

# Art

The Anne Arundel County High School art program is designed to offer all students personal enrichment as well as provide a high quality 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 art 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 21<sup>st</sup> 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 objects 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.

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<b>G19</b>	
<b>One Semester</b>	<b>0.5 Fine Arts Credit</b>

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**Foundations of Studio Art**  
 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.

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<b>G5</b>	
<b>One Semester</b>	<b>0.5 Fine Arts Credit</b>

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**Photography and Digital Processes I**  
 This course is the introductory class for the study of photography and digital processes. The manual camera, darkroom techniques, and/or the manipulation of student generated images on the computer will serve as the basis for exploring various media. Students will be challenged to solve photographic and digital problems based on 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*

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<b>G6</b>	
<i>Fine Arts Credit</i>	
<b>One Semester: 0.5 Credit</b>	<b>or Two Semesters: 1 Credit</b>

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**Photography and Digital Processes II**  
 This course builds upon skills and techniques developed in Photography and Digital Processes I. 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.  
 Prerequisites: *Photography and Digital Processes I*

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<b>G7   Honors</b>	
<i>Fine Arts Credit</i>	
<b>One Semester: 0.5 Credit</b>	<b>or Two Semesters: 1 Credit</b>

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**Photography and Digital Processes III**  
 The emphasis of this course is on developing a body of related photographic and digital work 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 photographic and digital artists leading to an individual style based on personal aesthetic criteria.  
 Prerequisites: *Photography and Digital Processes II*

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<b>G5</b>	
<b>One Semester</b>	<b>0.5 Fine Arts Credit</b>

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**Studio I: Two Dimensional Art Processes**  
 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*

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<b>G6</b>	
<i>Fine Arts Credit</i>	
<b>One Semester: 0.5 Credit</b>	<b>or Two Semesters: 1 Credit</b>

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**Studio II: Two Dimensional Art Processes**  
 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 I: Two Dimensional Processes*

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<b>G7   Honors</b>	
<i>Fine Arts Credit</i>	
<b>One Semester: 0.5 Credit</b>	<b>or Two Semesters: 1 Credit</b>

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**Studio Art III: Two Dimensional Portfolio Development**  
 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 II: Two Dimensional Art Processes*

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<b>G5</b>	
<b>One Semester</b>	<b>0.5 Fine Arts Credit</b>

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**Studio I: Three Dimensional Art Processes**  
 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*

<b>G66</b>	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Studio II: Three Dimensional Art Processes**

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 I: Three Dimensional Art Processes*

<b>G67   Honors</b>	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Studio Art III:  
Three Dimensional Portfolio Development**

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 II: Three Dimensional Art Processes*

<b>G69</b>	<i>0.5 Fine Arts Credit</i>
One Semester	

**Drawing For Fashion I**

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/portfolios showing the quality of their work, the 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

<b>G61   This Course is Pending Board Approval</b>	
One Semester	0.5 Fine Arts Credit

**Drawing For Fashion II**

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 I

**Advanced Placement Courses**

<b>G61</b>	Drawing
<b>G48</b>	Two-Dimensional Design
<b>G68</b>	Three-Dimensional Design
Two Semesters	1 Fine Arts Credit

**AP Studio Art**

Students in these courses develop their Drawing Portfolio, 2-D Design Portfolio, or 3-D Design Portfolio according to the requirements of the College Board's Advanced Placement Program. 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.

Prerequisites:

For AP Drawing—

*Studio Art III: Two Dimensional Portfolio Development*

For AP Two Dimensional Design—

*Studio Art III: Two Dimensional Portfolio Development or Photography and Digital Processes III*

For AP Three Dimensional Design Portfolio Development—

*Studio Art III: Three Dimensional Portfolio Development*

<b>G62</b>	<i>1 Fine Arts Credit</i>
Two Semesters	

**AP History of Art**

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*

# Career & Technology Education

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.

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. TECH PREP 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 TECH PREP. These applied courses enable students to understand complex technologies and new skill requirements in work environments. TECH PREP prepares students for highly skilled technical occupations and allows either direct entry into the workplace after high school graduation and/or continuation of study at a business/technology school or college.

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T96		
One Semester: 0.5 Credit	or	One Year: 1 Credit

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## CAT Career Exploration

This program provides students with an opportunity to experience 4 to 8 professional organized skill areas. These experiences are designed to be similar to occupations actually existing in the commercial/industrial workplace. This course is open to students in ninth and tenth grades. Career Exploration does not require completion of the Magnet application.

Prerequisites: None

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T97 (One Semester)	1 Career Internship Credit
T98 (Two Semesters)	2 Career Internship Credits

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## Career Internship

This offering includes all internship experiences occurring outside of school that are non-paid and award credit towards graduation. It is important that these experiences match the student's career plan and interests. Students interested in career internships should seek the advice of their Career and Technology Education teacher or counselor.

Prerequisites: None

## Applied Technology

The following programs are taught at the Centers of Applied Technology. Magnet applications are required for entrance. Most of the programs have a senior year work-based learning program

available which can lead to an apprenticeship program or continuing education.

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T07 (Two Semesters)	2 Auto Collision Repair Credits
T08 (Two Semesters)	3 Auto Collision Repair Credits 1 Technical Math Credit**
T09 (Two Semesters)	4 Auto Collision Repair Credits or 4 Work-based Learning Credits

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### Auto Collision Repair/Refinishing

An opportunity to diagnose and make repairs, read schematics, welding 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.

Prerequisites: None

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T10 (Two Semesters)	2 Auto Technology Credits
T11 (Two Semesters)	3 Auto Technology Credits 1 Technical Math Credit*
T12 (Two Semesters)	4 Auto Technology Credits or 4 Work-based Learning Credits

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### Automotive Technology

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 I will be enrolled in C01 (Pre-Engineering).

Completion of/Concurrent enrollment in Algebra I (C or better)

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T81 (One Semester)	1 Baking and Pastry Credit
T82 (Two Semesters)	3 Baking and Pastry Credits 1 Technical Math Credit*
T83 (Two Semesters)	4 Baking and Pastry Credits 4 Work-based Learning Credits

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### Baking and Pastry

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 experience. Career opportunities include cake decorator, baker, caterer, consultant, food service manager.

Center of Applied Technology North only.

Prerequisites: None

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T20 (Two Sem)	2 Build Maint. & Bus. Support Credit 1 Technical Math Credit*
T21 (One Sem)	2 Building Maint. & Bus. Support Credits
T70 (Two Credits each Sem)	Building Maint. & Bus. Support and/or Work-based Learning Credits

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### Building Maintenance & Business Support

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

# Arundel High School Course Offerings

2012 - 2013

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 at a local business and will be supervised by the class instructor

Center of Applied Technology North only.  
Prerequisites: None

T22 (One Semester)	1 Carpentry Credit
T23 (Two Semesters)	3 Carpentry Credits 1 Technical Math Credit*
T24 (Two Semesters)	4 Carpentry Credits or 4 Work-based Learning Credits

## 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).

Prerequisites: None

T58 (Two Semesters) Honors	2 Cisco Credits
T59 (Two Semesters) Honors	3 Cisco Credits 1 Technical Math Credit*

## Cisco (formerly Computer/Networking Technology)

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.)

Prerequisites: Completion of *Algebra I (C or better)*  
*Computer Skills for Academic Success* Highly Recommended

T25 (Two Semesters)	3 Cosmetology Credits
T26 (Two Semesters)	3 Cosmetology Credits 1 Technical Math Credit*
T27 (First Semester)	3 Cosmetology Credits (Second Semester)
	2.5 Cosmetology Credits

## 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, haircolor or permanent wave technician, make-up artist, and owner-manager of a beauty salon.

Prerequisites: None

T77 (Two Semester)	1 Culinary Arts Credit
T78 (Two Semesters)	3 Culinary Arts Credits 1 Technical Math Credit*
T79 (Two Semesters)	4 Culinary Arts Credits or 4 Work-based Learning Credits

## Culinary Arts

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 a sanitation certificate.

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.

