3</td>
<td>2.0</td>
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<tr>
<td>-or-</td>
<td>4.0</td>
</tr>
<tr>
<td>T701 Culinary Arts Work-Based Learning</td>
<td></td>
</tr>
</tbody>
</table>

**Availability:** CAT North, CAT South

### CIP 110850 | Database Academy (Oracle)

The Oracle Database Academy Program is a nationally recognized program that prepares students for successful careers in Information Technology (IT), including database administration, database programming, IT consulting, IT project management and computer engineering. The Database Academy Program educates high school students in database programming, as well as the professional skills students require to pursue quality academic and professional opportunities. The last course in the program of study is an online course that offers dual-enrollment opportunity for students

<table>
<thead>
<tr>
<th>Minimum Credits: 4</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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</thead>
<tbody>
<tr>
<td>Q53 Visual Basic 1</td>
<td>0.5</td>
<td>2.0</td>
</tr>
<tr>
<td>R18 Computer Science Program: Java</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>R20 AP Computer Science (A level)</td>
<td>1.0</td>
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</tr>
<tr>
<td>R21 Computer Science — Data Structures</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Q78 Advanced Web Design 1</td>
<td>0.5</td>
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<tr>
<td>Q79 Advanced Web Design 2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>R10 Database Design &amp; Program (SQL)</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>R11 Database Applications Development (PL/SQL)</td>
<td>0.5</td>
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**Extension**

<table>
<thead>
<tr>
<th>Minimum Credits:</th>
<th>Credits per Semester</th>
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<tbody>
<tr>
<td>T704 Database Work-Based Learning Internship (Recommended)</td>
<td>0.5</td>
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</table>

**Availability:** Glen Burnie, South River

### CIP 510601 | Dental Assisting

Students will be instructed in the areas of receptionist, chairside assistant, business office manager, and dental laboratory assistant. Clinical experiences and observations take place in a dental clinic and are supervised by a doctor of dentistry. A senior year clinical experience may be available in a dental office.

**Required:** T86 Technical Math (taught concurrently with Level 2) ..........0.5/sem

<table>
<thead>
<tr>
<th>Minimum Credits: 4.5</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tbody>
<tr>
<td>T55 Honors Dental Assisting 1—Semester 1</td>
<td>0.5</td>
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<tr>
<td>Semester 2</td>
<td></td>
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<tr>
<td>T56 Honors Dental Assisting 2</td>
<td>1.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Extension**

<table>
<thead>
<tr>
<th>Minimum Credits:</th>
<th>Credits per Semester</th>
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</thead>
<tbody>
<tr>
<td>T84 Honors Dental Assisting/Radiology—Semester 1</td>
<td>0.5</td>
</tr>
<tr>
<td>T84 Honors Dental Assisting/Radiology—Semester 2</td>
<td>1.0</td>
</tr>
<tr>
<td>T57 Dental Assisting 3</td>
<td>2.0</td>
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<tr>
<td>-or-</td>
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<tr>
<td>T702 Dental Assisting Work-Based Learning</td>
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</tbody>
</table>

**Availability:** CAT South
**CIP 470655 | Diesel Power Technology** (State name: Diesel Engine Technology)

The Diesel Power Technology course prepares the student to service and repair a wide variety of diesel powered vehicles and equipment. This program provides training in the Inspection, diagnosis, repair and service of diesel engines, brakes, suspension & steering, electrical/electronic systems, heating, ventilation & air conditioning, preventative maintenance inspection, and hydraulic systems. This course has been developed in partnership with Cummins Power Systems and is certified by the National Automotive Technicians Education Foundation (NATEF).

Associated Certification: ASE Student Certification

Required: T86 Technical Math (taught concurrently with Level 2) .......... 0.5/sem

**CIP 480101 | Drafting**

Students will be instructed in basic drafting, orthographic projection, sketching drawings, ANSI standard lettering, blueprint reading, CAD, geometric construction, sectioning, auxiliary views, detail and assembly drawings, inking drawings, architectural layouts of floor plans and elevation drawings. Career opportunities include drafter, engineering technician, mechanical engineer, industrial designer, teacher, architect, and construction superintendent. Students may also be eligible for Proficiency Credits from Anne Arundel Community College.

