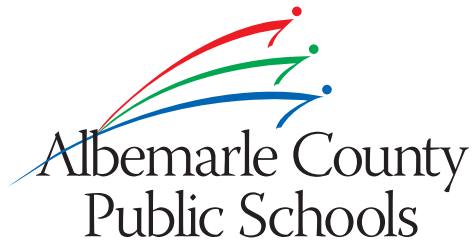


Inside Front Cover

Perhaps we can put the names and address info of each high school here



12 Lifelong-Learning Standards

The Division developed 12 Lifelong-Learning Standards through which we set rigorous expectations for how students learn, analyze information, and communicate, leading to increased student engagement, content mastery, and higher-order thinking. Students who attain these standards will be equipped with a foundation for lifelong inquiry and learning. In addition to high levels of achievement as measured by state assessments, students demonstrate their depth of understanding through locally-developed benchmark performance assessments within the context of each academic discipline.

Lifelong-Learning Standards

1. Plan and conduct research;
2. Gather, organize, and analyze data, evaluate processes and products; and draw conclusions;
3. Think analytically, critically, and creatively to pursue new ideas, acquire new knowledge, and make decisions;
4. Understand and apply principles of logic and reasoning; develop, evaluate, and defend arguments;
5. Seek, recognize and understand systems, patterns, themes, and interactions;
6. Apply and adapt a variety of appropriate strategies to solve new and increasingly complex problems;
7. Acquire and use precise language to clearly communicate ideas, knowledge, and processes;
8. Explore and express ideas and opinions using multiple media, the arts, and technology;
9. Demonstrate ethical behavior and respect for diversity through daily actions and decision making;
10. Participate fully in civic life, and act on democratic ideals within the context of community and global interdependence;
11. Understand and follow a physically active lifestyle that promotes good health and wellness; and,
12. Apply habits of mind and metacognitive strategies to plan, monitor, and evaluate one's own work.

Course Selection Worksheet/Career Plan



Full Name _____ Current Grade _____ Counselor _____

Career Pathway _____ Career Planning Goals _____

Post Secondary Plan: Four year school _____ Two year school _____ Technical Training _____ Military _____ Other _____

Grade	Diploma Type	English	Social Studies	Math	Science	Health/PE Elective	World Language/ Elective	Electives	Verified Credits
Middle School 6-8									
9	Advanced	English 9	*World History I	*Algebra I * Geometry *Algebra II	* Earth Science *Biology	Health I Phys Ed I		Advanced Diploma Fine Art/CTE	
	Standard	English 9	*World History I	*Algebra I Fundamental Skills	* Earth Science	Health I Phys Ed I		Economics & Personal Finance	
10	Advanced	English 10	*World History II	* Geometry *Algebra II Math Analysis	*Biology *Chemistry	Health II Phys Ed II		3 other electives:	
	Standard	English 10	*World History II	Algebra Function Data * Geometry *Algebra I	*Biology	Health II Phys Ed II			
11	Advanced	*English 11 (2 SOLs given)	*US/VA History	*Algebra II Math Analysis College Algebra/Trig	*Chemistry Physics Ecology	Internship/ Coop		Standard Diploma** Sequence 1	
	Standard	*English 11 (2 SOLs given)	*US/VA History	Algebra Function Data *Algebra II * Geometry	*Chemistry Physics Ecology			Sequence 2	
12	Advanced	English 12	US/VA Government	Math Analysis AP Math or PVCC Dual Enrollment Math College Algebra/Trig	Physics AP Science			Economics & Personal Finance	
	Standard	English 12	US/VA Government	Additional Math (opt): *Algebra II * Geometry Algebra Function Data	Add. Science (opt):			4 other electives:	
Total									
** 1 of the 6 electives must be a Fine Art or CTE									



* SOL Course

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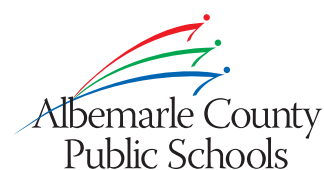
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Albemarle County Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, disability, age, pregnancy or marital status in its programs and activities. The Director of Human Resources has been designated to handle all inquiries regarding non-discrimination policies.

Address any inquiries or concerns to:
Director of Human Resources, 401 McIntire Road, Charlottesville, Virginia 22902 (434) 296-5827



January is the time of year for students to make plans and choose courses for the coming school year.

INTRODUCTION

Welcome to the 2010 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 your own future!

January is the time of year for students to make plans and 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/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

On the other side of this page, you will find 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.

This guide is organized in sections as outlined in the table of contents. The guide begins by identifying specialty centers and specialty programs offered at the high school level so you can think about pathways leading to them, if you choose.

Next, the guide is divided into department and course subject areas. On the divider for each subject area, related career pathways are identified to future planning.

For each core subjects, a flow chart is included to show how different course decisions will affect your path through the subject area. The final sections of this guide include general information about graduation requirements, diploma options, and programs for enrichment. An index is also provided.

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

The Process Timeline

Your course selection for the upcoming year is an opportunity for you to think carefully about your interests, achievement, and educational and career goals. Give very serious consideration to this registration process. Here is the timeline:

- | | |
|-------------------------|---|
| January | 1. Guide to High School Credit Courses will be made available to students and parents in January to make preliminary selections and plans. |
| January | 2. Teacher recommendations will be completed for each student in January. |
| January/February | 3. Curriculum Expos for current high school students and rising 9th graders will take place in January or February. |
| January/February | 4. Classroom Presentations and Small Group Program Planning Sessions will take place with School counselors in January and February as they visit classrooms to explain the Guide to High School Credit Courses. School counselors will meet with students individually to review teacher recommendations, five year plans, and transcripts. |
| January/February | 5. Course selections copies will be sent hom in January 2010, |
| Through April | 6. Students may schedule a meeting with school counselors to select 2010-2011 courses through April 2, 2010. |
| June 10 | 7. All course request adjustments must be made by June 10th, 2010 to allow for the building of a balanced master schedule, . |

Course Descriptions

As you get further into the guide and start reading about courses, you will find that each course description has several parts. Here is an explanation for the course descriptions.

The listings for courses in the Program of Studies include the following information (where applicable):

- Course title
- Course level
- Prerequisite(s) (courses that must be passed before taking this course)
- Grade level (9, 10, 11, 12)
- Credit (unless otherwise noted, .5 credit is awarded at the end of each semester)
- If not indicated, the course is taught at all three high schools: AHS, MoHS, and WAHS.

We provide icons to indicate important credit information about courses.



Indicates Standards of Learning Test



Indicates the course is offered at CATEC



Indicates this course is offered through Piedmont Virginia Community College

Dual Enrollment Courses The student is responsible for the college expenses including the college textbook associated with Dual Credit courses.

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). A course may satisfy the requirement for fine arts or career technical education and for sequential electives. Sequential elective courses may be taken in consecutive years or two years of high school.



How do I start making a career plan?

It might sound 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 – what will be the output of these careers and what will be the working situations.