Prerequisites: None

T55 (Two Semesters) Honors	1.5 Dental Assisting Credit
T56 (Two Semesters) Honors	3 Dental Assisting Credits 1 Technical Math Credit*
T84 (Two Semesters) Honors	1.5 Dental Assisting/Radiology
T57 (Two Semesters)	4 Dental Assisting Credits or 4 Work-based Learning Credits

## 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.

Center of Applied Technology South only.  
Prerequisites: None

T28 (Two Semester)	2 Diesel Power Technology Credits
T29 (Two Semesters)	3 Diesel Power Technology Credits 1 Technical Math Credit*
T30 (Two Semesters)	4 Diesel Power Technology Credits or 4 Work-based Learning Credits

## Diesel Power 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).

Center of Applied Technology North only.  
Prerequisites: None

T31 (One Semester)	1 Drafting/CAD Credit
T32 (Two Semesters)	3 Drafting/CAD Credits 1 Technical Math Credit*
T33 (Two Semesters)	4 Drafting/CAD Credits or 3 Work-based Learning Credits

## Drafting/CAD

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.

Prerequisites: None

NOTE: Completion of M20 and M21 (Engineering Drawing/CAD I) (C or better) may be taken for Two Semesters in the home school Technology Education Program to satisfy the requirements for T31.

T43 (One Semester)	0.5 ERM Credit 0.5 Environmental Science Credit
T44 (Two Semesters) Honors	4.0 ERM Credits

T45 (Two Semesters) Honors	4.0 ERM Credits
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**Environmental Resource Management**

The Environmental Resources 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 Resources 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.

Center of Applied Technology North only.  
Prerequisites: None

T34 (One Semester)	1 Electricity Credit
T35 (Two Semesters)	3 Electricity Credits 1 Technical Math Credit*
T36 (Two Semesters)	4 Electricity Credits or 4 Work-based Learning Credits

**Electricity**

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).

Recommended: Completion of *Algebra I (C or better)*

T19 (First Semester)	2 Credits	(Second Semester)
	3 Credits	

**Fire Fighter Cadet Program**

Students will participate in classroom and training programs for approximately 4-1/2 hours three days each week, at the Anne Arundel County Fire Department Training Facility in Millersville. Approximately one (1) Saturday training session per month is required. Students will receive formal training in Fire-fighting, emergency medical technician, hazardous materials awareness, rescue techniques and terrorism awareness training. Students may earn certificates in each area and may apply for state/national certification. In order to earn each certificate a passing score of 70% or better is required on each exam. After completion of this training, a full year of service as a volunteer fire fighter, and reaching 18 years of age, students will have opportunities in all local jurisdictions to apply for paid fire-fighter positions.

Prerequisites: 16 years of age, physical exam, & senior status

T16 (One Semester)	1 Graphic Design I Credit
T17 (Two Semesters)	4 Graphic Design II Credits

**Graphic Design**

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

Center of Applied Technology North only.  
Recommended: Completion of/concurrent enrollment in Computer Skills for Academic Success

T04 (One Sem)	1 Heating Ventilating and AC Credit
T05 (Two Semesters)	3 Heating Ventilating and AC Credits 1 Technical Math Credit*
T06 (Two Semesters)	4 Heating Ventilating and AC Credits or 4 Work-based Learning Credits

**Heating, Ventilating, and Air Conditioning**

Basic principles and practical applications to the Air Conditioning and Heating Industry are introduced in this course. Electro-Mechanical Theory, basic electricity, 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).

Prerequisites: None

Q16 (One Semester) Honors	1 IMPI Credit
Q17 (Two Semesters) Honors	4 IMPII Credits

**Interactive Media Production**

The Interactive Media Production (IMP) program consists of two honors designated courses. The one credit course has no prerequisites and it is required for entry into the advanced course. Students will gain experience in Adobe Photoshop and Illustrator to learn about the changing roles of media and technology. The second course is a two semester course in which students gain experience in internet technology, website development, computer graphics, digital media production, project management, 2D & 3D animation, plus digital, audio and video editing. 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.

Center of Applied Technology South only.  
Prerequisites: None

T68 (One Semester)	1 Health Career Credit
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**Introduction to Health Careers**

This one semester class will be the basis for health occupations and include fundamental requirements and skills of all health occupations. The class will include an introduction into various health occupations, characteristics and professionalism of the health care provider, communication skills, medical terminology and the basics of anatomy and physiology, legal and ethical considerations in the health care profession, infection control, vital signs, CPR and first aid. The curriculum would include trips to health care facilities in the area. This class is a prerequisite for the Nursing and Medical Assistant programs. The student will need to be successful in the class in order to proceed to the higher-level courses.

Prerequisites: None  
Note: Completion of this course will satisfy the Health Education Graduation Requirements.

T71 (Two Sem)	2 Marine Repair Technology Credits
T72 (Two Semesters)	3 Marine Repair Technology Credits 1 Technical Math Credit*
T73 (Two Semesters)	4 Marine Repair Technology Credits or 4 Work-based Learning Credits

**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, diagnose and repair 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.

Center of Applied Technology South only.

Prerequisites: None

T49 (One Semester)	1 Masonry Credit
T50 (Two Semesters)	3 Masonry Credits 1 Technical Math Credit*
T51 (Two Semesters)	4 Masonry Credits or 4 Work-based Learning Credits

**Masonry**

Students will learn to work with brick, block, stone and concrete. They will be able to estimate the cost of materials, read blue prints, 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).

Center of Applied Technology North only.

Prerequisites: None

T69   Honors	
Two Semesters	4 Medical Assistant Credits

**Medical Assistant**

This course is for 11th and 12th grade students. Students will learn both administrative and clinical duties such as how to perform basic lab tests, medical office management, prepare patients for physical examinations, take readings of patients' temperature, pulse, respiration and blood pressure, emergency procedures, charting procedures, sterilization techniques and take EKGs. Career opportunities are found in doctors' offices, clinics, hospitals, health maintenance organizations and adult care. Students may also be eligible for Proficiency Credits from Anne Arundel Community College.

Prerequisites: *Computer Skills for Academic Success, Introduction to Health Careers*

T74 (One Semester)	1 Motorcycle Repair Tech. Credit
T75 (Two Semesters)	3 Motorcycle Repair Technology Credits 1 Technical Math Credit*
T76 (Two Semesters)	4 Motorcycle Repair Technology Credits or 4 Work-based Learning Credits

**Motorcycle Repair Technology**

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.

Prerequisites: None

C65   Honors (Two Semesters)	2 Network Systems Admin. Credits
C66   Honors (Two Semesters)	3 Network Systems Admin. Credits 1 Technical Math Credit*

**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 MOS, A+, and Net+ exams.

Prerequisites: *Computer Skills for Academic Success*

T66   Honors	
One or Two Semesters	3 Nursing Credits

**Nursing Assistant**

Students in 11th or 12th grade will learn to collect vital signs and other basic caregiving techniques. Nursing Assistants care for geriatric clients in long term care and assisted living facilities. After successfully completing the Nursing Assistant course, the students will receive their Maryland State Nursing Assistant Certification and are eligible to sit for the Geriatric Nursing Assistant certification. Career opportunities are found in assisted living and extended care facilities, home health care, hospitals and the military.

Prerequisites: *Introduction to Health Careers*

T52 (One Semester)	1 Plumbing Credit
T53 (Two Semesters)   Honors	3 Plumbing Credits 1 Technical Math Credit*
T54 (Two Semesters)	4 Plumbing Credits or 4 Work-based Learning Credits

**Plumbing**

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 Work-based Learning Program 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.

Center of Applied Technology North only.

Prerequisites: None

T46 (One Semester)	1 Precision Machining Credit
T47 (Two Semesters)   Honors	3 Precision Machining Credits 1 Technical Math Credit*
T48 (Two Semesters)	4 Precision Machining Credits or 4 Work-based Learning Credits

**Precision Machining**

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.

Center of Applied Technology North only.

Prerequisites: *Algebra I with a "C" or better*

T40 (One Semester)	1 Printing Technologies Credit
T41 (Two Semesters)	3 Printing Technologies Credits 1 Technical Math Credit*
T42 (Two Semesters)	4 Printing Technologies Credits or 4 Work-based Learning Credits

**Printing Technologies**

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.

Center of Applied Technology North only.  
Prerequisites: None

T61 (One Semester)	1 Welding Credit
T62 (Two Semesters)	3 Welding Credits 1 Technical Math Credit*
T63 (Two Semesters)	4 Welding Credits or 4 Work-based Learning Credits

**Welding**

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.

Prerequisites: None

## Business Education

Business Education introduces students to the value of business skills in the domestic and global marketplace and prepares them for further education. Accounting, information technology, marketing, business administration and business management are some of the areas that students can explore. Upon successful completion, all programs will qualify students as a Career and Technology Education Completer. Most of the completer programs have proficiency credit agreements with Anne Arundel Community College where students may earn college credits. Work-based learning/internship experiences for seniors are available. Students will have the opportunity to earn the Internet and Core Computing Certification (IC3) and the Microsoft Certified Application Specialist (MCAS) certifications. The following courses are offered at most high schools.