Required: T86 Technical Math ............................................................... 0.5/sem

Note: Completion of M20 and M21 (Engineering Drawing/ CAD 1/2) (C or better) may be taken for Two Semesters in the home school Technology Education Program to satisfy the requirements for T31.

Program Connections: Anne Arundel Community College
(Architecture, Interior Design, Construction Management, Computer-Aided Designing, & Drafting Technology)

**CIP 200201 | Early Childhood**

This completer program is designed for students who wish to pursue a career in the field of early childhood care and education. The course sequence provides performance-based training and assessment, which prepares students for both work and college. A senior year internship is required.

Program Connection: Anne Arundel Community College:
www.aacc.edu/childcare/default.cfm

**CIP 465300 | Electrical—Construction Trades**

Students will be instructed in wiring diagrams and schematics, electrical safety, wiring methods, blueprint reading, furnace controls, wiring heat lamps and air condition electrical motors and starters is provided. Career opportunities include line meter installer, cable splicer, wire-person, inspector, trouble shooter, motor repair person, control expert, distribution panel installer, electrical contractor or self employment. This program is certified by the National Center for Construction Education and Research (NCCER).

Associated Certifications: Core Level 1 NCCER

Required: T86 Technical Math (taught concurrently with Level 2) .......... 0.5/sem

Recommended: Completion of Algebra 1 (C or better)
### CIP 030103 | Environmental Resource Management

The Environmental Resource Management Program will give students working knowledge and first-hand experience in the areas of: Water Resource, Fisheries/Wildlife, Soil, Forests, and Watershed Restoration. Instruction will include classroom, hands-on, lab, field, and project based activities, while incorporating instruction in various environmental technologies including GIS and GPS. Students will work in close association with Arlington Echo’s Chesapeake Connections program, community, private, and local government programs. The Natural Resource Management program will utilize the Chesapeake Bay Watershed as a model and for sites for work experience and study. Upon completion of the program, students will have acquired knowledge and work experience to aid them in further study or employment in fields such as: fish or forestry technicians, environmental engineers, wildlife managers, park rangers, naturalists, environmental scientists, and landscape workers. Students may earn proficiency credit from Anne Arundel Community College upon successful completion of the program.

**Program Connection:** Anne Arundel Community College
www.aacc.edu/science/biology.cfm

### CIP 520955 | Food & Beverage Management (Prostart)

The ProStart program introduces high school students to a wide variety of careers within the restaurant, food service and hospitality industry. Students will study and practice professional food preparation, preparation of international cuisines, food safety and sanitation, customer service relations, accounting, cost control, marketing and an introduction to aspects of lodging management. Students will build strong culinary, business, management and workplace skills as a result of their participation in this program. The National Restaurant Association Educational Foundation (NRAEF) designed the program’s industry driven curriculum.

**Program Connection:** Anne Arundel Community College
(www.aacc.edu/HCAT/credit)

### CIP 480299 | Graphic Design (State name: Digital Media & Web Design/Development)

Students will be introduced to publication design as a means of communication with a focus on studying and applying layout and design concepts used in the fields of graphic design, web page design and printing. Students use the Macintosh computer with software applications to learn basic page layout techniques, photo manipulation, advertising design, and digital illustration. Career opportunities exist as a graphic artist, ad designer, web page designer, and pre-press operator.

**Recommended:** Completion of/concurrent enrollment in Computer Skills for Academic Success

### CIP 475200 | Heating, Ventilating, Air Conditioning (HVAC)

Basic principles and practical applications to the Air Conditioning and Heating Industry are introduced in this course. Electro-Mechanical Theory, basic electric ity, and wiring diagrams are studied. Outcomes include trouble shooting, maintenance, wiring diagram, ducting, and repair of central heating and air conditioning systems. Jobs are available in manufacturing, wholesaling, retailing, and building maintenance. This program is certified by the National Center for Construction Education and Research (NCCER).