Make a Fit – Match your skills with the career that best suits you and your skill sets.

Create a Plan – Craft a whole plan which includes discovery of an education program, selection of a school, financial aid, resume preparation, standardized admission tests and interviewing techniques.

Adapted from Career Planning Tools on www.OnlineEducationFacts.com

Specialty Centers



VISION: We are the school of excellence and choice for students, staff, and businesses.

MISSION: Our mission is to develop workforce skills and careers.



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.

Overview of CATEC Career Programs

The Charlottesville-Albemarle Technical Education Center (CATEC) operates with a very special purpose in mind: to provide high school students and adults in the community an opportunity to prepare for successful careers or to update existing skills. Students may choose to seek employment upon graduation and/or to continue their formal education through apprenticeship programs or advanced study in technical institutes, community colleges, and universities.

Students may be admitted to the center if they meet the following criteria:

1. Attend Albemarle County or Charlottesville City Schools
2. Attend Fluvanna High School or neighboring high schools (admitted on space available basis)
3. Have parental permission
4. Make application through their school counselors and meet requirements for admission to programs
5. Pay tuition if they are adults and space is available in the class

Application & Selection Process

Students wanting to enroll in CATEC programs must complete an Application for Enrollment, available through their home high school counseling office. Students return completed applications to their school counselor who will forward the applications to CATEC.

Since class sizes at CATEC are limited, CATEC will review the applications and select students based upon the following:

- I. Applicants will be considered for the programs provided they meet any listed prerequisites.
- II. CATEC will review the following information on applicants: attendance, disciplinary record, grades, grade level, age and personal interview, if applicable. Final selection for each program will then be based upon a variety of factors, including the above information, the number of enrollments from each school, and the total enrollments from each school division.
- III. Current CATEC students wishing to return to complete their program, or desire to enter a new program, must obtain a grade level of "C" or higher.
- IV. Juniors & Seniors are given priority in all programs with Sophomores being accepted on a case by case basis in all but the following programs (Cosmetology, Barbering, Auto Tech, Practical Nursing, Pharmacy Tech, Dental Assistant and EMT/FF).

Program Completer/ Certificate/Seal Options

All credit(s) for CATEC programs meet the requirement as a career and technical education elective(s).

Students who finish any state approved one or two-year sequence of technical courses and earn a high school diploma will constitute a "program completer."

Program completers receive a Career and Technical Education Certificate of Completion (based upon program requirements).

Students earn a Career and Technical Education Seal if they complete one of the following:

- I.** Achieve a B average in a sequence of courses
- II.** Pass an examination that confers certification from a recognized industry, trade, or professional association
- III.** Acquire a professional license in the field from the Commonwealth of Virginia

Students will receive a Certificate of Participation upon completion of a one-year program or one year of a two-year program (based upon program/certificate requirements), or complete a two-year program and do not earn a high school diploma.

Verified Credits

Career and technical students may earn two verified credits toward a Standard Diploma by completing a program sequence and passing a recognized certification or licensure examination. One of these may be substituted for a verified credit in either science or history and the other used as a student-selected verified credit.

Technical Education Organizations for Students

Student participation in SkillsUSA or Health Occupations Student Association (HOSA) is an integral part of instruction in all of CATEC's programs. These organizations provide opportunities for students to develop personal leadership and communication skills and motivate them to excel in their chosen fields of study.

Curriculum Focus

While there are many technical "hard" skills taught in our programs at CATEC, an increased portion of our instruction is geared towards workplace readiness skills, known as "soft" skills. These skills are incorporated into the curriculum for each trade area, as well as implemented school-wide in lessons to better prepare students for the workplace environment.

In addition to the workplace skills, we incorporate Entrepreneurship and Technology Skills into the trade areas to better prepare students for opportunities once they have completed their program of study.



Students receive comprehensive technical instruction in preparation for the workforce. The instructors are industry and state certified, and have significant experience in their occupation.



Businesses and community members who are interested in making connections and developing programs should check out our web-site at www.catec.org

CATEC Programs

Academic Programs		a.m.	p.m.	Grade	Prerequisite	Course Number	Credits
Exploratory English	English 10 Academic/Advanced		■	10th		1149Y	1
	Trade Exploratory (Students explore possible career options by rotating through different labs—nine weeks per lab, 4 labs per year)		■	10th		9908Y	2
Advanced English	Advanced English 10		■	10th	English 9	1149Y	1
	Advanced English 11	■	■	11th	English 10	1159Y	1
	Advanced English 12	■	■	12th	English 11	1167Y	1

Note: All English courses meet SOL requirements. The classes above can be taken in conjunction with any A.M. or P.M. CATEC program. A student can earn three credits: 1 English and two elective credits.

Summer Program		Grade	Prerequisite	Credits
Internship Program	The Summer Internship Program allows students to explore a career interest in the Health and Medical Sciences field or the Information Technology field. Students are paired with a mentor for 3 weeks during this work experience. Students will also receive several hours of employability skills training at CATEC. Students must go through an application process to be considered for an internship, and not all students are guaranteed a placement. The application process will take place during the month of April.	11-12	None	1/2
Camp Opportunities	Opportunities are being explored for summer classes at CATEC that will work in conjunction with local businesses to develop programs of enrichment and skill training. Visit www.catec.org in January for additional information.			

Technical Programs		a.m.	p.m.	Industry Certification	Credits		
					HH	Verified	College
Audio, Media & Communications	Music Industry Technology		■		2		
Automotive Technology	Auto Body Technology I	■	■		2-3		
	Auto Body Technology II	■		NOCTI	2-3	1-2	
	Automotive Service Technology I		■		2-3		
	Automotive Service Technology II	■		AYES	2-3	1-2	20 JSRCC
Engineering & Construction	Building Trades I	■	■		2-3		
	Building Trades II	■			2-3	1-2	
	Masonry I	■	■		2-3		
	Masonry II	■		HBRCA	2-3	1-2	
Health Sciences	Dental Assistant		■	NOCTI Certified Dental Assistant	2-3	1-2	
	Emergency Medical Technician/ Fire Fighting	■		EMT Basic Firefighter I	2	1-2	6 PVCC
	Practical Nursing	■	■	State Licensure	2-3	1-2	
	Pharmacy Tech		■	State Licensure	2-3	1-2	
Service Industries	Barbering I	■	■		2-3		
	Barbering II	■		State Licensure	2-3	1-2	
	Cosmetology I	■	■		2-3		
	Cosmetology II	■	■	State Licensure	2-3	1-2	
	Intro to Culinary Arts	■					
	Culinary Arts I	■	■		2-3		
	Culinary Arts II	■		NOCTI / ServeSafe	2-3	1-2	

*Note: pass certification and be a CTE completer to earn 2 verified credits

NOCTI – National Occupational Competency Testing Institute

HBRCA- Home Builders Residential Construction Academy

Changes in scheduling may occur based on enrollment numbers

Specialty Centers

MATH, ENGINEERING & SCIENCE ACADEMY



The Math, Engineering and 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—Math, Engineering, and Science Academy

ENGINEERING ALGEBRA II / MATH ANALYSIS (2 year program)

Prerequisites: Algebra I, Geometry (concurrently), Teacher Recommendation, Application

Co-requisite: Engineering Science and Research

Grades: 9/10: (students must enter the program in their 9th grade year)

2 Credits

Students will complete the Algebra II and Pre-Calculus curriculum in a project enriched class environment which 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.

