

# Pathways to Your Future: Guide to High School Credit Courses

## 2019-20

The 2019-20 Guide to High School Credit Courses for Albemarle County Public Schools was designed as an online, interactive website, accessible at:

---

[www.k12albemarle.org/pathways](http://www.k12albemarle.org/pathways)

---

This printable version was downloaded on **February 12, 2019**. Edits made to the online version of the guide after that date are not reflected in this printable copy. Links embedded within the online version are not accessible through this document.

*If you have any questions about the content within this guide,  
please contact your school counselor.*

# Table of Contents

<b>Introduction</b> .....	<b>5</b>
Process Timeline .....	7
Course Selection Worksheet .....	8
Career Planning .....	9
<b>Specialty Centers</b> .....	<b>12</b>
Murray High School .....	13
CATEC (Charlottesville Albemarle Technical Education Center) .....	20
MESA (Math, Engineering & Science Academy) .....	22
HMSA (Health and Medical Sciences Academy) .....	27
ESA (Environmental Studies Academy).....	32
<b>Departments and Course Descriptions</b> .....	<b>37</b>
Career and Technical Education (CTE).....	38
Business and Information Technology .....	38
Microsoft® Information Technology Academy.....	47
Technology Education .....	48
Career Connections .....	58
Marketing .....	59
Health and Medical Science.....	62
Family and Consumer Science.....	67
Trade and Industrial Education.....	71
English .....	77
Fine and Performing Arts.....	90
Performing Arts – Instrumental Music .....	90
Performing Arts – Vocal Music.....	96
Performing Arts – Theatre .....	101
Visual Arts – Art.....	106
Visual Arts – Publishing and More .....	118
Health, Physical Education & Driver’s Education .....	125
History and Social Sciences .....	134
Mathematics.....	149
Calculus.....	157
Science .....	162
Special Education Programs & Services .....	175
Special Education Diplomas .....	175
Special Education Course Delivery Models.....	175
Special Education Classes.....	176
Special (IEP) Diploma / Self-Contained Functional Classes.....	180

World Languages .....	186
French .....	186
German .....	188
Greek .....	191
Japanese .....	191
Latin .....	193
Spanish .....	195
<b>Enrichment Opportunities .....</b>	<b>199</b>
Arts and Letters Pathway .....	199
AVID (Advancement Via Individual Determination).....	199
CORE+ .....	201
Independent Study.....	202
STEM Pathway .....	202
Teaching Fellows Program .....	203
<b>Course Credit Guidelines .....</b>	<b>204</b>
Add/Drop Procedures.....	204
Repeating a Course .....	205
Loss of Credit .....	205
Translation of Pass/Fail Grades .....	205
Transcript Evaluation of Foreign Study Grades.....	205
Attendance .....	206
Class Absences .....	206
Pre-Arranged Absences .....	206
School-Related Absences .....	206
Out-of-School Suspension .....	206
Early Dismissal .....	207
Tardy to Class .....	207
Make-Up Work.....	207
Appeals Process .....	207
Advanced Placement (AP) Examinations .....	207
Exams .....	207
Exam Exemptions .....	207
Substitution of SOL Test Results for the Semester Exam.....	208
<b>General Information.....</b>	<b>209</b>
Graduation Requirements.....	209
Sequential Electives .....	209
Certificate of Program Completion .....	209
Individualized Student Alternative Education Program (ISAEP).....	209
Economics & Personal Finance Graduation Requirement.....	210

Diploma Seals .....	210
Enriching Your High School Experience .....	211
Advanced Placement (AP).....	211
Dual Enrollment/Dual Credit .....	211
Senior/Junior Internship Program .....	212
Governor’s Senior Year Plus: Early College Scholars Agreement .....	212
Virtual Virginia School.....	212
Online Virtual Learning.....	212
Freshman Seminar .....	212
Verified Credits .....	213
Core Courses/Levels .....	213
Student Course Load .....	214
Grading Scale .....	214
Grade Point Average, Academic Achievement Program, and Weighted Grades.....	214
Early High School Program Completion.....	215
Regulations Governing the Secondary School Transcript .....	216
Athletic Eligibility .....	216
Virginia High School League.....	216
NCAA – Academic Eligibility Requirements .....	216
Career Planning .....	216
Early Graduation Request Form .....	218
<b>Index of Courses .....</b>	<b>219</b>
Specialty Centers .....	219
Departments .....	221
Enrichment Opportunities.....	230

# Pathways to Your Future

## Introduction

Welcome to "Pathways to Your Future," the **Guide to High School Credit Courses** for Albemarle County Public Schools. This guide is provided as a tool to enable you to embrace learning, to excel in your work and readiness for a career and education beyond high school, and to own your future!

January is the time of year for students to make plans and to choose courses for the coming school year. As a part of this process, the Guide to High School Credit Courses is provided to assist you with course selections and long-term educational and career planning. School counselors, in collaboration with parents and teachers, assist each student in planning a program of study and selecting courses for the next school year.

## How to Use this Guide

[Process Timeline »](#)

 [Course Selection Worksheet »](#)

Please download your [Course Selection Worksheet](#), a five-year planning form. This form does not take the place of your career plan; rather, it is meant to be used as a planning worksheet by you, your parents, and your school counselor.

[Learn more about career planning »](#)

This guide is organized in sections as outlined in the top-left menu. It begins by identifying specialty centers offered at the high school level, so you can think about pathways leading to them. The guide further details department subject areas, including course descriptions. Additional sections include enrichment opportunities, course credit guidelines, and general information, including graduation requirements, our grading scale, athletic eligibility, and more.

## Course Descriptions

As you start reading about courses, you will find that each course description has several parts. The listings for courses in this guide include the following information (where applicable):

### Course Title & Description

#### Prerequisite(s)

*Course(s) that should be passed before taking this course*

#### Corequisite(s)

*Course(s) that should be taken at the same time as this course*

**Credit**

Number of credits received upon passing the course

**Course Code**

If applicable, this section also indicates the level(s) at which the course is taught. In addition to Advanced Placement and Dual Enrollment, the school division offers the following levels of core courses: Standard, Academic/Advanced, and Honors. Learn more on the [General Information](#) page.

**Grades**

Grade(s) in which course is offered (9, 10, 11, 12)

**Location**

Indicates which school(s) or Specialty Center offers the course

**Sequential Electives**

Students qualifying for a Standard Diploma or a Modified Standard Diploma must successfully complete two elective courses that are sequential (courses that provide a foundation for further education, training or preparation for employment). Certain courses satisfy the requirement for Fine Arts or Career and Technical Education and for sequential electives.

**Key to Icons**

SOL Test Required



Offered at CATEC

**Dual Enrollment**

Piedmont Virginia  
Community College



Reynolds  
Reynolds  
Community College

# Process Timeline

The Course Request Process for the upcoming year is an opportunity for you to think carefully about your interests, achievements, and educational and career goals. Give very serious consideration to this process. Here is the timeline:

## November

1. Guide to High School Credit Courses will be made available to students and parents online to make preliminary requests and plans. Schools may print copies upon request.

## December – January

2. Curriculum Expos for current high school students and rising 9th graders will take place.
3. Classroom Presentations and Small Group Program Planning Sessions will take place with school counselors as they visit classrooms to explain the *Guide to High School Credit Courses*. School counselors will begin meeting with students individually to review teacher recommendations, five year plans, and transcripts.
4. Teacher recommendations will be completed for each student prior to student online registration.

## January – March

5. Students schedule a meeting with school counselors to request courses.

## April

6. Course requests will be verified.

## Last Friday in April

7. To allow for the building of a balanced master schedule, all course request adjustments must be made by the last Friday in April.

---

*To ensure the best choice of courses, especially elective courses, all requests should be given your most thoughtful consideration. Your school will develop the master schedule and will allocate teaching staff around students' choices early in the process, so alternate courses may not be available at a later date.*

# Course Selection Worksheet/Career Plan



Full Name: \_\_\_\_\_ Current Grade: \_\_\_\_\_ Counselor: \_\_\_\_\_

Diploma Type: \_\_\_\_\_ Career Pathway: \_\_\_\_\_ Career Planning Goals: \_\_\_\_\_

Post-Secondary Plan:  4-Year School  2-Year School  Technical Training  Military

Other: \_\_\_\_\_

Grade	English	Social Studies	Math	Science	Personal Finance	Health/PE Elective	World Language/ Elective	Other Electives	Credits	Verified Credits
Middle School 6-8										
9										
10										
11										
12										



# Career Planning

All Albemarle County high school students will graduate with a Career Plan. With the support of school counselors and career specialists, students will develop and refine their career plan through the 4-year planning process. The plan allows students to:

- Establish short-term and long-term education/career goals;
- Assess personal interests as they relate to career decisions;
- Formulate thoughtful educational plans that reflect rigorous academics in their chosen career directions;
- Participate in electives, extra-curricular activities, and community service projects supporting their career directions; and
- Include internships or cooperative work experiences during grades 11 and/or 12.

## How Do I Start Making a Career Plan?

It might sound like a huge task to plan your whole career; but if we understand that everything can be done systematically, then it won't turn into a hassle in the end. According to research, these are the four main pillars and units of career planning:

### **Self-Assessment**

Learn more about you; be clear about your likes, dislikes, values, personality, and learning style.

### **Research**

Find out more about the careers that interest you— about the output of these careers and what the working situations will be like.

### **Make a Fit**

Match your skills with the career that best suits you and your skill sets.

### **Create a Plan**

Craft a whole plan that includes finding an educational program, selection of a school, financial aid, resumé preparation, standardized admission tests, and interviewing techniques.

*Adapted from Career Planning Tools at OnlineEducationFacts.com*

## Career Planning Activities

As students mature, change, and develop new skills, they may modify their career plan to reflect their new interests and goals. The career interest inventories and activities the students complete during high school utilize the 16 career clusters from the Virginia Department of Education.

### **9th Grade**

Personal goal setting, career pathways survey (registration), curriculum expo, career plan update, year-end review

### **10th Grade**

Personal goal setting, career pathways survey (registration), curriculum expo, career plan update, interest inventory, career fair, year-end review

### **11th Grade**

Personal goal setting, internship/ CTE co-op experience, resume workshop, curriculum expo, career plan update, college and career prep workshop, year-end review

### **12th Grade**

Personal goal review, internship/ CTE co-op experience, finalize college and career plans workshop, finalize resume, career plan update, exit survey

### **All Grades**

Outside learning experiences: clubs, sports, job shadowing, community service, part-time/summer job, student government, internship, teacher cadet

## **Virginia's 16 Career Clusters**

**Career Clusters** are groupings of occupations and broad industries based on commonalities. They help students investigate careers and design their courses of study to advance their career goals.

Virginia has adopted the nationally accepted structure of career clusters, career pathways, and sample career specialties or occupations. Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, both academic and technical, necessary to pursue a full range of career opportunities within that pathway, ranging from entry level to management, including technical and professional career specialties.

*Click on each of the Career Clusters below for more information.*

### **ARTS, AV, COMMUNICATIONS & HUMANITIES**

[Cluster 1: Arts, AV, Technology & Communications](#)

### **HEALTH SERVICES**

Cluster 2: Health Science

## **HOSPITALITY & TOURISM SERVICES**

Cluster 3: Hospitality & Tourism

## **LEGAL, PROTECTIVE, EDUCATION & HUMAN SERVICES**

Cluster 4: Education & Training

Cluster 5: Human Services

Cluster 6: Law, Public Safety, Corrections & Security

Cluster 7: Government & Public Administration

## **BUSINESS, FINANCE, MARKETING & INFORMATION TECHNOLOGY**

Cluster 8: Business Management & Administration

Cluster 9: Finance

Cluster 10: Information Technology

Cluster 11: Marketing

## **ENGINEERING, TECHNOLOGY, SCIENCE & NATURAL RESOURCES**

Cluster 12: Agriculture, Food & Natural Resources

Cluster 13: Architecture & Construction

Cluster 14: Transportation, Distribution & Logistics

Cluster 15: Manufacturing

Cluster 16: Science, Technology, Engineering & Mathematics

For more information about Virginia's pathways to college and career readiness, including student and parent resources, visit the Virginia Department of Education's [Career Clusters](#) site.

## **Creativity and Career Planning**

A well-rounded high school program involves the careful planning of electives. The 21st century workplace requires new multi-disciplinary and creative ways of thinking about problem solving and managing knowledge. Thus, we suggest that students think creatively about how a variety of electives, especially in the areas of art, business, engineering, and human relations, can support their career goals. **Remember, creativity is the key to success in the 21st century!**

## Specialty Centers

We want to offer you choices in your education. As a result, we are always seeking new pathways for enrichment, learning support, and expanded career and continuing educational opportunities.

The programs and courses on the following pages represent larger-scale centers housed at different schools.

- [Murray High School](#)
- [CATEC \(Charlottesville Albemarle Technical Education Center\)](#).
- [MESA \(Math, Engineering & Science Academy\)](#).
- [HMSA \(Health and Medical Sciences Academy\)](#).
- [ESA \(Environmental Studies Academy\)](#).

# Specialty Centers

## Murray High School

**Murray High School** is a non-traditional public charter school that is fully accredited by the Virginia State Board of Education. In 2001, Murray was named the first public high school to become a Glasser Quality School. Murray High School serves approximately 110 students, grades 9-12, from throughout the county. Murray was established as an option for students whose academic and personal needs were not being met with a traditional program.

Students interested in attending Murray complete an application process. The process includes completing an application stating their reasons for applying, participating in an interview, and attending a visitation day at Murray. These and the student's permanent records are then reviewed by an admissions committee that makes the decision regarding the student's appropriateness for the Murray program. Mastery learning is used, and all students must earn an 80% or better on every assignment. Instruction is differentiated according to the student's needs and interests, and project-based learning is emphasized.

Murray High offers courses needed to fulfill the requirements to earn either a Standard Diploma or Advanced Studies Diploma. Murray students are encouraged to enrich their high school program through dual credit courses at PVCC, CATEC courses, senior internships, and independent studies.

**Murray High School, 1200 Forest Street, Charlottesville, VA 22903**  
Phone: 434-296-3090 • Fax: 434-979-6479 • [www.k12albemarle.org/murrayhs](http://www.k12albemarle.org/murrayhs)

## English

The English curriculum at Murray High includes a multi-grade, thematic approach. Both the Albemarle County curriculum and the Virginia Standards of Learning are included in the curriculum that emphasizes the continuous development and improvement of reading, writing, speaking, and listening skills. Courses are open to multi-grade levels, and students receive the appropriate level of English credit.



\* SOL Test required

- **English 9**
- **English 10**
- **English 11\***
- **English 12**
- **English Literature & Composition, Advanced Placement**

## Mathematics

- **Study Skills Math/Algebra Lab — Preparation for Algebra I**

- **Algebra I\***

Prerequisites: 8th grade Math and/or teacher recommendation

- **Geometry\***

Prerequisite: Algebra I

- **Algebra II\***

Prerequisite: Algebra I

- **Algebra Functions, and Data Analysis (AFDA)**

Prerequisite: Algebra I

- **Algebra II/Trigonometry**

Prerequisite: Algebra II, Geometry

- **Math Analysis**

Prerequisite: Algebra II, Geometry, Trig



\* SOL Test required

## Social Studies

The social studies curriculum is based on the Virginia Standards of Learning and incorporates project-based and inquiry-based instruction. The social studies courses at Murray High School may include but are not limited to the following:

- **World History II from 1500 to Present\***

- **World Geography\***

- **Virginia and U.S. History\***

- **Virginia and U.S. Government**

This course requires that each student complete 10 hours of community service.



\* SOL Test required

## World Languages

The main purpose of studying a world language is to understand and communicate with peoples of different nationalities and ethnic groups and to appreciate their contributions to the development of our own nation and culture. The world languages offered at Murray consist of **Spanish I, II, III, and IV**

## Science

The science curriculum is based on the Virginia SOL's and includes a project-based, inquiry-based approach. The science courses at Murray include but are not limited to the following:

- **Earth Science\***
- **Biology\***
- **Oceanography**
- **Chemistry\***
- **Physics**
- **Anatomy and Physiology**
- **Ecology**



\* SOL Test required

## Fine Arts

These courses are designed to stimulate creativity, develop critical thinking skills, impart technical knowledge, and expand expressive skills through a wide variety of developmental experiences in the arts.

- **Visual Arts - Art: Art I-IV**  
Drawing, painting, multimedia crafts, and sculpture are included.
- **Visual Arts - Publishing and More: Creative Writing I and II**  
This course is designed for students with special interest in writing original poetry, short stories, essays, scripts, and novels. Strategies, style and techniques used by successful authors are studied. The course requires independent study, teacher-student conferences, group discussions, and sharing of work.

## Career and Technical Education

- **Design 1 and 2**  
This is a foundational design theory course that introduces students to a variety of tools that focuses specifically on the nature of design and aesthetic appeal. Students will identify the specific needs of worldly concern or a customer, generate concepts, pitch ideas, and create physical or digital prototypes for evaluation. Students may interact with a variety of problems or iterate a few designs based on the needs of the class. (CTE Code: 8425)
- **Design Thinking**  
This course provides an introduction to design thinking, problem seeking, ideation techniques and strategies, creative cognition theories, creative intelligence, and the methodologies embedded in the design thinking process. (Local Code: 9097)
- **Audio Production 1 and 2**  
Students enrolled in this course develop a foundational understanding of sound and how to capture it in a digital form. Students will learn the fundamentals of audio recording and editing, including hardware identification, terminology, and standard recording techniques.

Working independently and in mixed-skill groups, they will produce original work in digital formats such as music, broadcast journalism, and creative prose. Students in this class are not required to have any prior experience with music or audio production. (CTE Code: 8120)

## Health and Physical Education

Classes are scheduled by semester so that the health and the physical education components occur and are graded separately. Students may elect to complete their two required semesters of health and/or physical education in the same year.

- **Physical Education I-II** (.5 credit each)  
Involves the study of and participation in a variety of physical activities.
- **Health Education I** (.5 credit)  
Areas of study include nutrition, diseases, first aid, and family life.
- **Health Education II** (.5 credit)  
Areas of study include: substance abuse, driver education, mental health, and family life.
- **Weight Lifting I-IV**
- **Advanced PE/Elective** (offered based on student interests and needs.)
- **Fitness Instructor** (1 credit)  
The purpose of the Fitness Instructor elective course is to provide students with the knowledge, skills, and experience needed to become certified in personal training, strength and physical conditioning, group fitness, or in other health fitness specialty areas. Students will learn to develop individualized programs with goals that are based on a variety of factors that affect one's overall health, to include genetic and chronic health conditions, sports injuries, age and gender, level of fitness, and lifestyle factors. Students will gain knowledge and skills to help improve posture, movement, flexibility, balance, core function, cardiorespiratory fitness, and muscular endurance and strength. Students will learn a variety of business skills, to include effective communication, leadership skills, marketing strategies, consumer advocacy, résumé writing, and interviewing skills. Students will also earn a certification in CPR and AED.
- **Dance Production/Improvisation / PED 161/167** (1 credit; 4 dual enrollment college credits with PVCC)  
Students in this course will focus on creating a dance performance. Teaches the basic skills in creating and producing a dance. Includes lighting, costumes, music, and choreography. Additionally, students will explore the creation of spontaneous movement experiences with emphasis on self-expression and creature awareness. Includes improvisational techniques utilizing body awareness, use of the environment, and group dynamics.



## Outdoor Adventure and Leadership

Outdoor Adventure and Leadership is a new, immersion-style course designed to complement and expand experiential learning opportunities. The purpose of the course is to (1) have fun; (2) build group trust through teambuilding activities and creating a sense of community; (3) enhance communication skills by becoming active listeners and using empowering language; (4) challenge old behaviors and introduce new choices of how to be with each other through applying Dr. Glasser's Choice Theory; (5) develop problem-solving skills through individual and group initiatives; (6) identify students' needs and strengths and incorporate those into planning activities; (7) utilize organizational skills and communication skills in planning activities; (8) apply understanding of proper nutrition by planning balanced meals for the overnight backpack experience; (9) improve overall fitness by engaging in activities involving strength, flexibility, motor coordination, and cardio-vascular conditioning; (10) increase awareness of opportunities for recreation and leisure activities available in the local community; (11) improve self-confidence by learning the individual edge of one's comfort zone and then challenging oneself in the most authentic, meaningful way; and (12) increase awareness about environmental impact and learn low impact methods of camping.

## Driver's Education

- **Part I Classroom**

During the sophomore year, the 36-hour driver's education classroom instruction component is provided as a part of the Health II curriculum. Students are cautioned not to be absent during this 6-week period, as excuses from parents and doctors do not exempt one from the DMV requirement for classroom instruction.

- **Part II Behind-the-Wheel**

Students should be scheduled for Behind-the-Wheel training around 16 years of age. Murray High School does not offer Behind-the-Wheel training. Students are encouraged to sign up at their base school for this portion of driver's education. (See page 48 for more information.)

## Special Education Programs

The Special Education Program is provided for students who have been identified with a disability and found eligible for special education services. Assistance is provided using various levels of service including consultation/ monitor, collaboration, and resource classes.

- **Consultation/Monitor** (Non-Credit)

The special education teacher offers support to students in mainstream classes through consultation with regular education teachers to monitor student performance and to give direct assistance on an as-needed basis.

- **Study/Organizational Skills** (1 credit)

Students are supported in reading, writing, spelling, grammar, language, and vocabulary. They will investigate effective methods of studying in order to improve their academic

performance. A percentage of class time is devoted to applying these skills to core subjects.

## **Additional Offerings to Fulfill Graduation Requirements**

- **CATEC**

Students apply to, meet requirements for admission to, and attend programs of their interest at the Charlottesville- Albemarle Technical Education Center (CATEC). [Learn more about CATEC offerings »](#)

- **Leadership**

Leadership courses are offered as electives. These courses may focus on understanding personal leadership through the study of issues related to social justice or on school leadership issues. See the [History/Social Sciences](#) section for full course description.

- **Courses Through PVCC**

Seniors are encouraged to take courses offered at Piedmont Virginia Community College (PVCC). A three-hour college class is equal to a .5 high school credit. Placement testing and assistance with PVCC registration are available at Murray in the guidance office.

- **Independent Study**

Prerequisite: Proposal approval. Proposal information is available in the school counseling office.

1 Credit or .5 Credit per semester

Independent study provides the opportunity for students to investigate a topic of personal interest that is outside the scope of current course offerings. Mentors for independent study can be faculty from the school or community members.

- **Internship Program**

An application procedure is required.

1-2 Credits

All Students are encouraged to participate in a senior internship program. Students work with professionals in the community as interns in jobs related to career objectives. Typical internships include the areas of medicine, law, architecture, engineering, computer science, veterinary medicine, education, public relations, journalism, management, accounting, and finance.

- **Economics and Personal Finance**

The Economics and Personal Finance class is offered to fulfill the graduation requirement. Students learn how to navigate the financial decisions they must face and to make informed decisions. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. Students also will explore entrepreneurship as they learn the skills needed to plan,

organize, manage and finance a small business. This course also is offered in multiple formats, including virtual and dual enrollment through PVCC.

# Specialty Centers

## Charlottesville Albemarle Technical Education Center (CATEC)

### ***My Choice. My School. My Future.***

High school CATEC classes are offered at CATEC and other sites and are available to all Albemarle County and Charlottesville City Public School students free of charge. Most programs meet for a half-day and include practical, hands-on training in a variety of exciting career fields.

Transportation to and from base schools is provided. To enroll in CATEC classes, students should talk with their high school counselor.

Students who attend and complete CATEC programs have the opportunity to receive a recognized certification or credential in their field and high school elective credit. Many CATEC classes also offer dual enrollment credit.

CATEC houses two academies that offer educational and career pathways for students in partnership with post-secondary institutions and employers. Students in the academies may qualify to receive industry certifications and credentials. These credentials are a valuable tool to gain full-time employment in growth industries with livable wages. Graduates also may continue their education utilizing the dual enrollment credits they received while in high school.

### **CATEC Academies:**

- [Healthcare & Medical Services Academy](#)  
CATEC is partnered with Piedmont Virginia Community College (PVCC), Reynolds Community College (RCC), and local businesses to develop career and educational pathways in the areas of nursing, pharmacy, dental, and emergency medicine.
- [Information & Engineering Technology Academy](#)  
CATEC is partnered with Piedmont Virginia Community College (PVCC), CISCO Systems, and local businesses to develop career and educational pathways in computer networking and cybersecurity.

### **CATEC Programs:**

- [Auto Body Repair](#)
- [Auto Service Technician](#)
- [Building Trades & Electrical](#)



- [Cosmetology](#)
- [Culinary Arts](#)
- [Exploratory](#)
- [Firefighting](#)
- [Music Industry Technology](#)

For a complete list of academy and program course offerings, visit the [CATEC Program of Studies](#) web page.

### **Admissions**

Students need to register for classes with their school counselor. CATEC staff will work with guidance counselors to assist students in scheduling their classes. All programs have a maximum of 20 students, including the exploratory program. If any classes are over capacity, the CATEC interview process will determine those students accepted.

In addition, students who select a dual enrollment course are required to take the VPT exam in the spring before they begin the class. Students should check with their high school counselor to see if they are exempt from taking any part of the VPT exam based on qualifying scores on their ACT, SAT, PSAT, and SOL exams.

### **Scheduling**

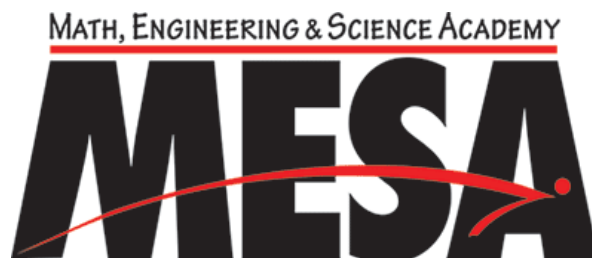
Most CATEC classes are offered at CATEC on Rio Road. Students are bussed from their base schools and usually spend either the entire morning or the entire afternoon at CATEC.

# Specialty Centers

## Math, Engineering & Science Academy (MESA)

### at Albemarle High School

**This program is offered at Albemarle High School, but is available to all Albemarle County Public School students. Students must enroll as full-time students and provide their own transportation to Albemarle High School. Applications should be submitted to your school counseling office by the deadline.**



The Math, Engineering & Science Academy offers a four-year program designed to prepare students for a college preparatory pathway to a career in engineering. Students will thrive in a state-of-the-art laboratory environment designed to provide authentic experiences in mathematics, engineering, and science. Academy students will explore science and mathematics through the lens of engineering research and design. Students will learn to communicate complex ideas reflecting the rapid growth of technologies applicable in the global community. Students enrolled in the Academy will have the opportunity to experiment with cutting-edge technologies as they interact and intern with professionals in the science, mathematical, and engineering fields.

---

### **MESA Algebra II / Trig/Pre-Calc, Honors (2-year program)**

Students must enter the program in 9th grade. Honors Algebra II is taken in 9th Grade; Honors Trig/Pre-Calc is taken in 10th grade.

Students will complete the Algebra II and Pre-Calculus curriculum in a project enriched class environment that will bring real-world focus and meaning into complex mathematical concepts. Students will study a variety of functions in-depth, along with their applications; uses and derivations of conic sections; systems of equations and their use in engineering design; basic differential calculus and its applications; complex numbers and their uses in electrical engineering; polar coordinates; and more. Enrichment topics, as they relate to the mathematical concepts and/or cross curricular science topics, will be explored throughout the two-year course. Emphasis will be placed on the physical applications for concepts.

Students will take the Algebra II SOL at the end of the first year. At the end of this course, students will be prepared for the rigors of AP Calculus.

Prerequisite(s): Algebra I and/or Geometry

Corequisite(s): 9th Grade: Honors Physics; 10th Grade: Honors Earth  
Sci/Chemistry

Credit: 3

Hon Algebra II (9th Grade) . . . . . 3166 (1 credit)  
Hon Trig/Pre-Calc (10th Grade) . . . . . 3167 (2 credits)

Grades: 9, 10

---

### **MESA Engineering Design / EGR 115**

This course allows students to examine systems, the interaction of technology and society, ethics in a technological world, and the fundamentals of modeling while applying the engineering design process to areas of the designed world. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports. Students will learn the principles of orthographic projection and multiview drawings. Other topics will include descriptive geometry with relationships of points, lines, and planes. Sectioning, dimensioning, and computer graphic techniques will be introduced. (CTE Code: This course allows students to examine systems, the interaction of technology and society, ethics in a technological world, and the fundamentals of modeling while applying the engineering design process to areas of the designed world. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports. Students will learn the principles of orthographic projection and multiview drawings. Other topics will include descriptive geometry with relationships of points, lines, and planes. Sectioning, dimensioning, and computer graphic techniques will be introduced. (CTE Code: 8441)



Prerequisite(s): Meet dual enrollment admission requirements; Introduction to Engineering / EGR 120; Calculus AB; Instructor approval

Corequisite(s): Honors Engineering Research II

Credit: 1; 2 dual enrollment college credits with PVCC (transferable to UVA, VA TECH, ODU, VCU)

. . . . . 8450

Grades: 12

---

### **MESA Engineering Research I, Honors**

Students will further develop strong research and analytical skills through hands on experiments. Experiments will be in various science disciplines with a focus on data collection, validation, and analysis. A project suitable for entry in the science fair will be required upon completing the 1st semester. The second semester will explore engineering principles and techniques through hands on experiments and research.

Prerequisite(s): Math Analysis; Physics

Corequisite(s): Introduction to Engineering / EGR 120

Credit: 1 (Science elective)

..... 8454

Grades: 11

---

**MESA Engineering Research II, Honors**

The MESA course is designed to allow students the flexibility to investigate scientific areas that interest them. Guidance that accentuates (stresses, emphasizes) essential skills needed to excel and succeed in a global environment: teamwork, communication and creativity will be provided.

Prerequisite(s): Calculus AB

Corequisite(s): Engineering Design / EGR 115

Credit: 1 (Science elective)

..... 8452

Grades: 12

---

**MESA Introduction to Engineering / EGR 120**



This course allows students to examine systems, the interaction of technology and society, ethics in a technological world, and the fundamentals of modeling while applying the engineering design process to areas of the designed world. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports.