<b>Q61   Honors</b>	
One Semester	0.5 Credit

**Business Management**

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.

Prerequisites: None

<b>Q2</b>	
Two Semesters	1 Credit

**Career Research and Development**

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 Work-based Learning to fulfill the program requirements.

Prerequisites: *Principals of Business A & B*  
Concurrent enrollment in Career Research and Development – Work-based Learning

<b>Q65</b>	
One Semester	0.5 Credit

**Computer Skills for Academic Success**

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.

Prerequisites: None

<b>Q85</b>	
One Semester	0.5 Credit

**E-Commerce and the Global Market**

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.

Prerequisites: None

<b>Q84   Honors</b>	
One Semester	0.5 Credit

**Entrepreneurship**

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

<b>Q25</b>	
One Semesters	0.5 Elective Credit

**Managing Your Personal Resources**

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.

Prerequisites: None

**Q00 | Honors**

Two Semesters 1 Elective Credit

**Marketing I**

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.

Prerequisites: None

**Q0**

One Semester 0.5 Credit

**Principles of Business A**

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

**Q1**

One Semester 0.5 Credit

**Principles of Business B**

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.

**Q0**

One Semester 0.5 Credit

**Software Applications**

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

**Q3 | Honors**

One Semester 0.5 Credit

**Visual Basic I**

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 I,  
Recommended for Completer Programs: Computer Skills for Academic Success

**Q4 | Honors**

One Semester

0.5 Credit

**Visual Basic II**

Students will learn advanced concepts of programming including sequential and random access files, dialog boxes, database access and advanced applications.

Prerequisites: *Visual Basic I*

**Q7**

One Semester 0.5 Credit

**Web Page Design**

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

**Q8**

One Semester 0.5 Credit

**Advanced Web Page Design I**

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.

Recommended: Web Page Design

**Q9 | Honors**

One semester 0.5 Credit

**Advanced Web Page Design II**

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 I

**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 to 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.

**Q3 | Honors**

**Visual Basic I**

**Q4 | Honors**

**Visual Basic II**

for both, see *Business Education* section, page C-10

**R18 | Honors**

One Semester	0.5 Credit
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**Computer Science Programming – Java**  
 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: 1 credit, *Algebra I* and *Geometry* (“C” or better in both)

R20	
Two Semesters	1 Credit

**AP Computer Science (A Level)**  
 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 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 II* (1 credit, “B” or better) or concurrent enrollment in *Algebra II*  
 Highly Recommended: Computer Science Programming – Java R18000

## 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

### The Early Childhood Completer Program

This completer program is designed for students who wish to pursue a career in the field of early childhood. Focusing on skills of childcare providers and early childhood teachers, the program is designed to provide performance-based training and assessment for career preparation. An articulation agreement with Anne Arundel Community College is a benefit of this program. A senior year Work-based Learning or internship is required.

### The ProStart Program

ProStart is a career-building program for high school students focusing on fundamental culinary and management skills that are needed for success in the restaurant industry. ProStart students practice their knowledge and skills in qualified food service operations. In this 400 hour work experience environment students receive mentor support from community professionals and develop the character and real-world skills that give them a head start in the restaurant industry. Many post-secondary hospitality programs accept ProStart courses for college credit. Whether considering an entry level position immediately after high school or planning for college, a ProStart graduate makes a solid candidate for success.

H10 | Honors (formerly Applied Nutrition I)

One semester	0.5 Credit
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**Art and Science of Nutrition A**  
 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, biotechnology, 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.  
 Prerequisites: None

H11   Honors (formerly Applied Nutrition II)	
One semester	0.5 Credit

**Art and Science of Nutrition B**  
 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*

H20	
Two Semesters	1 Credit

**Child Development I**  
 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.  
 Prerequisites: None\*

H21	
Two Semesters	1 Credit

**Child Development II**  
 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 I* (C or better) \*

H22   Honors	
Two Semesters	1 Credit

**Child Development III**  
 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 II* (C or better)\*

Prerequisites: None

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**H77|Hhons****Two Semesters****1 Credit**

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**Culinary Skills & Hospitality Management I**

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 , Applied Nutrition I, Nutrition Science, or Sports Nutrition

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**H78|Hhons****Two Semesters****1 Credit**

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**Culinary Skills and Hospitality Management II**

This course is a continuation of CSHM I 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 I

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**H25****One Semester****0.5 Credit**

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**Decisions for Responsible Parenthood**

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 for Grades 10–12 only.

Prerequisites: None

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**H26****One Semester: 0.5 Credit upto 2 Credits**

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**Early Childhood Career Internship**

Seniors who desire a non-paid 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 III*,  
Approved curricular goals and outcomes and the permission of the administration and the child development teacher

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**H80****One Semester****0.5 Credit**

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**Fashion Design I**

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.

Prerequisites: None

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**H81****One Year****1 Credit**

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**Introduction to Teaching Profession**

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 work-based learning opportunities at different grade levels.

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**H73****One Semester****0.5 Science Laboratory Credit**

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**Nutrition Science**

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*

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**H74****Two Semesters****2 Credit**

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**Prostart Work-Based Learning**

Seniors who have completed the required courses Culinary Skills & Hospitality Management I and II must complete this 400 hour work-based learning in the hospitality industry to meet the ProStart completer requirements. Students seeking a work-based learning experience must have excellent attendance and the recommendation of the ProStart teacher.

Prerequisites: *Culinary Skills & Hospitality Management I & II*  
Approved curricular goals and outcomes and recommendation of the nutrition teacher.

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**H80****One Semester****0.5 Credit**

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**Take Charge of Your Finances**

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 for Grades 10–12

Prerequisites: None

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**Technology Education**

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

recognize that the design process is dependent upon language skills to effectively communicate ideas about or solutions to “real-world” problems.

Technology education courses are both required and elective. One 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 are eligible to receive free articulated credits for an Architecture/Interior Design or Certification program at AACC upon completion of required coursework in the Technology Education program. High school students need to have taken a minimum of three semesters of drafting, one of which must be architectural drawing, completed the required competencies, submit a portfolio and have the recommendation of their high school Tech-Ed instructor.

**02**

One Semester: 0.5 Credit or Two Semesters: 1 Credit

**Advanced Technology Systems**

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.

Prerequisites: 2 science credits in order to meet the science requirement

**M2**

One Semester 0.5 Advanced Technology Credit

**Architectural Design and Development I**

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 3-D Home Architect/ArchiCad. 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 I

**M23 | Honors Option**

One Semester 0.5 Advanced Technology Credit

**Architectural Design and Development II**

This course is intended to continue the development of competencies learned in ADT I 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 I & II and complete ADT I & II with at least a “B” average may qualify to receive Anne Arundel Community College credit.

Prerequisites: *Architectural Design and Development I*

**M10**

One Semester 0.5 Advanced Technology Credit

**Communications Technology I**

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, radio & television production, computer graphics & imaging.

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

**M11**

One Semester 0.5 Advanced Technology Credit

**Communications Technology II**

This course focuses on more advanced communication technology by building upon what was learned in CT I to refine and enhance a variety of technical communication skills. Skills and understandings developed in CT I 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 I*

**M20**

One Semester 0.5 Advanced Technology Credit

**Engineering Drawing/CAD I**

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

**M21**

One Semester 0.5 Advanced Technology Credit

**Engineering Drawing/CAD II**

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 I*

**M69**

Required

One Semester 0.5 Basic Technology Credit

**Foundations of Technology A**

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.

Prerequisites: None

**M70**

Required

One Semester 0.5 Basic Technology Credit

**Foundations of Technology B**

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: None

advanced students to study an area of technology education in depth. The student will be supervised by a particular teacher who will assign and assist

students in developing special projects that are aligned with and beneficial to broadening student understanding of technology as a career path.

Prerequisites: Courses in at least three different sub-areas of technology education. Recommendation by teacher and department chairperson.