Honors.....3166Y 3167Y

**“Engineering design, analysis and teamwork will be emphasized through a semester-long project involving the Lego® Mindstorms Robot.”
—EGR 120**

ENGINEERING ANALYSIS AND APPLICATIONS



EGR 120: Introduction to Engineering

Prerequisite: qualifying COMPASS, AP, SAT scores

Taken concurrently with Science, Engineering Research Methods Part I

Co-requisites: MTH 164; math COMPASS score; AP Calculus, SATII 680

Grade: 11

1 High School Credit; 2 College Credits transferable to UVA, VATECH, ODU, VCU)

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 student 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 the students throughout their career, including technical documentation, presentation skills and the use of software-based computational tools for solving engineering problems. EGR 120 is guaranteed to be transferable to UVA, VPI, ODU and VCU.

..... 8451Y

Math, Engineering, and Science Academy

ENGINEERING ANALYSIS AND APPLICATIONS



EGR 115: Introduction to Engineering

Prerequisite: Introduction to Engineering, Math 164, Calculus A/B, Qualifying Compass or SAT Score, Instructor Approval, Taken concurrently with Science, Engineering Research Methods Part I

Grade: 12

1 High School Credit; 2 College Credits transferable to UVA, VATECH, ODU, VCU)

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 include descriptive geometry with relationships of points, lines, and planes. Sectioning, dimensioning, and computer graphic techniques will be introduced.

(Course Number Needed?)

ENGINEERING, SCIENCE AND RESEARCH (2 year program)

Prerequisites: Algebra I, Geometry (concurrently), Teacher Recommendation, Application

Co-requisite: Taken with Engineering Algebra II/Math Analysis

Grades: 9/10 (students must enter the program in their 9th grade year)

3 Credits (Earth Science, Chemistry and Physics)

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.

Honors: 4202y 4203y

SCIENCE & ENGINEERING RESEARCH METHODS PART I

Prerequisite: Algebra II, Physics (concurrently), Teacher Recommendation, and Application

Co-requisite: Engineering 8451Y

Grades: 11 **1 Credit:** (Science elective)

Students will further develop strong research and analysis 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.

..... 8454Y

SCIENCE & ENGINEERING RESEARCH METHODS PART II

Prerequisite: Math 164, Calculus A/B, Qualifying Compass or SAT Score, Instructor Approval

Grade: 12 **1 Credit:** (Science elective)

The MESA course is designed to allow students the flexibility to investigate scientific areas that interest them, with guidance that accentuates (stresses, emphasizes) essential skills needed to excel and succeed in a global environment: Teamwork, Communication, and Creativity.

8455Y



**Indicates
PVCC Dual Enrollment**

Dual Enrollment offers the student credit through Piedmont Virginia Community College (PVCC), as well as high school credit, for courses offered during the regular school day at the high school. Dual Enrollment/Credit courses taken in the core areas (English, History/Social Sciences, Science and Mathematics) are weighted as college/dual enrollment courses. Students taking Dual Enrollment courses follow the college add/drop policy and deadlines. See your school counselor for more information.

Specialty Centers

Murray High School



Murray High School, one of the four Albemarle County high schools, is a non-traditional, public charter school

and 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 through 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 items, along with the student's permanent records, are then reviewed by an admissions committee, who makes the decision regarding the student's appropriateness for the Murray program. A mastery learning model is used, and all students must earn an 80% or better on every assignment for each class. Instruction is differentiated according to students' 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 PYCC, 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

ENGLISH

The English curriculum at Murray High School includes a multi-grade, thematic approach to courses. Each student must successfully complete four credits in English to meet state graduation requirements. Both the Albemarle County curriculum and the Virginia Standards of Learning are included in the English curriculum. The English curriculum emphasizes the continuous development and improvement of reading, writing, speaking, and listening skills. Students study major works of literature throughout the curriculum. The English curriculum courses are open to students at any grade level and students will receive the appropriate level of English credit. Students take the English Standards of Learning Test in the eleventh grade or at the completion of their 3rd English credit. English classes include but are not limited to the following:

- **Advanced Placement English Literature** (College level course)
- **English Through Journalism**
- **American Studies** (English 11 and United States History)
- **English Through Poetry**
- **English Through The Short Story and Novel**
- **English Through Leadership**
- **English Through African American Literature**
- **English Through Drama**
- **English Through Multimedia**

SOCIAL STUDIES

Students must earn three social studies credits for a standard diploma and four for an advanced studies diploma. All students must take one world history or geography class, the United States history class, and government. Advanced studies diploma students take two world history/geography classes. 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 include but are not limited to the following:



- **World History To 1500:** (Sol Test Required)
- **World History From 1500 To Present:** (Sol Test Required)
- **World Geography:** (Sol Test Required)
- **Virginia And United States History:**
(Sol Test Required)
- **Virginia And United States Government:** This course requires that each student complete ten hours of community service.
- **Philosophy:** (Social studies elective)

Murray High School

MATHEMATICS

- **Study Skills Math—Preparation for Algebra I**
- **Algebra I:** Prerequisites: 8th grade Math and/or teacher recommendation*
- **Geometry** Prerequisite: Algebra I*
- **Algebra II** Prerequisite* Algebra I*
- **Algebra Patterns, Functions, And Data Analysis** Prerequisite: Algebra I
- **College Algebra III/Trigonometry** Prerequisite: Algebra II
- **Computer Math** Prerequisite: Algebra I

SCIENCE

Students must take three sciences in two disciplines for a standard diploma and four sciences in three disciplines for an advanced studies diploma. The science curriculum is based on the Virginia SOLs and includes a project-based, inquiry-based approach. The science courses at Murray High School include but are not limited to the following:

- **Earth Science***
- **Ecology**
- **Biology***
- **Oceanography**
- **Chemistry:**
- **Physics**
- **Anatomy And Physiology**



* (SOL test required)

WORLD LANGUAGES

The main purpose in 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 HS consist of the following:

- **Spanish I, II, and III**
(There may be a workbook fee.)
- **Additional languages** are offered through computer-based instruction through the Virginia Virtual High School or through other online resources.

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 credits each) involves the study of and participation in a variety of activities. These activities include physical fitness, strength training, recreational sports activities, yoga, Pilates, dance and movement, and other types of physical activities.
- **Health Education I** (.5 credits) Areas of study for Health Education I include the following: nutrition, diseases, first aid, and family life.
- **Health Education II** (.5 credits) Areas of study for Health Education II include the following: substance abuse, driver education, mental health, and family life.
- **Weight Lifting I-IV**
- **Physical Education Electives** (offered based on student interests and needs.)