This course is dual enrolled with PVCC as EGR 120 Introduction to Engineering. EGR 120 is an introductory-level engineering class designed to introduce students to ideas, concepts, and methods universal to all disciplines of engineering. Engineering design, analysis, and teamwork will be emphasized through a semester-long project involving the Lego® Mindstorms Robot. In addition to problem solving, this class will emphasize important skills that will be useful to students throughout their careers including technical documentation, presentation skills, and the use of softwarebased computational tools for solving engineering problems. (CTE Code: 8439)

Prerequisite(s): Meet dual enrollment admission requirements; Instructor approval

Corequisite(s): Honors Engineering Research I; Applied Calculus / MTH 271

Credit: 1; 2 dual enrollment college credits with PVCC (transferable to UVA, VA TECH, ODU, VCU)

..... 8451

Grades: 11

---

**MESA Physics / Earth Sci/Chemistry, Honors (2-year program)**

Students must enter the program in 9th grade. Honors Physics is taken in 9th Grade; Honors Earth Sci/Chemistry is taken in 10th grade.

Students will complete three levels of science in two years in an integrated science course that focuses on research and projects that overlap the disciplines and create a richer understanding of the sciences. The major concepts of earth science, geology, oceanography, astronomy, and meteorology will be studied through the chemistry and physics framework. Chemical bonding, atomic structure, reactions, and gas laws will become the fundamentals upon which earth science is brought into focus. The physical forces of nature and energy relationships along with molecular kinetic theory, waves, gravity, motion, electricity and circuitry will allow the student to understand the sciences and the natural world in a holistic context. The investigative skills used by practicing scientists are heavily emphasized.

Students will take the Earth Science and Chemistry SOL upon completion of this course. At the end of this course, students will be prepared for the rigors of AP Chemistry or AP Physics.

Prerequisite(s): Algebra I and/or Geometry

Corequisite(s): 9th Grade: Honors Algebra II; 10th Grade: Honors Trig/Pre-Calc

Credit: 3

Hon Physics (9th Grade) . . . . . 4202 (1 credit)

Hon Earth Sci/Chemistry (10th Grade) . . 4203 (2 credits)

Grades: 9, 10

# Specialty Centers

## Health and Medical Sciences Academy (HMSA)

### at Monticello High School

#### Inspiring Excellence, Innovation, and a Future of Service

This program is offered at Monticello High School, but is available to all Albemarle County Public School students. Applications should be submitted to your school counseling office by the deadline.



The Health and Medical Sciences Academy (HMSA) is designed to prepare students for college and/or career pathways in the Health Sciences. Academy students will explore an integrated curriculum through the lens of Health Sciences and Research. During their junior and senior year, students will have additional opportunities to support their academic aspirations in Health Science Careers that may include but are not limited to: Case Studies, Internships, Clinical Rotations, Site Visits/Tours, and College Visits.

### Mission

The Health and Medical Sciences Academy's mission is to empower students for success by using 21st century skills while exploring Health Science Career opportunities. The program will provide students with a foundation for post-secondary education or workforce readiness in certified health related professions. Students will explore core content with technology through integrated projects, case studies, and focused learning experiences.

### Academy Pathways

#### Pathway 1:

Allied Health (to include a variety of industry certification programs)

#### Pathway 2:

Technical, Bio-Engineering, Medical Equipment

#### Pathway 3:

Medical Doctor, DDS, RN, LPN

A student's studies may culminate in career and technical centers, community college, or a four-year program based on their choice of pathway and success in the Academy.

---

### HMSA Anatomy and Physiology, Honors

Students explore the human body systems of communication, power, and movement. To do this, students are taught the body's components, tissues, molecules and cells, as well as concepts of homeostasis and body system defenses. Students will complete case studies, participate in field trips and will continue to explore career opportunities in Health and Medical Sciences.

Prerequisite(s):

Corequisite(s):

Credit: 1

HMSA . . . . . 4335

Grades: 10

---

### **HMSA Biology/Foundations of Biomedical Sciences/Health, Honors**

The course curriculum is integrated and will explore content from the core areas through the lens of Health and Medical Sciences. The goal of the integrative course is to provide an opportunity for students to pursue their interests and prepare for a career in health and medical sciences.

Students will be exposed to various professions in the health care field, participate in field trips and case studies as they explore opportunities of interest. Students are taught concepts of human physiology, medical innovation, water contamination, public health issues, molecular biology, and forensic autopsy. Students complete an independent project as a culminating activity. (CTE Code: 8379)

Prerequisite(s): HMSA Acceptance

Corequisite(s):

Credit: 2.5

HMSA . . . . . 4323

Grades: 9

---

### **HMSA Biomedicine, Honors**

HMSA Honors Biomedicine is an in-depth study of selected topics introduced in Biology I. The course explores advanced topics in Biology specifically related to Human Anatomy and Physiology and prevention and treatment of disease. Emphasis is on investigative exercises in the laboratory and clinical simulations.

Prerequisite(s): Biology I; Chemistry

Corequisite(s):

Credit: 1

HMSA . . . . . 4334

Grades: 11, 12

---

### **HMSA Chemistry, Honors**

Students are introduced to basic chemical concepts including composition of matter, atomic structure, periodic table, chemical bonding, formulas and equations, reacting quantities, gas laws, and acid base theory. The investigative skills used by practicing scientists are emphasized. This course is taught through the lens of medical science in order to further familiarize students to new opportunities of interest.

Prerequisite(s):

Corequisite(s):

Credit: 1

HMSA . . . . . 4413

Grades: 10

---

### **HMSA Independent Research Project**

Independent Study provides the opportunity for students to investigate a topic of personal interest that is outside the scope of current course offerings. Mentors for independent study can be school faculty or community members. Research project proposals will be submitted to the HMSA Director and should include a commitment from a mentor and a plan for carrying out the independent study.

Prerequisite(s):

Corequisite(s):

Credit: 1

HMSA . . . . . 9933

Grades: 11, 12

---

### **HMSA Junior/Senior Internship**

Internships are designed to support a student’s long-term education and career goals. Students will work closely with professional mentors and will have the opportunity to experience “first-hand” a particular career or pathway. Students can enhance their academic and technical skills and become more informed about certain career field expectations and requirements prior to entering college and/or the workforce. Students will meet with the HMSA Director to determine placements suitable for their career goals. (CTE Code: 9071)

Prerequisite(s):

Corequisite(s):

Credit: 1

HMSA . . . . . 9070

Grades: 11, 12

---

### **HMSA Medical Research Laboratory I**

In Medical Laboratory Technology I, students gain foundational knowledge and skills appropriate for STEM research to include a variety of medical-related career paths in the field of medical technology. Students will address problems that can be tested using the scientific method. The scientific method is an inquiry process used to systematically study, investigate, and provide explanations for observed phenomenon in the natural world. Students are introduced to diagnostic and therapeutic laboratory procedures that support medical research and practice, and investigate safety, quality assurance, and ethical concerns associated with the field of medical technology. (CTE Code: 8377)

Prerequisite(s): HMSA Acceptance

Corequisite(s):

Credit: 0.5

HMSA . . . . . 8377Q

Grades: 9, 10

---

### **HMSA Principals of Psychology/Developmental Psychology / PSY 200/230**

The first half of this course, offered in the fall, surveys the basic concepts of psychology. It covers the scientific study of behavior, including behavioral research methods, analysis, and theoretical interpretations. Included are topics that cover physiological mechanisms, sensation/perception, motivation, learning, personality, psychopathology, therapy, and social psychology.



The second half of this course, offered in the spring, allows students the opportunity to study the development of the individual from conception to birth. It follows a life-span perspective on the development of the person's physical, cognitive and psycho-social growth.

This year-long course fulfills general education requirements for students interested in earning their Associate of Applied Science Degree in Diagnostic Medical Sonography or Nursing at PVCC.

Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; 6 dual enrollment college credits with PVCC

..... 2899

Grades: 11, 12

# Specialty Centers

## Environmental Studies Academy (ESA)

### at Western Albemarle High School

Environmental studies is the interdisciplinary academic field that studies human interaction with the natural environment in the interest of solving complex problems. The Environmental Studies Academy is a “fun and challenging”, high school option for students to consider. This program stresses collaboration, project based learning, and engagement through labs and hands-on learning. All ESA students will develop a comprehensive digital portfolio including work samples and a capstone project.

The ESA is a four-year academic program designed to prepare students for a variety of college and career options. Curricular focus includes three broad concentrations that are integrated throughout the course offerings. The curricular concentrations include, but are not limited to:

- Agricultural: Career pathway in Agricultural sciences, Horticulture, green materials, and sustainability. May include industry certifications.
- Conservation: Career or educational pathway in resource management, including fisheries, wildlife, forestry, land use, natural resources, Ecology, and alternative energy.
- Research Focus: Educational pathway preparing students to pursue careers in Environmental Science, Research, Health, Policy, Law, and Physical and Earth Sciences.

This program is offered at Western Albemarle High School, but is available to all Albemarle County Public Schools students. Applications should be submitted to your school counseling office by the deadline.

---

#### **ESA BIO of Environment / BIO 107**

Presents the basic concepts of environmental science through a topical approach. Includes the scientific method, population growth and migration, use of natural resources and waste management, ecosystem simplification recovery, evolution, biogeochemical cycles, photosynthesis and global warming, geological formations, atmosphere and climate, and ozone depletion and acid deposition.



Prerequisite(s):

Corequisite(s):

Credit: 1; 4 dual enrollment college credits with PVCC

Honors . . . . . 4219DE



Grades: 11

---

**ESA Biosystems: Biology/Ecology, Honors**

This course combines the curriculum of Biology and Ecology and is analyzed through an environmentally-based lens. Students will earn 2 science credits and take the end of year SOL in Biology. ESA Biology offers a foundation in the study of the living processes that shape our world. Cell structure, function, genetics, adaptations, and importance are emphasized. This course combines the physical abiotic factors of our Ecosphere with the living biotic organisms to study the interconnectivity of the Biosphere. Ecological concepts such as energy flow, bio-geochemical cycles, and ecosystem dynamics all are studied. The primary objectives are to enhance the student’s understanding of the complexity and diversity of the dynamic living Earth. Laboratory experiments are used to teach conceptual themes.

Prerequisite(s): ESA Geosystems

Corequisite(s):

Credit: 2

..... 4108

Grades: 10

---

**ESA Biosystems: Botany/Horticulture I, Honors**

This course combines an introduction to plant systems, ecological systems, basic horticulture, and greenhouse management. Our concentration is on the plant growth, identification, classification, genetics, and reproduction of various plant families.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 4324

Grades: 10

---

**ESA Botany/Horticulture II, Honors**

Building on the skills and knowledge obtained in Horticulture I, students will develop competencies in each of the major areas of the Plant Systems career pathway including applied botany, plant propagation, plant care and selection. Curriculum focuses on the horticulture plant production industry through the lens of sustainability, including the science of plant production as well as marketing and business management.

Prerequisite(s): ESA Biosystems: Botany/Horticulture I, Honors

Corequisite(s):

Credit: 1

..... 4328

Grades: 11

---

### **ESA Chemistry I, Honors**

Students are introduced to basic chemical concepts including composition of matter, atomic structure, periodic table, chemical bonding, formulas and equations, reacting quantities, gas laws, and acid base theory. The investigative skills used by practicing scientists are emphasized.



Prerequisite(s): Algebra II

Corequisite(s):

Credit: 1

..... 4412

Grades: 11

---

### **ESA Environmental Science, Advanced Placement**

AP Environmental Science is offered to students who are interested in taking the AP Environmental Science exam for college credit. The AP content outline (available from College Board) is closely followed in this course. Topics covered in the course include: interrelationships with the natural world, global changes and their consequences, human population dynamics, renewable and nonrenewable resources, and environmental ethics.

Prerequisite(s): Biology I; Algebra I

Corequisite(s):

Credit: 1

..... 4270

Grades: 11

---

**ESA Geosystems: Geology / Earth Science, Honors**

This course combines the curriculum of Geology and Earth Science. Students will earn 2 science credits and take the end of year SOL in Earth Science.

ESA Geology offers a foundation in the study of the geologic processes that have formed our world and the scientific skills used to observe and interpret it. In this laboratory course, students will learn about Earth’s structure, plate tectonics, minerals, rocks, Virginia’s geologic provinces, natural resources, weathering, erosion, soils and natural resources, and comparative planetary geology.

ESA Earth Science expands three of the four major concepts of Earth science stressing Oceanography, Astronomy, and Meteorology. The primary objectives are to enhance the student’s understanding and appreciation of Earth’s systems and, through this knowledge, to encourage students to become responsible citizens. Students will learn about the physical environment and environmental issues facing the world in these disciplines. Laboratory experiments are used to teach conceptual themes.

Prerequisite(s): ESA Acceptance

Corequisite(s):

Credit: 2

Honors Geology . . . . . 4242

Honors Earth Science. . . . . 4251

Grades: 9

---

**ESA Geosystems: World Geography: Physical and Human, Honors**

World Geography provides a rigorous curriculum that introduces students to the study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. The content and perspectives of the course are centered on the world's peoples and their cultural characteristics, landforms, climates, economic development, migration, and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. The skills of analytical reading, writing, and research will be key components of this course and will be practiced daily. This course is designed to expand academy students understanding of culture, environmental impact, natural resources, and global citizenship.

Prerequisite(s): ESA Acceptance

Corequisite(s):

Credit: 1

..... 2209

Grades: 9

# Departments and Course Descriptions

- Career and Technical Education (CTE)
- English
- Fine and Performing Arts
- Health, Physical Education & Driver's Education
- History and Social Sciences
- Mathematics
- Science
- Special Education
- World Languages

# Career and Technical Education (CTE)

**Career and Technical Education (CTE)** programs prepare students to succeed in a world that is increasingly focused on highly skilled jobs. Students participate in a rigorous and relevant career and technical education program which leads to academic success and employment in a local and global economy.

CTE courses and career pathway programs lead to great opportunities across a variety of career studies and provide the sequential electives required for the standard diplomas. Through the Virginia Department of Education’s High School Industry Credentialing initiative, students can earn a credential or license by passing an approved exam. Students who successfully complete a career and technical education program and pass the accompanying state-approved credentialing exam may earn two verified credits to fulfill a graduation requirement. These students have a higher earning potential and ultimately will be more marketable.

Career Technical Education Graduation Requirements can be fulfilled with courses described in this section. The following pages list the courses available by program area. For additional information on course offerings, consult your school counselor.

## **CTE Sequential Electives**

Students qualifying for a Standard Diploma must successfully complete two elective courses that are sequential (courses that provide a foundation for further education, training, or preparation for employment). A course may satisfy the requirement for fine arts or career technical education and for sequential electives.

## Business and Information Technology

**These courses fulfill Fine Art/Career Technical Education graduation requirements. Unless otherwise indicated, all courses are offered at all high schools.**

### **Applied Management Principles / BUS 202**

This course focuses on management practices and issues and may use case studies and/or management decision models to analyze and develop solutions to management problems. (CTE Code: 6115)



Prerequisite(s): Principles of Management

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6138

Grades: 11, 12

Offered at: MoHS, WAHS

---

**Audio Production I**

Students enrolled in this course develop a foundational understanding of sound and how to capture it in a digital form. Students will learn the fundamentals of audio recording and editing, including hardware identification, terminology, and standard recording techniques. Working independently and in mixed-skill groups, they will produce original work in digital formats such as music, broadcast journalism, and creative prose. Students in this class are not required to have any prior experience with music or audio production. (CTE Code: 8120)

Prerequisite(s):

Credit: 1

..... 8640

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Audio Production II**

Students enrolled in this course will continue adding to their arsenal of recording techniques, while also refining the skills they learned in Audio Production I to create more sophisticated audio compositions. Students will develop a portfolio of finished work, which they'll have the opportunity to publish. They will be exposed to a variety of audio art forms and encouraged to specialize in an area that incites their passion. (CTE Code: 8130)

Prerequisite(s): Audio Production I or instructor permission

Credit: 1

..... 8641

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Business Cooperative Education (Co-op)**

Students who have a career objective in business can enroll in a cooperative education course. Credit is given to students who are in a paid, supervised parttime work experience. A coordinator along with the employer provide the student with an individualized training plan. The student must be employed for the duration of the course and must abide by the Cooperative Training Agreement. (CTE Code: 9071)

Prerequisite(s):

Credit: 1

..... 6105

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Business Management**

This is a foundation course for students to explore the roles of business and marketing in the free enterprise system and the global economy. Students receive instruction in developing communication and interpersonal skills, making consumer choices, and developing employability skills. (CTE Code: 6135)

Prerequisite(s):

Credit: 1

..... 6136

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Computer Network Hardware I & II (1-year program)**



Students will learn the basics of computer networking including hardware and software. This program is a certification program for entry-level Network Engineers, Network Specialists, Network



Administrators, and Network Support Engineers. First year skills include installation, configuration, operation and troubleshooting of medium-sized routed and switched networks as well as computer and network hardware repair and troubleshooting. Wireless networking is also introduced. It provides a hands-on introduction to networking and the Internet, using tools and hardware commonly found in home and small business environments. It familiarizes students with servers that provide e-mail services, Web space, and authenticated access.

Certifications: Cisco CCENT; CompTIA A+

Prerequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); 10 dual enrollment college credits with PVCC

- I . . . . . 8542
- II . . . . . 8543

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

### **Computer Network Hardware III & IV (1-year program)**

This course familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce student learning. Students will also design a network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management.



Certifications: Cisco CCNA-RS

Prerequisite(s): Computer Network Hardware I & II

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); 6 dual enrollment college credits with PVCC

- III . . . . . 8544
- IV . . . . . 8545

Grades: 11, 12

Offered at: CATEC (available to all students)

**Computer Science A, Advanced Placement**

This course covers object-oriented programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction. (CTE Code: N/A - Math)

Prerequisite(s): Algebra II or Programming

Credit: 1

..... 3219

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

**Computer Science I & II**

Students explore computer concepts, use logic procedures, and implement programming procedures using one or more programming languages. In addition, HTML or JavaScript may be used to create dynamic Web pages. (CTE Code: I - 6640 II - 6641)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s): Algebra I

Credit: 1

I ..... 6640

II ..... 6641

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

**Design, Multimedia and Web Technologies I & II**

This course is a two-year sequence designed to develop students' skills in Graphic, Print, and Web Design. Students will develop proficiency in using desktop publishing software. Students will create advanced Web sites (individually and in teams) using both HTML code and web authoring software. In addition, students learn software to populate their web pages with eye-catching graphics and animations. Students will also explore, "cyberethics." Students will be required to present many of their projects to strengthen communication skills, which will enhance their employment or further education. (CTE Code: I - 6630 II - 6631)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s):

Credit: 1 credit each

I . . . . . 6200  
II . . . . . 6631

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Economics and Personal Finance**

Students learn how to navigate the financial decisions they must face and to make informed decisions. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. Students will also explore entrepreneurship as they learn the skills needed to plan, organize, manage, and finance a small business. (CTE Code: 6123)

**Note:** This course is a graduation requirement for students entering the 9th grade in 2011 and beyond.

Prerequisite(s):

Credit: 1

. . . . . 6123  
Virtual . . . . . 6123V

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Economics and Personal Finance / FIN 107**

Students learn how to navigate the financial decisions they must face and to make informed decisions. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. Students also will explore entrepreneurship as they learn the skills needed to plan, organize, manage and finance a small business. (CTE Code: 6123)



**Note:** This course is a graduation requirement for students entering the 9th grade in 2011 and beyond.

Prerequisite(s): PVCC Placement Testing

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6121DE

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

**Entrepreneurship / BUS 116**

Presents the various steps considered necessary when going into business. Includes areas such as product-service analysis, market research evaluation, setting up books, ways to finance startup, operations of the business, development of business plans, buyouts versus starting from scratch, and franchising. Uses problems and cases to demonstrate implementation of these techniques. (CTE Code: 9093)



Prerequisite(s): Meet dual enrollment admission requirements

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6148

Grades: 11, 12

Offered at: WAHS

**Entrepreneurship I / Exploring Entrepreneurship**

Presents the various steps considered necessary when developing an idea. Includes areas such as product analysis; market research; financing; ways to finance a startup; operations of the business; development of business plans; buyouts versus starting from scratch; and franchising. Uses problems and cases to demonstrate implementation of these techniques. (CTE Code: 9093)

Prerequisite(s):

Credit: 1

..... 9093

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Entrepreneurship II**

This course is designed for students who wish to concentrate on advanced strategies for entrepreneurship, building upon concepts introduced in Entrepreneurship I. The focus of the course is on the iteration of student ideas and strategies for bringing an idea to market. Students will have the opportunity to connect with the local entrepreneurial community to help support the development of their idea. (CTE Code: 9094)

Prerequisite(s): Exploring Entrepreneurship

Credit: 1

..... 9094

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Music Industry Technology (1-year program)**

Working in conjunction with the Music Resource Center, this course is a survey of multiple aspects of the music industry and music technology. Students will be exposed to and have the opportunity to learn critical thinking skills as it pertains to consuming and creating music. In addition, students will get foundational vocational training in a number of music industry fields including but not limited to Digital Music Production, Audio Engineering, Audio Mixing Technology, Songwriting and Composition, Music Journalism and Live Sound Engineering.



Prerequisite(s):

Credit: 2

..... 8640

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

**Principles Of Information Systems / ITE 120**

This course provides an overview of the fundamentals of computer information systems design and implementation with a focus on the role of computers in today’s business, and includes an introduction to computer ethics and security. Students will have an opportunity to work hands-on with spreadsheets, databases, and web design applications. (CTE Code: 6612)



Prerequisite(s): Meet dual enrollment admission requirements

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6669

Grades: 10, 11, 12

Offered at: MoHS

---

**Principles of Management / BUS 200**

This course offers instruction in management and management functions including planning, organizing, directing, and controlling. Students will apply management principles to realistic situations managers encounter as they attempt to achieve organizational objectives. (CTE Code: 6135)



Prerequisite(s): Business Management recommended

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6137

Grades: 11, 12

Offered at: MoHS, WAHS

---

**Web Design I / ITD 110**

Web Design stresses a working knowledge of web site design, construction, and management using HTML or XHTML and includes headings, lists, links, images, image maps, tables, and forms. (CTE Code: 6630)



Prerequisite(s): Meet dual enrollment admission requirements; Design, Multimedia, and Web Technologies II

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6633

Grades: 11, 12

Offered at: MoHS, WAHS

**Web Design II / ITD 210**

Using web editor software, this course incorporates advanced techniques in web site planning, design, usability, accessibility, advanced site management and maintenance. (CTE Code: 6631)



Prerequisite(s): Meet dual enrollment admission requirements; PVCC Web Design I

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6634

Grades: 12

Offered at: MoHS, WAHS

**Microsoft® Information Technology Academy**

Students participating in the Microsoft IT Academy (MS IT) receive hands-on experience with the latest Microsoft software and industry approved curriculum. With the opportunity to earn Microsoft Certifications that are widely recognized by employers, students will gain an edge in today's competitive job market.

---

**MS IT: I**

Offered at MoHS and AHS This course prepares students to earn Microsoft Office Specialist (MOS) certifications in Word, PowerPoint, and Outlook. Students will apply real-world problem solving strategies while creating documents, developing multimedia presentations, and exploring advanced communication methods. (CTE Code: 6612)

Prerequisite(s):

Credit: 1

..... 6613

Grades: 9, 10, 11, 12

Offered at: MoHS

---

**MS IT: II**

Offered at MoHS and AHS This course prepares students to earn their Microsoft Office Specialist Master (MOS Master) certification. This industry recognized certification validates overall proficiency and deep expertise of Microsoft Office programs and requires four exams: Word Expert, Excel Expert, PowerPoint, and either Outlook or Access. Students will develop expertise in a hands-on learning environment guided by official Microsoft IT curriculum. (CTE Code: 6613)

Prerequisite(s): MS IT: I

Credit: 1

..... 6614

Grades: 9, 10, 11, 12

Offered at: MoHS

---

## Technology Education

**These courses fulfill Fine Art/Career Technical Education graduation requirements. Unless otherwise indicated, all courses are offered at all high schools.**

---

### Architectural Drawing



Students learn about the principles of architecture and increase understanding of drafting practices, working drawings, and construction techniques. Students use Computer-Aided Drafting (CAD) programs and established standards or codes to prepare plans for presentation. This course is recommended for all students, especially those interested in pursuing a career or major in architecture, interior design, or homebuilding. Completion of this course may prepare the student for industry certification. (CTE Code: 8437)

Prerequisite(s): Technical Drawing

Corequisite(s):

Credit: 1

..... 8437

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Architectural Drawing / ARC 121 Architectural Drafting I**

Students learn more about the principles of architecture and increase understanding of drafting practices, working drawings, and construction techniques. Students use Computer-Aided Drafting (CAD) programs and established standards or codes to prepare plans for presentation. This course is dual enrolled with PVCC as ARC 121 Architectural Drafting I. ARC 121 introduces techniques of architectural drafting including lettering, dimensioning, and symbols.



This course requires production plans, sections, and elevations of a simple building. Students study common reference material and the organization of architectural working drawings. This course requires development of a limited set of working drawings, a site plan, related details, and pictorial drawings.

Students will earn 3 college credits that will transfer to the two year Associate's Degree at PVCC. These credits will not transfer to the four year college/university. (CTE Code: 8437)

Industry Certification/Credentialing Exam is required at the end of this course.

Prerequisite(s): Meet dual enrollment admission requirements; Technical Drawing

Corequisite(s):

Credit: 1; 3 dual enrollment college credits with PVCC

..... 8654

Grades: 10, 11, 12

Offered at: AHS, MoHS

---

**Architecture II**

This is a 100% computer assisted drawing course. Students learn to customize a menu; to adjust dimensioning variables; and to use commands to create, edit, dimension, and plot to scale. They also study and duplicate commercial blueprints. This course is recommended for all students, especially those interested in pursuing an architecture career or major. (CTE Code: 8438)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s): Basic Technical Drawing

Corequisite(s):

Credit: 1

..... 8492

Grades: 11, 12

Offered at: WAHS

---

**Basic Technical Drawing**

Technical Drawing is an introductory course to familiarize students with various drafting practices, resource materials, use of the drawing board, and the Computer- Aided-Drafting (CAD) system. The course covers the important aspects of the application of drafting principles of typical engineering drawings and design problems. (CTE Code: 8435)

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8435

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

## Digital Imaging Technology I & II

Digital Imaging Technology is a course in which students study the development of photography as a communication medium and its evolution into the digital realm. Students will learn to use specialized editing software such as Photoshop to manipulate images. Course topics include: elements of design; digital photo technique; differences between computer technology imaging and print imaging; how various graphic activities affects web imaging; video, sound and animation design; and storage and memory issues. (CTE Code: I - 6630 II - 6631)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . . 8456  
II . . . . . 8459

Grades: 9, 10, 11, 12

Offered at: MoHS

---

## Digital Imaging Technology III & IV

This course is designed for students who want an in-depth knowledge of digital photography, design, and the Adobe Creative Suite. Emphasis will be placed on creating a digital portfolio. Students will assist in designing their own projects which align to goals and competencies for learning. (CTE Code: III - 8458 IV - 8455)

Prerequisite(s): Digital Imaging I & II

Corequisite(s):

Credit: 1

III. . . . . 8183  
IV. . . . . 9185

Grades: 10, 11, 12

Offered at: MoHS

---

## Engineering Design / EGR 115

This course allows students to examine systems, the interaction of technology and society, ethics in a technological world, and the fundamentals of modeling while applying the engineering design process to areas of the designed world. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports. Students will learn the principles of orthographic projection and multiview drawings. Other topics will include descriptive geometry with relationships of points, lines, and planes. Sectioning, dimensioning, and computer graphic techniques will be introduced. (CTE Code: 8441)



Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s): Math Analysis

Credit: 1; 2 dual enrollment college credits with PVCC

..... 8450

Grades: 10, 11

Offered at: MoHS

---

### **Engineering Drawing / DR 140 Technical Drawing**

This course provides students the opportunity to learn the skills and concepts required for further engineering education and/or employment in the engineering field through the use of Computer-Aided Drafting (CAD) programs. This course is dual enrolled with PVCC as DR 140 Technical Drawing. DR 140 enhances the principles learned that are related directly to the field of drafting and design; gives a more in-depth exposure to detail and working drawings, dimensioning, tolerancing, and conventional drafting practices; teaches CAD modeling; and may include parametric modeling. Students will earn 3 college credits that will transfer to the two year Associate's Degree at PVCC. These credits will not transfer to the four-year college/university. (CTE Code: 8436)



Industry Certification/Credentialing Exam is required at the end of this course.

Prerequisite(s): Meet dual enrollment admission requirements; Basic Technical Drawing

Corequisite(s):

Credit: 1; 3 dual enrollment college credits with PVCC

..... 8655

Grades: 10, 11, 12

Offered at: AHS

---

**Engineering Drawing I**

This course provides students the opportunity to learn the skills and concepts required for further engineering education and/or employment in the engineering field through the use of Computer-Aided Drafting (CAD) programs. (CTE Code: 8436)

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8436

Grades: 9, 10, 11, 12

Offered at: WAHS

---

**Engineering Drawing II**

Students use a graphic language for product design and technical illustration. This is a 100% Computer Aided Drawing (CAD) class using SolidWorks. They will increase their understanding of drawing techniques learned in the prerequisite courses. They research design-related fields while identifying the role of advanced drawing and design in manufacturing and construction industry processes. Topics will also include history of inventions and innovations through research and presentation projects. Students will apply the design process, analyze design solutions, reverse engineer products, create a 3D models using SolidWorks, construct physical models, and create multimedia presentation of finished designs. Students will create a company name and logo while working with clients in the school, outside of school, and with engineering firms. Completion of an engineering portfolio will be done throughout the class. (CTE Code: 8436)

Prerequisite(s): Engineering Drawing I

Corequisite(s):

Credit: 1

..... 8438

Grades: 10, 11, 12

Offered at: WAHS

---

## **Geospatial Technology I & II**

The Geospatial Technology program introduces students to Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technology. Students learn to integrate these technologies to collect, analyze, and display a variety of data to solve real life problems. Students are trained in the latest ESRI ArcMap software in a variety of scenarios. Classes have the opportunity to partner with James Madison University, allowing students to earn transferable college credit from JMU through its "Geospatial Semester" program.\* In these classes there is a focus on learning and applying the software through a variety of local projects that are connected with the community. (CTE Code: I - 8423 II - 8424)

Industry Certification/Credentialing Exam may be required at the end of this course.