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M18	
One Semester	0.5 Advanced Technology Credit

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**Power, Energy & Transportation Systems**

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*

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M42	
One Semester	0.5 Advanced Technology Credit

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**Manufacturing & Construction Technologies**

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*

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M13	
One Semester	0.5 Advanced Technology Credit

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**Technological Design I**

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

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M14	
One Semester	0.5 Advanced Technology Credit

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**Technological Design II**

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: Technological Design I

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M2	
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One Semester	0.5 Advanced Technology Credit
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**Technology of Flight**

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*

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## Internships/Work-based Learning

Internships/Work-based Learning provides an opportunity for students to identify a career of interest and to combine classroom instruction with on-the-job experience in that field. It is on-the-job, real life applications supervised by a teacher-coordinator who approves the work site and manages the learning activities while the student is employed. Students enrolled in Career and Technology Programs may apply for Internships/Work-based Learning. Transportation from school to the job is the student’s responsibility. The student is paid at least minimum wage and earns credit toward graduation. Students must have a minimum of 20 credits to enroll in Work-based Learning. Work-based learning is an important part of career completer programs.

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T70	
First Semester	2WB Learning Credits
Second Semester	2WB Learning Credits
Two Semesters with work experience	4 Credits

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**Applied Technology Work-based Learning**

Students already taking training in the Applied Technology skills may apply for the Work-based Learning Program during the final year of their course work. The on-the-job training that is offered by the Work-based Learning Program must be related to the trade skill for which the student is preparing. This is only offered as a part of the Applied Technology Program.

Prerequisites: Four semesters of training in Applied Technology skills

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S35 One Semester (minimum 68 hours)	0.5 Credit
S36 One Semester (minimum 135 hours)	1 Credit

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**Career Internship**

This offering includes all internship experiences occurring outside of school that are paid or non-paid. Career Internship is an elective and is awarded an internship credit in a particular content area. It is important that these experiences match the student's career plan and interests.

Seniors interested in career internships should seek the advice of their Work-based Learning/Internship Coordinator, Academy Instructor/Director, or counselor.

Prerequisites: None

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S24	
Two Semesters (Full year only)	4 Credits

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**Career Research and Development**

**Work-based Learning**

Seniors enrolled in Career Research and Development (CRD) Work-based Learning Program must successfully complete the CRD course. In the Work-based Learning program, the students attend class part of the school day and are employed in business during the remainder of the day. To receive credit for S24 the student must pass Q22. The CRD Work-based Learning prerequisites are waived for child care completer students.

Prerequisites: *Principals of Business A and B* and Concurrent enrollment in Career Research & Development

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S10	
One Semester	2 WB Learning Credits
Two Semesters	4 WB Learning Credits

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**Family and Consumer Sciences**

**Work-based Learning**

Seniors who have successfully completed all prerequisites may enroll in the Family and Consumer Sciences Work-based learning Program. In the work-based learning program, students attend class part of the school day and are employed in business during the remainder of the day.

Prerequisites: None

# Dance

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 Maryland Essential Learner Outcomes for Dance and 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.

There are three dance tracks:

*Dance I–IV* classes are intended for students, beginners through advanced, who are interested in dance. No audition is required.

*Dance for Athletes I–IV* classes are intended for those wishing to use dance training techniques to enhance athletic performance. No audition is required.

*Dance Company I–IV* classes are intended 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.

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

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## L02

One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Dance I

Dance I focuses on beginning levels of dance technique for a variety of dance forms, alignment, dance history, physiology, theory, dancer health, careers, choreography, performance, and criticism.

Prerequisites: None

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## L08

One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Dance II–IV

Dance II, III, IV emphasizes increased technical proficiency in dance forms progressing toward focus on dance as a performing art and means of communication. Students continue to increase knowledge of history, theory, choreography and criticism.

Prerequisites: Dance I

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One Semester: 0.5 Credit

Two Semesters: 1 Credit

### Dance Company I–IV

Dance Company classes are performance emphasis and goal-based with students involved in research, choreography, and every aspect of dance production. Technical proficiency, academic knowledge, portfolio building, continued improvement and growth in dance, and public dance performances are expected.

Prerequisites: Audition

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## L11

One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Dance for Athletes I

Dance for Athletes I focuses on enhancing and refining athletic performance through techniques, conditioning, and training in the art of dance.

Prerequisites: None

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## L12

One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Dance for Athletes II–IV

Dance for Athletes II, III, IV emphasizes continued skill development and refinement through a variety of higher level movement patterns. Student originated performance projects occur at these levels.

Prerequisites: Dance for Athletes I

# 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. We believe that through language and literature we understand ourselves, we contribute to society, and we express the human spirit. It is the mission of English teachers to cultivate in each of our students proficiency in and appreciation of language and literature.

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 specialties like theatre, journalism, publications, or forensics. Students are encouraged to select and work hard in a rigorous program of required English courses and generous English electives.

Through their experiences in the English classroom, therefore, 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.

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<b>A99</b>	
<b>Two Semesters</b>	<b>1 English Credit &amp; 1 Elective Credit</b>

## Daily English 9: The Journey with Additional Reading

Students with a need for additional reading instruction receive daily support that includes research-based reading strategies, comprehension and fluency practice, along with a focus on vocabulary. This instruction supports their study of literature, language development, composition and speaking as they analyze themes related to their own life's journeys and apply critical reading skills, extend grammar development, and generate research for oral and written compositions. This daily course prepares students for success on the Maryland English High School Assessment.

Prerequisites: None

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<b>A09</b>	<b>Required (or A99 or A097)</b>
<b>Two Semesters</b>	<b>1 English Credit</b>

## English 9

Students study literature, language development, composition and speaking. They analyze themes related to their own life's journeys and apply critical reading skills, extend grammar development, and generate research for oral and written compositions. This A/B day course prepares students for success on the Maryland English High School Assessment.

Prerequisites: None

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<b>A097   Honors</b>	
<b>Two Semesters</b>	<b>1 English Credit</b>

## English 9

Students study literature, language development, composition and speaking. Honors English students use challenging texts to practice and expand their critical reading proficiency, to further develop theme analysis strategies, to analyze a variety of structures and details within and among texts, to apply proper grammar techniques, and to use research for oral and written compositions. This course rigorously prepares students for the Maryland English High School Assessment. Students may be assigned reading over the

preceding summer.

Prerequisites: None

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<b>A10909</b>	
<b>Two Semesters</b>	<b>1 English Credit &amp; 1 Elective Credit</b>

## Daily English 10 with Additional Reading

Students receive reading instruction and support daily to practice fluency, increase comprehension, and expand vocabulary through research-based reading strategies. Students set goals, extend their abilities to read and write, and practice strategies in both independent and guided reading. Students examine ways writers create, refine, and communicate ideas, then apply writing, grammar, and research skills in oral and written compositions. This daily course prepares students for success on the Maryland English High School Assessment.

Prerequisites: One credit in *English 9* or 0.5 credit plus concurrent enrollment in required *English 9* semester.

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<b>A10903</b>	<b>Required (or A10909 or 10700)</b>
<b>Two Semesters</b>	<b>1 English Credit</b>

## English 10

Students set goals, extend their abilities to read, write, and speak, and participate in both independent and guided reading to build fluency, endurance, and comprehension. Students examine ways both traditional and contemporary writers create, refine, and communicate ideas, then apply writing, grammar, and research skills in oral and written compositions. This course prepares students for the Maryland English High School Assessment.

Prerequisites: One credit in *English 9* or 0.5 credit plus concurrent enrollment in required *English 9* semester.

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<b>A107   Honors</b>	
<b>Two Semesters</b>	<b>1 English Credit</b>

## English 10

Students apply critical theories and rhetoric to literature and composition using challenging traditional and modern texts. They practice critical reading by analyzing themes, structures, and details. Students apply writing, grammar, and research skills in oral and written compositions. This course prepares students for AP English and the Maryland English High School Assessment. Students may be assigned reading over the preceding summer.

Prerequisites: One credit in *English 9* or 0.5 credit plus concurrent enrollment in required *English 9* semester.

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<b>A11</b>	
<b>Two Semesters</b>	<b>1 English Credit</b>

## English 11

Students read, discuss, and write with guided support on works by authors such as Lee, Sallinger, and Myers in order to explore the question, "What does it mean to be an adult?" Students improve their knowledge and skills in literature, language, grammar, composition, speech and research. Students further develop fluency through independent reading of self-selected texts. To highlight real world connections, students are required to submit original work to at least one contest each semester.

Prerequisites: One credit in *English 10* or 0.5 credit plus concurrent enrollment in required *English 10* semester.

<b>A117  Honors</b>	
<b>Two Semesters</b>	<b>1 English Credit</b>

**English 11**

Students study works by classic and contemporary authors to explore the question, “What does it mean to be an adult?” Students expand knowledge and skills while surveying literature; enhancing language, grammar, and sentence structure; composing; speaking; and researching. To emphasize real world connections, students are required to submit original work to at least one contest each semester. Students receive preparation for AP English. . Students may be assigned reading over the preceding summer.