**Associated Certifications:** Core Level 1 NCCER

**Required:** T86 Technical Math (taught concurrently with Level 2) ........... 0.5/sem

### Minimum Credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tbody>
<tr>
<td>T43 Environmental Resource Management 1</td>
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<tr>
<td>T65 Environmental Science</td>
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<tr>
<td>T44 Honors Environmental Resource Management 2</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Extension</strong></td>
<td></td>
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<tr>
<td>T45 Honors Environmental Resource Management 3</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td>T701 Environmental Resource Management Work-Based Learning</td>
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</tbody>
</table>

**Availability:** CAT North
CIP 430350 | Homeland Security Emergency Preparedness

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

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>X06 Homeland Security Explorations 1</td>
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<tr>
<td>X07 Homeland Security Explorations 2</td>
<td>0.5</td>
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</tr>
<tr>
<td>X31 Global Information Systems (GIS) 1</td>
<td>0.5</td>
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<tr>
<td>X32 GIS 2</td>
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<tr>
<td>X33 GIS 3</td>
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<td>X34 GIS 4</td>
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<tr>
<td>T704 Internship/Capstone</td>
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</table>

Availability: Meade

CIP 100150 | Interactive Media Production

The IMP program will enable students to create a range of projects by combining sound, video, graphics, animation, and web technology. These media tools are used by business and industry to develop content for marketing, training, and entertainment. Students will prepare for the Adobe Creative Suite Certification(s) and/or Web Design (WOW) industry certifications, and also have the opportunity to earn college credit toward advanced study.

If taking this program at the high school, these courses are required:
- Q16 Honors Interactive Media 1 .................................................. 1.0
- Q17 Honors Interactive Media 2 .................................................. 1.0
- Q18 Honors Advanced Interactive Media Production 1 ...................... 1.0
- Q19 Honors Advanced Interactive Media Production 2 ...................... 1.0

If taking this program at CAT South, these courses are required:
- Q16 Honors Interactive Media 1 .................................................. 1.0
- Q17 Honors Interactive Media 2 (also meets requirements of Q18 and Q19) .... 3.0

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q16 Honors Interactive Media Production 1</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Q17 Honors Interactive Media Production 2</td>
<td>1.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Availability: CAT South, Chesapeake, Old Mill, Severna Park, South River

The above courses are required if taking the program at CAT South

CIP 110950 | IT Networking Academy (CISCO)

Students will be taught the conceptual and technical skills to design, install, operate and maintain state-of-the-art computer networks. Each participant will have the opportunity for theory, component recognition, cabling techniques and design. This two year course is a Cisco Systems Certified program and students can elect to test for accredited industry standard networking certification (Cisco Certified Entry Networking Technician (CCENT) and Cisco Certified Network Associate (CCNA) during the second year of the program.) Students may be eligible to earn proficiency credits from Anne Arundel Community College upon successful completion of the program.

Required: T86 Technical Math (taught concurrently with Level 2) ............ 0.5/sem

Prerequisites: Completion of Algebra 1 (C or better), Computer Skills for Academic Success Highly Recommended

Program Connection: Anne Arundel Community College
(www.aacc.edu/computertech/cis_prog.cfm)

CIP 490306 | Marine Repair Technology

Standards and guidelines set by the American Boat & Yacht Council (ABYC) are incorporated in this program and supported by ABYC. Students will learn boat related skills in carpentry, marine wiring, diagnoses and repair of marine engines, painting, refinishing, plumbing, fiberglassing and rigging. Career possibilities include crew member, refinishing, rigging, carpentry, fiberglass fabrication and repair, sales, and cleaning and maintenance.

Required: T86 Technical Math (taught concurrently with Level 2) ............ 0.5/sem

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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</thead>
<tbody>
<tr>
<td>T701 Marine Repair Technology 1</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>T702 Marine Repair Technology 2</td>
<td>1.5</td>
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Extension

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<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tbody>
<tr>
<td>T703 Marine Repair Technology 3 -or- T702 Marine Repair Technology Work-Based Learning</td>
<td>2.0</td>
<td>4.0</td>
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</tbody>
</table>

Availability: CAT South
CIP 521451 | Marketing

In the Marketing pathway, students learn about the consumer’s role, research in global marketing, developing a marketing plan and the importance of ethics and social responsibility. Internships and mentored projects are highly recommended. Graduates may earn college credit through articulation agreements, dual enrollment or by taking the Principles of Marketing CLEP Exam.