Note: A JMU tuition fee applies to students who want to earn college credit for Geospatial I.

\*Sophomores ineligible for JMU credit.

Prerequisite(s): Successful completion of Algebra I

Corequisite(s):

Credit: 1

I . . . . . 8430  
II . . . . . 8412

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

## **Graphic Communications**

Graphic Communications deals with printed images such as newspapers, books, printed T-shirts, signs, photographs, and stationery. The course includes design/ layout composition, electronic publishing, and computer graphics. Students use a variety of processes and equipment to produce visual projects in printed graphics, similar to those produced by the graphic arts industry. (CTE Code: 8458)

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8458

Grades: 9, 10, 11, 12

Offered at: AHS

**Introduction to Engineering / EGR 120**

This course allows students to examine systems, the interaction of technology and society, ethics in a technological world, and the fundamentals of modeling while applying the engineering design process to areas of the designed world. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports. This course is dual enrolled with PVCC as EGR 120 Introduction to engineering. EGR 120 is an introductory level engineering class designed to introduce students to ideas, concepts, and methods universal to all disciplines of engineering. Engineering design, analysis, and teamwork will be emphasized through a semester-long project involving the Lego® Mindstorms Robot. In addition to problem solving, this class will emphasize important skills that will be useful to students throughout their careers including technical documentation, presentation skills, and the use of software-based computational tools for solving engineering problems. (CTE Code: 8439)



Prerequisite(s): Meet dual enrollment admission requirements; Introduction to Engineering

Corequisite(s): Calculus A/B

Credit: 1; 2 dual enrollment college credits with PVCC

..... 8451

Grades: 11, 12

Offered at: MoHS

**Principles of Technology I & II**

Students in this single-period laboratory science course apply physics and mathematics concepts through a unified systems approach to develop a broad knowledge base of the principles underlying modern technical systems. Students study seven technical principles: force, work, rate, resistance, energy, power, and force transformers, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This "principles and systems" approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance. (CTE Code: I - 9811 II - 9812)

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . . 9811

II . . . . . 9810

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Robotics and Automation**

Robotics and Automation is a lab-based course that uses a team-based approach to introduce the basic concepts of robotics, construction and programming of autonomous and semi-autonomous robots. The course will focus on careers in engineering, robotics, programming and game design. Course instruction will primarily be tied to lab experiments, as students will work collaboratively to build and test increasingly more complex robots. (CTE Code: 8491)

Prerequisite(s):

Corequisite(s):

Credit: 1

. . . . . 8429

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Robotics and Automation II**



Students engage in the study of computers and microprocessors and their applications to manufacturing, transportation, and communication systems. Topics include computer programming using Java, robotic design, control systems, and social/cultural impact of these technologies. Problem-solving activities challenge students to design, program, and interface devices with computer systems. Learning activities include building robots, using computer-aided design, 3D printing, and control of electromechanical devices. Students will participate in hands-on projects in a laboratory setting as they communicate information through team-based presentations, proposals, and technical reports. In addition, students will have the ability to compete in the First Tech Challenge (FTC) Robotics. This will challenge their engineering skills and give them the ability to communicate with other schools, businesses, and industry. (CTE Code: 8405)

Prerequisite(s): Robotics and Automation

Corequisite(s):

Credit: 1

..... 8432

Grades: 10, 11, 12

Offered at: WAHS

---

### **Social Media Content Production**

The course is a variation of Television Production. Essentially, students learn how to create and edit videos, but with a focus on creating content for YouTube, Twitch, etc. There is heavy focus on creating gaming content. (CTE Code: 8688)

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8687

Grades: 9, 10, 11, 12

Offered at: MoHS

---

### **Television Production I, II, III & IV**

Students develop a basic understanding of the television industry with an emphasis on video production. Working individually and in teams, students produce various video projects both in and outside the studio setting. Students develop skills in equipment handling, filming techniques, lighting, editing, script writing, studio operations, and other skills related to video production. Students receive basic instruction in electronics to gain a working knowledge of studio equipment. (CTE Code: I - 8688 II - 8689 III - 8690 IV - 9071)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s):

Corequisite(s):

Credit: 1 credit each

- I . . . . . 8688
- II . . . . . 8689
- III. . . . . 8690
- IV. . . . . 8692

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

## Career Connections

---

### Junior/Senior Internship Program

The Junior/Senior Internship program is designed to support a student's long-range education and career goals. This program provides the opportunity to experience "first-hand" a particular career or career field by interning with professionals in the community. Students enhance their academic and technical skills as well as become more informed about certain career field expectations and requirements before entering college and/or the workforce. All students complete the application packet. See your high school counselor for more information. (CTE Code: 9071)

Prerequisite(s):

Corequisite(s):

Credit: 1

- . . . . . 9072

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

**Virginia Teachers for Tomorrow I & II: SDV Orientation to Teaching as a Profession**

This course introduces students to a career in teaching and education by allowing students to experience the components of learning, the school environment, and the classroom teaching environment. Virginia Teachers for Tomorrow aims to attract high school juniors and seniors to the field of education through participation in a rigorous, world-class curriculum and field experiences related to teaching. As part of that professional experience, students will be required to create a personal portfolio.



Students will earn 3 college credits for Teachers For Tomorrow I that will transfer to the two year Associate’s Degree at PVCC. Transfer of credit to a four-year college/university cannot be guaranteed.

This state program requires students to submit an application and recommendations and to meet specific criteria. See your school counselor or Teachers for Tomorrow instructor for more information. (CTE Code: I - 9062 II - 9072)

**Note:** Level II is not a dual enrollment course.

Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; I: 3 dual enrollment college credits with PVCC

I . . . . . 9062  
II . . . . . 9067

Grades: 11, 12

Offered at: WAHS

## Marketing

**These courses fulfill Fine Art/Career Technical Education graduation requirements. Unless otherwise indicated, all courses are offered at all high schools.**

### Internet Marketing Through Social and New Media

Students receive an introduction to marketing functions and the business plan to study internet marketing's role in the global economy. Students gain knowledge of the tools and techniques used in Internet marketing and learn how to design a web site. Students explore how new media is being used to create relationships, market products and services, engage key audiences, create brand awareness, and drive loyalty. This course covers techniques such as social networking, wikis, widgets, blogging, podcasting, web casting, social book marketing, mobile marketing, and mash-ups. Students explore ethical, legal, security aspects and prepare for a career in Internet marketing. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. (CTE Code: 8120)

Computer/technology applications supporting this course are studied.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8126

Grades: 10, 11, 12

Offered at: AHS

---

### **Marketing I**

Students examine activities in marketing and business that are important for success in marketing employment and postsecondary education. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL's). Computer/ technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. (CTE Code: 8120)

Industry Certification/Credentialing Exam may be required at the end of this course.

**Note:** The cooperative education method is available for this course.

Prerequisite(s):

Corequisite(s):

Credit: 1 (2 if taking Marketing Cooperative Education)

..... 8120

Grades: 10, 11, 12

Offered at: AHS

---

## Marketing II

Students build on knowledge gained in a prior marketing course. Students participate in supervisory management activities. Students will prepare for advancement in marketing careers and postsecondary education. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL's). Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. (CTE Code: 8130)

Industry Certification/Credentialing Exam is required for all students at the end of this course.

**Note:** The cooperative education method is available for this course.

Prerequisite(s): Marketing I

Corequisite(s):

Credit: 1 (2 if taking Marketing Cooperative Education)

..... 8130

Grades: 11, 12

Offered at: AHS

---

## Sports, Entertainment and Recreation Marketing

This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. The course supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. (CTE Code: 8175)

Industry Certification/Credentialing Exam may be required at the end of this course.

**Note:** The cooperative education method is available for this course.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8185

Grades: 10, 11, 12

Offered at: AHS, MoHS

**Sports, Entertainment and Recreation Marketing II**

Students will build on prior knowledge of sports, entertainment, and recreation marketing. This course focuses on the principles of management and planning support by research, financial, and legal concepts. Academic skills (mathematics, science, English, and history/social science) related to the content area a part of this course. Computer/ technology applications supporting the course are studied. (CTE Code: 8177)

Industry Certification/Credentialing Exam is required for all students at the end of this course.

**Note:** The cooperative education method is available for this course.

Prerequisite(s): Sports, Entertainment and Recreation Marketing, or Marketing I

Corequisite(s):

Credit: 1

..... 8178

Grades: 11, 12

Offered at: MoHS

## Health and Medical Science

**These courses fulfill Fine Art/Career Technical Education graduation requirements. Unless otherwise indicated, all courses are offered at all high schools.**

**Dental Careers I & II (1-year program)**

This one-year program prepares students to perform all the tasks of a Dental Assistant.



These include taking x-rays, preparing materials for procedures, making impressions, removing sutures, placing topical anesthetics, and making diagnostic study models. Dental Assistant students also study maintenance of patient records, disinfection of instruments and equipment, and preparation of patients for dental treatment. This program will give students a foundation to pursue a Dental Hygienist post-secondary degree through a two- or four-year college.

Reynolds

Certifications: Radiation Health and Safety, Infection Control, CPR, & First Aid

Prerequisite(s):

Corequisite(s):

Credit: 3 Elective Credits; 1-2 Verified Credits (certification, completer); 4 dual enrollment college credits with PVCC & TBD: dual enrollment college credits with RCC

I . . . . . 8328  
II . . . . . 8329

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

**Emergency Medical Technician I & II (1-year program)**

Students will learn the basics of emergency medical care including anatomy and physiology, initial patient survey and triage, airway management, oxygen therapy, and treatment of bleeding, shock, cardiac arrest, fractures, spinal injuries and other medical emergencies. Course requires strenuous physical activity.



Certifications: Virginia EMT-Basic, CPR

Prerequisite(s): Must be 16 or older by start of school; Other requirements as set forth by the Virginia Office of Emergency Medical Services

Corequisite(s):

Credit: 3 Elective Credits; 1-2 Verified Credits (certification, completer); TBD: dual enrollment college credits with PVCC

I . . . . . 8333  
II . . . . . 8334

Grades: 11, 12

Offered at: WAHS, CATEC (available to all students)

**Fire Service Academy / Firefighting I & II (1-year program)**

First semester instruction includes fire department organization and procedures.

Supervised internships are provided with fire and rescue and are managed by the teacher.

Second semester focuses on fire-ground management and operations. Course requires strenuous physical activity & occasional exposure to smoke-filled environments.



Certifications: Firefighter I, Firefighter II, CPR, First Aid, Hazardous Material Operation, FEMA 100, 200, and 700. Highway safety is covered during incidents for first responders and introduction to technical rescue.

Prerequisite(s): Must be 16 or older by start of school; Other requirements as set forth by the Virginia Office of Emergency Medical Services

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); 1-2 Verified Credits; 2 dual enrollment college credits with PVCC (CPR, Basic First Aid) & 6 dual enrollment college credits with RCC

I . . . . . 8705

II . . . . . 8706

Grades: 11, 12

Offered at: CATEC (available to all students)

**Health and Medical Sciences I**

This is a survey course covering healthcare and the healthcare system. Students are supported in understanding their interests and strengths with a goal of matching these to a particular health job/career. (CTE Code: 8302)

Industry Certification/Credentialing Exam may be required at the end of this course.

To be a CTE Completer and fulfill sequential elective requirement (2 credits), a student must take Health and Medical Sciences.

Prerequisite(s): Sciences at grade level or above

Corequisite(s):



Credit: 1

..... 8302

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

**Medical Terminology / HLT 141**

This course is designed to help students learn health care language. Topics are presented in order beginning with each body system's anatomy and physiology and progressing through pathology, diagnostic procedures, therapeutic interventions, and finally pharmacology. Students learn concepts, terms and abbreviations for each topic. (CTE Code: 8383)



Prerequisite(s): Meet dual enrollment admission requirements; AHS & MoHS: Health and Medical Sciences I

Corequisite(s):

Credit: 1; 2 dual enrollment college credits with PVCC

..... 8383

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

**Nurse Assistant I & II (1-year program)**

This course emphasizes study of nursing occupations as related to various health care systems. Students study body systems and disorders, basic nursing skills, study of human growth and development, first aid, nutrition, simple body structure, medical terminology, microbes and disease, vital signs, cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and nursing homes. Clinical experience is provided in nursing homes and hospitals. Community service outreach projects are required and organized by students. This course prepares students to take their state board to be a licensed CNA.



Certifications: VA Certified Nurse Aide, CPR, First Aid

Prerequisite(s):

Corequisite(s):

Credit: 3 Elective Credits; 1-2 Verified Credits (certification, completer); 11 dual enrollment college credits with PVCC

I . . . . . 8360  
II . . . . . 8362

Grades: 11, 12

Offered at: CATEC (available to all students)

---

**Pharmacy Technician I & II (1-year program)**

This one-year program will prepare students to perform all the tasks of a Pharmacy Technician. Students also study safety procedures, medication and inventory control, maintaining records, preparing labels, and processing insurance claims.



This program prepares students to successfully complete the Certified Pharmacy Technician (CPhT) examination.

Certifications: Virginia Pharmacy Technician, CPR, First Aid

Prerequisite(s):

Corequisite(s):

Credit: 3 Elective Credits; 1-2 Verified Credits (certification, completer); 10 dual enrollment college credits with PVCC, with 4 additional credits awarded upon passing the Virginia Pharmacy Technician exam

I . . . . . 8305  
II . . . . . 8306

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

**Veterinary Science I & II (1-year program)**

Students will learn about veterinary science in a classroom setting, on site visits, and in a simulated small animal veterinary hospital, with hands-on training in small animal care. This course will introduce students to the technical knowledge and skills necessary to be successful in careers pertaining to companion animals, including, but not limited to, pet care industries, government agencies, laboratory research institutions, pharmaceutical occupations, and veterinary medical assisting and technology, as well as postsecondary education. Additional educational opportunities include special guest speakers, animal demonstrations, and field trips to small animal care facilities. Students also will learn workplace readiness and leadership skills to further them on their pathway to success.



Certification: Veterinary Assistant

Prerequisite(s):

Corequisite(s):

Credit: 3 Elective Credits; 1-2 Verified Credits (certification, completer)

I . . . . . 8088

II . . . . . 8089

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

## Family and Consumer Science

### **Cosmetology I, II & III (2-year program)**

Students in this program are eligible to take their State Board examination after successfully completing the two-year course. Students will gain theory and practical knowledge through instruction and lab participation. First-year students will participate in a job shadowing program and second-year students during their second semester will participate in an internship two days a week.



Certifications: State Board of Cosmetology License

Cosmetology I: Open to grades 10 & 11

Cosmetology II & III: Open to grades 11 & 12

Prerequisite(s):

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); II & III: 1-2 Verified Credits (certification, completer)

I . . . . . 8527  
II . . . . . 8528  
III . . . . . 8529

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

### **Culinary Arts Specialization**

Continuing from Introduction to Culinary Arts, this course provides students with opportunities to obtain comprehensive knowledge of the food service industry as well as to expand their technical skills in a food service specialty. Students explore careers and refine their skills in implementing safety and sanitation standards, applying nutritional principles, planning menus, using business and math skills, and selecting and maintaining food service equipment. (CTE Code: 8279)

Students will prepare to take the ServSafe Industry Certification, and with a passing score, will test out of PVCC HRI 158 Sanitation and Safety.

Prerequisite(s): Introduction to Culinary Arts

Corequisite(s):

Credit: 1

. . . . . 8277

Grades: 10, 11, 12

Offered at: AHS, MoHS

---

### **Early Childhood Development**

This course focuses on the principles of child growth and development. Students use these principles to develop learning experiences for children in a safe and healthy environment. Careers related to the child care industry are emphasized. (CTE Code: 8234)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8283

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Fashion Design**

Students prepare for a career in the fashion industry by learning to use basic construction. Focus is on how to use the principles of color and design to produce original textiles. This course explores the individual careers within the fashion design, manufacturing, and merchandising industry. (CTE Code: 8248)

Industry Certification/Credentialing Exam may be required at the end of this course.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8247

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Introduction to Culinary Arts**

The Introduction to Culinary Arts curriculum provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry. Students investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food. (CTE Code: 8250)

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8252

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

**Principles of Culinary Arts I / HRI 106/219**

Introduces the fundamental principles of food preparation and basic culinary procedures. Stresses the use of proper culinary procedures combined with food science, proper sanitation, standards of quality for food items that are made, and proper use and care of kitchen equipment. (CTE Code: 8250)



Prerequisite(s): Culinary Arts Specialization

Corequisite(s):

Credit: 1; 6 dual enrollment college credits with PVCC

..... 8266

Grades: 11, 12

Offered at: MoHS

---

**Professional Culinary Arts I & II (2-year program)**

Culinary Arts prepares students to enter employment in food service occupations or to pursue additional education in culinary school. Instruction focuses on sanitation, nutrition, food preparation, catering, purchasing, and inventory control in addition to food presentation and service. Our learning emphasis is academic, hands-on, and includes community-based service learning.



Certifications: Commercial Foods Assessment (NOCTI); Serve Safe Certification

Articulated credit available for Culinary Institute of Virginia.

Prerequisite(s):

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); 1-2 Verified Credits (certification, completer); I: 9 dual enrollment college credits with PVCC; II: 11 dual enrollment college credits with PVCC

I ..... 8521

II ..... 8522

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

# Trade and Industrial Education

---

## **Auto Body Technology I, II & III (2-year program)**

Students in this program are prepared for careers in this field through the use of the latest technologies and state of the art equipment. Throughout the program students gain knowledge of classroom and shop experience by working on vehicles.



Selected students may be eligible for work experiences at local repair facilities. Successful completion of the two-year Auto Body program can reduce the two years of experience required for Automotive Service Excellence (ASE) certification by one year. This course is not recommended for individuals with respiratory or allergy problems.

Certifications: Auto Body Assessment (NOCTI), NATEF, ASE

Prerequisite(s):

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); III: 1-2 Verified Credits (certification, completer)

- I . . . . . 8676
- II . . . . . 8677
- III . . . . . 8678

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

## **Automotive Service Technology I & II (2-year program)**

Automotive Service Technology is a two-year program for students who wish to become automotive technicians. The program is dual enrolled with Reynolds Community College and has articulation agreements with several other institutions. The program is industry-certified through NATEF and Automotive Youth



Educational System (AYES) program. The program includes the study of engine repair, engine performance, electricity/electronics, automatic transmission, clutch and manual transmission, HVAC (air conditioning), brakes, steering, and suspension. In the classroom students will study automotive theory and put the theory into practical use in the auto lab. Automotive manufacturers and local dealerships sponsor the Automotive Youth Education System (AYES) at CATEC. This program offers employment opportunities with dealerships and independent repair shops for students who qualify and are selected during the spring semester of the first year. The program prepares graduates to pursue the Virginia State Inspector’s License.

Articulation Agreements: Universal Technical Institute (UTI), Lincoln Technical Institute/ Nashville Auto Diesel College, and University of Northern Ohio

Certifications: NATEF and AYES

Prerequisite(s):

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); II: 1-2 Verified Credits (certification, completer); 10 dual enrollment college credits per year with RCC

I . . . . . 8506  
 II . . . . . 8507

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

**Building Trades I & II (1-year program)**



This course will teach all the basic skills of the following trade areas: carpentry, residential wiring, residential plumbing, and masonry. Blueprint reading and drawing are introduced at the beginning of the course. The latter part of the course focuses on carpentry from framing to the finishing trim and roofing. Plumbing is introduced as it relates to the other trades during the year. Residential wiring emphasizes the basics of wiring a house and the National Electrical Code. All aspects of residential construction from project planning, purchasing material to code compliance are taught. Emphasis will be placed on proper employability skills and attitude throughout both years of the course.



Certifications: NCCER, OSHA10

Prerequisite(s):

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); 1-2 Verified Credits (certification, completer); 9 dual enrollment college credits with PVCC

I . . . . . 8515  
II . . . . . 8516

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

### **CATEC Exploratory**

Students will have the opportunity to experience a variety of CATEC classes. An individualized program is developed for each student and students spend 9 weeks in each of four program areas.



9th grade: PM only  
10th grade: AM only

Prerequisite(s):

Corequisite(s):

Credit: 3 Elective Credits

9th . . . . . 9070  
10th . . . . . 9071

Grades: 9, 10

Offered at: CATEC (available to all students)

---

**Design I: Industrial Design and Prototyping**

This is a foundational design theory course that introduces students to a variety of tools that focuses specifically on the nature of design and aesthetic appeal. Students will identify the specific needs of worldly concern or a customer, generate concepts, pitch ideas, and create physical or digital prototypes for evaluation. Students may interact with a variety of problems or iterate a few designs based on the needs of the class. (CTE Code: 8425)

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 8425

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Design II: Product Design and Development**

Students will work in teams to design and create unique, functional and meaningful products that will benefit society. Teams will apply knowledge and skills of design and manufacturing techniques combined with entrepreneurial thinking and social justice to bring ideas and products to market. Throughout the process, they will evaluate how aesthetics, materials, societal impact, and people’s interactions with their creations influence the final product or idea. (CTE Code: 8427)

Prerequisite(s): Design I: Industrial Design and Prototyping

Corequisite(s):

Credit: 1

..... 8431

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Electrician I & II (1-year program)**

Students develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory and mathematical problems related to electricity, navigate the National Electrical Code Book, select and install conductors, examine lighting, communication, and power systems, and work with conduit and raceways, panel boards, switchboards, grounding systems, and generators. Students who complete this program may qualify to receive credit for one year of Apprenticeship with the Department of Labor.



Certifications: NCCER, OSHA10

Prerequisite(s):

Corequisite(s):

Credit: 2-3 Elective Credits (2 if taken in conjunction with a CATEC English class); 1-2 Verified Credits (certification, completer)

I . . . . . 8533  
II . . . . . 8534

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

### **Engineering I: Tools and Manufacturing**

Introductory course in Engineering Design, design tools, and advanced manufacturing technologies. This course is a foundation for learning creative problem solving using a variety of hand tools and CAD/CAM machines. Students will learn the basics in 3D modeling, 2D design, maintenance through application of wood and metalworking equipment, and a variety of technology, including CNC machines, laser cutters, and 3D printers. Students will utilize these tools to solve a variety of problems and create physical and digital solutions. (CTE Code: 8433)

Prerequisite(s):

Corequisite(s):

Credit: 1

. . . . . 8433

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Engineering II: Design and Applications**

Students will apply design thinking to solve real world problems with advanced manufacturing tools and techniques. Throughout this course, students will iterate ideas utilizing software simulation and physics applications to bring functional and practical designs to life. (CTE Code: 8431)

Prerequisite(s): Engineering I: Tools and Manufacturing

Corequisite(s):

Credit: 1

..... 8426

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

# English

**Effective writing and reading skills** are as important for effective communication as speaking and listening skills. They are not just a set of basic skills people are taught at school. Writing and reading are an integral part of each educated individual's life since they are the basis of written communication. Written communication, in its turn, is another tool for people to express their ideas and learn about those of others.

---

## The Importance of Effective Reading Skills

Reading skills serve as a foundation for writing. Developed and mastered, effective reading skills give people the opportunity to learn new information about the world, people, events, and places. Reading enriches their vocabularies and improves their writing skills.

- Reading enriches the inner world of a person and improves grammar and spelling.
- Through reading, people learn to understand different ways of thinking and feelings of other people and become more flexible and open-minded.
- Avid readers not only read and write better than those who read less but also process information faster. The research presented by the Journal of Abnormal Child Psychology proves that poor readers have poorer shortmemory functions.
- As a result, avid readers have a broader outlook, are quicker to analyze facts, and find connections between seemingly unrelated ideas.
- A reader has better skills for comprehending, analyzing, understanding, responding, and, finally, learning from what he or she reads.
- As a result, it is easier for good readers to get used to new and unfamiliar circumstances or ideas. They are easier to communicate with and have higher chances to succeed in both professional and personal life.

## The Importance of Effective Writing Skills

- Application essays, resumes, cover letters, and even e-mails often have to represent an individual. In such cases the person's writing is to form the reader's opinion about the individual's personality and abilities.
- Excellent writing is sure to earn respect. Poor writing will, on the contrary, be difficult to understand and will leave a bad impression about the individual.
- Writing structures and crystallizes one's thoughts, improving learning.
- Writing improves the effectiveness of the person's word usage in both written and oral speech.

- A survey conducted among 64 American companies revealed that half of them pay attention to writing when considering a person for employment or promotion.
- According to Roger Howe, a former chairman and CEO of U.S. Precision Lens, the majority of the successful people are clear and persuasive in their writing.
- Developed reading skills lead to the development and improvement of writing skills. Regular readers' comprehension skills (ability to compare and contrast, evaluate and summarize, identify specific features and genres, make analogies) serve as a basis for good writing.

*Adapted from "The Importance of Reading and Writing Skills" by Alla Kondrat, Suite101.com, February 21, 2009.*

**College Composition I and II / ENG 111/112**

This college-level course develops the students' ability to write and read effectively for study, work, and pleasure. Students read prose, fiction, drama, and poetry. They also compose essays, letters, abstracts, annotations, and other nonfiction prose. Emphasis is placed on short narrative works. Students work extensively in each area of the writing process and learn to employ writing conventions while developing individual voice and style. Students write extensively, with emphasis on response to literature and writing for a variety of audiences and purposes. Through these writing experiences, students synthesize information, develop individual voice and style, and better understand literary technique.



Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; 6 dual enrollment college credits with PVCC

..... 1194

Grades: 12

Offered at: AHS, MoHS, WAHS

**CORE+**

CORE+ is a full year, full-credit skills based class designed to help support student achievement in the core areas. Small class size allows individual attention to student needs in the areas of reading, vocabulary, spelling, writing skills, foundational math skills, and research skills. The course includes career, college and training exploration and some real-world experiences in those areas, as appropriate for the students in the class. These experiences may include college visits, completion of job applications, practice with interviewing, and strengthening of selfadvocacy skills. CORE+ may be taken in consecutive years.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9821

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### English 10

English 10 is a comparative study of genres and world literature from medieval to modern times. Through five interdisciplinary concepts (systems, change and continuity, communication, aesthetics, and universality) and the correlating language arts concepts, students explore eastern and western literature and seek to answer critical questions about the language arts: Why do literary eras matter? How do cultural changes affect style of literature and art? What determines whether a belief (system) will be timeless or trendy? As such, tenth-grade students read extensively in a variety of genres and practice comparative analysis skills. Students write and speak for a variety of audiences and purposes, applying and refining written and oral communication using a range of literary and persuasive techniques.

**Note:** The Standards of Learning Test is only required at MoHS for English 10.

Prerequisite(s): English 9

Corequisite(s):

Credit: 1

Standard ..... 1142

Academic/Advanced ..... 1148

Honors ..... 1146

Grades:

Offered at: AHS, MoHS, WAHS

---

### **English 11**

English 11 is an integrated course designed to help students develop a comprehensive view of American literature, history, and culture. In gathering together the many threads of American culture, students leave this course with a better understanding of who they are and what it means to be an American. Through a variety of learning experiences, students discover relevant connections among movements in American art, literature, music, economics, and politics. This course integrates standards from English 11 and Virginia and United States History, thus preparing students for End-of-Course tests in each subject.

Prerequisite(s): English 10

Corequisite(s):

Credit: 1

Standard . . . . . 1152

Academic/Advanced . . . . . 1158

Honors . . . . . 1156

Grades:

Offered at: AHS, MoHS, WAHS

---

### **English 12**

English 12 is a study of the evolution of the English language through British and world literature. Students continue to hone their analytical skills and seek to answer critical questions about language and literature: What factors affect the evolution of language? What allows a piece of literature to endure the vagaries of culture and time? What does it mean to think through language and literature? Students demonstrate understanding of language and literature through polished compositions, literary analysis, and speaking. Additional emphasis is placed on the development of a personal, sophisticated style of communication that reflects creative, critical thinking.

Prerequisite(s): English 11

Corequisite(s):

Credit: 1

Standard . . . . . 1162

Academic/ Advanced . . . . . 1168



Grades:

Offered at: AHS, MoHS, WAHS

---

### **English 9**

English 9 is a comparative study of genres and world literature in the ancient and classical worlds. Through five interdisciplinary concepts (systems, change and continuity, communication, aesthetics, and universality) and the correlating language arts concepts, students explore eastern and western literature and seek to answer critical questions about the language arts: Why do literary eras matter? How do cultural changes affect style of literature and art? What determines whether a belief (system) will be timeless or trendy? Ninth-grade students read extensively in a variety of genres and practice comparative analysis skills. Continued emphasis is placed on the components of writing, such as organizational structures and written expression.

Prerequisite(s):

Corequisite(s):

Credit: 1

Standard . . . . . 1132  
Academic/Advanced . . . . . 1138  
Honors . . . . . 1136

Grades:

Offered at: AHS, MoHS, WAHS

---

### **English Language & Composition, Advanced Placement**

This is an integrated course designed to help students develop a comprehensive view of American literature, history, and culture. This highly rigorous course prepares students to take AP exams. Students concentrate on reading and analyzing historical material, weighing historical evidence and interpretation, and synthesizing and evaluating information in analytical writing. Students study American literary eras, reading from a variety of disciplines and contexts. They compose for a variety of purposes and audiences. Reading and writing experiences help students understand the concepts of communication, individual development and identity, aesthetics, and universality.

Students who do well on the AP exam may receive college credit or superior placement at participating colleges.

**Note:** Students may elect to take the Standards of Learning End-of-Course tests for Virginia and United States History and English 11. A score of 2 or better on the AP exam earns a verified credit.

Prerequisite(s): English 10

Corequisite(s):

Credit: 1

Advanced Placement . . . . . 1196

Grades:

Offered at: AHS, MoHS

---

### **English Literature & Composition, Advanced Placement**

Advanced Placement English is for twelfth-grade students who want an intensive, college-level English course that prepares them to take one or both of the AP English Exams. The course is conducted much like a college seminar, and therefore it requires high-quality work in and out of class. Students read works of literature analytically and critically, and they respond with increasing sensitivity and discrimination of language. Essays focus on literary analysis but students have some opportunity to practice creative writing.