DRIVER'S EDUCATION

■ Part I Classroom

During the student's 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. (Students may get a learner's permit from DMV at 15 ½ years of age.) Students should be scheduled for behind the wheel at 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.) 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.

■ Part II Behind The Wheel

Note*: Tuition is charged for this portion of the class. Students must have completed or at least begun the 36-hour 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.



All courses are offered at the Academic/Advanced level unless otherwise noted.



ALL STUDENTS are encouraged to participate in a senior internship program.

Students work with professionals in the community as interns in jobs relating to career objectives. Typical internships include the areas of:

- medicine,
- architecture,
- television production,
- law,
- engineering,
- computer science,
- veterinary medicine,
- education,
- public relations,
- journalism,
- management,
- accounting,
- and finance.

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. Murray High School offers courses in the Visual and Musical arts:

- **Four levels of visual arts—Art 1 through Art 4** (Drawing, painting, multimedia crafts, and sculpture are included)
- **Music course offerings include Jazz History.** Other music classes are dependent on student interest.

Advancement from one level to the next is upon recommendation of the instructor. Fundamental skills are developed in a traditional academic approach to the arts. Creative assignments are designed to develop the personal style of the student.

Art and music classes charge a fee of \$25.00.

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 and COLLABORATION—Non-Credit

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

RESOURCE—Non-Credit

Direct assistance is available for a variety of student needs, including test-taking, homework and make-up work, project/research paper development, and organization and study skills.

ADDITIONAL COURSES INDEPENDENT STUDY

Prerequisite: Teacher recommendation and proposal approval. Proposal information is available in 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. 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.

SENIOR INTERNSHIP PROGRAM

An application procedure is required

.5-2 Credits

ALL STUDENTS are encouraged to participate in a senior internship program.

Students work with professionals in the community as interns in jobs relating to career objectives. Typical internships include the areas of medicine, architecture, television production, law, engineering, computer science, veterinary medicine, education, public relations, journalism, management, accounting, and finance.

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.

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. Compass placement testing and assistance with PVCC registration are available at Murray in the guidance office.

Special Programs



As you plan your pathway, consider these opportunities for enrichment, learning support, and expanded career and continuing educational opportunities.

The programs and courses on the following pages are offered at one or more schools. The course or program description will provide details about school locations.

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. For example, the Air Force Junior Reserve Officer Training Core (AFJROTC) program offered at Monticello High School is a great set of courses designed to help you develop time management skills, team building abilities, and leadership. While many students enter the military as a career through JROTC, participation in this program does not incur military service.

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 keep learning—and 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
- Contextual Learning Skills

AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS

The objectives of AFJROTC are to educate and train high school cadets in citizenship; promote community service; instill responsibility, character, and self-discipline; and provide instruction in air and space fundamentals. AFROTC courses throughout the country are rotational and not sequential. There are no prerequisites to participate in this course and is offered for grades 9-12

Students earn 1 elective credit per year

AIR FORCE, JR. ROTC I

Aerospace Science I; A Journey into Aviation History, is a course designed to acquaint the student with the historical development of flight and the role of the military in history. It contains concise overviews of the principles of flight to include basic aeronautics, aircraft motion and control, flight power, and rockets (40%).

Leadership Education I is comprised of lessons on the heritage, organization and traditions of the Air Force JROTC. Students are introduced to concepts dealing with individual self control, leadership, teamwork, community service, and how to be a good citizen (40%). Throughout the course, there are readings, videos, hands-on activities, and in-text and student workbook exercises to guide in the reinforcement of the materials

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AIR FORCE, JR. ROTC II

Aerospace Education II, The Science of Flight, is a science course designed to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight, and principles of navigation. The course begins with a discussion of the atmosphere and weather. After developing an understanding of the environment, how that environment affects flight is introduced. Discussions include the forces of lift, drag, thrust, and weight. Students also learn basic navigation including map reading, course plotting, and the effects of wind. The portion on the Human Requirements of Flight is a survey course on human physiology. Discussed here are the human circulatory system, the effects of acceleration and deceleration, and protective equipment (40%).

The Leadership Education II curriculum stresses communication skills and cadet corps activities. The curriculum provides instruction on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development. Written reports and speeches compliment the academic materials. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects (40%).

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Note: Currently AFJROTC is offered at MoHS; however, students from AHS and WAHS may apply for admission to this program. Students must enroll as full-time students and provide their own transportation to Monticello High School. See your school counselor for more information.



AIR FORCE, JR. ROTC III

Aerospace Education III, Exploration of Space, is a science course examines our Earth, the Moon and the planets, the latest advances in space technology, and continuing challenges of space and manned spaceflight. Issues that are critical to travel in the upper atmosphere such as orbits and trajectories, unmanned satellites, space probes, guidance and control systems are explained. The manned spaceflight section covers major milestones in the endeavor to land on the Moon, and to safely orbit humans and crafts in space for temporary and prolonged periods. It also covers the development of space stations, the Space Shuttle and its future, and international laws for the use of and travel in space (40%).

The Leadership Education III component provides information on applying for admission to college or to a vocational or technical school. Information on how to begin the job search is available to students who decide not to go to college or vocational school. Information about financial planning and how to save, invest, and spend money wisely, as well as how not to get caught in the credit trap. Students are informed about real life issues such as understanding contracts, leases, wills, warranties, legal notices, and personal bills. Citizen responsibilities such as registering to vote, jury duty, and draft registration will be helpful to. For those students who may be moving into an apartment of their own, information is presented on apartment shopping and grocery shopping skills. There is information on how to prepare a résumé and the importance of good interviewing skills. If there are students who are interested in a career in the military, in the federal government, or an aerospace career, information is also provided for them (40%).

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AIR FORCE, JR. ROTC IV

Aerospace Education IV, Careers and Current Issues, allows Cadets to manage the entire corps. Cadets study, discuss, and lead discussions on current issues. They also research and give presentations on various careers (40%). Students learn project management techniques and implement those techniques by managing a wide variety of cadet corps related projects. Working as a productive member of a cohesive team is stressed throughout the curriculum.

The leadership IV component utilizes the Principles of Management textbook which is a guide to understanding the fundamentals of management, managing yourself, and others. Emphasis is placed on allowing the student to see himself/herself as a manager. There are four building blocks of leadership considered in this text from the military and civilian perspective. The four areas are management techniques, management decisions, management functions, and managing yourself and others (40%).

Wellness Education, All Air Force JROTC courses (except Drill Only Class) include a wellness component which is 20% of the overall grade. This curriculum focuses on a students overall wellness and includes an initial assessment of each students overall wellness. An individualized exercise plan is development based on the student's initial assessment. Students participate in a limited but structured physical fitness regimen coupled with a variety of team building physical fitness activities and exercises. At the end of the year students are given a final assessment to demonstrate how effective their efforts were. The Wellness Education curriculum accounts for 20% of the overall grade in all courses.