Prerequisites: One credit in *English 10*  
or 0.5 credit plus concurrent enrollment in required *English 10* semester.

<b>A12</b>	
<b>Two Semesters</b>	<b>1 English Credit</b>

**English 12**

Students apply critical reading and writing skills to a variety of genres and styles in world literature by authors such as Chaucer, Coelho, Hosseini, and Shakespeare. They refine their writing in forms such as critical analysis, and apply appropriate diction and syntax in creating a distinctive writing voice. English 12 emphasizes research and oral communication skills to prepare graduates for employment or college.

Prerequisites: One credit in *English 11*  
or 0.5 credit plus concurrent enrollment in required *English 11* semester.

<b>A127  Honors</b>	
<b>Two Semesters</b>	<b>1 English Credit</b>

**English 12**

Students apply critical reading and writing skills to a variety of genres and styles found in world literature. They refine their writing to compose essays in various rhetorical patterns, to provide support for an integrated thesis, and to apply appropriate diction and complex syntax in creating a distinctive writing voice. English 12 Honors emphasizes research and oral communication skills to prepare graduates for college. Students may be assigned reading over the preceding summer.

Prerequisites: One credit in *English 11*  
or 0.5 credit plus concurrent enrollment in required *English 11* semester.

<b>A21</b>	
<b>One Semester</b>	<b>0.5 Elective Credit</b>

**Academic Writing**

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.

Prerequisites: None

<b>A74  Honors Option</b>	
<b>One Semester</b>	<b>0.5 Elective Credits</b>

**Contemporary Voices**

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*

<b>A17</b>	
<b>One Semester</b>	<b>0.5 Elective Credit</b>

**Creative Writing**

Creative Writing is the course for students who wish to explore and experiment with such literary forms as the short story, the poem, the essay, or the one-act play. Using reading and journal keeping as sources of ideas, students pursue individual interests and develop their talents through techniques practiced by professional authors.

Prerequisites: None

<b>A14</b>	
<b>One Semester</b>	<b>0.5 Credit</b>

**Journalism**

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 I and Yearbook I.

Prerequisites: None

<b>A29</b>	
<b>One Semester</b>	<b>0.5 Credit</b>

**Media Production I**

Media Production I 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.

Prerequisites: None

<b>A30</b>	
<b>One Semester</b>	<b>0.5 Elective Credit</b>

**Media Production II**

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

Prerequisites: *Media Production I*

<b>A35</b>	
<b>Maximum: 4 Elective Credits</b>	
<b>One Semester: 0.5 Credit</b>	<b>or Two Semesters: 1 Credit</b>

**Newspaper I–IV**

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

<b>A41</b>	
<b>One Semester</b>	<b>0.5 Elective Credit</b>

**Passing the English HSA**

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

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A51	Maximum: 1 Elective Credit
One Semester:	0.5 Credit

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**Speech and Debate I and II**

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.

Prerequisites: None

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A06	<i>Fine Arts Credit</i>
One Semester:	0.5 Credit or Two Semesters: 1 Credit

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**Theatre Arts I**

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 back-stage. 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.

Prerequisites: None

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A07	<i>Fine Arts Credit</i>
One Semester:	0.5 Credit or Two Semesters: 1 Credit

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**Theatre Arts II**

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 II meets and exceeds the State of Maryland Essential Learner Outcomes for Theatre

Prerequisites: *Theatre Arts I*

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A08 Pending Board Approval	<i>Fine Arts Credit</i>
One Semester:	0.5 Credit

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**Theatre Arts III**

Theatre Arts III allows students to expand their understanding of theatre beyond improvisation and script reading, which are the focuses of Theatre Arts I and Theatre Arts II. 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 I and II

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A40	Maximum 4 Elective Credits
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One Semester: 0.5 Credit or Two Semesters: 1 Credit

**Yearbook I-IV**

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

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**Advanced Placement Courses**

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A20	
Two Semesters	1 <i>English Credit</i>

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**AP English Language and Composition**

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: One credit in *English 10*

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A13	
Two Semesters	1 <i>English Credit</i>

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**AP English Literature and Composition**

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: One credit in *English 10*

# Health

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 goal setting and advocacy.

enhancing health behaviors relating to one's sexuality. Content focus is on sexuality, decision making, relationships, protecting one's own health , human reproduction, and social issues.

Prerequisites: Health Competencies for the 21st Century *and* Signed Parental Permission

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L67

One Semester

0.5 Elective Credit

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## Introduction to Health Professions

This course introduces students to professional health careers, medical terminology, and technology. Education and certification required for professional health careers is explored. Guest speakers provide work-based learning experiences.

Prerequisites: None

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L70

Required

One Semester

0.5 Health Education Credit

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## Health Competencies for the 21st Century

This course is designed to prepare students with the skills to identify the impact of family, peers, culture, media and technology on health behaviors and to teach students how to access valid health information. Through these skills students acquire functional knowledge about the following core health concepts: 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. \*

Prerequisites: None

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

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L95

One Semester

0.5 Elective Credit

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## Drug Education

This elective course will examine the issues related to use, misuse and abuse of tobacco, alcohol and other drugs. Students will take an in-depth look at specific substances of abuse and explore methods of prevention, intervention and treatment for addiction. An emphasis on the skills to identify the impact of family, peers, culture, media and technology on drug use behaviors; to know how to access valid drug prevention information, use interpersonal communication, decision-making, goal setting, and advocacy skills; and to enact personal health enhancing practices

Prerequisites: *Health Competencies for the 21st Century*

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L75

One Semester

0.5 Elective Credit

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## Human Sexuality

This is an advanced level course with an emphasis on promoting life

# Mathematics

In order to graduate with a Maryland High School Diploma, students must do both of the following:

- Earn required credits in mathematics, including
  - Algebra I
  - Geometry
  - 2 additional Mathematics credits
- Pass the High School Assessment (HSA) for Algebra/Data Analysis at the completion of Algebra I.

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

One of these courses, or D27, is required

Course Placement is based on the instructional needs of the student. See your counselor for the specific course appropriate for you.

D18	
D274	
All Year (everyday)	2 Mathematics (Algebra I) Credits

## Algebra I

This high school graduation requirement course serves as the gateway for advanced mathematical courses by providing a complete foundation of the topics in elementary algebra and data analysis. The core instructional objectives are defined by the Maryland High School Core Learning Goals 1 and 3. Learning objectives extend to include quadratic and non-linear functions. Instructional emphasis is placed on analyzing patterns and functions, modeling real-life situations, collecting, organizing and analyzing data, and using data to make predictions. Students are required to pass the Maryland High School Assessment for Algebra/Data Analysis at the completion of this course. Graphing calculator required.

Prerequisites: *None*

To be enrolled in the following Algebra I course (D279), a student must meet one of the following criteria:

- o Passed both semesters of Algebra I in a Maryland public middle school and failed the final examination and did not pass the High School Assessment for Algebra/Data Analysis (COMAR 13A.03.02.03).
- o Failed Algebra I but passed the High School Assessment for Algebra/Data Analysis.
- o Failed one semester of everyday Algebra I in High School

D27	Required (or D18/D27400)
Two Semesters	1 Mathematics (Algebra) Credit

## Algebra I (*see above*)

This high school graduation requirement course serves as the gateway for advanced mathematical courses by providing a complete foundation of the topics in elementary algebra and data analysis. The core instructional objectives are defined by the Maryland High School Core Learning Goals 1 and 3. Learning objectives extend to include quadratic and non-linear functions. Instructional emphasis is placed on analyzing patterns and functions, modeling real-life situations, collecting, organizing and analyzing data, and using data to make predictions.

Students are required to pass the Maryland High School Assessment for

Algebra/Data Analysis at the completion of this course. Graphing calculator required.

Prerequisite: All students registered for this course, must have previously taken Algebra I.

Concurrent enrollment in Geometry is highly recommended.

D29   Honors Option	
Two Semesters	1 Mathematics Credit

## Algebra II

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 functions. Graphing calculator required.

Recommended: Algebra I ("C" or better) and Geometry credit or concurrent enrollment in Geometry

D41	
Two Semesters	1 Mathematics Credit

## Foundations for College Algebra

This course reviews and extends intermediate and advanced algebra topics 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.

Prerequisites: *Algebra II* credit

D28   Honors Option	Required
Two Semesters	1 Mathematics (Geometry) Credit

## Geometry

This high school graduation requirement courses serves as the second in the series of advanced mathematical courses by providing a complete foundation of the geometry topics. The core instructional objectives are 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 calculator recommended.