Prerequisite(s):

Corequisite(s):

Credit: 1

Advanced Placement . . . . . 1195

Grades: 12

Offered at: AHS, MoHS, WAHS

---

**Environmental Literature, Law and Policy**

Through the analysis of environmental literature and examination of important laws and policy, students will explore the complex relationship between human beings and the environment. Students will develop a comprehensive understanding of how literature, philosophy, and governmental action have correlated historically with important environmental issues. Content will include local, regional and global policy changes and current legislation and will be supported by a combination of fiction, non-fiction, poetry, and case studies.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1514

Grades: 9, 10, 11, 12

Offered at: WAHS

---

**ESOL I: Introductory Academic English (double-blocked)**

Students who take ESOL I begin a journey of adding a new language and culture to their international experiences. The course fosters a love for reading by using a readers' workshop model that allows students to explore new texts in English. Students practice English across the domains of writing, speaking, listening, and reading in lessons that explore open-ended questions and model real-world environments to follow the interests of students. They use English to solve problems as well as to investigate personal interests and academic themes. Students learn social vocabulary quickly and build understanding of key academic vocabulary that spans across disciplines. The course explores students' cultures and how these connect to their new community. Students use their strengths in these cultures and their native languages to learn English. The course builds a foundation for students to be successful in English 11; thus, draws from standards common in English 9. Each student in ESOL I forms a graduation plan to achieve individualized post-secondary goals.

Prerequisite(s): Assessment

Corequisite(s):

Credit: 1 (English 9 and/or 10, World Language, or Elective Credit)

..... 5724

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**ESOL II: Intermediate Academic English**

Students who take ESOL II use academic English vocabulary in open-ended projects that require public speaking and writing for real audiences. Students continue their exploration of reading and supplement this with a writers workshop model that focuses on learning the process of revision to express ideas in public forums. The course, which draws from standards in English 10, builds a foundation for students to be successful in English 11. Students continue to use their own cultures and languages as strengths for gaining new insights and expressing themselves in English. They build on and refine their individual graduation plans, with teacher and counselor support, and explore options for connecting with school and community extracurricular resources and activities. Finally, the ESOL II teacher coordinates with content teachers to tailor instruction to the needs of students in ESOL II who are also taking courses required for graduation.

Prerequisite(s): Assessment

Corequisite(s):

Credit: 1 (English 9 and/or 10, World Language, or Elective Credit)

..... 5729

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**ESOL III: Advanced Academic English**

ESOL III supports advanced ESOL students taking rigorous academic courses required for meeting graduation requirements. Students who take ESOL III learn academic vocabulary that may be applied across a range of courses required for meeting graduation requirements. They explore their linguistic and cultural heritage and connect these to the civic and economic life of their community in individual and collaborative projects. The ESOL III course emphasizes applying academic vocabulary in advanced academic writing, research, and projects with real-world audiences. Students use these skills to excel on class assignments and give presentations using formal oral English. Students create, revisit, and revise individual graduation plans and connect their curricular and extracurricular activities to postsecondary goals. The ESOL III teacher coordinates with content course teachers to tailor instruction to the needs of students in ESOL III who are also taking courses required for graduation.

Prerequisite(s): Assessment

Corequisite(s):

Credit: 1 (English 9 and/or 10, World Language, or Elective Credit)

..... 5732

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

**ESOL Study Skills: Strategies for Academic Advancement**

This ESOL course is designed as a writing-intensive resource class to support English Language Learners (ELLs) who are taking a mainstream-level course load. The ESOL teacher works closely with content area teachers to design enrichment lessons that teach content curriculum with an emphasis on comprehension and academic vocabulary. Students also receive support in test-taking and study skills, organizational skills, SOL preparation, and effective reading strategies.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

I ..... 5725  
 II. .... 5726  
 III ..... 5727  
 IV. .... 5728

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Genre Studies**

This course will focus on one genre each quarter, rotating through a variety of genre over the course of a year. Quarterly offerings could include non-fiction, poetry, and contemporary literature, as well as more specialized studies such as historical fiction, dystopian/science fiction, or magical realism. Students will sample a variety of writers and literature in each studied genre, and will incorporate independent and individualized reading programs designed to allow each student the opportunity to explore a variety of topics.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1520

Grades: 9, 10, 11, 12

Offered at: WAHS

---

**Media Studies: Analyzing and Creating in the 21st Century**

A multi-disciplinary course that will explore multimodal communication, including newswriting, photojournalism, social media, fiction and documentary filmmaking, and entertainment, and their broader sociological implications. Designed to offer cross-curricular opportunities in the humanities, including English, history, psychology, sociology, and journalism. Students will be given the opportunity to explore various topics and interests through individualized projects.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1183

Grades: 10, 11, 12

Offered at: WAHS

---

**Peer Tutoring I: Methods**

Students enrolled in this course are responsible for operating the school's peer tutoring center. They will learn a variety of pedagogical approaches and practice leadership skills that will serve them in their future professions. In addition to tutoring, students will strengthen their own knowledge in areas such as study habits, resume writing, and research skills. All students are required to tutor for approximately 45 minutes outside of class, once per week.

Prerequisite(s): Application; Interview; 10th graders must have completed Honors English 9 with a B or better

Corequisite(s): 11th graders must be enrolled in Honors or AP English

Credit: 1

..... 1541

Grades: 10, 11, 12

Offered at: AHS, MoHS

---

### **Peer Tutoring II: Leadership**

Students in this course apply the knowledge they gained in Peer Tutoring I to take on an enhanced leadership role in the peer tutoring center. They will contribute to managing center operations, mentoring new tutors, and heightening school-wide academic achievement. They will make at least one significant contribution to the wider peer tutoring community; for example, by presenting at a conference or publishing a scholarly article.

Prerequisite(s): Successful completion of Peer Tutoring I and be tutors in good standing

Corequisite(s): 11th graders must be enrolled in Honors or AP English

Credit: 1

..... 1542

Grades: 11, 12

Offered at: AHS, MoHS

---

### **Peer Tutoring III: Fellowship**

Building on the leadership skills they established in Peer Tutoring II, tutors in this course apprentice with a sponsor teacher for the duration of the school year, engaging in a deep study of that educator's approach to instruction in his or her academic field. These seniors will also work with a consistent group of clients on an ongoing basis. They will report on their learning via regular reflection logs, and both create a portfolio of their learning across their three years as a tutor, and innovate a permanent learning tool for the benefit of the school.

Prerequisite(s): Successful completion of Peer Tutoring II and be tutors in good standing

Corequisite(s):

Credit: 1

..... 1543

Grades: 12

Offered at: AHS, MoHS

---

### **Practical Language**

This is a highly-structured, research-based intervention that offers an accelerated, sequential approach to literacy while addressing the components of a balanced literacy diet.

Prerequisite(s):

Corequisite(s): This course should be in addition to a student's English class

Credit:

1 ..... 1485  
2 ..... 1483  
3 ..... 1486  
4 ..... 1487

Grades:

Offered at: AHS

---

### **Skills Development - Reading/Writing I, II, III, IV**



This course is offered for students whose reading comprehension levels are significantly below grade level. It is designed to develop and enhance fundamental reading and writing skills. Course content includes skills development through decoding and encoding, vocabulary development, comprehension practice, and exposure to various reading strategies. Course content in writing includes instruction in the areas of composition, written expression, usage, and mechanics.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:

I . . . . .	1112
II . . . . .	1113
III . . . . .	1114
IV . . . . .	1115

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

# Fine and Performing Arts

**Visual and Performing Arts** provide a natural and essential context for important Lifelong Learning habits and skills, such as creating, risk-taking, and perseverance, and also bring us joy as an expressive part of the human experience. In our Fine Arts classes students have the opportunity to:

- Apply musical, theatrical, and/or visual arts skills, independently and collaboratively, through performance and display opportunities, both inside and outside of the classroom.
- Communicate about the Arts by describing, analyzing, evaluating, and critiquing using Arts-specific vocabulary.
- Recognize and appreciate the aesthetic nature of the Arts, anchored in cultural and historical contexts as well as personal preferences.
- Connect with Arts opportunities and careers, both locally and globally. The goal of Fine Arts instruction is ultimately to prepare all students for a lifetime of engagement with their creative side through art, music, theater, publishing, filmmaking and creative writing.

## Performing Arts - Instrumental Music

---

### **Concert Band, I-IV**

Concert Band I is an entry-level large ensemble and is required for all 9th grade band members, except with special permission of the director. The Concert Band rehearses and performs Band Repertoire in the 3-4 level of difficulty range. Concert band members perform at the regular concerts, and at some district events and are eligible to audition for district and regional honors and Albemarle County Honors Band.

Prerequisite(s): One year minimum previous instrumental training or director approval

Corequisite(s):

Credit: 1

I . . . . .	9233
II . . . . .	9246
III. . . . .	9247
IV. . . . .	9248

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Concert Orchestra, I-IV**

Standard violin, viola, cello, bass instrumentation. This group studies and performs orchestral works from the Baroque through the Modern periods. Student must provide own instrument; large instruments may be rented from the school.

Prerequisite(s): Two years previous instrumental training or director approval

Corequisite(s):

Credit: 1

- I . . . . . 9238
- II . . . . . 9239
- III. . . . . 9215
- IV. . . . . 9216

Grades: 9, 10, 11, 12

Offered at: AHS

---

**Guitar I and II**

This course will be open to any student who is interested in learning guitar. It will be self-paced to allow for different levels of proficiency. There will also be performance opportunities available.

Prerequisite(s):

Corequisite(s):

Credit: 1

- I . . . . . 9245
- II . . . . . 9249

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Jazz Band, I-IV**

The Jazz Band is an audition-only group that focuses on the performance, theory, and practice of jazz and popular music including style, articulations, phrasing, improvisation, and ensemble playing. The Jazz Band performs throughout the year in the community, in school concerts, and at jazz festivals. Some performances are in the evenings and on weekends. Jazz Band members are eligible to audition for district and regional honors and for the Albemarle County Honors Band.

Prerequisite(s): Previous instrumental training; Audition

Corequisite(s):

Credit: 1

- I . . . . . 9296
- II . . . . . 9299
- III . . . . . 9298
- IV . . . . . 9262

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

### **Marching Band**

The Marching Band performs at home football games, parades and competitions.

The Albemarle Band rehearses at zero period and some Tuesday afternoons.

The Monticello Band meets during the school day and on Friday afternoons of home football games.

Prerequisite(s): Summer band camp

Corequisite(s):

Credit: 0.5

- . . . . . 9297

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

### **Music Theory**

Students will read and recognize musical concepts, musical notation, and employ technology for meaningful expression in music.

1-year Course

Advanced Placement Available

Prerequisite(s): Music Theory or 3 years music performance

Corequisite(s):

Credit: 1

..... 9228

AP ..... 9226

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Percussion Ensemble**

This class is offered for students interested in percussion, keyboard, guitar, bass, and theory. It places emphasis on continued development of skills as well as proper rehearsal and performance techniques. It also includes instruction in theory, eartraining, and music history. The Percussion Ensemble performs winter and spring concerts and at other times at the discretion of the director.

Prerequisite(s): One year minimum previous instrumental training

Corequisite(s):

Credit: 1 per year

..... 9242

Grades: 9, 10, 11

Offered at: AHS, MoHS, WAHS

---

### **Piano/Keyboard I**

Piano class is designed for students of various levels to learn to play the piano. Students will develop a working knowledge of skills and techniques required to play the piano. They will learn music reading skills, correct keyboard fingering and technique. Students work individually, at their own pace, with teacher supervision and instruction. Class time will be used for instruction, practice and performance for peers. Concepts of self-discipline, study strategies and the ability to handle difficult tasks will be incorporated into the lessons. This class is for students who have a serious desire to learn to play the piano.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9255

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Piano/Keyboard II**

This course is designed for students who have mastered basic musical and technical skills in piano and wish to continue developing as pianists and musicians. Students will refine skills and techniques required to play the piano and be introduced to new concepts and more challenging pieces that build on the foundation provided in Piano/Keyboard I. Students work together on units of material, with individual practice time and flexibility for student repertoire choice built in. Concepts of self-discipline, study strategies, and the ability to handle multi-faceted tasks will be incorporated into the lessons. Students also will learn concepts in music theory and music history and will have the opportunity to explore different genres of piano music and perform for their peers.

Prerequisite(s): Piano/Keyboard I

Corequisite(s):

Credit: 1

..... 9256

Grades: 10, 11, 12

Offered at: AHS

---

### **Piano/Keyboard III**

This course is designed for students who have attained intermediate fluency in piano and wish to continue developing as pianists and musicians. Students will refine skills and techniques required to play the piano and be introduced to new concepts and more challenging pieces that build on the foundation provided in Piano/Keyboard I and II. Students work together on units of material, with individual practice time and flexibility for student repertoire choice built in, including supplementary pieces gleaned from the larger body of piano repertoire. Concepts of self-discipline, study strategies, and the ability to handle multi-faceted tasks will be incorporated into the lessons. Students will also learn more advanced concepts in music theory and music history and will have the opportunity to explore different genres of piano music and perform for their peers.

Prerequisite(s): Piano/Keyboard II

Corequisite(s):

Credit: 1

..... 9257

Grades: 11, 12

Offered at: AHS

---

### **String Ensemble, I-IV**

Standard violin, viola, cello, bass instrumentation. This group studies and performs more advanced orchestral works from the Baroque through the Modern periods. Student must provide own instrument; large instruments may be rented from the school.

Prerequisite(s): Minimum two years private instruction; Audition

Corequisite(s):

Credit: 1

I ..... 9241

II ..... 9266

III. .... 9267

IV. .... 9268

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Symphonic Band, I-IV**

The Symphonic Band I is an intermediate large ensemble and requires the recommendation of the director to become a member. The Symphonic Band also functions as the Marching Band at WAHS. Time commitments and events vary by the individual school. Please consult with the school's band director for more information.

Prerequisite(s): Two years previous instrumental training or director approval; Audition

Corequisite(s):

Credit: 1

- I . . . . . 9234
- II . . . . . 9235
- III. . . . . 9263
- IV. . . . . 9264

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Wind Ensemble**

The Wind Ensemble is the most advanced large ensemble and serves as a primary performing ensemble at the school. The Wind Ensemble rehearses and performs repertoire in the 5–6 level of difficulty. Ensemble members perform at regular concerts and are eligible to audition for district and regional honors and for the Albemarle County Honors Band. Ensemble members practice daily, develop skills on ear training and dictation, and may compose music.

Prerequisite(s): Previous instrumental training; Audition

Corequisite(s):

Credit: 1

- . . . . . 9243

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

## **Performing Arts - Vocal Music**

---

### **Chamber Music Ensemble**



Student must be proficient as an instrumentalist or singer and be studying privately or be willing to let the program help secure appropriate private instruction. Advanced performance, sight reading, and music proficiency required. There will be an emphasis on interactive chamber music in class, as well as continuing music theory, composition, and arranging skills. Students may prepare college and competition audition repertoire and could be given performance opportunities for junior and senior recitals at the school. Contact with university and conservatory instructors will be facilitated to further the education of these students. Encouragement and assistance will be given for placement in UVA chamber and ensemble music classes if desired. The Chamber Ensemble will also perform once a month in the community to support and develop the community music culture.

Prerequisite(s): Audition

Corequisite(s):

Credit: 1

..... 9205

Grades: 10, 11, 12

Offered at: MoHS, WAHS

---

### **Concert Choir**

This class is available to students with an interest in developing singing ability. Students learn note reading, part singing (soprano, alto, tenor, bass), rhythm, and how to be a participating member of a group.

Prerequisite(s): Middle School chorus recommended

Corequisite(s):

Credit: 1 per year

I ..... 9285  
II ..... 9286  
III ..... 9287  
IV ..... 9288

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Concert Choir, Advanced**

The concert choir is a mixed group and provides our most advanced choral students opportunities to develop their singing abilities to the greatest possible extent. Advanced chorus performs in public. All members must participate in all functions. The most advanced students audition for Regional Chorus (10-12), All State Chorus (11-12), and State Honors Chorus (12).

Prerequisite(s): Chorus I

Corequisite(s):

Credit: 1 per year

..... 9277

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **Men's Ensemble**

Students concentrate on all genres of men's music. Students have the opportunity to perform in local, regional, and state-wide Choral events.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9271

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Show Choir**

Students concentrate on show choir techniques: blocking, choreography, staging, and microphone techniques. Students demonstrate an advanced knowledge of basic singing skills: pitchmatching, tonal memory, sight reading, theory, and harmony. Students perform three major concerts with the possibility of several smaller performances. Students have the opportunity to participate in District Choir, All-State Chorus, District Choral Festival, and a spring competition.

Prerequisite(s): One year of Chorus; Audition (vocal and choreography)

Corequisite(s):

Credit: 1

I . . . . .	9272
II . . . . .	9273
III . . . . .	9274
IV . . . . .	9275

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

**Treble Jazz I, II and III**

Students perform standard and contemporary vocal jazz repertoire with an emphasis on jazz technique. Students demonstrate an advanced knowledge of basic singing skills. Students have the opportunity to perform in local, regional, and state-wide Choral events. Advanced student proficiency expected in Treble Jazz III.

Prerequisite(s): Audition

Corequisite(s):

Credit: 1

I . . . . .	9279
II . . . . .	9280
III (MoHS only) . . . . .	9284

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

**Vocal Jazz**

Students perform standard and contemporary vocal jazz repertoire, with an emphasis on jazz technique. Students demonstrate an advanced knowledge of basic singing skills. Students perform three major concerts with the possibility of several smaller performances. Students have the opportunity to participate in District Choir, All-State Chorus, District Choral Festival, and the Spring Competition.

Prerequisite(s): Audition

Corequisite(s):

Credit: 1

I . . . . .	9282
II . . . . .	9283
III . . . . .	9276
IV . . . . .	9278

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

**Women's Ensemble**

Students concentrate on all genres of treble music. Students must demonstrate an advanced knowledge of basic singing skills. Students have the opportunity to perform in local, regional, and state-wide Choral events.

Prerequisite(s): Audition; Knowledge of music reading

Corequisite(s):

Credit: 1

I . . . . .	9250
II . . . . .	9251
III . . . . .	9252
IV . . . . .	9253

Grades: 9, 10, 11, 12

Offered at: AHS, WAHS

**Women's Ensemble, Advanced**

This ensemble provides our most advanced female choral students the opportunity to develop their singing abilities to the greatest extent. The ensemble performs in public and all members must participate at all functions. Students will audition for All County Chorus (grades 10-12), district Chorus (grades 10-12), All State Chorus (grades 11-12) and Virginia Honors Chorus (grade 12). Students concentrate on all genres of treble music.

Prerequisite(s): Audition

Corequisite(s):

Credit: 1 per year

. . . . .	9270
-----------	------

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

## Performing Arts - Theatre

---

### Basics of Tech Theater

This introductory course covers theater and stage history, aspects of stage management, lighting, audio and sound for stage, basic set design and scenery construction, and safety. Students will be involved in the technical aspects of various productions and events throughout the school year.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1435

Grades: 9, 10, 11, 12

Offered at: MoHS, WAHS

---

### Debate I

Debate teaches students how to coordinate the written and oral communication process through a study of logical thinking and research techniques culminating in written and oral presentations. A study of the national debate topic, leading to participation in interscholastic debate competition, is one strategy for accomplishing this goal. Students may take this course four years and receive four credits toward graduation.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9918

Grades: 9, 10, 11, 12

Offered at: AHS

---

### Drama I

This course explores the fundamentals of theater as an ensemble art. Students apply the creative process through in-class storytelling, playwriting, acting, and improvisation and respond to theatrical experiences using theatre arts vocabulary. This course prepares students for participation extracurricular participation in dramatic productions (although course participation is not a prerequisite for participation in extracurricular school plays and musicals).

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1430

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Drama II**

This advanced course is designed for students who want to expand their artistic abilities and appreciation of drama. It is designed for students eager to excel in theater as an extracurricular activity beyond the classroom and/or a career. Through various modes of expression and performance, students investigate and interact with dramatic literature, theater styles, historical periods, and technical theater.

Prerequisite(s): Drama I or teacher recommendation

Corequisite(s):

Credit: 1

..... 1440

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Drama III**

This course is similar in design and scope Drama II with an emphasis on exploration of playwriting which includes research, character development, and creation of dramatic structure, conflict, and resolution. Students study and respond to a variety of theatrical experiences that refine their collaborative, analytical, interpretive, and problem-solving skills. Performance and production outside of the classroom are encouraged.

Prerequisite(s): Drama II or teacher recommendation

Corequisite(s):

Credit: 1

..... 1442

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Drama IV and V**

This course is for advanced students who wish to maximize creative and collaborative opportunities in the theater arts. Students refine their personal acting techniques, demonstrate a variety of performance skills, and prepare for academic and/or professional auditions. As a culmination of their coursework in drama, students have the opportunity to direct—ranging from a two-character scene to one-act play.

Prerequisite(s): Drama III or teacher recommendation

Corequisite(s):

Credit: 1

IV (offered at WAHS). . . . . 1444

V (offered at AHS, MoHS). . . . . 1445

Grades: 12

Offered at: AHS, MoHS, WAHS

---

### **Improvisation and Comedy**

Students will study the history of improvisation as well as the modern schools of improvisation. Students will learn the skills of long and short form improv, examine comedy across cultures over the past fifty years, and write and perform their own sketch comedy.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1448

Grades: 9, 10, 11, 12

Offered at: MoHS

---

### **Musical Theatre Ensemble**

Explores the styles and periods of musical theatre development, and explores singing techniques, various styles of dance and movement, and opportunities to choreograph. This ensemble class works toward one completed musical revue performance or musical (per semester) for presentation at various venues.

Prerequisite(s): Audition

Corequisite(s):

Credit: 1

..... 1415

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **Speech and Communication**

Students learn the basic principles of public speaking by evaluating their own and others' speeches. Technology will be used to produce a computer-generated slide show. Students will learn to become critical listeners and analyze important speeches from history and current events.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1303

Grades: 9, 10, 11, 12

Offered at: AHS, WAHS



---

**Theatre Appreciation / CST 141**

Theatre Appreciation aims to increase knowledge and enjoyment of theatre. The course includes field trips to local theatres, watching and reading plays, along with class discussion and critiques. Students will consider style, play structure, written drama, and performed drama.



Prerequisite(s):

Corequisite(s):

Credit: 1; 3 dual enrollment college credits with PVCC

..... 1411DE

Grades: 11, 12

Offered at: WAHS

---

**Visual Thinking / Intro to Film**

This course will provide an insight into film as an art form, both in terms of culture and entertainment. Students will study the films of Hitchcock, Spielberg, Blake Edwards, Zemeckis, Jewison, Redford, Kurosawa, Frankenheimer, Pollack, Curtiz, and many more. Film genres include: animation, mystery, thrillers, action films, classics, comedies, and foreign films.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1447

Grades: 10, 11, 12

Offered at: AHS

---

**World Theatre: Theory and Performance**

This engaging course explores the dramatic literature, theatre practices, performance styles, and theories of nations and regions worldwide. Students will learn about the theatrical cultures of other parts of the world, historically and in contemporary society. In addition, the course will have a large performance component; students will rehearse and perform in workshop productions of various world theatrical traditions as well as attend globally-inspired theatrical performances.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 1459

Grades: 9, 10, 11, 12

Offered at: AHS

## Visual Arts - Art

---

### **2D/3D Design**

This visual arts course will focus on the principles of design. Students will learn about the principles of design and apply the principles of design in both two-dimensional and three-dimensional artwork. Students will have the opportunity to demonstrate knowledge of the principles of design using a variety of media, including drawing, painting, collage, clay, digital media, photography, and sculpture. This course will allow students to explore a variety of materials and media. This will be a studio/project-based course, and students will create a portfolio of their best pieces as a culminating assessment.

Prerequisite(s): Art I

Corequisite(s):

Credit: 1

..... 9188

Grades: 10, 11, 12

Offered at: WAHS

---

### **Art History, Advanced Placement**

Building on a strong foundation in world history, students explore western and nonwestern traditions in art and architecture from the prehistoric-era to the present. This course integrates studies of aesthetics, production, and criticism with the history of art in preparation for the AP Art History test. Course expectations include independent reading of a college-level text and writing critically about art.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9151

Grades: 11, 12

Offered at: AHS, WAHS

---

### **Art I**

This course introduces students to the foundational elements and principles of design to be used as a basis for the development of a common language both visual and verbal. It provides an overview of many aspects of art through a variety of experiences in drawing, painting, printmaking, and sculpting. The course stimulates creative thinking and problem solving, imparts technical knowledge, and develops expressive skills.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9120

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Art II**

This course provides students with the opportunity to build on the skills developed in Art I in the areas of drawing, painting, printmaking, and sculpting. An in-depth exploration of a variety of media allows students to develop a personal style and to compile a portfolio.

Prerequisite(s): Art I

Corequisite(s):

Credit: 1

..... 9130

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Art III**

Students continue the development of artistic and aesthetic skills learned in the first two years of art at a more advanced level with increased emphasis on personal expression and on the use of a wider range of media in the areas of drawing, painting, printmaking, and sculpture. Students continue to develop their portfolios.

Prerequisite(s): Art II

Corequisite(s):

Credit: 1

..... 9140

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

**Art IV**

This advanced course is designed for students who have a serious interest in art and have demonstrated a high level of proficiency. Students will be guided to work more independently with special emphasis on individual growth. This course provides the opportunity for the mature student to develop a portfolio and to apply art knowledge and techniques for personal expression.

Prerequisite(s): Art III

Corequisite(s):

Credit: 1

..... 9154

Grades: 12

Offered at: AHS, MoHS, WAHS

---

**Ceramics I**

This course is designed for students who want to concentrate on hand-building, wheel thrown pottery, and clay construction. Specific ceramic techniques are used to make pots and sculptures. Emphasis is on form, design, and craftsmanship.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9110

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Ceramics II**

This advanced course is designed for the serious ceramics student. Emphasis on the development of skills, both in handbuilding and wheel-throwing, is of primary importance. Personal and artistic style is stressed through advanced projects and techniques.

Prerequisite(s): Ceramics I

Corequisite(s):

Credit: 1

..... 9112

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Ceramics III**

This course is similar in design and scope to Ceramics II with an emphasis on the development of personal and artistic style. Advanced techniques in glazing and decorating are introduced.

Prerequisite(s): Ceramics II

Corequisite(s):

Credit: 1

..... 9114

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

**Ceramics IV**

This advanced course is for the serious ceramist as it continues the exploration of and craftsmanship in both hand-building and wheel-throwing. Students work at a highly independent level to utilize these skills in the creation of both functional and non-functional ceramic pieces. Glazing and decorative experimentation are pursued in-depth.

Prerequisite(s): Ceramics III

Corequisite(s):

Credit: 1

..... 9115

Grades: 12

Offered at: AHS, MoHS, WAHS

---

**Digital Imaging I**

Students will work on digital or film images enhanced through Photoshop. The emphasis will be on creating altered images that could be used for fine art, advertising, or publications. The Internet will serve as a resource for tutorials, artistic examples, and research.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9191

Grades: 9, 10, 11, 12

Offered at: AHS, WAHS

---

**Digital Imaging II**

This course continues the study of digital imaging. An emphasis will be placed on learning more advanced Photoshop skills to study design and digital production.

Prerequisite(s): Digital Imaging I

Corequisite(s):

Credit: 1

..... 9181

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **Digital Imaging III**

For students who want a more in-depth knowledge of design, digital photography, and Photoshop. Emphasis will be placed on creating a digital portfolio. Students will assist in designing their own projects and setting goals for learning.

Prerequisite(s): Digital Imaging I & II

Corequisite(s):

Credit: 1


..... 9183

Grades: 11, 12

Offered at: AHS, WAHS

---

### **Drawing 121/122**

Students will develop basic drawing skills and understanding of visual language through studio instruction /lecture. Concepts of  proportion, tone, space, perspective, and composition as applied to drawing styles such as still life, landscape and the human figure. A variety of media including pencils, charcoal, ink and various colored media will be used in conventional and unconventional ways. Critiques, art exhibitions, field trips and gallery/museum visits as appropriate.

Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; 8 dual enrollment college credits with PVCC

..... 9122

Grades: 9, 10, 11, 12

Offered at: WAHS

---

**Environmental Art**

This is a studio art course using the environment, nature, and recycled materials as main themes and topics. Using a variety of media, including drawing, painting, ceramics, sculpture, photography, movie making, journaling, and blogging, students will observe and document the natural world.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9196

Grades: 9, 10, 11, 12

Offered at: WAHS

---

**Film Photography**

Students will explore film photography through the use of 35 mm SLR film cameras and darkroom developing techniques. Students will learn about film cameras, lenses, exposure meters, composition, black and white film processing and printing, and presentation.

Prerequisite(s): Photography I

Corequisite(s):

Credit: 1

..... 9190

Grades: 10, 11, 12

Offered at: WAHS

---

**Functional Ceramics, Advanced**



This course is offered for advanced students who wish to continue the study of ceramics at a higher level. It is designed to encourage personal creative growth through experimentation with innovative functional ceramics processes and techniques not taught in previous courses. Students participate in both formal and informal critiques at the advanced level.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9116

Grades: 11, 12

Offered at: MoHS

---

### **Geometry and the Visual Arts**

Students will discover how mathematics is related to art by studying examples of works of art from cultures around the world, examining the mathematical concepts and techniques underlying these works, and using graphic design software and other software tools to create original works of art employing these ideas and techniques. A tentative list of topics to be covered includes: recursion, symmetry transformations, perspective and projections, color mixing, the golden ratio, and sequences. Examples will be drawn from Asian, African and Arabic art, as well as European art.



Prerequisite(s): Algebra I

Corequisite(s):

Credit: 2 (1 Geometry and 1 Art credit)

..... 9830

Grades: 9, 10, 11, 12

Offered at: WAHS

---

### **Multimedia Crafts / Design**

This is a beginning level course that emphasizes the exploration and history of various crafts. Topics may include weaving, mosaics, batik, papermaking, macramé, mixed media designs, and basketry. Both the functional aspects of crafts and the nontraditional creative approach are stressed.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9160

Grades: 9, 10, 11, 12

Offered at: AHS, WAHS

---

### **Multimedia Crafts II**

This course is for the more experienced student who is continuing his/her education in crafts. Students research and study the history of specific crafts along with the adaptation of certain craft objects to contemporary use. The student works with a variety of media and techniques such as textile and fiber arts, ceramics, basketry, batik, jewelry making, papermaking, mixed media design, bookmaking, and collage.