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AIR FORCE, JR. ROTC DRILL ONLY CLASS

The Drill and Ceremonies course provides in-depth knowledge and realistic experience on military style drill and ceremonies. The Drill and Ceremonies course concentrates on the elements of military drill, and describes individual and group precision movements, procedures for saluting, drill, ceremonies, reviews, parades, and development of a command voice. Students are provided detailed instruction on ceremonial performances and protocol for civilian and military events and personally learn drill movements as an individual and within a group. Though each class will follow an established lesson plan, most of the work is hands-on. Students must be concurrently enrolled in an AFJROTC I-IV course to be eligible to participate in this Drill Only Class. All students satisfactorily participating in the Drill Only Class are eligible to compete on the AFJROTC Drill Team and Color Guard Team. (Year Long Course, 1 elective credit each year the course is taken, up to 4 credits)

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All cadets are awarded an AF Form 1256, Certificate of Training, for successful completion of 2 academic program years of AFJROTC. AFOATS Form 310, AFJROTC Certificate of Completion, will be awarded to all cadets for successful completion of 3 or 4 academic program years of AFJROTC.

Service academies (Annapolis, West Point, and the Air Force Academy) offer the following for AFJROTC cadets: 20 set aside appointments for High School and College cadets.

AFJROTC graduates receive scholarship board emphasis. 3 or 4 years of AFJROTC = 1 year of ROTC college credit.

All branches of the military services offer the following:
2 years of AFJORTC = E-2 after training
3 or 4 years of JROTC = E-3 after training
(Marines max cap is E-2)

AIR FORCE, JR. ROTC ADVANCED DRILL ONLY CLASS

Prerequisite: Enrollment in AFJROTC I, II, III, or IV & 1 year of the AFJROTC Drill Only Class

Students will learn advanced military drill maneuvers, drill sequence development, individual training techniques, team building, leadership skills, and project management. Participants will be able to demonstrate the ability to use leadership and interpersonal skills to develop a cohesive team of twelve to fifteen students. Students will develop drill sequences, train students on drill maneuvers, and command a group of students through a drill sequence. Students enrolled in the Advanced Drill Only Class are eligible to participate on the AFJROTC competitive drill team.

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AIR FORCE JUNIOR ROTC-410

Prerequisites: A student must have completed at least two years in AFJROTC and have the written approval of the AFJROTC Instructors on their schedule request. **.5 Credits**

This course is for students who are responsible for management of the AFJROTC Cadet Corps. It covers the same material as the other courses on a yearly rotating basis. Students apply what they have learned to lead and manage the AFJROTC program. Students also meet the requirements of AFJROTC 400 for wellness and drill and ceremonies.

..... 7918S

HONORS AND TECHNOLOGY CAMPS

Prerequisites: Available to current AFJROTC cadet sophomores or juniors (Seniors are not eligible). Cadets must possess a 3.0 GPA (may be lower with strong SASI recommendation letter), be enrolled or have completed college Prep Math and Science courses, demonstrate leadership potential inside and outside of AFJROTC, be physically fit, present a good military image, be a US citizen, and be 15 years of age or older by 1 June of the year applying.

.5 Credits

The Honors and Technology Camps are 5 days in duration and are held at various times and locations throughout the United States from mid June through the end of July. Several camps are offered and each has a specific specialty such as Aerospace Science, Medical applications, Naval applications, Army applications, and Marine Outdoor Odyssey camp.

Cadets who attend the Honors and Technology Camp must apply between 1 Dec and 30 Jan

SUMMER LEADERSHIP SCHOOL JUNIOR COURSE

Prerequisites: A student must have completed at least one year of AFJROTC and received an invitation from the AFJROTC Instructors.

.5 Credits

Held in-residence on a university campus, the course is for students who have demonstrated leadership ability and desire to become future leaders within AFJROTC. Content centers on leadership, management, personal standards, character education/ethics, education and careers, customs and courtesies, geography, physical training, drill and ceremonies, and survival skills. Students earn credit towards graduation. Students will receive 80 hours of instruction.

..... 7917S

SUMMER LEADERSHIP SCHOOL SENIOR COURSE

Prerequisites: A student must have completed at least two years of AFJROTC, the Summer Leadership School Junior Course and received an invitation from the AFJROTC Instructors. **.5 Credits**

Similar to the Summer Leadership School Junior Course, the course is for student leaders who will lead the AFJROTC program. Students attend more in-depth classes than the junior course and assist instructors with operating the school as part of their leadership development. Students earn credit towards graduation. Students will receive 80 hours of instruction.

..... 7916S

AVID: ADVANCEMENT VIA INDIVIDUAL DETERMINATION

AVID, Advancement Via Individual Determination, 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

Prerequisite: Desire to go to college

1 Credit

Offered at MoHS, WAHS

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 a rigorous college preparatory classes.

AVID 11, for juniors, 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, completing college and financial aid applications. Students are provided continued support as they engage in college preparatory courses. Students in AVID 12+ must have completed a previous AVID class.

9th 9815Y
10th 9816Y
11th 9817Y
12th 9818Y

AVID TUTOR

Prerequisite: Two successful years of AVID

1 Credit

Offered at MoHS, WAHS

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. These would include but not be limited to World Languages, Language Arts, Mathematics, Science, and Social Studies. Tutors will receive instruction and training using the inquiry method that encourages higher level thinking by students.

..... 9813Y

C-QUEST

C-QUEST

Prerequisite: Teacher Recommendation

Grades: 11-12

.5 Credits

Offered at MoHS

C-Quest is a privately funded program designed to support disadvantaged students who wish to attend competitive four year colleges. Juniors and seniors enrolled in advanced courses and achieving at satisfactory levels are prepped for requisite standardized testing, escorted on numerous college visits and offered individualized assistance in identifying colleges and universities that suit their needs/interests. Completing applications, essays, recommendation requests, scholarship/financial aid paperwork and assisting students in communicating with schools of interest all take place during C-Quest classes.

..... **9865S**

INDEPENDENT STUDY

INDEPENDENT STUDY

Prerequisite: Teacher recommendation and proposal approval. Proposal information is available in the school counseling office or online at www.k12albemarle.org/instruction/gifted

Grades: 9-12

1 credit or .5 credit per semester, Pass-Fail Grading

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. 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.

..... **9930Y**

LAUNCH

LAUNCH (Language Arts United with Numbers Combined with History)

Prerequisite: Teacher recommendation

Grade: 9

2 elective credits

Offered at WAHS

LAUNCH is a program for rising 9th graders who have not passed either their reading or math SOL. LAUNCH will provide instructional support in the core areas of reading, math, social studies and science to assure success on the Virginia Standards of Learning (SOL) test. Additionally students will focus on the study skills necessary to pass all their classes. Recommendation from the 8th grade teacher is required for participation in this program.