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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</thead>
<tbody>
<tr>
<td>Q65 Computer Skills for Academic Success</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Q50 Software Applications</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Q61 Business Management</td>
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</tr>
<tr>
<td>Q63 Business Finance Using Software</td>
<td>0.5</td>
<td>0.5</td>
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<tr>
<td>Q30 Honors Marketing 1</td>
<td>0.5</td>
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<tr>
<td>Q31 Marketing 2</td>
<td>0.5</td>
<td>1.0</td>
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<tr>
<td>Extension</td>
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<tr>
<td>S32 Marketing Work-Based Learning</td>
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<td>2.0</td>
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</tbody>
</table>

Availability: Annapolis, Meade, North County

CIP 465100 | Masonry—Construction Trades

Students will learn to work with brick, block, stone and concrete. They will be able to estimate the cost of materials, read blueprints, and layout projects. Career opportunities in this trade offer a promising future for graduates as a Masontender, Bricklayer, Layout person, Foreman, Estimator, Superintendent, and Contractor. This program is certified by the National Center for Construction Education and Research (NCCER).

Associated Certifications: Core Level 1 NCCER

Required: T86 Technical Math (taught concurrently with Level 2) 0.5/sem

Minimum Credits: 4

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<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
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<tr>
<td>T49 Masonry 1</td>
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<tr>
<td>Extension</td>
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<tr>
<td>T51 Masonry 3</td>
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<tr>
<td>-or-</td>
<td></td>
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</tr>
<tr>
<td>T702 Masonry Work-Based Learning</td>
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</tr>
</tbody>
</table>

Availability: CAT North

CIP 470606 | Motorcycle Repair Technology (State name: Small Engine Repair)

Students will develop skills in the operating principles of motorcycle engines, primary and secondary driveline, electrical systems, systematic troubleshooting and generally accepted repair, service, and maintenance procedures will comprise the course of study. Career opportunities existing in motorcycle and sport watercraft service, repair, and sales.

Required: T86 Technical Math 0.5/sem

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tbody>
<tr>
<td>T74 Motorcycle Repair Technology 1</td>
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<tr>
<td>T75 Motorcycle Repair Technology 2</td>
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<td>Extension</td>
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<tr>
<td>T76 Motorcycle Repair Technology 3</td>
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<tr>
<td>-or-</td>
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</tr>
<tr>
<td>T703 Motorcycle Repair Tech Work-Based Learning</td>
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</tbody>
</table>

Availability: CAT North

CIP 520499 | Network Systems Administration

As a student in this two year program, you will learn the networking skills to install applications and systems, work with multiple operating systems, setup and configure network hardware and software, install and configure TCP/IP protocol on workstations and servers, troubleshoot and maintain a network server, work in a team setting, use HTML. Students will be able to sit for IC3, MOS, A+, and Net+ exams. Students may also be eligible to receive proficiency credits from Anne Arundel Community College.

Required: T86 Technical Math (taught concurrently with Level 2) 0.5/sem

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tbody>
<tr>
<td>Q55 Honors Network Systems Administration 1</td>
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<tr>
<td>Q56 Honors Network Systems Administration 2</td>
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<tr>
<td>Extension</td>
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</tr>
<tr>
<td>T703 Network Systems Administration Work-Based Learning</td>
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<td>4.0</td>
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</tbody>
</table>

Availability: CAT North, CAT South

CIP 465500 | Plumbing—Construction Trades

Students will be instructed in the areas of soldering, brazing, repairing sinks and toilets, repairing water heaters, reading blueprints and designing bathrooms. A senior year internship is available, which can lead to an Apprenticeship program. Career opportunities exist as plumber, gas fitter, maintenance engineer, engineer, steam fitter, sprinkler system mechanic, boiler mechanic, plumbing sales representative, service person or estimator. This program is certified by the National Center for Construction Education and Research (NCCER)

Associated Certifications: Core Level 1 NCCER

Required: T86 Technical Math (taught concurrently with Level 2) 0.5/sem

Program Connection: Catonsville Community College

Community College of Baltimore County

Minimum Credits: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits per Semester</th>
<th>Maximum Possible</th>
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<tr>
<td>T52 Plumbing 1</td>
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<tr>
<td>T54 Plumbing 3</td>
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<tr>
<td>-or-</td>
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<tr>
<td>T703 Plumbing Work-Based Learning</td>
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</tbody>
</table>

Availability: CAT North
### CIP 480503 | Precision Machining (Machine Tool Operation)

Students will develop skills to read and interpret prints, use precision measuring instruments and hand tools. Students will efficiently setup and operate drill presses, vertical milling machines, engine lathes and grinders. Students will also develop CNC programs using software applied in the industrial field. Career opportunities include Machinist, Maintenance Machinist, Instrument Maker, Inspector, Tool and Die Maker, Shop Supervisor and Engineer.