Prerequisite(s): Multimedia Crafts / Design

Corequisite(s):

Credit: 1

..... 9161

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **Multimedia Crafts III**

This is an advanced crafts course designed for students who are highly skilled in this discipline and have a special interest in Fine Arts. Students work more independently with an emphasis on artistic and aesthetic growth and development.

Prerequisite(s): Multimedia Crafts II

Corequisite(s):

Credit: 1

..... 9104

Grades: 11, 12

Offered at: AHS, WAHS

---

### **Multimedia Crafts IV**

This course is designed for students who can work independently to enhance their knowledge of the materials and techniques taught in previous Multimedia Crafts classes.

Prerequisite(s): Three years of Multimedia Crafts

Corequisite(s):

Credit: 1

..... 9166

Grades: 11, 12

Offered at: WAHS

---

### **Photography I**

This beginning course in digital and film photography introduces the student to photographic equipment, materials, processes and ideas. The emphasis is on taking pictures using the manual settings of 35mm and digital cameras and digital editing and darkroom film processing. Students learn how to visualize a scene to create a well composed image through the fundamental rules of composition. Final presentation of student work is explored through printing, matting and exhibiting photos. Considerable time outside of class is required to complete assignments.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9193

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Photography II**

Photography II students build on skills and processes learned in Photography I and explore alternative processes such as cyanotype, hand coloring, color toning, multiple negative printing, solarization, or photo collage.

Prerequisite(s): Photography I

Corequisite(s):

Credit: 1

..... 9180

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Photography III**

Students produce quality prints for inclusion in a portfolio for college application. Students are asked to make a final presentation to the class with a written statement about their work.

Prerequisite(s): Photography I and II; Portfolio

Corequisite(s):

Credit: 1

..... 9182

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

**Photography IV**

Students continue developing photography and photo altering techniques using Photoshop and other programs. Students work at an independent level to create a professional level portfolio while applying techniques for personal creativity.

Prerequisite(s): Photography III

Corequisite(s):

Credit: 1

..... 9184

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Printmaking**

This one year course emphasizes the graphic arts through the use of various print techniques such as: monotype, lithography, wood block, linoleum, intaglio (engraving), and silkscreen. The application of the principles and elements of design will provide the structure for learning about printmaking. Skills that involve the use and care of various tools for carving and cutting will be taught as well how to use a printing press.

Prerequisite(s): Art I

Corequisite(s):

Credit: 1

..... 9186

Grades: 10, 11, 12

Offered at: AHS

---

**Sculptural Ceramics, Advanced**

This course is offered to advanced students who wish to continue the study of ceramics. It uses non-functional sculptural problems to encourage and develop personal creative growth through innovative sculptural ceramics processes and techniques not taught in previous courses. Students will experiment with surface design as it relates to sculptural ceramics including use of technological advances and mixed media, developing and mixing glazes appropriate for sculptural ceramics, and participating in both formal and informal critiques at the advanced level.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9117

Grades: 11, 12

Offered at: MoHS

---

**Sculpture I**

Sculpture I will allow students to explore and expand upon their knowledge of three-dimensional forms while learning about professional sculptors. Students will apply design principles to create forms using a wide variety of techniques and media. Learning about professional sculptors will provide inspiration and clarify techniques.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9175

Grades: 9, 10, 11, 12

Offered at: AHS

**Sculpture II and III**

This advanced course allows students to build upon the concepts learned in Sculpture I while focusing on the Principles of Design to further enhance their three-dimensional work. Students will continue gain construction experience with a wide variety of materials and tools while learning about professional artists. Problem solving and exploration will be a key aspect of this class. Students will keep an online portfolio.

Prerequisite(s): Sculpture I

Corequisite(s):

Credit: 1 credit each

II. .... 9176

III . .... 9177

Grades: 10, 11, 12

Offered at: AHS

**Visual Arts - Publishing and More**

**Audio Production I**

Students enrolled in this course develop a foundational understanding of sound and how to capture it in a digital form. Students will learn the fundamentals of audio recording and editing, including hardware identification, terminology, and standard recording techniques. Working independently and in mixed-skill groups, they will produce original work in digital formats such as music, broadcast journalism, and creative prose. Students in this class are not required to have any prior experience with music or audio production.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 6162

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Audio Production II**

Students enrolled in this course will continue adding to their arsenal of recording techniques, while also refining the skills they learned in Audio Production I to create more sophisticated audio compositions. Students will develop a portfolio of finished work, which they'll have the opportunity to publish. They will be exposed to a variety of audio art forms and encouraged to specialize in an area that incites their passion.

Prerequisite(s): Audio Production I or instructor permission

Corequisite(s):

Credit: 1

..... 6163

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Creative Writing / Literary Magazine I & II**

This course is designed for students with an interest in writing original poetry, short stories, essays, scripts, and novels. Students will study strategies and techniques used by successful authors, and they will read and critique each other's writing in a writing workshop format. Students will read and discuss all submissions to the school literary magazine and select and edit the pieces to be included. Students will format the magazine using current publishing and design software. This course requires some independent work, a good deal of group interaction and discussion, and the ability to be sensitive to submitting writers and artists.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . . 1172  
II . . . . . 1117

Grades: 9, 10, 11, 12

Offered at: WAHS

---

### **Creative Writing I, II**

This course is designed for students with special interest in writing original poetry, short stories, essays, scripts, and novels. Strategies, style and techniques used by successful authors are studied. The course requires independent study, teacher-student conferences, group discussions, and sharing of work.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . . 1171  
II . . . . . 1174

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Creative Writing III, IV**



Students are already proficient writers with a deep interest in writing creatively. Strategies and techniques used by successful authors are studied. The course requires independent study, teacher-student conference, group discussions, and sharing of work. Emphasis is on writing style and techniques. Students write poetry, fiction, plays, essays, and non-fiction. Students in this class publish the school literary/art magazine.

Prerequisite(s):

Corequisite(s):

Credit: 1

III . . . . . 1176

IV . . . . . 1178

Grades: 10, 11, 12

Offered at: AHS

---

### **Filmmaking I**

This course is very similar to a college film studies class. Students should have a serious interest in film. Students view, discuss, and analyze acclaimed classic and contemporary films to discover how great filmmakers produce their work. They study foreign films, art and documentary films, filmmaking techniques, and particular directors. Students produce their own film projects using digital video cameras and iMovie editing equipment.

Prerequisite(s):

Corequisite(s):

Credit: 1

. . . . . 1451

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Filmmaking II**

Students will explore advanced elements of the art of digital video production. With a focus on advanced techniques in lighting, composition, editing, and sound engineering, students will experience all aspects of completing a high quality narrative or documentary film. Special emphasis on commercial film and the business of filmmaking will round out the course. Internships with local filmmakers and production companies will be available.

Prerequisite(s): Filmmaking I or Television Production I

Corequisite(s):

Credit: 1

..... 1453

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **Filmmaking III**

Filmmaking III builds upon the techniques and skills acquired in the first two levels of the course by focusing on the craft of screenwriting. Students will practice creating original scenes and short films. The techniques of color correction, filters, and post-production effects will be incorporated into student work.

Prerequisite(s): Filmmaking II

Corequisite(s):

Credit: 1

..... 1455

Grades: 11, 12

Offered at: AHS, WAHS

---

### **Humanities I-IV**

This interdisciplinary course is about the relationships among music, art, literature, history, philosophy, and science. Personalized projects, trips to cultural centers, and individual research and reading programs supplement a traditional presentation of the products of human beings from Aristotle to Zappa. Participants should have, or be willing to have, a wide range of interests.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . .	1515
II . . . . .	1516
III . . . . .	1518
IV . . . . .	1519

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Journalism**

This course is a prerequisite for the newspaper staff. The class focuses on news reporting, writing, and photography as well as word processing and desktop publishing computer skills. Assignments in writing and photography require a significant portion of work outside of class. For photography assignments, students need a camera. Photography study is on good news photos.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . .	1200
II . . . . .	1210
III . . . . .	1211
IV . . . . .	1212

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Yearbook**

This course is a prerequisite for the yearbook staff. The class focuses on feature writing and photography as well as word processing and desktop publishing skills. Assignments in writing and photography require a significant portion of work outside of class. For photography assignments, students need a camera. The focus of photography study is on good news photos.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . .	1470
II . . . . .	1221
III . . . . .	1222
IV . . . . .	1223

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

# Health, Physical Education & Driver's Education

Physical education plays a vital role in the student's development and growth. Here are some good reasons for active engagement with your health and physical education classes.

1. Health and PE are linked to good health. The value of physical fitness can never be overstated. In physical educational classrooms, students learn the value of taking care of themselves through proper grooming, healthy eating, and regular exercise.
2. Health and PE are a preventive measure against disease. Physical education in school is a preventive measure to teach students the value of regular exercise and healthy eating habits.
3. Health and PE are programs for muscle strength and fitness. Physical education develops the student's motor skills and hand-eye coordination.
4. Health and PE promote academic learning. Physical health allows students to function even better in classrooms. A good cardiovascular system developed from regular exercise promotes excellent blood and oxygen circulation. This means more nutrients circulate throughout the body, which includes the brain. This circulation produces longer attention span during classes.
5. Health and PE build self-esteem. Students who are active in physical activities are more confident with themselves, according to most social school studies. In school, the physical education program introduces sport activities to students allowing them to make choices in which sport areas they want to get involved.
6. Health and PE develop cooperation, teamwork and sportsmanship skills. Most physical education programs are holistic. The program allows students to interact toward a common goal.
7. Health and PE promote a physically active lifestyle. The purpose of physical education is to instill in students, at an early age, the value of self-preservation and choosing a lifestyle that is good for both the mind and body.

---

*Adapted from the position statement of the National Association for Sport and Physical Education.*

---

Presents basic principles of human anatomy and physiology, including body structure, systems and functions. The course provides a foundation on which to build and apply concepts in the study of Exercise Science, Group Fitness, Personal Training, and related fitness studies.



Prerequisite(s):

Corequisite(s):

Credit: 1; 3 dual enrollment college credits with PVCC

Honors . . . . . 7638DE

Grades: 11, 12

Offered at: WAHS

---

**Driver's Education**

### **Part I: Classroom**

During the sophomore year, the 36-hour driver's education classroom instruction component is provided as a part of the Health II curriculum (see above listing for Health II). Students are cautioned not to be absent during this period, as excuses from parents and doctors do not exempt one from the DMV requirement for classroom instruction.

### **Part II: Behind-the-Wheel**

Students should be scheduled for Behind-the-Wheel around 16 years of age. Students may not get their license until they have had their permit for 9 months, and they are at least 16 years and 3 months old. Students may get a learner's permit from DMV at 15½ years of age.

Tuition is charged for this portion of the class. Students must have completed or at least begun the 36-hour Part I classroom portion before beginning Behind-the-Wheel training. Driver's Education Behind-the-Wheel will be offered at the three comprehensive high schools in the morning before school and in the afternoon after school throughout the school year. Please call one of the three comprehensive high schools to take Behind-the-Wheel.

### **Parental Requirements and Driver's Education**

All parents must participate in a FREE Parent Seminar for Driver Education prior to their child taking the Behind-the-Wheel portion of driver's education. The seminar is a requirement for families with students pursuing a driver's license. Any student registering for Behind-the-Wheel training must provide the certificate of attendance from the Parent Seminar. The seminars will be offered once a month at all three comprehensive high schools in the county. Register online at [www.opendoors1.org](http://www.opendoors1.org), select class number 5001, or call (434) 975 9451 or (434) 975 9450.

Prerequisite(s):

Corequisite(s):

Credit:

Grades:

Offered at: AHS, MoHS, WAHS

---

## **Fitness / Weight Training I & II**

This is a weightlifting class designed to teach weightlifting theory and technique in combination with personal fitness training. Students establish personal weightlifting goals and design and implement individual weightlifting programs. Student progress is monitored through self, peer, and instructor evaluation. A change of clothes is required for class.

**Note:** This course may NOT substitute for PE I or PE II as a graduation requirement. Students who have not previously received credit for Weight Training will be given scheduling priority.

Prerequisite(s): PE I and/or PE II

Corequisite(s):

Credit: 1 per year

I . . . . . 7677  
II . . . . . 7676

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Fitness / Yoga I & II**

Fitness Yoga is an elective course for upperclassmen that have completed PE I and PE II. Students interested in Fitness Yoga must obtain instructor's approval prior to the beginning of the semester. This class involves instruction in physical postures with the incorporation of breath control and conscious relaxation (known as Hatha Yoga). There is an emphasis on stress management, increased vitality, and physical well-being.

**Note:** This course may NOT substitute for PE I or PE II as a graduation requirement.

Prerequisite(s): PE I and/or PE II

Corequisite(s):

Credit: 1

I . . . . . 7670  
II . . . . . 7652

Grades: 11, 12

Offered at: AHS, WAHS

---

### **Health Education I**



### Required for Graduation

The goal of health education is to help students acquire an understanding of health concepts and skills and apply them in making healthy decisions to improve, sustain, and promote personal, family, and community health. Health Education I focuses on knowledge, examines attitudes, and formulates lifestyle behaviors. Students integrate a variety of health concepts, skills, and behaviors to plan their personal health goals. Potential areas of study include wellness, injury prevention and first aid, body systems, disease prevention and hygiene, and family life education.

Prerequisite(s):

Corequisite(s):

Credit: 0.5

..... 7320

Virtual ..... V7320

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Health Education II**

Required for graduation; enrollment based on space availability.

The goal of health education is to help students acquire an understanding of health concepts and skills and apply them in making healthy decisions to improve, sustain, and promote personal, family, and community health. Health Education II continues to build on the knowledge, attitudes, and lifestyle behaviors examined in Health I. Students integrate a variety of health concepts, skills, and behaviors to plan their personal health goals. Potential areas of study include substance abuse, gang and violence intervention, consumer health, community health, and family life education. Health Education II includes the classroom portion of Driver's Education. At the present time, Health II includes instruction in Driver's Education and Health Standards of Learning. This is a graduation requirement and students must participate in the entire course. Students who have already completed Driver's Education and/or hold a driver's license are still required to participate in the entire Health II course.

The virtual course does NOT include Driver's Education.

Prerequisite(s): 9th Graders: Must be 15 by September 1 and acquire counseling director approval

Corequisite(s):

Credit: 0.5

..... 7425  
Virtual ..... V7425

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Introduction to Sports Medicine**

This course offers an introduction to students interested in learning about careers in sports medicine such as: athletic training, physical therapy, medical doctor, exercise physiology, and nutrition. The course introduces students to the theory of prevention, care, and rehabilitation of athletic injuries. Areas to be covered include: human anatomy and physiology, assessment and evaluation of athletic injuries, prevention of injuries, treatment and rehabilitation of injuries, therapeutic modalities, conditioning principles, and nutrition. Students gain useful experience by learning taping and evaluative techniques and by assisting in the training room after school.

**Note:** This course may NOT substitute for PE I or PE II as a graduation requirement.

Prerequisite(s): Biology I

Corequisite(s):

Credit: 1

..... 7680

Grades: 11, 12

Offered at: WAHS

---

### **Physical Education I**

Required for Graduation

Physical Education I builds on the fundamental skills and skill combinations learned in Middle School. Students are given the opportunity to self-select wellness activities, demonstrate a depth of understanding of physical activity, and show competence in lifetime physical activities. Students are responsible for skill mastery in four content areas: team sports, individual sports, leisure, and rhythmic activities. They analyze and apply biomechanical principles to skilled movement and physiological principles to achieve and to improve physical fitness. Through record keeping, students are accountable for evaluating the benefits of physical activity. Students use appropriate social interactions and decision-making skills and demonstrate respect for differences in culture and abilities. Students understand and follow a physically active lifestyle that promotes good health and wellness for a lifetime.

Prerequisite(s):

Corequisite(s):

Credit: 0.5

..... 7310  
Virtual ..... V7310

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

**Physical Education II**

Required for Graduation

Physical Education II builds on the fundamental skills and skill combinations learned in previous courses. Students are responsible for skill mastery in two content areas reflecting student interest. They analyze and apply biomechanical principles to skilled movement and physiological principles to achieve and to improve physical fitness. Students regularly evaluate and adjust goals that promote a lifetime of physical activity. Students use appropriate social interactions and decision-making skills and demonstrate respect for differences in culture and abilities. Students understand and follow a physically active lifestyle that promotes good health and wellness for a lifetime.

Prerequisite(s):

Corequisite(s):

Credit: 0.5

..... 7410  
Virtual ..... V7410

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Sports Medicine I**

This course provides students with the basic concepts and skills required for careers in sports medicine such as: athletic training, physical therapy, medical physician, exercise physiology, and occupational therapy. It introduces students to topics such as injury prevention, nutrition, first aid/CPR/AED, exercise physiology, and biomechanics. Students study basic human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation. Course competencies have been constructed so as not to go beyond the professional scope of aide/assistant level. Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer.

Prerequisite(s): Biology I recommended

Corequisite(s):

Credit: 1

..... 7686

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Sports Medicine II**

This course continues the studies of "Sports Medicine I." Students learn advanced concepts and skills required for careers in sports medicine.

Prerequisite(s): Sports Medicine I

Corequisite(s):

Credit: 1

..... 7687

Grades: 10, 11, 12

Offered at: AHS, MoHS

---

## Team Sports

This course provides a learning experiences that will lead to the development of the basic skills in various team sports. The units may include basketball, volleyball, flag football, soccer, speedball, and softball. Content will include game strategies, fundamental skills, history, rules, safety, officiating, drills and mini-games. Upon completion of the course, students will be able to demonstrate basic skills in selected sports, demonstrate knowledge of history, rules, safety and will be able to demonstrate team play concepts and strategies in game situations.

**Note:** This course may NOT substitute for PE I or PE II as a graduation requirement.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 7646

Grades: 11, 12

Offered at: WAHS

# History and Social Sciences

**The study of history and social science** is vital in promoting a civic-minded, democratic society. The National Council for Social Studies proposes that social studies courses support college, career, and civic life readiness by focusing on planning inquiry, evaluating sources, using evidence in decision making, communicating conclusions, and taking informed actions.

Courses in History and Social Science are designed to:

- develop the knowledge and skills of history, geography, civics, and economics that enable students to place the people, ideas, and events that have shaped our state, nation, and world in perspective;
- support students in developing an understanding of diverse cultures, and of a shared humanity.
- prepare students for informed, responsible, and participatory citizenship;
- enhance students' ability to seek and recognize patterns and complex relationships such as change and continuity, conflict and cooperation, choice and consequence, and systems.
- develop students' skills in inquiry, debate, discussion, writing, and critical reading.

Social Studies offerings in high school provide students with several means to explore new disciplines and expand on their work K-8 through both required courses and electives. Social science courses introduce complex content and support the development of critical thinking skills that are essential for student success in and beyond school as students grow as lifelong learners.

---

## Economics and Personal Finance

Students learn how to navigate the financial decisions they must face and to make informed decisions. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. Students will also explore entrepreneurship as they learn the skills needed to plan, organize, manage, and finance a small business. (CTE Code: 6123)

**Note:** This course is a graduation requirement for students entering the 9th grade in 2011 and beyond.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 6123  
Virtual ..... 6123V

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Economics and Personal Finance / FIN 107**

Students learn how to navigate the financial decisions they must face and to make informed decisions. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. Students also will explore entrepreneurship as they learn the skills needed to plan, organize, manage and finance a small business. (CTE Code: 6123)



**Note:** This course is a graduation requirement for students entering the 9th grade in 2011 and beyond.

Prerequisite(s): PVCC Placement Testing

Corequisite(s):

Credit: 1; 3 dual enrollment college credits with PVCC

..... 6121DE

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **ESOL Social Studies**

This course is designed to provide a foundation of academic vocabulary for students to be successful in World History, U.S. History, and U.S. Government courses. Students learn new vocabulary through hands-on, visual, experiential lessons and apply this vocabulary in individual and collaborative projects on topics of world history, immigration, and civic engagement. Students give formal presentations and write for real-world audiences in their exploration of history and politics. They connect their understanding of civics and history in their native languages to learning the academic vocabulary of social studies in English. Students master the academic terminology that serves as a foundation for research in the social sciences.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2980

Grades: 9, 10, 11, 12

Offered at: AHS

**Ethnic Studies**

The study of the history of people of color in America from their perspective. Ethnic Studies focuses on the lives of African- Americans, Latinos/as, Asian-Americans, Native Americans and those Americans of Middle Eastern descent. Our focus in this class will be on the similarities between the communities and their struggles for equality in America.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2992

Grades: 9, 10, 11, 12

Offered at: AHS

**European History, Advanced Placement**

AP European History is designed to challenge the highly motivated student who wants to experience college level work. Students will study European History in global context from c. 1450 (high Renaissance) to the Contemporary Age. The goals of this course are to develop an understanding of some of the principal themes in modern European history and an ability to analyze historical evidence and to review the basic factual narrative.



Students who do well on the AP exam receive college credit or superior placement at participating colleges.

**Note:** This course may be taken in place of World History from 1500 to Present. Students electing this course either take the Standards of Learning test for World History from 1500 to Present or earn an AP score of 2 or better to earn a verified credit.

Prerequisite(s):

Corequisite(s):

Credit: 1



..... 2399

Grades: 10, 11, 12

Offered at: MoHS

**History Lab**

History Lab represents a hands-on “maker” approach to historical inquiry. Students will explore various topics in United States and World History through experiential processes and content creation, such as GIS, interactive exhibits, the creation of historical artifacts, interpretive displays (digital and “brick and mortar”), and other modes of content presentation.

Prerequisite(s): 1 traditional U.S. history course

Corequisite(s):

Credit: 1

..... 2999

Grades: 10, 11, 12

Offered at: AHS

**History Through Film**

This course will use film/movies as a medium to investigate the history of the United States and the World. Students are asked to explore the boundaries between history and film. Movies and film are given the same analysis and interpretation as any other sources and used as a medium to learn about history. Specific focus is on “valid” historical films, offering glimpses into the social, political, and cultural moments when they were created. Students will examine ways in which films shape and influence understanding.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2453

Grades: 11, 12

Offered at: AHS

---

**Human Geography, Advanced Placement**

Grades 9-12 (MoHS); Grades 10-12 (AHS)

AP Human Geography provides a rigorous curriculum that introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use. Students will engage in class discussions and writing assignments that demonstrate their understanding of the world and human interaction with the environment.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2212

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

**Issues of the Modern World**

This is an elective course recommended for engaged, motivated, inquisitive students who are interested in the study of current events and recent American and world history. Topics, will be discussed, explored, researched, and analyzed using readings (newspaper articles, academic journals), internet research, films (feature and documentary), broadcast news reports, and class discussions. Topics may include: modern terrorism, the modern global economy (globalization), the environment, America's "culture wars," gun control, the modern Middle East, problems and issues in American foreign policy, and more.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2978

Grades: 11, 12

Offered at: AHS

---

## Leadership

Students improve their own personal leadership abilities by taking on responsibility for planning and implementing student government proposals and activities throughout the year. Students work with homeroom representatives and class officers in fulfilling the tasks of student government. They determine issues of concern to students, conduct meetings to elicit student opinions, write policy proposals, and represent student opinions to faculty and principals. They also plan and put on various student activities such as Spirit Week, The Multicultural Fair, Black History Month, and Community Service.

Prerequisite(s):

Corequisite(s):

Credit: 1

I . . . . .	8288
II . . . . .	8287
III . . . . .	8289
IV . . . . .	8290

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

## Microeconomics and Virginia Personal Finance, Advanced Placement

In this year-long course, students will complete the curriculum for both AP Micro Economics and Virginia Personal Finance. Students will develop an understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within larger economic systems. Economic studies focus on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Personal Finance studies will focus on how individuals navigate financial decisions in an informed manner. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success.

**Note:** This course meets the economic & personal finance graduation requirement for students entering the 9th grade in 2011 and beyond.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2808

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

**Political Science / U.S. Government 211/212**

This college course teaches structure, operation, and the process of national, state, and local governments. It includes in-depth study of the three branches of the government and public policy.



Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; 6 dual enrollment college credits with PVCC

..... 2458

Grades: 12

Offered at: AHS, MoHS

**Practical Law**

This course provides the high school student with the practical legal background one needs to function as an adult. It enables the young adult to foresee and avoid legal problems and to obtain professional help when necessary. Topics covered include contracts, property, marriage, wills, civil and criminal procedure, and consumer protection.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2420

Grades: 10, 11, 12

Offered at: WAHS

**Principals of Psychology/Developmental Psychology / PSY 200/230**

The first half of this course, offered in the fall, surveys the basic concepts of psychology. It covers the scientific study of behavior, including behavioral research methods, analysis, and theoretical interpretations. Included are topics that cover physiological mechanisms, sensation/perception, motivation, learning, personality, psychopathology, therapy, and social psychology.



The second half of this course, offered in the spring, allows students the opportunity to study the development of the individual from conception to birth. It follows a life-span perspective on the development of the person's physical, cognitive and psycho-social growth.

This year-long course fulfills general education requirements for students interested in earning their Associate of Applied Science Degree in Diagnostic Medical Sonography or Nursing at PVCC.

Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; 6 dual enrollment college credits with PVCC

..... 2899

Grades: 11, 12

Offered at: MoHS

---

## **Psychology**

This course is designed to give the student an introduction to the concepts, theories, and applications of psychology. Topics covered include theories of learning, memory, sensation, perception, personality, abnormal psychology, therapy, and current issues in psychology. In addition to being an introduction to psychology, the course is also designed to equip students with skills to improve their relations with friends of both sexes, parents, and other adults. Through the study of psychology, students gain a better understanding of themselves and others, as well as an acceptance of individual differences. This course stresses reading, developing critical thinking skills, and writing as a demonstration of comprehension.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2900

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **Psychology Applications and Research**

This course provides students the opportunity to continue their study of topics introduced in AP Psychology with added emphasis on independent research and the study of current advances in the field. Students will form research groups that select one general topic (e.g., learning, developmental psychology, social psychology) each quarter to study in greater depth. They will then narrow their focus to a specific application and will conduct research using one of the methods psychologists typically employ (e.g., observation, survey, field or lab experiments.) The groups will collect data, analyze the results, and report their findings following the American Psychological Association guidelines.

Prerequisite(s): AP Psychology

Corequisite(s):

Credit: 1

..... 2911

Grades: 11, 12

Offered at: WAHS

---

### **Psychology, Advanced Placement**

This course provides an introduction to the psychological topics and principles taught in an introductory psychology class at the college level. Specific topics addressed include: the biological bases of behavior; sensation and perception; states of consciousness; learning, memory, and intelligence; language development; motivation and emotion; human development; personality theory; social psychology; abnormal psychology and methods of therapy; current issues; and applications of the discipline. Emphasis will be placed on reading and writing, evaluating and conducting research, and completing independent projects.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2930

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Sociology**

The study of sociology is designed to examine the ways people interact with one another. Sociology involves learning about relationships within groups such as the social class, relationships within social institutions such as the family, and the organization of societies. Additionally, sociology deals with varied and vital issues and social problems of society. The subject matter of sociology, therefore, is a study of man and his relationship to human groups and institutions.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2500

Grades: 10, 11, 12

Offered at: AHS, WAHS

---

### **U.S. Government and Politics, Advanced Placement**

Advanced Placement U.S. Government and Politics makes demands on a student equivalent to an introductory college course. The course covers the basic concepts, principles, and institutions of American government, the political process, and the formation and implementation of public policy.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2445

Virtual (MoHS only) ..... 2449VV

Grades: 12

Offered at: AHS, MoHS, WAHS

---

### **United States History / History 121/122**

This college course surveys United States history from its beginnings to the present.



Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 1; 6 dual enrollment college credits with PVCC

..... 2363

Grades:

Offered at: AHS, MoHS

### Virginia and U.S. Government

Subject matter cover the rationale, foundations, and operations of U.S. government. The interrelationships among the national, state, and local levels of government are presented. Economic systems are compared and other forms of government are studied.

Prerequisite(s):

Corequisite(s):

Credit: 1

Standard ..... 2440

Academic/Advanced ..... 2444

Grades: 12

Offered at: AHS, MoHS, WAHS

### Virginia and U.S. History

Students examine the historical development of American ideas and institutions from the age of exploration to the modern era. Basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history will be connected by focusing on political and economic history. Students will use social studies skills to explore the events, people and ideas that fostered a national identity and led to America's prominence in world affairs. Students will be tested at the end of this course on the Virginia and United States History standards of learning.



Prerequisite(s):



Corequisite(s):

Credit: 1

Standard . . . . . 2360

Academic/Advanced . . . . . 2358

Grades: 11

Offered at: AHS, MoHS, WAHS

---

### **Virginia and U.S. History, Advanced Placement**

This is an integrated course designed to help students develop a comprehensive view of American literature, history, and culture. This course is highly rigorous and prepares students to take AP exams. Students concentrate on reading and analyzing historical material, weighing historical evidence and interpretation, reading and analyzing works of literature, and synthesizing and evaluating information in analytical writing.



Students who do well on the AP exam receive college credit or superior placement at participating colleges.

**Note:** Students may elect to take the Standards of Learning End-of-Course tests for Virginia and United States History and English 11. A score of 2 or better on the AP exam earns a verified credit.

Prerequisite(s):

Corequisite(s):

Credit: 1

. . . . . 2319

Grades: 11

Offered at: AHS, MoHS, WAHS

---

### **Women's Studies**

Students will study history, literature, film and sociology related to Women's Studies. Students will understand the historical and modern roles and contributions of women. Students will analyze the changing issues related to women and discuss the perspectives of women. Students also will focus on women's leadership and consider solutions that will promote women leaders of a variety of perspectives.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 2991

Grades: 9, 10, 11, 12

Offered at: WAHS

---

### **World Geography**

World Geography provides a rigorous curriculum that introduces students to the study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. The course is centered on the world's peoples and their cultural characteristics, landforms, climates, economic development, migration, and settlement patterns. Spatial concepts of geography will be used as a framework for studying interactions between humans and their environments. Students will also learn about the methods and tools geographers use in their science and practice. The skills of analytical reading, writing, and research will be key components of this course and will be practiced daily.