..... **9812Y**

MEDIATION TRAINING

MEDIATION TRAINING I

Grades: 9-12

.5 Credits

This course introduces the students to interpersonal and social conflict, and examines the causes and implications of conflict in personal relationships, in literature, and in history. Students learn to improve their communication skills, and develop strategies for resolving conflict through the use of the peer mediation model of conflict resolution. Students in the class are required a minimum of six weeks training, beginning with simulated mediations and before becoming eligible to be considered to conduct actual mediations. Much of the work in the class is group-oriented, with an emphasis on learning to manage the mediation process through practice simulations. This course is recommended for all students considering careers in law, business, or counseling, and for those who wish to improve their ability to deal with conflict in their lives.

..... **9923S**

MEDIATION II

Prerequisite: Mediation I and Teacher Recommendation

Grades: 10-12

1 Credit

Pass/Fail Grading

Students serve as peer mediators.

..... **9924Y**

TEACHING FELLOWS PROGRAM

TEACHING FELLOWS PROGRAM

Grades: 11-12

1 Credit

Offered at WAHS

The Teaching Fellow 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 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.

..... **9921Y**

Course Descriptions

Career and Technical Education (CTE)

Albemarle County offers Career and Technical Education programs that 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.

Career and Technology Education (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 Requirement 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 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). A course may satisfy the requirement for fine arts or career technical education and for sequential electives. Sequential elective courses may be taken in consecutive years or two years of high school.

BUSINESS AND INFORMATION TECHNOLOGY



Have you ever thought of starting your own business?
Do you like working in an office and using computers?
Do you enjoy dealing with the public?
Do you communicate effectively?

Diploma with some training	Certification or Associate degree	College degree plus
Customer Service Representative	Office Manager	Human Resources Specialist
Bookkeeper, Fiscal Tech.	Property Manager	Management Analyst
Medical Administrative Specialist	Administrative Assistant, Secretary	Chief Executive Officer (CEO)

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

BUSINESS MANAGEMENT

Grades 9-12

1 Credit

Offered at AHS, MoHS

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.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Computer Information Systems I or II, Design Multimedia and Web Technologies I or II, Finance or Principles of Business and Marketing.

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with the employer provides the student with an individualized training plan. The student must be employed for a semester and abide by the Cooperative Training Agreement.

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COMPUTER INFORMATION SYSTEMS I

Grades 9 – 12 1 Credit

(also eligible for Business Co-Op credit)

Students apply problem-solving skills to real-life situations through word processing, spreadsheet, database, multimedia presentation software, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks and telecommunications, and emerging technologies.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits). A student may take Computer Information Systems II, Design Multimedia and Web Technologies I or II, Finance, Information Technology Fundamentals, Office Specialist, Principles of Business and Marketing or Computer Science I or II, Business Management.

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BUSINESS COOPERATIVE EDUCATION (CO-OP)

Prerequisite: Concurrent enrollment in a business education class other than a foundation class

Grades 11-12

1 Credit

Students who have a career objective in business can enroll in a cooperative education course. Students must be enrolled in a business class to be eligible for a business co-op. Credit is given to students who are in a paid, supervised part-time work experience. A coordinator along

Career and Technology Education

COMPUTER INFORMATION SYSTEMS II

Prerequisite: Computer Information Systems I
Grades 10-12 **1 Credit (also eligible for Business Co-Op credit)**

Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and Web publications. Students work individually and in groups to explore advanced computer maintenance activities, Web site development, programming, networking, emerging technology, and employability skills.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Business Management, Computer Information Systems I, Design Multimedia and Web Technologies I or II, Finance, Information Technology Fundamentals, Office Specialist, Principles of Business and Marketing or Computer Science I or II.

..... 6617Y

COMPUTER SCIENCE I

Prerequisite: Algebra I
Grades 9 – 12 **1 credit**

Students explore computer concepts, use logic procedures, and implement programming procedures using one or more programming languages, such as Visual Basic, Net, Java, Python, C #, and C++. In addition, HTML or JavaScript may be used to create dynamic Web pages.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Computer Science II, Computer Information Systems I or II, Design Multimedia and Web Technologies I or II, or Information Technologies Fundamentals.

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COMPUTER SCIENCE II

Prerequisite: Computer Science I
Grades 10 – 12 **1 credit**

Students use their knowledge of computer concepts, logic procedures, and object-oriented programming to develop an advanced level program application in one or more programming languages. Programming languages may include Visual Basic, Net, Java, Python, C #, and C++. In addition, HTML, JavaScript, or other industry-recognized programming language may be integrated in advanced Web page development or for use in industry certification programs.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Computer Science I, Computer Information Systems I or II, Design Multimedia and Web Technologies I or II, or Information Technologies Fundamentals.

..... 6641Y

DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES I

Grades 9-12 **1 credit**

Design, Multimedia, and Web Technologies is part one of a two year sequence designed to develop students' skills in Graphic, Print, and Web Design. Students will develop proficiency in using desktop publishing software to create a variety of printed and electronic publications such as personal resumes, brochures, and newsletters. Students will create advanced Web sites (individually and in teams) using HTML code and/or Web creation software such as Dreamweaver. In addition students will use graphic design software Fireworks and animation software Flash to populate their web pages with eye-catching graphics and animations.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take one of these classes – Design Multimedia and Web Technologies II, Computer Information Systems I or II, Information Technologies Fundamentals, Principles of Business and Marketing, Computer Science I, or Computer Science II.

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DESIGN, MULTIMEDIA AND WEB TECHNOLOGIES II

Prerequisite: Design, Multimedia and Web Technologies I

Grades 10-12 **1 credit**

This course is for students interested in the programs and languages involved in designing sites for online distribution. Students will have the opportunity to investigate careers in various web design fields. Students will create sites through code and web publishing software. Students will use software to create custom elements for their sites and to add animation to those elements. Students will be using the following methods to create sites, HTML programming, CSS, JavaScript, XML, Dreamweaver, Fireworks, and Flash. Students will create advanced webpage mirrored after real life examples and projects using the above mentioned programming and software mediums. The focus of this course is to instruct students on advanced techniques related to web design. Students will learn not only the initial steps taken in creating a site, but the upkeep involved as well. Students will also explore ethical concerns, "cyberethics", involved when creating a site. Students will be required to present many of their projects, which will enhance communication skills that will enhance their employment or further education.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take one of these classes – Design Multimedia and Web Technologies II, Computer Information Systems I or II, Information Technologies Fundamentals, Principles of Business and Marketing, Computer Science I, or Computer Science II.

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A Career and Technical Education Completer (CTE Completer) is a student who completes a CTE concentration. A concentration is a coherent sequence of courses (courses totaling 2 credits) completed by a student in a specific career area or specialization and meets all high school graduation or GED requirements.