**Required:** T86 Technical Math (taught concurrently with Level 2) .......... 0.5/sem

<table>
<thead>
<tr>
<th>Minimum Credits: 4</th>
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</thead>
<tbody>
<tr>
<td>T46 Precision Machining 1</td>
</tr>
<tr>
<td>T47 Honors Precision Machining 2</td>
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<tr>
<td><strong>Extension</strong></td>
</tr>
<tr>
<td>T48 Precision Machining 3</td>
</tr>
<tr>
<td>-or- T703 Precision Machining Work-Based Learning</td>
</tr>
</tbody>
</table>

**Availability:** CAT North

### CIP 480201 | Printing Technology (State name: Graphic & Printing Technology)

Students will have the opportunity to learn all aspects of the printing process including: digital printing, digital file management, offset lithography, binding and finishing, and production planning. Students will learn to use iMac computers, Adobe Suite, computer to plate system, printing press, and bindery equipment. Students will develop an understanding of inventory and cost control, electronic prepress and employment responsibilities. Career opportunities include: pressman or bindery operator, prepress technician, production planning, purchasing and customer service.

**Associated Certifications:** Print Education

**Required:** T86 Technical Math (taught concurrently with Level 2) .......... 0.5/sem

**Program Connection:** Catonsville Community College

### CIP 155000 | Project Lead the Way (PLTW)—Pre-Engineering

Project Lead The Way (PLTW) is a CTE instructional program that incorporates the national standards of The National Council of Teachers of Mathematics, the National Science Standards and the International Technology Education Association. The program prepares students for further education and careers in engineering and engineering technology. The list of courses provided meet the criteria of the Project Lead the Way Program. Specialty year-long courses are selected by the school and not all courses listed are offered at every PLTW school.

<table>
<thead>
<tr>
<th>Minimum Credits: 4</th>
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<tbody>
<tr>
<td>M25 Honors Principles of Engineering</td>
</tr>
<tr>
<td>M26 Honors Engineering Design</td>
</tr>
<tr>
<td>M27 Honors Digital Electronics</td>
</tr>
<tr>
<td>M28 Honors Computer Integrated Manufacturing</td>
</tr>
<tr>
<td>M30 Honors Aerospace Engineering</td>
</tr>
<tr>
<td>M44 Honors Engineering Design &amp; Development</td>
</tr>
<tr>
<td>M49 Honors Civil Engineering &amp; Architecture</td>
</tr>
</tbody>
</table>

**Availability:** Glen Burnie, Meade, Severna Park, South River

### CIP 475300 | Welding—Construction Trades

Students will be instructed in blueprint reading, oxy-acetylene welding and cutting, brazing, arc welding, plasma cutting and welding, and pulse MIG welding. Career opportunities exist as production welder, machine operator, job shop welder, fabricator, pipe line welder, sheet metal mechanic and welder, construction welder, and welding shop owner. This program is certified by the National Center for Construction Education and Research (NCCER)

**Associated Certifications:** Core Level 1 NCCER

**Required:** T86 Technical Math (taught concurrently with Level 2) .......... 0.5/sem

<table>
<thead>
<tr>
<th>Minimum Credits: 4</th>
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<tbody>
<tr>
<td>T61 Welding 1</td>
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<tr>
<td>T62 Welding 2</td>
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<td><strong>Extension</strong></td>
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<tr>
<td>T63 Welding 3</td>
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<tr>
<td>-or- T703 Welding Work-Based Learning</td>
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**Availability:** CAT North, CAT South
# Scheduling Worksheet