Prerequisite(s):

Corequisite(s):

Credit: 1

Academic/Advanced ..... 2109

Honors. .... 2213

Grades: 9

Offered at: MoHS

---

### **World History I to 1500**

This is a broad survey course designed to provide each student with a historical overview and analysis of the major political, social, and economic events of the world. Students trace the major patterns of world history from the prehistoric period through the European Middle Ages. Concepts, historical trends, and cycles are emphasized.



Prerequisite(s):

Corequisite(s):

Credit: 1

Standard . . . . . 2343  
Academic/Advanced . . . . . 2346  
Honors . . . . . 2350

Grades: 9

Offered at: AHS, WAHS

---

### **World History II from 1500 to Present**

This is a broad survey course designed to provide each student with a historical overview and analysis of the major political, social, and economic events of the world. Students trace the major patterns of world history from about 1500 CE (Middle Ages) through current times.



Prerequisite(s):

Corequisite(s):

Credit: 1

Standard . . . . . 2334  
Academic/Advanced . . . . . 2338  
Honors . . . . . 2349

Grades: 10

Offered at: AHS, MoHS, WAHS

---

### **World History, Advanced Placement**

Grades 9-12 (MoHS); Grades 10-12 (AHS, WAHS)

This course is an extensive and intensive examination of global societies, social structure, and the themes and processes that have shaped our world since the Middle Ages. The students learn the analytical and writing proficiencies necessary to succeed on the Advanced Placement World History exam. Students are expected to take the AP exam. The exam fee is approximately \$89 per test. Students who do well on this test receive college credit or superior placement at participating colleges.



**Note:** This course may be taken in place of World History from 1500 to Present. Students electing this course either take the Standards of Learning test for World History from 1500 to Present or earn an AP score of 2 or better to earn a verified credit. At MoHS this course is taken in place of World History I.

Prerequisite(s): AHS: World History I

Corequisite(s):

Credit: 1

..... 2339

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

# Mathematics

**Students today require more rigorous mathematical knowledge and skills** to pursue higher education, to compete in a technologically sophisticated connected work-force, and to be informed citizens. By taking a concept-centered approach to instruction and utilizing ACPS K-12 Essential Standards, teachers help build capacity in students to make connections across content areas. This approach will help students gain an understanding of fundamental ideas in arithmetic, measurement, geometry, probability, data analysis and statistics, and algebra and functions while developing proficiency in mathematical skills.

Students will also learn to use a variety of methods and tools to compute, including paper and pencil, mental arithmetic, estimation, and calculators. Graphing utilities, spreadsheets, calculators, computers, and other forms of electronic information technology are now standard tools for mathematical problem solving in science, engineering, business and industry, government, and practical everyday affairs. Hence, the use of technology must be an integral part of teaching, learning, and assessment.

At the heart of developing the mathematical capacity of our students, Mathematics Habits of Mind and Lifelong Learner Standards, both developed by ACPS, are embedded within mathematical process goals congruent with goals set forth by the Virginia Department of Education and the National Council of Teachers of Mathematics. Therefore, courses in mathematics are designed to build students' ability to:

- analyze situations in mathematical terms; pose and solve problems based on observed situations
- select and use various types of reasoning to develop and evaluate mathematical arguments and proof
- organize and consolidate mathematical thinking through precise verbal, written, and graphical communication
- understand how mathematical ideas interconnect and build on one another to produce a coherent whole
- use representations to model and interpret physical, social, and mathematical phenomena
- evaluate and use technology appropriately as a tool to support and apply the problem solving process

## Algebra I

Algebra I develops the properties and structure of the real-number system. Content includes linear equations, functions, inequalities, polynomials, special products, graphs, and quadratic equations. Graphing calculators are used and problem-solving techniques are stressed. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.



Prerequisite(s): Standard: 8th Grade Math

Corequisite(s):

Credit: 1

Standard . . . . . 3130

Advanced. . . . . 3136

Offered at: AHS, MoHS, WAHS

---

## Algebra I, Part I

Part I is the first year course for Algebra I. This is an individualized and comprehensive course that covers the concepts and skills necessary to be successfully complete both parts of Algebra I.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

. . . . . 3131

Offered at: AHS, MoHS, WAHS

---

## Algebra I, Part II

Part II is the second year course for Algebra I. This is an individualized and comprehensive course that covers the concepts and skills necessary to be successfully complete both parts of Algebra I. Successful completion of this course will result in the student being awarded one (1) math credit, the second Math credit in this sequence.

Prerequisite(s): Algebra I, Part I

Corequisite(s):

Credit: 1

..... 3132

Offered at: AHS, MoHS, WAHS

### **Algebra II**

The development of the topics of Algebra I is continued in greater depth in Algebra II. There is a more in-depth examination of relations and functions including linear, quadratic, polynomial, radical, exponential and logarithmic functions, conic sections, and matrices. The course also includes irrational numbers, properties of radicals, systems of linear equations, and linear inequalities. There is extensive use of technology, including the graphing calculator, and emphasis is placed on problem solving. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.



Prerequisite(s): Algebra I

Corequisite(s):

Credit: 1

Standard ..... 3135

Advanced. .... 3102

Honors. .... 3104

Offered at: AHS, MoHS, WAHS

### **Algebra, Functions, and Data Analysis (AFDA)**

This course may be used to fulfill the requirements of Advanced Studies, Standard, and Modified Standard Diplomas. Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated by authentic applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, exponential, or logarithmic equations or a system of equations. The infusion of technology (graphing calculator and/or computer software) in this course will assist in modeling and investigating a transformational approach to functions and data analysis.

Prerequisite(s): Algebra I

Corequisite(s):

Credit: 1

..... 3134

Offered at: AHS, MoHS, WAHS

**College Algebra and Trigonometry**

The emphasis is on functions and their graphs, including the six trigonometric functions and their applications. After a review of functions and fundamental concepts of the real-number system, quadratic, polynomial, rational, exponential, and logarithmic functions are studied and graphed. The conics are studied in detail. Other topics studied include finding real and complex roots to polynomial equations, theory and application of logarithms, and partial fractions. The course emphasizes problem solving and the use of technology, including the graphing calculator, the CBL, and appropriate software.

Prerequisite(s): Algebra II and Geometry

Corequisite(s):

Credit: 1

Standard ..... 3171

Advanced. .... 3164

Offered at: AHS, MoHS, WAHS

**Computer Science A, Advanced Placement**

This course covers object-oriented programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction.

Prerequisite(s): Algebra II or Programming

Corequisite(s):

Credit: 1

..... 3219

Offered at: AHS, WAHS

**Computer Science Principles, Advanced Placement**



This course is for students who are interested in computing. The course is designed to be a first semester introductory college computing course. The major areas of study in the course are organized around seven big ideas, which encompass ideas foundational to studying computer science.

Full curriculum and framework are available at AP College Board. This course is a newly developed course by the College Board. This school year is the last of five pilot years; the 2016-17 school year will be the first year the AP exam will be fully accessible for all students. The AP Exam format will be similar to AP Studio Art, in that there is a portfolio component as well as a written component.

Prerequisite(s): Geometry and/or Algebra II (may be taken concurrently)

Corequisite(s):

Credit: 1

..... 3293

Offered at: AHS

---

### **ESOL Math: The Language of Mathematics**

The ESOL Math course prepares students to be successful in Algebra I by teaching the academic vocabulary of mathematics and applying this vocabulary to mathematical problem solving. Students review math concepts that serve as the foundation for algebraic thinking and apply these to real-world examples and word problems that require writing, speaking, listening and reading in English. The course is designed for students who are learning basic English and need a review of pre-Algebraic math concepts; students who have already mastered these may be placed in a sheltered Algebra I course.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 3312

Offered at: AHS

---

### **Geometry**

The properties of plane and three-dimensional figures are studied in this course. Students will learn constructions, logical and deductive reasoning, angle relationships; parallel and perpendicular line relationships, congruence and similarity of polygons, triangle relationships and inequalities, and attributes and properties of quadrilaterals. Also included are properties and attributes of polygons; right triangle theorems and relationships; applications and practical problems involving circles and chords; tangents; secants; area, volume, and surface area of three dimensional objects; drawing two dimensional figures from three dimensional objects; perspective and scale drawings; coordinate geometry; and symmetry, rotation, and reflection of an object. Technology is used to reinforce geometric concepts throughout the course.



The Geometry SOL test is given upon completion of this course. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.

Prerequisite(s): Algebra I

Corequisite(s):

Credit: 1

Standard . . . . . 3143  
 Advanced . . . . . 3145  
 Honors . . . . . 3147

Offered at: AHS, MoHS, WAHS

**Mathematical Inference and Applications (Discrete Math)**

Discrete mathematics is the mathematics of decision making. Connections between contemporary mathematics and modern society will be presented. There will be an emphasis on statistics as well as applications to business and management, social choices and decision making, information codes, patterns in growth, and patterns in art.

Prerequisite(s): Geometry and Algebra II

Corequisite(s):

Credit: 1

Standard . . . . . 3119  
 Advanced . . . . . 3120

Offered at: WAHS

## Probability and Statistics

Grades 11-12 (MoHS, Advanced only); Grade 12 (AHS, Standard or Advanced)

The course presents topics in displaying and analyzing data using different statistical measurements and testing techniques. The topics in probability include methods of counting, distribution curves, and elementary probability. Quantitative literacy is incorporated and emphasized within the course. The topics in probability and statistics are at the concrete level using manipulatives and simulations.

Prerequisite(s): Algebra II

Corequisite(s):

Credit: 1

Standard (AHS). . . . . 3190  
Advanced (AHS, MoHS). . . . . 3193

Offered at: AHS, MoHS

---

## Quantitative Reasoning / MTH 154

Presents topics in proportional reasoning, modeling, financial literacy, and validity studies (logic and set theory). Focuses on the process of taking a real-world situation, identifying the mathematical foundation needed to address the problem, solving the problem, and applying what is learned to the original situation.



Prerequisite(s): Meet dual enrollment admission requirements; Geometry and Algebra II

Corequisite(s):

Credit: 1; 3 dual enrollment college credits with PVCC

Honors . . . . . 3207

Offered at: WAHS

---

## Skills Development Math / Algebra Lab

This is an individualized and comprehensive course that covers the concepts and skills necessary to be successful in Algebra I.

Prerequisite(s):

Corequisite(s):

Credit: 1 Math elective credit each

- I . . . . . 3301
- II . . . . . 3302
- Algebra Lab . . . . . 3306

Offered at: AHS, MoHS, WAHS

---

**Statistics, Advanced Placement**

Taking Statistics in high school can help students become more informed citizens who are better prepared to recognize patterns, interpret graphs, analyze data, and make inferences to draw valuable conclusions on a daily basis. Topics for the course are grouped around four themes: exploratory analysis, planning a study, probability, and statistical inference. Within each theme, the topics stress statistical thinking and use of technology, primarily the graphing calculator and computers with appropriate software.

This course prepares students to take the Advanced Placement Statistics exam.

Prerequisite(s): Algebra II

Corequisite(s):

Credit: 1

. . . . . 3192

Offered at: AHS, MoHS, WAHS

---

**Trigonometry / Math Analysis, Honors**

This course presents students with a comprehensive study of trigonometry concepts and skills. Students will grow in mathematical communication and logic through an emphasis on application of trigonometric and algebraic functions. Technology will be utilized to explore real life applications, mathematical modeling and verification of solutions to equations and inequalities. An in-depth study of mathematical relationships includes creating and analyzing piecewise functions, composing functions, and examining relations for 1:1 and inverse characteristics. Polar coordinates and vectors are introduced in connection to future study in calculus. Real world applications and problem-based learning are utilized to enrich learning experiences beyond stated standards.

This course may be taken concurrently or consecutively with Honors Math Analysis / Pre-Calculus.

Prerequisite(s): Geometry and Algebra II

Corequisite(s):

Credit: 1

..... 3155

Offered at: AHS, MoHS, WAHS

## Calculus

The study of calculus provides a culminating study of secondary mathematics inclusive of many concepts and understandings put into motion! Many students who are pursuing careers in STEM fields find calculus a valuable stepping-stone toward further study and application of mathematics in college and beyond.

### **Applied Calculus / MTH 271**

Covers topics in applied calculus for business, life sciences, and social sciences. It includes description and application of functions, limits, derivatives, graphing, and integrals.



Prerequisite(s): Meet dual enrollment admission requirements; Pre-Calculus I / Math 163

Corequisite(s):

Credit: 0.5; 3 dual enrollment college credits with PVCC

..... 3180

Offered at: AHS

---

**Calculus AB, Advanced Placement**

This course is concerned with developing the student’s understanding of the concepts of calculus and providing experience with its methods and application. It emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Technology, especially graphing calculators, is used regularly by students to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. The topics studied in this course include functions, graphs, limits, asymptotic and unbounded behavior, continuity, concept and definition of derivative, derivative as a function, computation and applications of derivatives, slope fields, Riemann sums, interpretations and properties of definite integrals, applications of integrals, Fundamental Theorem of Calculus, and techniques of anti-differentiation.

The course prepares students to take the Advanced Placement AB Calculus exam given by ETS.

Prerequisite(s): Honors Trigonometry / Math Analysis; Honors Math Analysis / Pre-Calculus

Corequisite(s):

Credit: 1

..... 3177

Offered at: AHS, MoHS, WAHS

---

**Calculus BC, Advanced Placement**

Calculus BC will include a quick review of all topics covered in AB Calculus and sequentially will cover the additional topics not covered in the year long AB Course including parametric equations, polar curves, infinite series, L’Hopital’s Rule, and vectors. The course will also explore the rudiments of multivariable calculus and differential equations (sequential courses to BC Calculus). Similar to AB Calculus, BC is also concerned with developing the students’ understanding of the concepts of calculus and providing experience with its methods and application. This course emphasizes a multirepresentational approach to calculus with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.

Prerequisite(s): Calculus AB, Advanced Placement

Corequisite(s):

Credit: 1

..... 3178

Offered at: AHS, MoHS, WAHS

---

### **Calculus, Honors**

This course is concerned with developing the student's understanding of the concepts of calculus and providing experience with its methods and application. It emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Technology, especially graphing calculators, is used regularly by students to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. The topics studied in this course include functions, graphs, limits, asymptotic and unbounded behavior, continuity, concept and definition of derivative, derivative as a function, computation and applications of derivatives, slope fields, Riemann sums, interpretations and properties of definite integrals, applications of integrals, Fundamental Theorem of Calculus, and techniques of anti-differentiation.

This course prepares students to take the AP Exam or to enroll in AP Calculus AB the following year.

Prerequisite(s): Honors Trigonometry / Math Analysis; Honors Math Analysis / Pre-Calculus

Corequisite(s):

Credit: 1

..... 3175

Offered at: MoHS

---

### **Geometry and the Visual Arts**

Students will discover how mathematics is related to art by studying examples of works of art from cultures around the world, examining the mathematical concepts and techniques underlying these works, and using graphic design software and other software tools to create original works of art employing these ideas and techniques. A tentative list of topics to be covered includes: recursion, symmetry transformations, perspective and projections, color mixing, the golden ratio, and sequences. Examples will be drawn from Asian, African and Arabic art, as well as European art.



Prerequisite(s): Algebra I

Corequisite(s):

Credit: 2 (1 Geometry and 1 Art credit)

..... 9830

Offered at: WAHS

---

### **Math Analysis / Pre-Calculus, Honors**

This course presents many of the topics previously introduced in algebra course in a much greater depth and with more emphasis on derivation and analysis of functions. The course includes a study of the complex number system. Students will study functions inclusive of polynomial, logarithmic, exponential and rational functions. Systems of equations and matrices are explored. The concept of the limit is introduced through analysis of sequence and series. Limits of functions are introduced and applied to the development of the concept of the derivative. Basic differential calculus and applications are introduced. The course emphasizes problem-based learning problem solving and analysis by integrating the use of technology when appropriate. Real world applications and problem-based learning are utilized to enrich learning experiences beyond stated standards.

This course may be taken concurrently or consecutively with Honors Trigonometry / Math Analysis.

Prerequisite(s): Geometry and Algebra II

Corequisite(s):

Credit: 1

..... 3162

Offered at: AHS, MoHS, WAHS



**Ordinary Differential Equations / MTH 279**

Introduces ordinary differential equations. Includes first order differential equations, second and higher order ordinary differential equations with application. Also includes Laplace transforms and introduces eigenvalues and eigenvectors in solutions of systems. Designed for mathematical, physical and engineering science programs.



Prerequisite(s): Meet dual enrollment admission requirements; Vector Calculus / MTH 277

Corequisite(s):

Credit: 0.5; 4 dual enrollment college credits with PVCC

..... 3188

Offered at: AHS

**Pre-Calculus I / MTH 163**

Covers topics in algebra such as equations and inequalities, graphing and functions, exponents and logarithms, systems of equations, inequalities, linear programming, and matrices.



Prerequisite(s): Meet dual enrollment admission requirements

Corequisite(s):

Credit: 0.5; 3 dual enrollment college credits with PVCC

..... 3169

Offered at: AHS

**Vector Calculus / MTH 277**

Presents vector valued functions, partial derivatives, multiple integrals and topics from the calculus of vectors. Includes Greens theorem, Stokes theorem and the Divergence theorem. Designed for mathematical, physical and engineering science programs.



Prerequisite(s): Meet dual enrollment admission requirements; Calculus AB and/or BC

Corequisite(s):

Credit: 0.5; 4 dual enrollment college credits with PVCC

..... 3174

Offered at: AHS

# Science

**Scientific investigation and discovery** satisfies humankind's quest for knowledge and understanding in order to preserve and enhance the quality of the human experience. The National Academies of Sciences proposes that science courses support college and workforce readiness by focusing on developing skills in asking questions and defining problems, developing and using models, planning and carrying out investigations, analyzing and interpreting data, constructing explanations and designing solutions, and engaging in argument through evidence.

Courses in science will help students to achieve the following objectives:

- Develop and use an experimental design in scientific inquiry.
- Use the language of science to communicate understanding.
- Investigate phenomena using technology.
- Apply scientific concepts, skills, and processes to everyday experiences.
- Experience the richness and excitement of scientific discovery of the natural world through the collaborative quest for knowledge and understanding.
- Make informed decisions regarding contemporary issues.
- Develop scientific dispositions and habits of mind.
- Develop an understanding of the interrelationship of science with technology, engineering and mathematics.
- Explore science-related careers and interests.

High school science offerings provide students with multiple contexts in which to explore new disciplines and expand on their K-8 work through both required courses and electives. Science courses introduce complex content and support the development of critical thinking skills that are essential for student success in and beyond school as students grow as lifelong learners.

---

## **Analytical Chemistry Investigations**

This course compliments the AP Chemistry program and serves as an optional corequisite to AP Chemistry. It provides students with opportunities to focus on specialized laboratory investigations that are integral parts of the AP Chemistry course. Students will gain practical experience in laboratory techniques that will increase their ability to design and conduct scientific research. Furthermore, this course will provide instructional support to develop the critical thinking, problem solving, and communication skills required for success on the AP Chemistry exam.

Prerequisite(s): Chemistry I, Honors or Advanced

Corequisite(s): AP Chemistry

Credit: 1

..... 4422

Grades: 11, 12

Offered at: AHS

---

### **Analytical Lab Investigations**

The course provides an opportunity for students to focus on investigations across a wide range of science topics, with the goal of entering science fairs and similar competitions. Similar to a maker space focused on science, students will design, conduct and present laboratory investigations. This course is open to all students who wish to explore independent work in the science field.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 4611

Grades: 9, 10, 11, 12

Offered at: MoHS, WAHS

---

### **Anatomy and Physiology**

Anatomy and Physiology is offered to students who are interested in furthering their understanding of how an organism's tissues, organs, and systems function. Units to be covered include the brain and nervous system, respiration, the circulatory system, the actions of hormones, and mechanisms of disease. Topics are explored through discussion, numerous dissections and other laboratory experiments, and research.

Successful completion of this course fulfills the graduation requirements for science courses.

Prerequisite(s): Biology; Strong laboratory skills

Corequisite(s):

Credit: 1

Academic . . . . . 4600

Honors . . . . . 4602

Grades: 10, 11, 12

Offered at: AHS, MoHS

---

### **Animal Studies**

This course is an introduction to the world of Zoology designed for 11th and 12th grade students. Students will survey the animal world from protists through chordates. Using a comparative approach, the study of each group will emphasize diversity, anatomy, evolutionary relationships, functional adaptations, and environmental relationships. Extensive lab work, including dissections, will be an integral part of the course.

Successful completion of this course fulfills the graduation requirements for science courses.

Prerequisite(s): Biology I

Corequisite(s):

Credit: 1

Academic . . . . . 4326

Honors (MoHS only) . . . . . 4327

Grades: 11, 12

Offered at: MoHS, WAHS

---

### **Astronomy**

### First Semester: Solar System Astronomy



The first semester topics include the history of astronomy from Aristotle to the present; types of telescopes; the scientific method in astronomy; and the formation of the solar system, planets, comets, asteroids, and meteors. Laboratories for the first semester include Kepler's Law of Planetary Motion, Newton's Law of Universal Gravitation, The Moons of Jupiter, Electromagnetic Spectrum, and others.

### Second Semester: Stellar Astronomy and Cosmology

The second semester topics include solar astronomy, sunspots and sunspot cycles, spectroscopy and element abundance in stars, stellar classification and types of stars, distance indicators, binary stars, stellar evolution, white dwarfs, neutron stars, black holes, history of cosmology, the Big Bang Theory and the origin of the universe, cosmic microwave background, the expanding universe, and fate of the universe. Laboratories for the second semester include Hubble's Law, Stellar Spectroscopy, Cepheid Variables, Orbits of Binary Stars, Hertzsprung-Russell Diagram, and others.

Prerequisite(s): Meet dual enrollment admission requirements; College Algebra and Trigonometry recommended (may be taken concurrently); Advanced or Honors Physics recommended

Corequisite(s):

Credit: 1; 8 dual enrollment college credits with PVCC

..... 4651

Grades: 10, 11, 12

Offered at: AHS

---

### **Astronomy, Honors**

### First Semester: Solar System Astronomy

The first semester topics include the history of astronomy from Aristotle to the present; types of telescopes; the scientific method in astronomy; and the formation of the solar system, planets, comets, asteroids, and meteors. Laboratories for the first semester include Kepler's Law of Planetary Motion, Newton's Law of Universal Gravitation, The Moons of Jupiter, Electromagnetic Spectrum, and others.

### Second Semester: Stellar Astronomy and Cosmology

The second semester topics include solar astronomy, sunspots and sunspot cycles, spectroscopy and element abundance in stars, stellar classification and types of stars, distance indicators, binary stars, stellar evolution, white dwarfs, neutron stars, black holes, history of cosmology, the Big Bang Theory and the origin of the universe, cosmic microwave background, the expanding universe, and fate of the universe. Laboratories for the second semester include Hubble's Law, Stellar Spectroscopy, Cepheid Variables, Orbits of Binary Stars, Hertzsprung-Russell Diagram, and others.

Prerequisite(s): Algebra II, Physics (Advanced or Honors) recommended

Corequisite(s):

Credit: 1

Grades: 11, 12

Offered at: AHS, WAHS

### **Biology I**

This course increases the student's awareness of the living world. Major concepts such as cell structure and organization, metabolism, growth, reproduction, biochemistry, genetics, taxonomy, evolution, and ecology are emphasized. Laboratory experiments are used to teach conceptual themes.



Prerequisite(s): Honors: Algebra I

Corequisite(s): Advanced or Honors: Geometry

Credit: 1

Standard . . . . .	4312
Academic/Advanced . . . . .	4318
Honors. . . . .	4316

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Biology, Advanced Placement**

Advanced Placement (AP) Biology is offered to students who are interested in taking the AP Biology exam for college credit. Since it is the equivalent of a college-level course, a great deal of reading and independent learning is required. The AP content outline and laboratory experiences are followed.

Prerequisite(s): Biology I; Chemistry; Algebra II

Corequisite(s):

Credit: 1

..... 4340

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

**Biology-Ecology Cooperative**

This course combines the curriculum of Biology I and Ecology. Students will learn the concepts of Biology and Ecology using hands-on activities and labs. This course will provide students the opportunity to receive 2 science credits and an additional verified Biology credit.

Students take the 2 courses separately.

Prerequisite(s):

Corequisite(s):

Credit: 2

Grades: 10, 11, 12

Offered at: MoHS

---

**Chemistry I**

Students are introduced to basic chemical concepts including composition of matter, atomic structure, periodic table, chemical bonding, formulas and equations, reacting quantities, gas laws, and acid base theory. The investigative skills used by practicing scientists are emphasized.



Prerequisite(s): Algebra, Functions, and Data Analysis (AFDA) or Algebra II; Advanced or Honors: Algebra II

Corequisite(s):

Credit: 1

Standard (AHS, WAHS) . . . . . 4410  
Advanced . . . . . 4412  
Honors . . . . . 4414

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Chemistry, Advanced Placement**

This course is the equivalent of a noncalculus- based college freshman course. Theory is developed in the first part, descriptive chemistry and applied chemistry are developed in the second part. Principles and concepts are developed as interpretations of well-known compounds. Laboratory work is an integral part of the study.

Prerequisite(s):

Corequisite(s): Chemistry I; College Algebra and Trigonometry (or other higher math)

Credit: 1

. . . . . 4440

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Earth Science**



This course stresses the major concepts of geology, oceanography, astronomy, and meteorology. The primary objectives are to enhance the student's understanding and appreciation of earth's systems and, through this knowledge, to encourage students to become responsible citizens. Laboratory experiments are used to teach conceptual themes.



Prerequisite(s):

Corequisite(s):

Credit: 1

Standard . . . . . 4212  
Academic/Advanced . . . . . 4215  
Honors . . . . . 4216

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Ecology**

Ecology is a laboratory science from the biology discipline dealing with the interrelationships of living things and their environments. Major topics include energy flow, bio-geochemical cycles, biotic and abiotic influences on communities of living things, population dynamics, and an in-depth study of aquatic and terrestrial ecosystem pollution.

Successful completion of this course fulfills the graduation requirements for science courses.

Prerequisite(s): Biology

Corequisite(s):

Credit: 1

Standard. . . . . 4102  
Advanced . . . . . 4106

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Environmental Science, Advanced Placement**

AP Environmental Science is offered to students who are interested in taking the AP Environmental Science exam for college credit. The AP content outline (available from College Board) is closely followed in this course. Topics covered in the course include: interrelationships with the natural world, global changes and their consequences, human population dynamics, renewable and nonrenewable resources, and environmental ethics.

Prerequisite(s): Biology I; Algebra I

Corequisite(s):

Credit: 1

..... 4270

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **ESA BIO of Environment / BIO 107**

Presents the basic concepts of environmental science through a topical approach. Includes the scientific method, population growth and migration, use of natural resources and waste management, ecosystem simplification recovery, evolution, biogeochemical cycles, photosynthesis and global warming, geological formations, atmosphere and climate, and ozone depletion and acid deposition.



Prerequisite(s):

Corequisite(s):

Credit: 1; 4 dual enrollment college credits with PVCC

Honors ..... 4219DE

Grades: 11

Offered at:

---

### **ESOL Science: The Language of Life Sciences**

This course provides students with a strong foundation in academic vocabulary and key concepts across the life sciences. Students strengthen skills in the domains of reading, writing, speaking and listening to bolster knowledge of scientific concepts, increase English language proficiency, and demonstrate critical thinking skills. Students connect previous scientific learning in their native languages to the concepts and academic vocabulary of science in English. Content is delivered through hands-on, visual, experiential and interactive lessons typically culminating in performance-based assessments.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 4612

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Geology**

Geology offers a foundation in the study of the geologic processes that have formed our world and the scientific skills used to observe and interpret it. In this laboratory course, students will learn to use and apply the vocabulary and technology of the geologist and earth scientist. The following topics will be covered: longitude and latitude, topographic maps, Earth's structure, plate tectonics, minerals, rocks, Virginia's geologic provinces, natural resources, weathering erosion, soils and natural resources, and comparative planetary geology.

Prerequisite(s):

Corequisite(s):

Credit: 1

Standard ..... 4241

Academic/Advanced ..... 4240

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Geology-Earth Science Cooperative**

This course combines the curriculum of Geology and Earth Science. Through this course, students will have the opportunity to earn 2 science credits and a verified Earth Science credit.

Students take the 2 courses separately.

Prerequisite(s):

Corequisite(s):

Credit: 2

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Physics C, Advanced Placement**

This is a single-year course that teaches both AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism. AP Physics C: Mechanics is equivalent to a one-semester, calculus based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. AP Physics C: Electricity and Magnetism is a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course.

Prerequisite(s): Physics I, Advanced Placement (may be taken concurrently)

Corequisite(s): Calculus AB, Advanced Placement

Credit: 1

..... 4571

Grades: 11, 12

Offered at: MoHS, WAHS

---

### **Physics I**

This course focuses on the forces and energy relationships in the physical world. Topics include measurement, motion, work, gravity, molecular kinetic theory, waves, light, electricity, and circuitry. General principles are stated in mathematical terms and students are expected to use the principles to solve problems. The investigative skills used by practicing scientists are emphasized.

Prerequisite(s):

Corequisite(s): Standard: Algebra, Functions, and Data Analysis (AFDA) or Algebra II; Advanced: College Algebra and Trigonometry (or higher), Chemistry recommended

Credit: 1

Standard (AHS, WAHS) . . . . . 4510  
Advanced . . . . . 4512

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Physics I, Advanced Placement**

This is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Can be taken as a first-year physics course.

Prerequisite(s):

Corequisite(s): College Algebra and Trigonometry (or higher); Chemistry recommended

Credit: 1

. . . . . 4572

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Physics II, Advanced Placement**

This course is the equivalent to a secondsemester college course in algebra-based physics. It covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics.

Prerequisite(s): Honors Math Analysis; Physics I

Corequisite(s):

Credit: 1

..... 4573

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**STEM Pathway Capstone**

This will be the culmination class for students in the STEM pathway. Students have the option of working in an internship class or working on a culminating project incorporating the previous course work.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9934

Grades: 12

Offered at: AHS

# Special Education Programs & Services

Albemarle County Public Schools is committed to providing all children with opportunities to benefit from a public education. Special education programs and services are available to county residents who have children with special educational needs. These programs and services are provided for children with disabilities whose second birthday falls on or before September 30 through the age of 21 years. Each student receives special education services designed to meet his or her individual needs. These programs are discussed and planned by school personnel and the parents and student involved. Often instruction is carried out both in regular and special education classrooms.