INFORMATION TECHNOLOGY FUNDAMENTALS

Grades 9-12 **1 Credit**
Offered at WAHS

The focus of the course is on introducing skills related to information technology basics, internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, web page design, and interactive media. Students explore ethical issues related to computer and Internet technology and develop teamwork and communication skills that enhance their employability.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take one of these classes—Design Multimedia and Web Technologies II, Computer Information Systems I or II, Information Technologies Fundamentals, Office Administration, Computer Science I or II.

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MUSIC INDUSTRY TECHNOLOGY



Grades 11, 12 **2 Credits**
Offered at CATEC

Working in conjunction with the Music Resource Center, this course is designed to provide in-depth instruction on music industry elements such as composition, recording systems, mixing and processing techniques, and live sound. Students will also be exposed to musical theory, computer use, and instrument understanding and function. Projects will include recording of instruments and arranging recording tracks on an album, including, but not limited to, the arrangement of multiple microphones, use of synthesizers, applying compression and equalization, and amplifying sound. Students will incorporate advertising and marketing aspects in these projects and study the possible careers available in the field.

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OFFICE SPECIALIST I

Grades 9 – 12 **1 Credit**

Students enrolled in the first year of the Office Specialists sequence develop skills in areas including keyboarding, word processing, office procedures, and record management. Communication skills are developed through reading, writing, and speaking activities focused around office and business scenarios.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), A student may take Office Specialist II or III.

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OFFICE SPECIALIST II

Prerequisite: Office Specialist I

Grades 10-12 **1 Credit** **Offered at MoHS**

The combined second and third year course continues the development of skills from the first year of the Office Specialists sequence. Students learn to apply these skills by delivering office and business related services such as copying, binding, and creating personalized products. Students completing the Office Specialists sequence will have developed the skills necessary to be a competitive applicant for jobs set in an office environment.

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

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OFFICE SPECIALIST III

Prerequisite: Office Specialist II

Grades 11-12 **1 Credit**
Offered at MoHS

The combined second and third year course continues the development of skills from the first year of the Office Specialists sequence. Students learn to apply these skills by delivering office and business related services such as copying, binding, and creating personalized products. Students completing the Office Specialists sequence will have developed the skills necessary to be a competitive applicant for jobs set in an office environment.

Students may also complete Office specialist III through a supervised employment arrangement with local businesses, students choosing the Office Specialist III work a minimum average of 15 hours on the job each week. Assistance is offered in locating suitable work situations, with emphasis placed on the selection of a job which provides training to help the student reach his/her career goal.

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

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MARKETING



Do you enjoy providing a service to others?
 Can you write a good advertisement?
 Do you like helping people find solutions to their problems?
 Are you good at persuading people to make purchases and convincing people to do things?
 Are you a creative person?

Diploma With Some Training	Certification Or Associate Degree	College Degree Plus
Vehicle Sales	Real Estate Sales Agent	Sales Engineer, Buyer
Sales Associate/ Assistant Manager	Sales Representative, Store/Regional Manager	Marketing Manager, Public Relations Representative
Telemarketer	Auctioneer, Merchandise Display Artist	Market Research Analyst

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

PRINCIPLES OF BUSINESS AND MARKETING

Grades 9-10 1 credit

Students discover the roles of business and marketing in the free enterprise system and the global economy. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions as consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills is evident throughout the course. This course also supports career development skills and explores career options.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take one of the following: Marketing I, Marketing I, Sports Entertainment and Recreation Marketing I and/or II.

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MARKETING I (co-op available)

Grades 10-12 1 Credit (2 if taking Marketing Cooperative Education)

Students examine activities in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and position, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL). Computer/ technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must take Marketing II.

..... 8120Y



Student Organizations that Focus on CTE

Future Business Leaders of America; Family, Career and Community Leaders of America; Distributive Education Clubs of America; Technology Students Association; Health Occupations Students of America; and SkillsUSA are co-curricular student organizations that are available to all students taking courses in Career and Technical Education. These organizations are designed to complement, supplement, and strengthen the instructional program. Students participate in local, state and national activities, and in competitive events. Students learn to work as part of a team, develop leadership ability, problem solving skills, and skills for life. Students in the Career and Technical Education programs are expected to take advantage of the opportunities available to them through these student organizations.

MARKETING II (Advanced Marketing)

(co-op available) ?? what does this mean

Prerequisite: Successful completion of Marketing I

Grades 11-12 1 Credit (2 if taking Marketing Cooperative Education)

Student build knowledge gained in a prior Marketing course. Students participate in supervisory management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, and emerging technologies. Student will prepare for advancement in marketing careers and postsecondary education. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL).

Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must take Marketing I.

..... 8130Y

SPORTS, ENTERTAINMENT, AND RECREATION MARKETING

(co-op available)

Grade 10-12 1 Credit

This introductory course helps students develop a through understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. Students will investigate the components of branding, sponsorship and endorsements, as well as promotion plans needed for sports, entertainment and recreation events. The course also 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. The cooperative education method is available for this course. Student combine classroom instruction and supervised on-the-job training in an approved position within continuing supervision throughout the school year.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Sports, Entertainment, and Recreation Marketing II, Marketing I or Marketing II.

..... 8185Y

SPORTS, ENTERTAINMENT, AND RECREATION MARKETING II

Prerequisite: Sports, Entertainment, and recreation Marketing, or Marketing I

Grade 11-12 1 Credit

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. Students will be able to plan and execute an event, develop a career plan, and establish a sports, entertainment, or recreation marketing product/business. 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. The cooperative education method is available for this course. Student combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Sports, Entertainment, and Recreation Marketing, Marketing I or Marketing II.

..... 8178Y



CAREER CONNECTIONS

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

SMART MONEY MANAGEMENT/ECONOMICS

Grades 9-12 1 credit

Students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. 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.

* Graduation requirement for students entering the 9th grade in 2010.

..... 6123Y

JUNIOR/SENIOR INTERNSHIP PROGRAM

Grade 11-12 1 credit

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. Typical internships can be developed in areas of medicine, architecture, law, television production, law enforcement, journalism, finance, accounting, veterinary medicine, business management, computer technology, engineering, and many more. All students complete the application packet. See your high school counselor for more information.

..... 9072Y

VIRGINIA TEACHERS FOR TOMORROW I, II Sdv Orientation To Teaching As A Profession

Grades 11-12 Credit: 1 credit
(3 college credits)

This course introduces students to a career in teaching and education by allowing students to experience the components of the learner, the school environment, and the classroom teaching environment.

Virginia Teachers for Tomorrow aims to attract high school junior and seniors to the field of education through participation in a rigorous, world-class curriculum and field experiences related to teaching. Students will explore the exciting profession of teaching through a variety of classroom experiences and by teaching lessons they create. In the first part of the course, future teachers will learn the fundamentals of education theory including learning styles, needs, growth, and development. The second portion of the course is devoted to preparing and teaching lessons in local schools.

This course offers a unique opportunity for high school students to gain authentic experience in a profession. As part of that professional experience, students will be required to create a personal portfolio. In the portfolio, students reflect on and synthesize their learning by assembling a representative sample of their projects, observation forms, pupil assignments, self-assessments, and other evidence of their success in examining teaching as a profession.