Prerequisites: *Algebra* credit

D11	<i>Mathematics Credit</i>
Two Semesters	1 Credit

## Integrated Topics of Mathematics

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 I to Algebra II by reinforcing concepts and skills necessary for success in Algebra II.

Prerequisites: Algebra I and Geometry credit or concurrent enrollment in

Geometry

Recommendation: This course is sequenced between Geometry and Algebra II.

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**D81 | (AP weighted grading)**

Two Semesters                      1 Mathematics Credit

**Linear Algebra**

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.

Prerequisite: AP Calculus AB/BC credit with a 3 or higher on the AP Calculus BC exam.

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**D9**

One Semester                      0.5 Elective Credit

**Passing the HSA: Algebra I/Data Analysis**

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

Prerequisites: Earned Algebra I credit have not earned a passing score on the HSA Algebra I/Data Analysis

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**D51 | Honors Option**

Two Semesters                      1 Mathematics Credit

**Precalculus**

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.

Prerequisite: Algebra II credit  
 Recommended: Grade of C or better in Algebra II for Honors Option  
 English HSA  
 Prerequisites: Algebra Credit

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**D77**

Two Semesters                      1.0 Mathematics Credit

**Statistical Analysis**

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.

Prerequisites: 3 Mathematics Credits

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## Advanced Placement Courses

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**D59**

Two Semesters                      1 Mathematics Credit

**AP Calculus (BC Level)**

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.

Prerequisites: Precalculus credit ("B" or better)

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**D88**

Two Semesters                      1 Mathematics Credit

**AP Calculus (AB Level)**

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.

Prerequisite: Precalculus credit  
 Recommended: C or better in Precalculus and concurrent enrollment in AP Calculus AB Seminar

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**D8619**

One Semester                      0.5 Elective Credit

**AP Calculus AB Seminar**

Students receive intensive assistance in the concepts and skills learned currently in the AP Calculus AB course. This course is recommended for students who require additional practice, guidance, and experience beyond those available in the standard AP Calculus AB course or for students taking an AP Mathematics course for the first time.

Concurrent enrollment in AP Calculus AB

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**D62**

Two Semesters                      1 Mathematics Credit

**AP Statistics**

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.

Recommended: Algebra II ("C" or better)

# 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, Vocal Technique, and Independent Study; classes which extend and reinforce core learning in music.

F70	Band I-III
F71   Honors Option	Band IV (honors option)
<i>Fine Arts Credit</i>	
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Band

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. Public musical performances will be expected.

F26	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Chorus Female

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.

Prerequisites: None

F27	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Chorus Male

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.

Prerequisites: None

F20	Chorus Mixed I-III
F23   Honors Option	Chorus Mixed IV
<i>Fine Arts Credit</i>	
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Chorus Mixed

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. Public musical performances will be expected.

F65	Music for Life I
F66	Music for Life II
<i>Fine Arts Credit</i>	
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Music for Life

This course focuses upon the use and value of music in people's lives. It encourages students to view music in a social context rather than as abstract information to be learned for its own sake. It presents music as a natural and essential ingredient of one's own life and of human life in all cultures. The course surveys music from diverse cultures around the world and shows how people express themselves through music. Finally, Music for Life exemplifies how music is a common denominator for life's essentials across the globe.

F83	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Music Technology

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.

Prerequisites: None

F09	Guitar I
F10	Guitar II-IV
<i>Fine Arts Credit</i>	
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Guitar**

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 I-IV.

F98	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Independent Study**

Independent Study is offered for the student who is capable of greater depth, breadth, or pace of music learning. Typically, it focuses on a special area of music exploration which is not available in the course selection. Independent Study may be used by students preparing for Advanced Placement Music Examinations when there are insufficient numbers of students to schedule the class. The plan of study should be rigorous and based on the Maryland Essential Learner Outcomes in Music. The work plan, objectives, and content of the course will be determined by student and teacher. Coaching and assessment of student progress will be done by the music teacher.

Prerequisites: Previous experience in some form of music and the recommendation of a faculty member in the music department.

F60	String
F61	Woodwind
F62	Brass
F63	Percussion
F64	Mixed
One Semester	0.5 <i>Fine Arts Credit</i>

**Instrumental Ensemble**

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.

F50	String
F51	Woodwind
F52	Brass
F53	Percussion
F54	Mixed
One Semester	0.5 <i>Fine Arts Credit</i>

**Instrumental Instruction:**

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.

Prerequisites: These courses are open to all students. Auditions may be required for advanced classes.

F74	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Jazz Band**

This course provides an opportunity for students who have reached the necessary degree of maturity in playing an instrument to perform different styles of jazz from the big band era as well as dance music, rock, and popular music of the present day. Improvisation and stylistic playing will be emphasized to develop comprehensive musicianship. Public musical performances will be expected.

Prerequisites: None

F80  Honors Option
One Semester: 0.5 Credit or Two Semesters: 1 Credit

**Music Theory**

This course is designed to familiarize the student with the building blocks of music structure. Rhythm, melody, harmony, form, and analysis are the key components of this course. Students will use standard music notation to read, write, and understand the structure of music. Sight singing, ear-training and creating through composing and arranging are important components of this course. The course is a pre-requisite to AP Music Theory.

Prerequisites: None

F75	Orchestral I-III*
F76  Honors Option	Orchestra IV*
	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Orchestra**

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. Public musical performances will be expected.

Prerequisites: Previous course designation for *Orch. II, III, IV*

\*This course may be offered for orchestra string players only. Wind and percussion may be included when there is appropriate instrumentation and balance for standard repertoire written for mixed instrumentation.

F13	Piano and Keyboard I-IV
	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	Two Semesters: 1 Credit

**Piano and Keyboards**

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 I-IV.

Prerequisites: Previous course designation for *Keyboard II, III, IV*

F24  Honors Option	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	Two Semesters: 1 Credit

**Vocal Ensemble**

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.

Prerequisites: None

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F25	<i>Fine Arts Credit</i>
One Semester: 0.5 Credit	Two Semesters: 1 Credit

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### Vocal Instruction

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. Opportunities for performance will be available based on the student's ability.

Prerequisites: None

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## Advanced Placement Courses

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F84	
Two Semesters	1 <i>Fine Arts Credit</i>

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### AP Music Theory

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: *Music Theory*

# 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, weight training, 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 C-16).

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.

L56	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Aerobics and Personal Fitness I

This course provides foundational principles for assisting students in developing an understanding of strength, flexibility, cardiovascular endurance, and muscular endurance principles as well as improving body composition.

Prerequisites: None

L57	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Aerobics and Personal Fitness II

This course provides students with opportunities to develop optimal levels of physical fitness and to acquire knowledge of the physical fitness components.

Prerequisites: *Aerobics and Personal Fitness I*

L82	Required
One Semester	0.5 Physical Education Credit

## Fitness for Life I

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.

Prerequisites: None

L07	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Gymnastics I

Gymnastics I is an introduction to gymnastics techniques and concepts through development of basic tumbling skills and routines using gymnastics apparatus while emphasizing safety and appropriate practice.

Prerequisites: None

L08	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Gymnastics II-IV

Gymnastics II, III, IV 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.

Prerequisites: Gymnastics I

L14	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Lifetime Sports I

Students will experience a variety of activities which will provide the skills and knowledge necessary to successfully participate in leisure time activities throughout life.

Prerequisites: None

L15	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Lifetime Sports II-IV

Lifetime Sports II, III, IV extends student experiences in leisure activities throughout life and allows them to refine skills in multiple sport offerings. Students increase knowledge and proficiency in all sport and leisure activities.

Prerequisites: Lifetime Sports I

L72	0.5 Credit
One Semester	

## Sports Medicine and Athletic Training

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.

Prerequisites: *Fitness for Life I and senior status*

L37	<i>Elective Credit</i>
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

## Team Sports I

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.

Prerequisites: None

L38	<i>Elective Credit</i>
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One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Team Sports II–IV

Students will improve their knowledge of game rules and basic skills 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.

Prerequisites: Team Sports I

L51

One Semester 0.5 Elective Credit

### Walking Wellness I

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.

Prerequisites: None

L52

One Semester 0.5 Elective Credit

### Walking Wellness II–IV

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.

Prerequisites: Walking Wellness I

L58

*Elective Credit*

One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Strength and Conditioning I

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.