Each special education student's progress is reviewed at least yearly and his / her need for special services is reassessed at a minimum of every three years. Special education programs and services are provided by trained personnel in the following areas of disability as defined by federal and state law: Autism, deaf-blindness, developmental delay, emotional disability, hearing impairment (including deafness), intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, or visual impairment (including blindness).

**Contact: Kevin Kirst**, Director of Special Education and Student Services 434-296-5885

## Special Education Diplomas

The Special Education Program is provided for students who have been identified with a disability and found eligible for special education services. Assistance is provided using various delivery models of instruction. In addition to the Advanced and Standard Diploma, students with disabilities who receive special education services have available to them additional diploma options.

### Modified Standard Diploma <sup>1</sup>

The Modified Standard Diploma program is intended for certain students at the secondary level who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. For details about Modified Standard Diploma, see the Graduation Requirements section of this book.

<sup>1</sup>. *Students who entered 9th grade for the first time prior to 2013-14*

### Special IEP Diploma

A special diploma (called IEP or Individualized Education Program Diploma) is awarded to identified students with disabilities who require special education services and have completed the requirements of the Individualized Educational Program.

## Special Education Course Delivery Models

### Consultation/Monitor

The Special Education Department offers support to students in mainstream classes through consultation with regular education teachers, monitoring of the student's performance, and direct assistance on an as-needed basis.

### **Study Skills**

Direct assistance is available for a variety of student needs including the following: test-taking, homework and make-up work, project/research paper development, and organization and study skills. This class is designed for students in creditbearing classes.

### **Collaborative Classes – Credit**

Regular and special education teachers work together to teach core subjects.

### **Departmentalized Model/Self-Contained Core Classes – Credit**

These classes are taught at the standard level by special education teachers. They are intended for students with significant levels of need such that they would not be successful in collaborative classes. In order for students to be enrolled in these departmentalized classes, need and placement must be documented through the IEP process. Small group and/or individualized instruction is provided in a setting where several content areas are being taught simultaneously. Students in these classes take the designated SOL tests, if appropriate.

### **Departmentalized Model/Self-Contained Elective Classes – Credit**

These classes are taught by special education teachers. They are intended for students with significant levels of need such that they would not be successful in collaborative classes. In order for students to be enrolled in these departmentalized classes, need and placement must be documented through the IEP process. Small group and/or individualized instruction is provided in a setting where several content areas are being taught simultaneously.

## **Special Education Classes**

---

### **Algebra I, Part I**

Part I is the first year course for Algebra I. This is an individualized and comprehensive course that covers the concepts and skills necessary to be successfully complete both parts of Algebra I. If a student with disabilities is eligible for credit accommodations, successful completion of this course will result in the student being awarded one (1) math credit.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:

..... 3131C



Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Algebra I, Part II**

Part II is the second year course for Algebra I. This is an individualized and comprehensive course that covers the concepts and skills necessary to be successfully complete both parts of Algebra I. If a student with disabilities is eligible for credit accommodations, successful completion of this course will result in the student being awarded one (1) math credit, the second Math credit in this sequence.

Prerequisite(s): Algebra I, Part I

Corequisite(s):

Credit: 1

Levels:  
..... 3132C

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**Basic Computer Skills**

Students will learn basic keyboarding and introductory typing skills as well as proper typing technique, basic typing position, posture, and practice key stroking, spacing, return, and other typing skills. Students will also learn basic computer and printer set up and how to use computer programs such as word processing, PowerPoint, and spreadsheets in order to gain skills needed to secure employment as members of a global community and economy.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:  
..... 7874

Grades:

Offered at: AHS, MoHS

---

## Introduction to Culinary Arts

This class is designed to introduce students to career options in the food service industry as well as to provide instruction in culinary techniques. This entry-level course provides an overview of the culinary industry and career options through work-study placement. Class time is used for teaching new concepts, reinforcing important skills, and assisting Culinary Arts II students with catering activities. Students who are successful in this class may have the option to take Culinary Arts I the following year.



**Note:** Students must provide their own transportation to and from their work study site, if applicable.

Prerequisite(s):

Corequisite(s):

Credit: 3

..... 8250

Grades: 10, 11, 12

Offered at: CATEC (available to all students)

---

## Math Skills

This class is designed for students with special needs working towards a Modified Standard Diploma. The course addresses the objectives found in the numeric assessment including early algebra skills, basic geometry, statistics, probability, and more.

**Note:** This course does not count for the required math credit.

Prerequisite(s): Math 8

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7859

Grades: 9, 10

Offered at: AHS, MoHS

---

## Personal Living and Finance

This course gives instruction in the skills needed to manage personal finances and make sound financial decisions. This course serves as a math credit for the Modified Standard Diploma.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:  
..... 7819

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Reading Skills**

This course is offered for students whose reading ability is significantly below grade level. It is designed to develop fundamental reading skills. This course is taken along with and not in place of English. Students should be placed in this class according to their individualized weaknesses as documented through the IEP process.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:  
..... 7803

Grades:

Offered at: MoHS

---

### **Study/Organizational Skills**

Students are supported in reading, writing, spelling, grammar, language, and vocabulary. They will investigate effective methods of studying in order to improve their academic performance. A percentage of class time is devoted to applying these skills to core subjects.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:	
9 . . . . .	7847
10 . . . . .	7846
11 . . . . .	7850
12 . . . . .	7853

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

## **Special (IEP) Diploma / Self-Contained Functional Classes**

These classes are designed to assist students in improving and maintaining a foundation of basic skills and knowledge applicable to practical life experiences. In addition, a heavy emphasis is placed on providing students with vocational training and employment skills. All or some of the following courses are taken to fulfill the requirements of the IEP diploma. Only special education students may earn elective credit for these courses.

### **Community Based Instruction Program (CBIP)**

This program is designed for students with significant disabilities in need of intensive life-skills instruction provided in a self-contained setting. The focus is on functional academics, life skills, leisure skills, vocational skills, and social skills both at home and in the community. Instruction within this program may be supplemented with choices made from other areas of the program of studies. These choices should be related to the student interests and as deemed appropriate through the IEP process. Students successfully completing this program receive a Special (IEP) diploma. Enrollment in the Post-High Program is a possible extension of the CBIP program.

Prerequisite(s):

Corequisite(s):

Credit: Non-Credit

Levels:	
. . . . .	1046

Grades:

Offered at: AHS, MoHS, WAHS

### **Community Life Skills**

Students are taken into the community to practice essential life skills that will be needed after high school. This model permits individuals to practice academic skills in a variety of community settings. Students are exposed to community services available after high school and are trained to use alternative methods of transportation.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7814

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Education For Employment I**

Students explore reasons for working, and examine their vocational interests and the role that attitudes and behaviors play in success or failure on the job. Students become familiar with the types of jobs available and the skills needed to perform them. (CTE Code: 9085)

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7876

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Education for Employment II**

This course is a continuation of "Education For Employment I." It is designed to support students in jobs in the community. Increased emphasis is placed on the skills needed to maintain successful job performance and to improve vocational opportunities. (CTE Code: 9087)

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7877

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Functional English**

This course emphasizes language arts skills in reading, writing, and listening related to practical life and vocational experiences.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

..... 7840

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Functional Math**

This course focuses on the basic operations of math in a consumer and life-skills setting. Review and remediation are provided in basic skills and money management is stressed.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7841

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Functional Science**

This class explores basic science topics in the areas of earth science, biology, and physics as they relate to the students.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7861

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Functional Science II**

This class explores basic topics in science as related to students. Areas of focus are biology and ecology.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7863

Grades: 9, 10, 11, 12

Offered at: MoHS

---

### **Functional Social Studies**

This class focuses on local and national issues to prepare students to be positive and productive members of their communities. History, geography, and government are considered in combination.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7837

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

**Health / Recreation**

This course focuses on health related issues such as mental health, first aid, tobacco, alcohol, and drugs, diseases, family life, exercise, and leisure.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7844

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

**Legal Issues**

This course provides students with the practical legal background one needs to function as an adult. It enables the young adult to foresee and avoid legal problems and to obtain professional help when needed.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit

Levels:

..... 7842

Grades: 9, 10, 11, 12

Offered at: MoHS

---

**Serve Safe**

Students in this course will learn the basic requirements needed to work in a restaurant. At the end of the course, students who pass the "Serve Safe: Essentials Examination" will have an industry accredited endorsement that can help them obtain entry level employment in the food services industry.

Prerequisite(s):



Corequisite(s):

Credit: 1

Levels:

..... 7893

Grades: 9, 10

Offered at: AHS

---

### **Work Study**

This program provides vocational training and transitional assistance. Vocational counseling, help with job training/ placement, and job monitoring and followup are provided for students identified as appropriate through the IEP process.

Prerequisite(s):

Corequisite(s):

Credit: 1 Elective Credit (Pass/Fail)

Levels:

..... 7878

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Writing Skills**

This course is offered for students whose writing skills are significantly below grade level. It is designed to develop fundamental writing skills. This course will focus on improving different types of writing and the writing process itself. This course is taken along with and not in place of English. Students should be placed in this course according to their individual growth areas as documented through their IEP process.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:

..... 7801

Grades:

Offered at: MoHS

# World Languages

**Languages are at the heart of what makes us human:** expressing thoughts and ideas, making new friends, and learning about the world. We've always known that learning other languages helps us to meet new people and explore new places., and now science tells us that being multilingual also improves attention, creativity, problem solving, self-control, and organization. Multilingual students are better prepared to succeed in a global economy, connect across cultures, and be the problem-solvers our communities need to meet their greatest civic, social, and economic potential. As a result of their study in the world languages program students will:

- Improve their communication skills across all languages;
- Enhance their cultural understanding of themselves and others;
- Expand their access to information; and
- Gain a global perspective.

## French

---

### French I

Students will learn to listen, speak, read, and write in the language through a study of cultures that use the language as part of their heritage. Students will learn basic vocabulary and essential grammar to communicate in simple sentences and navigate real-world experiences. Students will practice basic literacy and gain insight into the way of life of cultures associated with the language.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5114

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### French II

This course continues to build on skills learned in the first year of the language. Students continue to work towards proficiency in all five-language skills: listening, reading, writing, studying culture, and a special emphasis on speaking.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5124

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **French III**

Conducted almost entirely in the target language, this course refines speaking, reading, and writing skills as it emphasizes vocabulary building. There is also intense grammar work in preparation for the standardized tests that are encountered in the upper levels of the target language. Culture, geography, and history are included.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5134

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **French IV, Honors**

This class is conducted exclusively in the target language. As an honors course, it places great responsibility for progress on the student. Students are expected to engage in self-instruction, independent work, readings, projects, and research. Emphasis is on communication skills and competency in the language. Literature and culture are studied and grammar is reviewed. Students are prepared for the SAT II Test.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5140

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **French Language and Culture, Advanced Placement**

The purpose of this class is to prepare students to take the Advanced Placement test for college credit. The emphasis is on listening to native speakers, reading literature intended for native speakers, writing compositions several paragraphs in length, and orally communicating facts and ideas. A thorough review of grammar is an integral part of this course.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5170

Grades: 12

Offered at: AHS, MoHS, WAHS

## **German**

---

### **German I**

Students will learn to listen, speak, read, and write in the language through a study of cultures that use the language as part of their heritage. Students will learn basic vocabulary and essential grammar to communicate in simple sentences and navigate real-world experiences. Students will practice basic literacy and gain insight into the way of life of cultures associated with the language.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5210

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**German II**

This course continues to build on skills learned in the first year of the language. Students continue to work towards proficiency in all five language skills: listening, reading, writing, studying culture, and a special emphasis on speaking.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5220

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**German III**

Conducted entirely in the target language, this course refines speaking, reading, and writing skills as it emphasizes vocabulary building. There is also intense grammar work in preparation for the standardized tests that are encountered in the upper levels of the target language. Culture, geography, and history are included.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5230

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**German IV, Honors**

This class is conducted exclusively in the target language. As an honors course, it places great responsibility for progress on the student. Students are expected to engage in self-instruction, independent work, readings, projects, and research. Emphasis is on communication skills and competency in the language. Literature and culture are studied and grammar is reviewed. Students are prepared for the SAT II Test.

German IV has an AP option.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5240

Grades: 11, 12

Offered at: AHS, MoHS, WAHS

---

### **German Language, Advanced Placement**

This class prepares students to take the Advanced Placement test for college credit. The emphasis is on listening to native speakers, reading literature intended for native speakers, writing compositions, and communicating orally. A thorough review of grammar is an integral part of this course.

Prerequisite(s): German IV

Corequisite(s):

Credit: 1

..... 5250

Grades: 12

Offered at: AHS, MoHS, WAHS

# Greek

---

## Greek I

A quick-paced acquisition of reading skills and vocabulary (particularly scientific terminology) in Greek is central to this course. This course will engage all learners in studies of ancient Greek Language, Greek history, philosophy, mythology, art, and architecture emphasizing cross-discipline connections to these subject areas. Students will create and expand partnerships using the interdisciplinary connections that this course will emphasize.

Prerequisite(s): Latin is recommended, but not required

Corequisite(s):

Credit: 1

Academic . . . . . 5608

Grades: 9, 10, 11, 12

Offered at: AHS

# Japanese

---

## Japanese I

Students will learn to listen, speak, read, and write in the language through a study of cultures that use the language as part of their heritage. Students will learn basic vocabulary and essential grammar to communicate in simple sentences and navigate realworld experiences. Students will practice basic literacy and gain insight into the way of life of cultures associated with the language.

Prerequisite(s):

Corequisite(s):

Credit: 1

. . . . . 5910

Grades: 9, 10, 11, 12

Offered at: AHS

---

## Japanese II

Continued emphasis is given to speaking, listening to, reading, and writing the language, as well as to studying the national culture.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5920

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Japanese III**

Continued emphasis is given to speaking, listening to, reading, and writing the language as well as to studying the national culture.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5931

Grades: 9, 10, 11, 12

Offered at: AHS

---

### **Japanese IV, Honors**

This course will provide a learning community to further improve student's proficiency in Japanese reading and listening comprehension and writing and speaking skills. It especially focuses on speaking skills using various topics.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5940

Grades: 9, 10, 11, 12

Offered at: AHS



# Latin

---

## Latin I

Through elementary readings and sentences, students learn how the Latin language operates and how English grammar and vocabulary stem from it. Students learn the inflections, rules of syntax, and vocabulary needed for the comprehension and translation of simple Latin stories. Other activities include English to Latin translation, both oral and written; word study (derivatives and formation of words); and discussion of Roman civilization and mythology.

Prerequisite(s): Good knowledge of English grammar

Corequisite(s):

Credit: 1

..... 5310

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

## Latin II

In the first half of Latin II, students review Latin I (if needed). Stories about Roman life and customs are translated in the second half of Latin II. Emphasis on vocabulary and word study is continued and an understanding and appreciation of the history and civilization of Rome is gained through various readings.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5320

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

## Latin III

Students will read selections from various texts including Pliny, Aulus Gellius, Apuleius and/or passages in Medieval Latin. Emphasis is placed on acquiring an understanding of Roman culture and an appreciation of Roman literature and on developing an increased English vocabulary through observing derivations. Studies in rhetoric and classical philosophy provide students with a valuable background for collegiate scholarship.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5330

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Latin IV, Honors**

This course provides an in-depth study of the poetry of Virgil, Ovid, Catullus, Horace, and/or Martial. Mythology, Roman history, poetic devices, and linguistic forms peculiar to poetry are studied.

This course may be offered in alternate years.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5340

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Virgil, Advanced Placement**

The purpose of this class is to prepare students to take the Advanced Placement test for college credit.

Prerequisite(s): Latin IV

Corequisite(s):

Credit: 1

..... 5371

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

## Spanish

---

### **Spanish Culture and Conversation**

This course will explore cultural topics for students studying the Spanish language. Students will develop and hone communication skills through the study of highly relevant cultural themes, such as immigration, the environment, the arts, and contemporary daily life. Through the use of primary, authentic sources, students will develop their oral, written, auditory and reading communication skills. This course is designed to be, above all, a conversation-based class with the aim that students increase their overall fluency throughout the year while engaging in personally relevant topics of study.

Prerequisite(s): Spanish III (or the equivalent)

Corequisite(s):

Credit: 3

..... 5507

Grades: 9, 10, 11, 12

Offered at: WAHS

---

### **Spanish I**

Students will learn to listen, speak, read, and write in the language through a study of cultures that use the language as part of their heritage. Students will learn basic vocabulary and essential grammar to communicate in simple sentences and navigate real-world experiences. Students will practice basic literacy and gain insight into the way of life of cultures associated with the language.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5514

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Spanish II**

This course continues to build on skills learned in the first year of the language. Students continue to work towards proficiency in all five-language skills: listening, reading, writing, studying culture, and a special emphasis on speaking.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5525

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Spanish III**

Conducted almost entirely in the target language, this course refines speaking, reading, and writing skills as it emphasizes vocabulary building. There is also intense grammar work in preparation for the standardized tests that are encountered in the upper levels of the target language. Culture, geography, and history are included.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5531

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Spanish IV, Honors**

This class is conducted exclusively in the target language. As an honors course, it places great responsibility for progress on the student. Students are expected to engage in self-instruction, independent work, readings, projects, and research. Emphasis is on communication skills and competency in the language. Literature and culture are studied and grammar is reviewed. Students are prepared for the SAT II Test.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5540

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

### **Spanish for Fluent Speakers I**

Emphasis will be placed on literacy in reading and writing. Students will learn the phonetic and verb systems and practice with level-appropriate texts and vocabulary lists as determined by diagnostic assessment.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5518

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS

---

### **Spanish Language, Advanced Placement**

This class is to prepares students to take the Advanced Placement test for college credit. The emphasis is on listening to native speakers, reading literature intended for native speakers, writing compositions several paragraphs in length, and orally communicating facts and ideas. A thorough review of grammar is an integral part of this course.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5570

Grades: 10, 11, 12

Offered at: AHS, MoHS, WAHS

**Spanish Literature, Advanced Placement**

This AP Spanish Literature course is comparable to a third-year college introduction to Hispanic literature course. The required reading list of literary significance represents various historical periods, literary movements, genres, geographic areas, and groups within the Spanish-speaking world. The course will help students to interpret and analyze literature in Spanish.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 5571

Grades: 12

Offered at: AHS, WAHS

## Enrichment Opportunities

Consider these opportunities for enrichment, learning support, and expanded career and continuing education. When you consider a course or a program, think about the college and career readiness skills that it offers beyond what seems to be the career pathway. **The Partnership for 21st Century Skills has identified Learning and Thinking Skills for College and Career Readiness.** As much as students need to learn academic content, they also need to know how to be life-long learners and how to make effective and innovative use of what they know throughout their lives. Learning and Thinking Skills are comprised of: Critical Thinking and Problem Solving Skills; Communication Skills; Creativity and Innovation Skills; Collaboration Skills; Information and Media Literacy Skills; and Contextual Learning Skills.

- [Arts and Letters Pathway](#).
- [AVID \(Advancement Via Individual Determination\)](#).
- [CORE+](#)
- [Independent Study](#).
- [STEM Pathway](#).
- [Teaching Fellows Program](#)

### Arts and Letters Pathway

The Arts and Letters Pathway, offered at Albemarle and Western Albemarle high schools, provides opportunities for Fine Arts students to gain additional recognition, rigorous experiences, and college and career skills. The Pathway enables students to choose among several areas of concentration and, in addition to course study, students participate in internships (or mentorship), job sharing/shadowing, and a capstone project during their high school career. Students are eligible to enter the Pathway in either 9th or 10th grade and should speak with their counselor to learn more about this opportunity.

[Albemarle High School Arts and Letters Pathway »](#)

[Western Albemarle High School Arts and Letters Pathway »](#)

### AVID (Advancement Via Individual Determination)

AVID is a college preparatory support program for students wishing to enter a four-year college.

Students in AVID focus on college-level entry skills, academic survival skills, study skills, communication skills, and PSAT/SAT preparation. The writing process is an integral component of the program. Tutorial assistance is provided within the AVID class to support and extend students' efforts in rigorous course work.

Motivational activities, guest speakers, and field trips further enhance the course. Students must apply for the program through their school counselor.

---

**AVID**

AVID 9 and 10 are designed with a focus on organization and academic skills to help students transition into high school and to be successful in rigorous college preparatory classes. AVID 11 continues to build on academic skills, but the focus changes to college readiness. Students review career goals and begin to design education plans that involve college exploration, test preparation, and financial aid awareness. AVID 12 begins the transition to post-secondary educational planning. Students focus on taking the SAT/ACT, exploring college, and completing college and financial aid applications. Students in AVID 12 must have completed a previous AVID class.

Prerequisite(s): Desire to go to college

Corequisite(s):

Credit: 1

Levels:

9th . . . . .	9815
10th . . . . .	9816
11th . . . . .	9817
12th . . . . .	9818

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

---

**AVID Tutor**

AVID Tutor is an elective course for students wishing to be tutors in the AVID elective program. Students will tutor 5-7 AVID students twice per week during the tutorial portion of the AVID elective class and assist the teacher in providing academic and organizational skills to students. The tutors are expected to be able to help in at least three academic subjects in which they have been successful at the Honors or Advanced level. Tutors will receive instruction and training using the inquiry method that encourages higher level thinking.

Prerequisite(s): Two successful years of AVID

Corequisite(s):

Credit: 1

Levels:

. . . . .	9813
-----------	------

Grades:

Offered at: AHS, MoHS



## **CORE+**

---

### **CORE+**

CORE+ is a full year, full-credit skills based class designed to help support student achievement in the core areas. Small class size allows individual attention to student needs in the areas of reading, vocabulary, spelling, writing skills, foundational math skills, and research skills. The course includes career, college and training exploration and some real-world experiences in those areas, as appropriate for the students in the class. These experiences may include college visits, completion of job applications, practice with interviewing, and strengthening of selfadvocacy skills. CORE+ may be taken in consecutive years.

Prerequisite(s):

Corequisite(s):

Credit: 1

..... 9821

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

## Independent Study

---

### Independent Study

Independent study provides the opportunity for students to investigate a topic of personal interest that is outside the scope of current course offerings. Mentors for independent study can be school faculty or community members. Students may orient independent studies toward research, special experiences, or performance. Students submit a proposal to be considered for independent study. The proposal should include a commitment from a mentor and a plan for carrying out the independent study. Proposal information is available in the school counseling office or online at the Gifted Program website.

Prerequisite(s): Teacher recommendation and proposal approval

Corequisite(s):

Credit: 1 (Pass/Fail grading)

Levels:

..... 9930

Grades: 9, 10, 11, 12

Offered at: AHS, MoHS, WAHS

## STEM Pathway

Albemarle High School has designed a new academic pathway for students: the STEM Pathway. In addition to selecting courses in such areas as engineering, technology, entrepreneurship, robotics, and computer science, students also will have access to related course offerings at CATEC, which will include computer and medical sciences and the building trades. Students will be able to enroll in the STEM Pathway during their freshman and sophomore years. [Learn more about Albemarle High School's STEM Pathway »](#)

 [Class Requirements & Offerings »](#)

 [Frequently Asked Questions »](#)

# Teaching Fellows Program

---

## Teaching Fellows Program

This program is designed for juniors and seniors who are interested in working with students with disabilities. Each teaching fellow will be responsible for assisting a special needs student in an elective class. Responsibilities include not only assisting but also direct teaching and modifying assignments, when needed, to fit the student's needs in order to promote success or mastery. Teaching fellows become a mentor, teacher, and friend.

Prerequisite(s):

Corequisite(s):

Credit: 1

Levels:

..... 9921

Grades: 11, 12

Offered at: AHS, WAHS

# Course Credit Guidelines

## Add/Drop Procedures

Course selection for the upcoming year is an opportunity for each student to think carefully about interests, achievement, and educational and career goals. Give very serious consideration to this registration process. Research indicates that college success is strongly related to the level of difficulty of high school courses.

Teacher recommendations for course selection and placement are based on students' interests, ability, and performance. School counselors use these recommendations to assist each student in planning a program of study and selecting of courses for the next school year.

School counselors start meeting with students/families beginning in the second semester of the academic year. During this meeting, counselors review teacher recommendations, student requests, and assist in selecting courses for the upcoming academic year, in addition to revisiting the student's career plan. Parents/guardians are strongly encouraged to attend these meetings.

The Recommendation/Registration Forms are brought home for parental review and signature and returned to the school counselor within three (3) days of the planning conference. After the submission of the registration form, all requests for schedule changes must be made prior to the end of the current school year.

It may not be possible to accommodate requests for changes.

Credits cannot be earned for courses entered after ten (10) school days have passed for year-long classes, and five (5) school days have passed for semester classes.

Other considerations:

- Due to budget and staffing guidelines, course selections are finalized by the end of the preceding school year.
- Selected courses may be offered during zero period, which meets before school. Students who register for these courses must provide their own transportation.
- A course is offered only if enough student requests support that course.
- Many courses list prerequisites for enrollment.
- Electives: alternate choices are made, as the school reserves the right to assign students the alternate choice if necessary or if scheduling conflicts occur.
- Corrections to student schedules must take place on or before the 5th day of the semester for semester-long courses and on or before the 10th day for year-long courses, to a prevent penalty or notation on the student's transcript.

- **Added Classes:** Classes may only be added under extenuating circumstances and must take place on or before the 5th day of the semester for semester-long courses and on or before the 10th day for year-long courses.
- **Dropped Classes:** Classes dropped after the 5th day of the semester for semester-long courses and after the 10th day for year-long courses but before the 2nd week after the 1st interim period will have a "W" (withdraw) noted on the transcript. The "W" is not factored into the GPA. Permission of the Principal is required.
- Under extenuating circumstances, exceptions may be considered by the Principal for a class to be dropped after the above dates. A withdrawn failure (WF) is recorded on the student's transcript. The withdrawn failure (WF) is included in the GPA calculation.
- An appeal of this policy may be considered by the Principal for the student to receive a Withdrawn (W) on their transcript and not have the course included in the GPA calculation.
- Dual Enrollment/College courses follow the college

## **Repeating a Course**

All courses taken and grades earned are recorded on the transcript, including courses retaken. However, only the highest grade is calculated in the GPA.

## **Loss of Credit**

Loss of credit occurs when the student fails to meet attendance requirements. Each time loss of credit occurs, the student, parent/guardian, and teacher is informed in writing. No Credit (NC) appears where the grade is listed. The grade is not included in the calculation of the GPA.

## **Translation of Pass/Fail Grades**

Students receiving a "Pass" in a course designated as pass/fail are credited with completion of the course, but the grade from such a course is not included in the calculation of the GPA. Students receiving a "Fail" in a pass/fail course receive a grade point of 0, which is included in calculations of the GPA.

## **Transcript Evaluation of Foreign Study Grades**

Transcripts of foreign study for students transferring for the first time require evaluation to determine standard units of credit that may count toward graduation. In order for foreign records to be considered official, they must be received sealed by the Albemarle County Public Schools, International, and ESOL Office from the foreign school. Documentation must include:

- courses;
- grades and a grading scale; and

- the number of minutes in a class, the number of times each class meets weekly, and the number of weeks in a school year.

Evaluation must be completed and standard units of credits awarded within the first semester of enrolling in an Albemarle County school. The responsibility for obtaining clarification from the foreign site rests with the parents and students.

## **Attendance**

School attendance is critical to academic achievement and preparing students for the world of work and personal success. Each parent or guardian having charge of a child within the compulsory attendance age is responsible for the child's regular and punctual attendance at school as required under provisions of state law.

## **Class Absences**

Absences are recorded by individual classes, not by school day. The principal has the discretion to deny credit for the course to a student who missed more than 8 instructional blocks of a 1-credit course (1/2 of the course). A note that includes the date(s) of absence(s) and reason for absence should be sent to the school upon the student's return. All notes are retained for the use of the Attendance Committee. Should an appeal be necessary, students must submit an attendance appeal to the Appeals Committee beginning with the first absence over the limit.

## **Pre-Arranged Absences**

Requests for extended absence because of travel, college visits, etc., should be submitted in writing prior to the absence. The dates to be missed and the nature of the absence should be included in the requests. Vacations and appointments should be scheduled outside of class time whenever possible. Pre-arranged absences do count toward absences for attendance.

## **School-Related Absences**

Absences that result from school-related activities do not count toward absences for attendance. These include but are not limited to the following: field trips, homebound instruction, sport activities, guidance or group meetings, late bus.

A school-related absence includes participation in a regional, state, and/or national competition in an activity that is not offered by the school. The activity fosters the development of the student's physical, academic, performing, or exhibition art talents, which is the culmination of a year's participation, and the student's participation reflects favorably on the school and the community.

## **Out-of-School Suspension**

After the third calendar day of absences resulting from out-of-school suspension, days of subsequent suspension count against the limit of absences for earning credit. The Attendance Committee gives special attention to these absences and may withhold a final decision on loss

of credit until the end of the semester or the current school year, as appropriate. During this time, the student's behavior is monitored to assess progress.

## **Early Dismissal**

If a class is missed due to early dismissal, it is considered an absence. As noted previously, absences are recorded by individual classes not by school day. Three early dismissals equals an absence in the applicable class(es).

## **Tardy to Class**

An absence is assigned each time a student is tardy to class three times during a semester. These absences do count toward absences for attendance and possible denial of credit.

## **Make-up Work**

Students who have been absent or are suspended are responsible for any work missed. See student handbook for details.

## **Appeals Process**

Loss of credit may be appealed to the School Attendance Committee. The principal makes decisions regarding loss of credit. Any decision to deny credit or promotion may be appealed to the Superintendent or her designee for final disposition.

## **Advanced Placement (AP) Examinations**

AP Exams are administered each year in May and represent the culmination of college-level work in a given discipline in a secondary school setting. Rigorously developed by committees of college and AP high school faculty, the AP Exams test students' ability to perform at a college level. Students who perform well can receive course credit and/or advanced standing at thousands of universities worldwide. For more information about AP Exams, including preparation, dates and fees, visit the [College Board's AP Central site](#).