<table>
<thead>
<tr>
<th></th>
<th>Fall Semester</th>
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<tr>
<td><strong>A-Day</strong></td>
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<tr>
<td><strong>B-Day</strong></td>
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<tr>
<td><strong>A-Day</strong></td>
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<tr>
<td><strong>B-Day</strong></td>
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<td><strong>A-Day</strong></td>
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<td><strong>B-Day</strong></td>
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<td><strong>B-Day</strong></td>
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<tr>
<td>Anne Arundel County High Schools</td>
<td></td>
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<tr>
<td>---------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>Annapolis High School</strong></td>
<td>410-266-5240</td>
<td></td>
</tr>
<tr>
<td>2700 Riva Road, Annapolis, MD 21401</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Arundel High School</strong></td>
<td>410-674-6500</td>
<td></td>
</tr>
<tr>
<td>1001 Annapolis Road, Gambrills, MD 21054</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Broadneck High School</strong></td>
<td>410-757-1300</td>
<td></td>
</tr>
<tr>
<td>1265 Green Holly Drive, Annapolis, MD 21401</td>
<td></td>
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</tr>
<tr>
<td><strong>Chesapeake High School</strong></td>
<td>410-255-9600</td>
<td></td>
</tr>
<tr>
<td>4798 Mountain Road, Pasadena, MD 21122</td>
<td></td>
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</tr>
<tr>
<td><strong>Glen Burnie High School</strong></td>
<td>410-761-8950</td>
<td></td>
</tr>
<tr>
<td>7550 Baltimore Annapolis Blvd., S.E., Glen Burnie, MD 21060</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Meade High School</strong></td>
<td>410-674-7710</td>
<td></td>
</tr>
<tr>
<td>1100 Clark Road, Fort George G. Meade, MD 20755</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>North County High School</strong></td>
<td>410-222-6970</td>
<td></td>
</tr>
<tr>
<td>10 E. 1st Avenue, Glen Burnie, MD 21061</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Northeast High School</strong></td>
<td>410-437-6400</td>
<td></td>
</tr>
<tr>
<td>1121 Duvall Highway, Pasadena, MD 21122</td>
<td></td>
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</tr>
<tr>
<td><strong>Old Mill High School</strong></td>
<td>410-969-9010</td>
<td></td>
</tr>
<tr>
<td>600 Patriot Lane, Millersville, MD 21108</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Severna Park High School</strong></td>
<td>410-544-0900</td>
<td></td>
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<tr>
<td>60 Robinson Road, Severna Park 21146</td>
<td></td>
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<tr>
<td><strong>South River High School</strong></td>
<td>410-956-5600</td>
<td></td>
</tr>
<tr>
<td>201 Central Avenue East, Edgewater, MD 21037</td>
<td></td>
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</tr>
<tr>
<td><strong>Southern High School</strong></td>
<td>410-867-7100</td>
<td></td>
</tr>
<tr>
<td>4400 Solomons Island Road, Lothian, MD 20711</td>
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<tr>
<td><strong>Other Educational Centers</strong></td>
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</tr>
<tr>
<td><strong>Center of Applied Technology-North</strong></td>
<td>410-969-3100</td>
<td></td>
</tr>
<tr>
<td>800 Stevenson Road, Severn, MD 21144</td>
<td></td>
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<tr>
<td><strong>Center of Applied Technology-South</strong></td>
<td>410-956-5900</td>
<td></td>
</tr>
<tr>
<td>211 Central Avenue East, Edgewater, MD 21037</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mary E. Moss Academy</strong></td>
<td>410-222-3836</td>
<td></td>
</tr>
<tr>
<td>45 Community Place, Crownsville, MD 21032</td>
<td></td>
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<tr>
<td><strong>Phoenix Academy</strong></td>
<td>410-222-1650</td>
<td></td>
</tr>
<tr>
<td>1411 Cedar Park Road, Annapolis, MD 21401</td>
<td></td>
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<tr>
<td><strong>Charter Schools</strong></td>
<td></td>
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<tr>
<td><strong>Chesapeake Science Point</strong></td>
<td>410-969-3100</td>
<td></td>
</tr>
<tr>
<td>7321 Parkway Drive South, Hanover, MD 21076</td>
<td></td>
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</tr>
</tbody>
</table>
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