Prerequisites: None

L59

*Elective Credit*

One Semester: 0.5 Credit or Two Semesters: 1 Credit

### Strength and Conditioning II–V

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.

Prerequisites: Strength and Conditioning I

## Science

In a world filled with the products of scientific inquiry, scientific literacy has become a necessity for everyone. 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).

Most students begin their study of science in high school with the project-based course, Matter and Energy and then enroll in Biology in the 10th grade year. Those students who complete Algebra I before Grade 9 with a B or better and who qualify as “proficient or advanced” on MSA Reading, begin high school science with Honors Biology. After successful completion of Biology, students should enroll in the core courses (Chemistry, Earth/Space Systems Science, and Physics). Students may also choose from elective courses, which have a particular science focus and extend and reinforce core learning.

We offer a full complement of advanced placement science courses— AP Biology, AP Chemistry, AP Physics B, AP Physics C, and AP Environmental Science. 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.

<b>C80</b>	
One Semester	0.5 <i>Science Laboratory Credit</i>

### Astronomy

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: One credit of *Biology*

<b>C26   Honors Option</b>	<b>Required</b>
Two Semesters	1 <i>Science Laboratory Credit</i>

or for students enrolled in Biology everyday,

1 *Science credit* and 1 *Elective credit*

### Biology

Biology is the study of living things. Students learn how living things grow, survive, and reproduce. Project-based learning allows students to connect learning to the real world. The Honors Biology curriculum supports the transition to 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.

Prerequisites for entering ninth graders: “B” or better in *Algebra I* and “Proficient” or “Advanced” on MSA Reading

<b>C09</b>	
One Semester	0.5 <i>Elective Credit</i>

### Passing the HSA: Biology

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.

Prerequisites: Earned Biology credit but did not pass HSA Biology

<b>C45   Honors Option</b>	
Two Semesters	1 <i>Science Laboratory Credit</i>

### Chemistry

Students learn how atoms combine to create all the substances and structures in the universe. Students learn about states of matter and the structure of the atom. Students use algebra to determine physical quantities.

Prerequisites: *Algebra I* and *Biology*

<b>C30   Honors Option</b>	
Two Semesters	1 <i>Science Laboratory Credit</i>

### Earth/Space Systems Science

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: One credit of *Biology*

<b>C65</b>	
One Semester	0.5 <i>Science Laboratory Credit</i>

### Environmental Science

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: One credit of *Biology*

<b>C33</b>	
One Semester	0.5 <i>Science Laboratory Credit</i>

### Forensic Science: Crime Scene Investigation

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: One credit of *Biology*

<b>C40</b>	
One Semester	0.5 <i>Science Laboratory Credit</i>

### Human Physiology

Human physiology is the study of the structure and function of human systems. 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: One credit of *Biology*

<b>C24</b>	
Two Semesters	1 <i>Science Laboratory Credit</i>

### Matter and Energy

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.

Prerequisites: None

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C81

One Semester 0.5 *Science Laboratory Credit*

### Marine Biology

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: One credit of *Biology*

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H73

One Semester 0.5 *Science Laboratory Credit*

### Nutrition Science

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.

Prerequisites: One credit of *Biology*

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C55 | Honors Option

Two Semesters 1 *Science Laboratory Credit*

### Physics

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.

Prerequisites: *Algebra I* and *Biology*

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C50 | Honors

One Semester 0.5 *Science Laboratory Credit*

### Science Research I

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*

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C52 | Honors

One Semester 0.5 *Science Laboratory Credit*

### Science Research II: Research Design

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 I*

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C41 | Honors Option

Two Semesters 1 *Science Laboratory Credit*

### Zoology

In this course, students study the organisms of the animal kingdom. Students study animal systems through dissection and comparative analysis.

Prerequisites: One credit of *Biology* and concurrent enrollment in *Chemistry*

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## Advanced Placement Courses

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C42

Two Semesters 1 *Science Laboratory Credit*

### AP Biology

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*

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C49

Two Semesters 1 *Science Laboratory Credit*

### AP Chemistry

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 II*

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C66

Two Semesters 1 *Science Laboratory Credit*

### AP Environmental Science

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: One credit of *Biology*  
Concurrent enrollment in *Chemistry*

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C58

Two Semesters 1 *Science Laboratory Credit*

### AP Physics (B)

Students learn the principles of physics with an emphasis on broad concepts and problem-solving using algebra and trigonometry. The basic ideas of calculus may be introduced during the study of some topics, such as acceleration and work. This course prepares students for the Advanced Placement Test in AP Physics B and the opportunity to earn college credit.

Prerequisites: *Physics* and *Algebra II*

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C59

Two Semesters 1 *Science Laboratory Credit*

### AP Physics (C)

This course forms the first part of the college sequence in physics for students majoring in the physical sciences or engineering. Calculus is used whenever appropriate in ideas and applying them to physical problems. The sequence is more intensive and analytic than in the B course and prepares students for the Advanced Placement Test in AP Physics C and the opportunity to earn college credit.

Prerequisites: *Physics*  
Concurrent enrollment in *AP Calculus*

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C42619 AP Biology Seminar

C49619 AP Chemistry Seminar

C58619 AP Physics Seminar

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OneSem:0.5ElectiveCredit or TwoSem:1.0ElectiveCredit

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### AP Seminar

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

# Social Studies

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.

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B77  Honors Option	
One Semester	0.5 Elective Credit

**African American History**  
 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.  
 Prerequisites: None

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B69  Honors Option	
One Semester	0.5 Elective Credit

**Comparative Religions**  
 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.  
 Prerequisites: None

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B43  Honors	
One Semester	0.5 Elective Credit

**Constitutional History and Law**  
 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.  
 Prerequisites: None

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B59	
One Semester	0.5 Elective Credit

General Psychology

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.  
 Prerequisites: None

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B20  Honors Option	
Two Semesters	1 US History Credit

**History of the United States**  
 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.  
 Prerequisites: None

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B70  Honors Option	
One Semester	0.5 Elective Credit

**International Studies**  
 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.  
 Prerequisites: None

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B60	
One Semester	0.5 Elective Credit

**Psychology of the Individual**  
 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.  
 Prerequisites: *General Psychology*

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B41	
One Semester	0.5 Elective Credit

**Social Issues of the 21st Century**  
 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.  
 Prerequisites: None

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B62	
One Semester	0.5 Elective Credit

**Sociology**  
 In this course, students investigate the field of Sociology: the study of social life, social change, and the social causes and consequences of human behavior. Students will use a social science research model to investigate contemporary American issues of social inequality, patterns of behavior, forces for social change and resistance, and how social systems work.  
 Prerequisites: None

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B38  Honors Option	
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Two Semesters	1 <i>US Government</i> Credit
<b>United States Government</b>	
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.	

<b>B29   Honors Option</b>	
Two Semesters	1 <i>World History</i> Credit
<b>World History</b>	
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.	
Prerequisites: None	

<b>B75   Honors Option</b>	
One Semester	0.5 <i>Elective</i> Credit
<b>Women's History</b>	
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.	
Prerequisites: Junior or Senior Status	

**Advanced Placement Courses**

<b>B42</b>	
Two Semesters	1 <i>Elective</i> Credit
<b>AP Comparative Government &amp; Politics</b>	
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.	
Prerequisites: None	
<b>B51</b>	
One Semester	0.5 <i>Elective</i> Credit

<b>AP Macro Economics</b>	
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.	
Prerequisites: None	

<b>B52</b>	
One Semester	0.5 <i>Elective</i> Credit
<b>AP Micro Economics</b>	
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.	
Prerequisites: None	

<b>B71</b>	
Two Semesters	1 <i>Elective</i> Credit
<b>AP Human Geography</b>	
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.	
Prerequisites: None	

<b>B49</b>	
Two Semesters	1 <i>Elective</i> Credit
<b>AP European History</b>	
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.	
Prerequisites: None	

<b>B61</b>	
Two Semesters	1 <i>Elective</i> Credit
<b>AP Psychology</b>	
Students will study the behavior and mental processes 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.	
Prerequisites: None	

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B32	
Two Semesters	1 <i>US Government</i> Credit

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**AP U. S. Government and Politics**

This course provides students with an analytical perspective on government and politics 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.

Prerequisites: None

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B50	
Two Semesters	1 <i>US History</i> Credit

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**AP United States History**

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.

Prerequisites: None

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B50619		<i>Elective Credit</i>	
One Semester: 0.5 Credit	or	Two Semesters: 1 Credit	

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**AP United States History Seminar**

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.