## **Exams**

Exams are a valuable cumulative learning experience for all students. Exams are designed to cover the objectives of the curriculum; the actual design of the exam is the instructor's professional decision. Exams are scheduled each semester. All year-long courses have exams at mid-term and at the end of the year. Exams count 20% of the grade.

Some courses are piloting a program in which the final exam is replaced by a culminating assessment. Students in these classes are not required to attend the final exam period, because culminating assessments will take place prior to exam days.

## **Exam Exemptions**

As an incentive for students to attend school regularly and consistently perform well, exam exemptions can be earned by students who meet the following criteria for grades and behavior during the final semester of the course:

- **Grades**

The student must have a grade of 90 or higher in the class.

- **Behavior**

No student is eligible for exemptions who has had an in-school or out-of-school suspension.

## **Substitution of SOL Test Results for the Semester Exam**

Final exams continue to count 20% of the final semester grade.

### **Standard, Academic, Advanced Level Courses**

Schools have the option of allowing students enrolled in Standard, Academic, Advanced level courses to substitute an SOL end-of-course exam for the final exam. This should be a team/department level decision. If this option is chosen by a school team/department, a 4th nine weeks cumulative performance task shall be developed to engage students during the 4th nine weeks in assessments that will demonstrate learning through research papers, investigative labs, presentations, or performance task.

If this option is utilized at the school level, students enrolled in Honors/AP, dual enrollment courses, and those courses without SOL tests, still will be able to exempt final exams under an exam exemption procedure through which students have a 90 semester average in the course prior to the exam and meet the behavioral criteria. Students who do not meet the exemption criterion will be required to take a final exam.

### **Honors/AP**

High school staff will use the school improvement process to determine second semester exam practices and will communicate exam expectations and procedures to students and parents at the beginning of the second semester.



# General Information

## Graduation Requirements

View the minimum course and credit requirements for the:

- [Advanced Studies Diploma](#)
- [Standard Diploma](#)
- [Modified Standard Diploma](#)
- [Applied Studies Diploma](#)

## Sequential Electives

Students qualifying for a Standard Diploma or a Modified Standard Diploma must successfully complete two sequential electives for 2 full credits chosen from a concentration of courses that provide a foundation for further education, training, or preparation for employment. A course may satisfy the requirement for 1 credit in a fine art or career and technical education course and for sequential electives.

## Certificate of Program Completion

In accordance with the requirements of the Standards of Quality, students who complete coursework defined by the local school board but have not earned the required verified credits for diplomas are awarded Certificates of Program Completion.

## Individualized Student Alternative Education Program (ISAEP)

An ISAEP provides students at-risk of dropping out of school an educational experience that can prepare them for continued learning, successful employment, and responsible citizenship. A referral to ISAEP may be made by the student's base school when a student demonstrates substantial need for an alternative program. The ISAEP recognizes that standard educational schedules and methods are not successful for all students. An ISAEP offers the opportunity of successful closure to one's high school experience and opens the possibility for continuing education.

In order to be considered for an ISAEP, students must:

- Currently be enrolled in an Albemarle County high school;
- Be at least 16 and one year (6 or more credits) behind their entering class in credits earned;
- Achieve minimum entry test scores (a minimum of 410) on each of the five sections of the General Educational Development (GED) Practice Test and a minimum score of 7.5 on

the Tests of Adult Basic Education (TABE) Reading Test;

- Complete a visit to the program;
- Meet with their parent/guardian, school counselor, and ISAEP Coordinator prior to enrollment in ISAEP; and
- Complete a career-aptitude assessment.

Each ISAEP has the following components:

1. Academic preparation for the GED exam;
2. Career guidance and exploration (demonstrate proficiency in Virginia's Workplace Readiness Skills);
3. Occupational experience and/or training; and
4. Econ PPF Credit.

The program is located on the campus of Murray High School. Students who pursue an ISAEP follow a class and career/technical schedule based on their individual situation. See your school counselor for more information.

## **Economics & Personal Finance Graduation Requirement**

Beginning with students entering ninth grade in fall 2011, one standard unit of credit in Economics and Personal Finance is required for graduation with a Standard or Advanced Studies Diploma. Students may earn this credit by successfully completing the course at any time during their high school career.

*Students with disabilities seeking a Modified Standard Diploma may use the course to satisfy one of the three required mathematics credits.*

## **Diploma Seals**

Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition. The Virginia Department of Education (VDOE) makes available the following Graduation (Diploma) Seals of Achievement:

- Governor's Seal
- Board of Education Seal
- Board of Education's Career & Technical Education Seal
- Board of Education's Advanced Mathematics & Technology Seal
- Board of Education's Excellence in Civics Education Seal
- Board of Education's Seal of Biliteracy

For more information about each seal, including specific requirements, visit the [VDOE website](#).

## Enriching Your High School Experience

*To encourage students to enrich their high school educational experience and to increase the rigor of the high school program, the following choices are available:*

### Advanced Placement (AP)

The Advanced Placement (AP) program, offered by the College Board, enables students to pursue college-level studies while still in high school. AP offers students the opportunity to participate in a rigorous curriculum that exposes students to high academic intensity and quality.

AP Examinations are administered each year in May and represent the culmination of college-level work in a given discipline in a secondary school setting. Rigorously developed by committees of college and AP high school faculty, the AP Exams test students' ability to perform at a college level. Students who perform well may earn college credit and/or advanced standing at thousands of universities worldwide.

Based on the amount of work required outside of the classroom, students who want to enroll in more than three Honors and/or AP level classes per semester should carefully consider their academic, personal and extracurricular activities. Students are encouraged to consult with their school counselor.

Visit the [CollegeBoard website](#) for more details about AP courses and exams, including exam dates and fees. Financial assistance is available for economically disadvantaged students. See a school counselor for more information.

[View Advanced Placement Tests and Scores Accepted by Virginia Institutions »](#)

### Dual Enrollment/Dual Credit

Students may choose to get a jump-start on a college degree or certificate by taking college classes while in high school. This can be accomplished through Dual Enrollment or Dual Credit classes, which allow eligible students to earn high school and college credit simultaneously.

Students can save money toward higher education by taking Dual Enrollment classes, which are taught in their high school during the regular school day at no cost. Alternately, a student may choose to enroll in Dual Credit classes, which are taken on the college campus. Students are responsible for any expenses associated with Dual Credit classes.

Students participating in Dual Enrollment or Dual Credit courses follow the college add/drop policy and deadlines. Course offerings vary from year to year. Courses taken in the core areas (English, history/social sciences, mathematics, and science) are weighted as Dual Enrollment/Dual Credit courses.

Students who successfully complete these courses earn college credit from the partnering higher education institution. *Credit transfer to another college or university depends upon the policies of that individual college or university.*

Albemarle County Public Schools offers a variety of Dual Enrollment and Dual Credit opportunities in partnership with Piedmont Virginia Community College. A smaller number of Dual Enrollment opportunities exist in partnership with Reynolds Community College.

Learn more about admission requirements:

- [Piedmont Virginia Community College \(PVCC\)](#).
- [Reynolds Community College \(RCC\)](#).

### **Senior/Junior Internship**

The Senior/Junior Internship Program is designed to support long-range education and career goals. It is strongly recommended that all students consider an internship as part of their high school plan of study. This program provides the opportunity to experience “first-hand” a particular career or career field by interning with professionals in the community. All internships are pass/fail only; students who participate in an internship will earn 1 credit. See your school counselor for additional details.

### **Governor’s Senior Year Plus**

Governor’s Senior Year Plus: Early College Scholars Agreement is intended to allow and to encourage eligible high school seniors to complete requirements for a high school diploma and concurrently earn at least 15 hours of transferable credits toward a college degree. This results in a more productive senior year and reduces the amount of college tuition for families. See your school counselor for more information.

### **Virtual Virginia School**

[Virtual Virginia](#) is a regular high school facilitated by the Virginia Department of Education. This virtual school offers a variety of Advanced Placement courses and non-AP courses, enabling students to earn college credit (through AP exams), regardless of their high school’s ability to offer college-level courses. Courses are available through satellite and Internet video streaming or online. There is a tuition charge for some courses. If a student drops a Virtual Virginia course, there is a \$75 fee. Courses pursued through this method are those courses that are not offered at the high school.

[View Virtual Virginia course offerings »](#)

### **Online Virtual Learning**

Online Virtual Learning Opportunities provide opportunities for students to complete coursework in a virtual setting. Albemarle County Public Schools (ACPS) offers virtual courses led by ACPS Teachers that are aligned to the same standards and at the same level of rigor as traditional classroom offerings. Students may take virtual courses as a part of their regular course offerings. In addition, students may opt to take a virtual course through another educational institution.

For a complete listing of virtual courses offered through ACPS and guidelines for taking virtual courses at other institutions, visit our [Virtual Learning website](#) or contact your school counselor.

### **Freshman Seminar**

Beginning in the 2018-19 school year, all ninth-grade students will be enrolled in a freshman seminar course during their first year of high school. The course will be designed to develop students in a number of ways that help them understand who they are as learners, community

members, and friends. The course will be a credit-bearing elective course for students and will provide all students with a faculty mentor who will help to guide them to success in high school and beyond. (Course Code: 9860S)

## Verified Credits

A **standard credit** is awarded for a course in which the student successfully completes the objectives of the course and the equivalent of 140 clock hours of instruction. A **verified credit** is awarded for a course in which the student earns a standard unit of credit and achieves a passing score on a corresponding end-of-course SOL test or a substitute assessment approved by the Board of Education.

For responses to commonly asked questions about verified credits, visit the Board of Education's [Frequently Asked Questions About Earning a Virginia High School Diploma](#).

For specifics about verified credit requirements for transfer students, visit the Board of Education's [Information for Transfer Students](#) page.

Ask your school counselor for more information about verified and locally verified credits.

## Core Courses/Levels

### Levels in Courses

1. The Division offers the following levels of core courses (in addition to AP and dual enrollment): Standard, Academic/Advanced, and Honors. Individual high schools will use school improvement planning to determine course levels that may be effectively combined to increase opportunities for students to participate in higher course levels. Currently, the Academic level represents a combined level typically serving students enrolled in Standard and Advanced level courses.

#### **Standard level**

is offered as a college preparatory/school-to-work program. This level provides a broad base of knowledge and emphasizes realistic application of concepts.

#### **Academic/Advanced level**

is offered as a college preparatory/ school-to-work program. Students in Academic/Advanced classes are engaged in a rigorous curriculum designed to stimulate and encourage academic growth and performance.

#### **Honors level**

is designed for students demonstrating exceptional aptitude and achievement in the discipline and a desire to pursue the curriculum beyond the Academic/Advanced level of study. Honors students are expected to be self-motivated, independent learners able to engage in self-instruction through independent reading, projects, and research.

2. This level structure is intended to provide schools, through the school improvement process, the flexibility to combine levels of classes. The Academic level combines Advanced and Standard levels. Other options might be pursued through the school improvement process with the goal of ensuring opportunity and access to high-level curriculum and instruction for all students.
3. Elective courses will remain unlevelled.

## Student Course Load

All students through grade 12 shall maintain a full-day schedule of classes unless:

- A waiver is granted by the Superintendent/Designee;
- A recommendation of the principal and acceptance by a college or university has qualified a student to be released during school hours to take college or university courses. Tuition and transportation for these courses are the responsibility of the student; or
- Students are taking college courses for dual credit according to the Virginia accreditation standards.

## Grading Scale

The Division’s grading scale is:

Grade	Range
<b>A</b>	90–100
<b>B</b>	80–89
<b>C</b>	70–79
<b>D</b>	60–69
<b>F</b>	0–59

## Grade Point Average, Academic Achievement Program, and Weighted Grades

### Grade Point Average (GPA)

GPA is determined by dividing the total grade points received by the total number of credits attempted.

### Academic Achievement Program

The school division's academic achievement program recognizes all graduating seniors who earn an unweighted 3.0 grade point average (GPA) or better during their high school career. The primary objective of this program is to recognize students both for their consistently high

performance throughout their four years of high school and for the contributions so many of them make to our high school communities.

We have three levels of academic honor recognitions. The following designations are affixed to the student's diploma:

- **Cum Laude**, graduating With Praise  
for students whose unweighted GPA is from 3.0 to 3.4
- **Magna Cum Laude**, graduating With Great Praise  
for students whose unweighted GPA is from 3.5 to 3.7
- **Summa Cum Laude**, graduating With Highest Praise  
for students whose unweighted GPA is 3.8 or higher

### Weighted Grades


GPA will be calculated by dividing the total grade points received by the total number of credits attempted. As part of the school profile, each high school will report class size and the highest and lowest GPA in the class. Class rank will only be reported for special circumstances: military academies, honors programs, scholarship opportunities and to recognize honor graduates at the end of the senior year.

Grade	Standard/ Academic/ Advanced	Honors/AP/ Dual Enrollment/ Dual Credit
<b>A</b>	4	5
<b>B</b>	3	4
<b>C</b>	2	3
<b>D</b>	1	2
<b>F</b>	0	0

### Early High School Program Completion

A student planning to satisfy all graduation requirements established by the Commonwealth of Virginia and Albemarle County Public Schools prior to his or her cohort's graduation date may petition the school principal for early graduation. The student must write a plan in collaboration with school counseling staff and his or her parent or guardian including courses and other requirements to be fulfilled. The plan must also outline the student's reason for requesting early graduation. Reasons may range from hardships to plans for early college attendance. A request for early graduation will be approved at the discretion of the school principal. Students wishing to graduate in a time period of less than four years must be able to show that they can meet their graduation requirements. In addition, students must show that

they have a sustainable post graduation plan. Students whose plans are approved will be remain enrolled at the school through their graduation date unless special circumstances are determined by the principal.

 [Early Graduation Request Form](#)

## Regulations Governing the Secondary School Transcript

On March 29, 2007, the Virginia Board of Education adopted amended regulations governing the Secondary School Transcript. These revisions were made in order to strengthen the transcript regulations and to bring them into conformity with amended or new state and federal laws as well as the needs of higher education. The secondary school transcript regulations became effective for students taking secondary courses for credit beginning in the 2008-09 school year.

When parents request a transcript from the high school, the student's "test record" is required by law to be on it, unless the parent has requested in writing that the information be excluded. "Test record" includes at least the highest score earned, if available, on college performance-related standardized tests, such as the SAT and ACT, and excludes Standards of Learning (SOL) test scores. **NOTE:** Parents/guardians who would like this information excluded from their child's high school transcript should contact their child's school counselor for the appropriate form.

## Athletic Eligibility

### Virginia High School League

To be eligible for participation on athletic teams, the Virginia High School League (VHSL) requires that students be enrolled in five (5) credits (in progress) and have passed five (5) classes (earned credits for 5 classes) the previous semester. Repeating a course for which a passing grade was received does not count toward the required five courses for athletic eligibility. First semester 9th graders are eligible on the basis of their promotion from the 8th grade the previous semester. See Athletic Handbook for details.

- Any course in which a student receives a full credit during one semester may be doubled and counted as such for eligibility purposes.
- Any course taken every day or every other day (for an extended block; e.g., an A-B block) for the entire year counts as a stand alone course for one credit.
- Any semester course taken for partial credit counts as one course.
- 3 credit courses at CATEC count as three classes for VHSL Eligibility.
- In the case of hybrid schedules one must count the courses based upon what is outlined above. Here are some scenarios:
  1. Straight 4 x 4 (four courses taken each semester—each for one credit):  
These are double and, as such, a student must pass a minimum of three each semester to be eligible.



2. 4x4 plus year long courses or semester courses:

Student is taking three 4 x 4 courses and 3 year long or semester courses. If the student fails one of the 4 x 4 courses (equivalent of four courses), he/she must pass at least one year long courses to attain the required "pass five" standard. If a student fails two of the 4 x 4 courses (equivalent of two courses), he/she must pass all three of the year long courses to attain 5 courses passed for credit.

[Visit the VHLS Eligibility site »](#)

### **NCAA – Academic Eligibility Requirements**

If you want to play National Collegiate Athletic Association (NCAA) sports at an NCAA Division I or II school, you need to register with the [NCAA Eligibility Center](#). The Eligibility Center works with you and your high school to certify your initial eligibility.

For more information about registering with the NCAA, view their [Registration Checklist](#).

### **Career Planning**

All Albemarle County high school students will graduate with a Career Plan. With the support of school counselors and career specialists, students will develop and refine their career plan through the 4-year planning process. [Learn more about Career Planning »](#)

# Early Graduation Request



Name of Student: \_\_\_\_\_

Students wishing to graduate in a time period of less than four years must be able to show that they can meet their graduation requirements. In addition, students must show that they have a sustainable post-graduation plan. Students who are considered “early graduates” will be enrolled in an internship or work-study course until their cohort graduates. They also are eligible to participate in graduation.

**Credits Earned:**

English \_\_\_\_\_  
 History \_\_\_\_\_  
 Math \_\_\_\_\_  
 Science \_\_\_\_\_  
 World Lang. \_\_\_\_\_  
 Health/PE \_\_\_\_\_  
 Electives \_\_\_\_\_

**Credits in Progress:**

English \_\_\_\_\_  
 History \_\_\_\_\_  
 Math \_\_\_\_\_  
 Science \_\_\_\_\_  
 World Lang. \_\_\_\_\_  
 Health/PE \_\_\_\_\_  
 Electives \_\_\_\_\_

**Credits Needed:**

English \_\_\_\_\_  
 History \_\_\_\_\_  
 Math \_\_\_\_\_  
 Science \_\_\_\_\_  
 World Lang. \_\_\_\_\_  
 Health/PE \_\_\_\_\_  
 Electives \_\_\_\_\_

Fine Art or Career Tech Ed Credit: \_\_\_\_\_  
 Sequential Electives (if applicable): \_\_\_\_\_

**SOL Credits Earned:**

Algebra I _____	World Hist. I _____	Earth Science _____	Reading _____
Geometry _____	World Hist. II _____	Biology _____	Writing _____
Algebra II _____	U.S. History _____	Chemistry _____	

**Diploma Type:**    Advanced \_\_\_\_\_    Standard \_\_\_\_\_

**Post High School Plan:**

College \_\_\_\_\_  
 Military \_\_\_\_\_  
 Employment \_\_\_\_\_  
 Other \_\_\_\_\_

**Comments:** (Feel free to attach a letter explaining your student’s situation.)

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Parent Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Counselor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

FINAL PRINCIPAL APPROVAL: \_\_\_\_\_

Date: \_\_\_\_\_

# Index of Courses

## Specialty Centers

## Departments

## Enrichment Opportunities

### ▣ **Specialty Center : CATEC (17)**

---

Auto Body Technology I, II & III (2-year program).

Automotive Service Technology I & II (2-year program).

Building Trades I & II (1-year program).

CATEC Exploratory

Computer Network Hardware I & II (1-year program).

Computer Network Hardware III & IV (1-year program).

Cosmetology I, II & III (2-year program).

Dental Careers I & II (1-year program).

Electrician I & II (1-year program).

Emergency Medical Technician I & II (1-year program).

Fire Service Academy / Firefighting I & II (1-year program).

Introduction to Culinary Arts

Music Industry Technology (1-year program).

Nurse Assistant I & II (1-year program).

Pharmacy Technician I & II (1-year program).

Professional Culinary Arts I & II (2-year program).

Veterinary Science I & II (1-year program).

### ▣ **Specialty Center : ESA (Environmental Studies Academy) (8)**

---

ESA BIO of Environment / BIO 107

ESA Biosystems: Biology/Ecology, Honors

ESA Biosystems: Botany/Horticulture I, Honors

ESA Botany/Horticulture II, Honors

ESA Chemistry I, Honors

ESA Environmental Science, Advanced Placement

ESA Geosystems: Geology / Earth Science, Honors

ESA Geosystems: World Geography: Physical and Human, Honors

### ▣ **Specialty Center : HMSA (Health and Medical Sciences Academy) (8)**

---

HMSA Anatomy and Physiology, Honors

HMSA Biology/Foundations of Biomedical Sciences/Health, Honors

HMSA Biomedicine, Honors

HMSA Chemistry, Honors

HMSA Independent Research Project

HMSA Junior/Senior Internship

HMSA Medical Research Laboratory I

HMSA Principals of Psychology/Developmental Psychology / PSY 200/230

▣ **Specialty Center : MESA (Math, Engineering and Science Academy) (6)**

---

MESA Algebra II / Trig/Pre-Calc, Honors (2-year program).

MESA Engineering Design / EGR 115

MESA Engineering Research I, Honors

MESA Engineering Research II, Honors

MESA Introduction to Engineering / EGR 120

MESA Physics / Earth Sci/Chemistry, Honors (2-year program).

# Index of Courses

Specialty Centers

Departments

Enrichment Opportunities

## ▣ **Department : Career and Technical Education (CTE)** (71)

---

Applied Management Principles / BUS 202

Architectural Drawing

Architectural Drawing / ARC 121 Architectural Drafting I

Architecture II

Audio Production I

Audio Production II

Auto Body Technology I, II & III (2-year program).

Automotive Service Technology I & II (2-year program).

Basic Technical Drawing

Building Trades I & II (1-year program).

Business Cooperative Education (Co-op).

Business Management

CATEC Exploratory

Computer Network Hardware I & II (1-year program).

Computer Network Hardware III & IV (1-year program).

Computer Science A, Advanced Placement

Computer Science I & II

Cosmetology I, II & III (2-year program).

Culinary Arts Specialization

Dental Careers I & II (1-year program).

Design I: Industrial Design and Prototyping

Design II: Product Design and Development

Design, Multimedia and Web Technologies I & II

Digital Imaging Technology I & II

Digital Imaging Technology III & IV

Early Childhood Development

Economics and Personal Finance

Economics and Personal Finance / FIN 107

Electrician I & II (1-year program).  
Emergency Medical Technician I & II (1-year program).  
Engineering Design / EGR 115  
Engineering Drawing / DR 140 Technical Drawing  
Engineering Drawing I  
Engineering Drawing II  
Engineering I: Tools and Manufacturing  
Engineering II: Design and Applications  
Entrepreneurship / BUS 116  
Entrepreneurship I / Exploring Entrepreneurship  
Entrepreneurship II  
Fashion Design  
Fire Service Academy / Firefighting I & II (1-year program).  
Geospatial Technology I & II  
Graphic Communications  
Health and Medical Sciences I  
Internet Marketing Through Social and New Media  
Introduction to Culinary Arts  
Introduction to Engineering / EGR 120  
Junior/Senior Internship Program  
Marketing I  
Marketing II  
Medical Terminology / HLT 141  
MS IT: I  
MS IT: II  
Music Industry Technology (1-year program).  
Nurse Assistant I & II (1-year program).  
Pharmacy Technician I & II (1-year program).  
Principles of Culinary Arts I / HRI 106/219  
Principles Of Information Systems / ITE 120  
Principles of Management / BUS 200  
Principles of Technology I & II  
Professional Culinary Arts I & II (2-year program).  
Robotics and Automation  
Robotics and Automation II  
Social Media Content Production

Sports, Entertainment and Recreation Marketing

Sports, Entertainment and Recreation Marketing II

Television Production I, II, III & IV

Veterinary Science I & II (1-year program)

Virginia Teachers for Tomorrow I & II: SDV Orientation to Teaching as a Profession

Web Design I / ITD 110

Web Design II / ITD 210

☐ **Department : English (20)**

---

College Composition I and II / ENG 111/112

CORE+

English 10

English 11

English 12

English 9

English Language & Composition, Advanced Placement

English Literature & Composition, Advanced Placement

Environmental Literature, Law and Policy

ESOL I: Introductory Academic English (double-blocked)

ESOL II: Intermediate Academic English

ESOL III: Advanced Academic English

ESOL Study Skills: Strategies for Academic Advancement

Genre Studies

Media Studies: Analyzing and Creating in the 21st Century

Peer Tutoring I: Methods

Peer Tutoring II: Leadership

Peer Tutoring III: Fellowship

Practical Language

Skills Development - Reading/Writing I, II, III, IV

☐ **Department : Fine and Performing Arts (78)**

---

2D/3D Design

Art History, Advanced Placement

Art I

Art II

Art III

Art IV

Audio Production I

Audio Production II  
Basics of Tech Theater  
Ceramics I  
Ceramics II  
Ceramics III  
Ceramics IV  
Chamber Music Ensemble  
Concert Band, I-IV  
Concert Choir  
Concert Choir, Advanced  
Concert Orchestra, I-IV  
Creative Writing / Literary Magazine I & II  
Creative Writing I, II  
Creative Writing III, IV  
Debate I  
Digital Imaging I  
Digital Imaging II  
Digital Imaging III  
Drama I  
Drama II  
Drama III  
Drama IV and V  
Drawing 121/122  
Environmental Art  
Film Photography  
Filmmaking I  
Filmmaking II  
Filmmaking III  
Functional Ceramics, Advanced  
Geometry and the Visual Arts  
Guitar I and II  
Humanities I-IV  
Improvisation and Comedy  
Jazz Band, I-IV  
Journalism  
Marching Band



Men's Ensemble  
Multimedia Crafts / Design  
Multimedia Crafts II  
Multimedia Crafts III  
Multimedia Crafts IV  
Music Theory  
Musical Theatre Ensemble  
Percussion Ensemble  
Photography I  
Photography II  
Photography III  
Photography IV  
Piano/Keyboard I  
Piano/Keyboard II  
Piano/Keyboard III  
Printmaking  
Sculptural Ceramics, Advanced  
Sculpture I  
Sculpture II and III  
Show Choir  
Speech and Communication  
String Ensemble, I-IV  
Studio Art 2-D Design, Advanced Placement  
Studio Art Drawing Portfolio, Advanced Placement  
Studio Art, Advanced Placement  
Symphonic Band, I-IV  
Theatre Appreciation / CST 141  
Treble Jazz I, II and III  
Visual Thinking / Intro to Film  
Vocal Jazz  
Wind Ensemble  
Women's Ensemble  
Women's Ensemble, Advanced  
World Theatre: Theory and Performance  
Yearbook

☐ **Department : Health, Physical Education & Driver's Education (12)**

---

Anatomy and Physiology for Exercise Science / HLT 125

Driver's Education

Fitness / Weight Training I & II

Fitness / Yoga I & II

Health Education I

Health Education II

Introduction to Sports Medicine

Physical Education I

Physical Education II

Sports Medicine I

Sports Medicine II

Team Sports

▣ **Department : History/Social Sciences (28)**

---

Economics and Personal Finance

Economics and Personal Finance / FIN 107

ESOL Social Studies

Ethnic Studies

European History, Advanced Placement

History Lab

History Through Film

Human Geography, Advanced Placement

Issues of the Modern World

Leadership

Microeconomics and Virginia Personal Finance, Advanced Placement

Political Science / U.S. Government 211/212

Practical Law

Principals of Psychology/Developmental Psychology / PSY 200/230

Psychology

Psychology Applications and Research

Psychology, Advanced Placement

Sociology

U.S. Government and Politics, Advanced Placement

United States History / History 121/122

Virginia and U.S. Government

Virginia and U.S. History

Virginia and U.S. History, Advanced Placement

Women's Studies

World Geography

World History I to 1500

World History II from 1500 to Present

World History, Advanced Placement

▣ **Department : Mathematics** (25)

---

Algebra I

Algebra I, Part I

Algebra I, Part II

Algebra II

Algebra, Functions, and Data Analysis (AFDA)

Applied Calculus / MTH 271

Calculus AB, Advanced Placement

Calculus BC, Advanced Placement

Calculus, Honors

College Algebra and Trigonometry

Computer Science A, Advanced Placement

Computer Science Principles, Advanced Placement

ESOL Math: The Language of Mathematics

Geometry

Geometry and the Visual Arts

Math Analysis / Pre-Calculus, Honors

Mathematical Inference and Applications (Discrete Math)

Ordinary Differential Equations / MTH 279

Pre-Calculus I / MTH 163

Probability and Statistics

Quantitative Reasoning / MTH 154

Skills Development Math / Algebra Lab

Statistics, Advanced Placement

Trigonometry / Math Analysis, Honors

Vector Calculus / MTH 277

▣ **Department : Science** (23)

---

Analytical Chemistry Investigations

Analytical Lab Investigations

Anatomy and Physiology

Animal Studies

Astronomy

Astronomy, Honors

Biology I

Biology, Advanced Placement

Biology-Ecology Cooperative

Chemistry I

Chemistry, Advanced Placement

Earth Science

Ecology

Environmental Science, Advanced Placement

ESA BIO of Environment / BIO 107

ESOL Science: The Language of Life Sciences

Geology

Geology-Earth Science Cooperative

Physics C, Advanced Placement

Physics I

Physics I, Advanced Placement

Physics II, Advanced Placement

STEM Pathway Capstone

☐ **Department : Special Education (22)**

---

Algebra I, Part I

Algebra I, Part II

Basic Computer Skills

Community Based Instruction Program (CBIP)

Community Life Skills

Education For Employment I

Education for Employment II

Functional English

Functional Math

Functional Science

Functional Science II

Functional Social Studies

Health / Recreation

Introduction to Culinary Arts

Legal Issues

Math Skills

Personal Living and Finance

Reading Skills

Serve Safe

Study/Organizational Skills

Work Study

Writing Skills

☐ **Department : World Languages (28)**

---

French I

French II

French III

French IV, Honors

French Language and Culture, Advanced Placement

German I

German II

German III

German IV, Honors

German Language, Advanced Placement

Greek I

Japanese I

Japanese II

Japanese III

Japanese IV, Honors

Latin I

Latin II

Latin III

Latin IV, Honors

Spanish Culture and Conversation

Spanish for Fluent Speakers I

Spanish I

Spanish II

Spanish III

Spanish IV, Honors

Spanish Language, Advanced Placement

Spanish Literature, Advanced Placement

Virgil, Advanced Placement

# Index of Courses

Specialty Centers

Departments

Enrichment Opportunities

▣ **Special Program : Arts & Letters Pathway (1)**

---

Arts & Letters Pathway

▣ **Special Program : AVID (2)**

---

AVID

AVID Tutor

▣ **Special Program : CORE+ (1)**

---

CORE+

▣ **Special Program : Independent Study (1)**

---

Independent Study

▣ **Special Program : STEM (1)**

---

STEM Pathway

▣ **Special Program : Teaching Fellows Program (1)**

---

Teaching Fellows Program