Concurrent Enrollment in *AP United States History*

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B31	
Two Semesters	1 <i>World History</i> Credit

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**AP World History**

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.

Prerequisites: None

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B31619		<i>Elective Credit</i>	
One Semester: 0.5 Credit	or	Two Semesters: 1 Credit	

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**AP World History Seminar**

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.

Concurrent Enrollment in *AP World History*

# 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 increase their ability to read, listen, speak, and write in the target language.

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E01	
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level I American Sign Language**  
 This course introduces students to the basics of American Sign Language and the culture of the hearing impaired. Emphasis is placed on the development of the students' receptive and expressive skills.  
 Prerequisites: Interest in learning American Sign Language

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E02	
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level II American Sign Language**  
 This course continues the development of the students' communicative competency by increasing opportunities to use expressive and receptive skills.  
 Prerequisites: *Level I American Sign Language* or its equivalent

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E03	
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level III American Sign Language**  
 This course continues the development of the students' communicative competency by increasing opportunities to use expressive and receptive skills.  
 Prerequisites: Level II American Sign Language or its equivalent

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E04 (Pending BCE Approval)	
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level IV American Sign Language**

This course continues the development of the students' communicative competency by increasing opportunities to use expressive and receptive skills.

Prerequisites: Level II American Sign Language or its equivalent

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E21	Chinese I
E61	Spanish I
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level I Language**  
 This course introduces students to the basics of the target language and culture. Emphasis is given to developing the students' ability to communicate effectively with other speakers of the language and to developing linguistic accuracy. The basic skills of listening, reading, speaking and writing are stressed. Classes are conducted primarily in the target language. Arabic I is offered at selected schools only.

Prerequisites: Interest in Learning the Language  
 Introduction to Chinese is required

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E22	Chinese II*
E12	French II
E62	Spanish II
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level II Language**  
 This course continues the development of the students' communicative competency and linguistic accuracy while expanding the students' awareness and appreciation of the target culture. Classes are conducted in the target language.

Prerequisites: The previous level of the same language or its equivalent

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E23   Honors	Chinese III
E13   Honors	French III
E63   Honors	Spanish III
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level III Language**  
 This course expands and refines the students' linguistic accuracy and increases their ability to function appropriately within the target culture. Emphasis is on developing the students' ability to use their language skills to make decisions, solve problems, investigate topics, and create new products. Students who successfully complete this Level III course have the option of taking either the Level IV Language or Advanced Placement Language as their next course. Classes are conducted in the target language.

Prerequisites: The previous level of the same language or its equivalent

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E24   Honors	Chinese IV
E14   Honors	French IV
E64   Honors	Spanish IV
Two Semesters	1 <i>World &amp; Classical Language Credit</i>

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**Level IV Language**  
 This advanced course places major emphasis on refining the students' linguistic accuracy while continuing to provide opportunities for students to communicate meaningfully in the language with native speakers and others. Students may opt to take this course prior to taking an Advanced Placement Language course. Classes are conducted in the target language.  
 Prerequisites: The previous level of the same language or its equivalent

## Advanced Placement Courses

E15	AP French Language
E65	AP Spanish Language
Two Semesters	1 <i>World &amp; Classical Language</i> Credit

### AP World & Classical Language

This course emphasizes the use of language for active communication including the ability to understand the spoken target language in various contexts; to read and comprehend a variety of authentic texts without dependence on a dictionary; and the ability to express oneself coherently with a high degree of fluency and accuracy in both the written and spoken language. This college level course is designed to earn college credit for those students scoring an acceptable level on the College Board Examination. Classes are conducted in the target language.

Prerequisites: Successful completion of the Level III or Level IV of the same language

E66	AP Spanish Literature
Two Semesters	1 <i>World &amp; Classical Language</i> Credit

### AP Spanish Literature

This course enables students to read and understand prose and verse of moderate difficulty and mature content; formulate and express critical opinions and judgments in correct oral and written Spanish; and, develop the ability to read and analyze critically and discuss perceptively representative works of Spanish literature. This is a college level course designed to earn college credit for those students scoring an acceptable level on the College Board Examination. Classes are conducted in Spanish.

Prerequisites: Successful completion the Level III, Level IV, or Advanced Placement Language

## Alternative Courses

For students earning a certificate of completion  
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 (I.E.P.) needs of students with disabilities and to provide credits toward graduation.

To earn the Maryland High School Certificate, 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 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.

N73	Grade 9
N74	Grade 10
N75	Grade 11
N76	Grade 12
One Semester	0.5 <i>Elective</i> Credit

### Community Based Instruction

This program will develop skills in applying functional academic skills to community-based activities of daily living, e.g. shopping, purchasing goods, utilizing community services.

Prerequisites: None

N19	Grade 9
N10	Grade 10
N11	Grade 11
N12	Grade 12
One Semester: 0.5 Credit or	Two Semesters: 1 Credit

### English/Reading

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.

Prerequisites: None

N29	Grade 9
N20	Grade 10
N21	Grade 11
N22	Grade 12
One Semester	0.5 <i>Elective</i> Credit

### Mathematics

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.

Prerequisites: None

N49	Grade 9
N40	Grade 10
N41	Grade 11

N42	Grade 12
One Semester	0.5 Elective Credit

**Science**

Students will study the relationships of organisms to other organisms in their environment.

Prerequisites: None

NB9	Grade 9
NB0	Grade 10
NB1	Grade 11
NB2	Grade 12
One Semester	0.5 Elective Credit

**Social Studies**

Students will study information related to history, economics, geography and government.

Prerequisites: None

N5000	Grade 11
N6000	Grade 12

Not for credit

**Community Vocational Program**

Includes on-site job training (enclave program) and individual job placements (supported employment) designed for students for whom competitive employment at or above minimum wage is not immediately obtainable, and who, because of their disability, will need intensive on-going support to perform in a work setting.

Prerequisites: Two years of high school classroom curricula/Must be at least 16 years of age.

## Interdisciplinary Courses

X20	Elective Credit
One Semester: 0.5 Credit	or Two Semesters: 1 Credit

**Alternative Credit—Grades 9–12**

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.

Prerequisites: Approval of the principal

K19	Grade 9
K20	Grade 10
K21	Grade 11
K22	Grade 12
Each Semester	0.5 Elective Credit

**AVID**

**Advancement Via Individual Determination**

Advancement Via Individual Determination (AVID) is an accelerated academic program that prepares students for a rigorous course of study that will enable them to meet requirements for 4-year university enrollment. AVID is an elective course offered to high school students in grades 9–12. In order to take the AVID elective course, students must apply, interview, and be accepted into the AVID Program. Students who are accepted into the AVID program commit to a schedule change to include advanced courses, excellent behavior and attendance, and an estimated 1–2 hours of homework/study time each night (for all courses). The AVID elective provides a strong, relevant writing and reading curriculum, study skills, assistance with organization and time management, college research, and tutoring.

X30	AMDTutor I-II
Each Semester	0.5 Elective Credit

**AVID Tutor I & II**

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.

Prerequisites: Approval of Avid Site Coordinator

**NJROTC**

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.

Prerequisites: 14 years of age

X55	Grade 9
X56	Grade 10
X57	Grade 11
X58	Grade 12
Each Semester	0.5 Elective Credit

**AJROTC**

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.

Prerequisites: 14 years of age

W80	1 Elective Credit
Two Semesters (every other day)	

**Read 180 A**

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.

Prerequisites: None

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W82	
Two Semesters (every other day)	1 Elective Credit

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**Read 180 B**

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.

Prerequisites: Read 180 A

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X42	
One Semester	0.5 Elective Credit
Two Semesters	1 Elective Credit

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**Student Leadership**

In this class, students will explore leadership traits and characteristics, goal setting, decision-making, communication and listening skills, conflict resolution and problem solving, group work and team building, meeting skills, project planning, financial literacy, ethics, organizational skills, critical thinking skills and civic responsibility. Students will study, practice and develop the processes associated with individual and group leadership. This class would develop and evaluate leadership traits and characteristics through a leadership-in-action model.

Prerequisites: None

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X45	
Each Semester	0.25 Elective Credit

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X46	
Each Semester	0.5 Elective Credit

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**Student Seminar**

The major theme of Student Seminar is to help students with the numerous decisions that must be made in their educational and career development. Student Seminar addresses five major skill areas: Self-Knowledge, Life Skills, Educational Development, Work Ethics and Career Planning. The activities contained in these five areas have been developed in accordance with the Maryland School-To-Work initiative.

Prerequisites: None