Students will earn 3 college credits 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, recommendations and meet specific criteria. See your school counselor or Teacher for Tomorrow instructor for more information.

I 9062Y

II 9067Y



Interested in Teaching?
See page 19 in the Special Programs Section for information on the Teaching Fellows Program offered at WAHS for Juniors and Seniors interested in working with students with disabilities.

INTERNSHIPS

Typical internships can be developed in areas of:

- medicine,
- architecture,
- law,
- television production,
- law enforcement,
- journalism,
- finance,
- accounting,
- veterinary medicine,
- business management,
- computer technology,
- engineering, and many more.



EARLY CHILDHOOD DEVELOPMENT

Grades 9 –12 1 Credit
Offered at AHS

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.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Introduction to Culinary Arts, or Life Management I.

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

Fee: \$5

..... **8283S**

INTRODUCTION TO CULINARY ARTS

Grades 9–12 .5 Credits
Offered at MoHS

This course focuses on careers in foods service industry. Units of study will include different types of food preparation, food science, food safety and sanitation, nutrition, service styles and etiquette, foods from around the world, and how culture and environment influence foods eaten. A student will have taken Life Management I and II to make this course a sequential elective.

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

Fee \$15

..... **8252S**

INTRODUCTION TO CULINARY ARTS

Prerequisites: Students must provide their own transportation to and from their work-study site.

Grades 10-12 3 Credits
Offered at CATEC

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.

Fee: \$30 for uniform

..... **8250Y**

CULINARY ARTS I & II

2 Year Program 2-3 Elective Credits*

Prerequisites: Ability to perform measurements, follow written directions, and have strong reading ability.

Grades: 10-12 Offered at CATEC

Culinary Arts prepares students to enter employment in food service occupations. Instruction focuses on sanitation, nutrition, food preparation, catering, purchasing, and inventory control in addition to food presentation and service. Students plan menus, prepare food, and use a variety of kitchen equipment such as ovens, grills, broilers, slicers, grinders, and blenders.

Be part of a team that emphasizes passion, attitude, character and team work in a disciplined and creative environment. Our emphasis on learning is academic, hands-on, and community-based service learning.

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

Verified Credits: 1-2 (certification, completer)

Fees: \$90 for a uniform, hat, lab workbook, and classroom supplies. \$29 for SkillsUSA dues (optional).

*2 elective credits taken in conjunction with a CATEC English class.

Culinary Arts I: 8521Y
Culinary Arts II: 8522Y

INTERNATIONAL FOODS

Grades 9-12 .5 Credits
Offered at AHS, MoHS

In addition to teaching food safety, sanitation, nutrition, and basic food preparation skills, the class identifies origins of foods, explains how climate, geography, and culture affect cuisine, and prepares foods from six main regions of the world. These regions include the United States and Canada, Latin America, Europe, Mediterranean Countries, Middle East, Africa, and Asia.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Life Management I and II and Introduction to Culinary Arts.

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

Fee: \$15

..... **8271S**

FASHION DESIGN

Grades 11-12 .5 Credits
Offered at AHS, MoHS

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Life Management I and II.

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

Fee: \$15 for small sewing equipment. Students will purchase their own fabric, patterns, and notions.

..... **8247S**

INTRODUCTION TO INTERIOR DESIGN AND HOUSING

Grades 11-12 .5 credits
Offered at AHS, MoHS

This course focuses on identifying and exploring the individual careers in all areas of housing and interior environment, career options in residential and commercial interior design. The individual characteristics and skills necessary for career success in the industry of housing and interior environments are investigated. Units of study include investigation of careers in construction, real estate, home design, and home care and maintenance. Math, science, and communication skills are emphasized throughout this course.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take a combination of Life Management I, International Foods, or Early Childhood Development.

Fee: \$5 per semester. All project materials will be purchased by the student.

..... **8256S**

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



LIFE MANAGEMENT I

Grades 9-12 **1 Credit**
Offered at AHS, MoHS

This introductory course explores managing resources to achieve individual goals, making informed consumer choices, personal finance, creating and maintaining a living environment that supports the well-being of individuals, living in a global environment, making decisions related to nutrition, clothing, and housing, and managing a household. Several food labs and opportunities for sewing or clothing repair are included as appropriate to content. The course reinforces basic skills of math, science, and communication when appropriate in the content.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Life Management I and/or Introduction to Culinary Arts, International Foods.

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

Fee: \$30 per semester

..... 8219Y

LIFE MANAGEMENT II

Prerequisite: Life Management I

Grades 10-12 **1 Credit**
Offered at AHS

In this advanced course, students continue exploring managing resources to achieve individual goals, making informed consumer choices, creating and maintaining a living environment that supports the well-being of individuals, living in a global environment, making decisions related to nutrition, clothing, and housing, and managing a household. Several food labs and opportunities for sewing or clothing repair are included as appropriate to content. The course reinforces basic skills of math, science, and communication when appropriate in the content.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student will have taken Life Management I.

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

Fee: \$30

..... 8220Y



Do you like to care for sick people or help them stay well?
 Are you interested in diseases and in how the body works?
 Do you like to provide a service to people?
 Do you like science and lab experiments?

Diploma with some training	Certification or Associate degree	College degree plus
Dental Assistant	Dental Hygienist	Dentist
Home Health Aide, Nurse Aide	LPN, Registered Nurse, EMT	Physician
Most careers in Health Science require certification or college degrees	Surgical Technician, Biotechnology Technician	Radiation Therapist
	Fitness Trainer, Physical/Occupational Therapy Assistant	Physical/Occupational Therapist, Athletic Trainer

DENTAL ASSISTANT

1 Year Program

Prerequisites: C or better in Biology

Grades: 11, 12 **2-3 Elective Credits***

Offered at CATEC

This one-year program prepares students to perform all the tasks of a Dental Assistant. These tasks include exposing, processing, and mounting x-rays, preparing materials for various procedures, including impressions, removing sutures, placing topical anesthetics, and making diagnostic study models for alginate impressions. Dental Assistant students also study maintenance of patient records, sterilization, disinfection of instruments and equipment, preparation of patients for dental treatment, application of topical anesthetics, arrangement of dental instruments, materials and medications on chair side trays, use of oral evaluation system, mixtures and preparation procedures of materials such as fillings and cements, laboratory procedures such as pouring/trimming/polishing cast, post op, and oral hygiene instructions for patients. This program will give students a foundation to pursue a Dental Hygienist post-secondary degree through a two or four year college.

Certifications: Dental Assisting Assessment (NOCTI), Radiation Health and Safety, Infection Control

*2 elective credits taken in conjunction with a CATEC English class.

Verified credits: 1 – 2 (completer, certification)

..... 8328Y



EMERGENCY MEDICAL TECHNICIAN & FIREFIGHTING

1 Year Program

Firefighting

1 Elective Credits

EMT

1 Elective Credits

Grades: 11, 12

Offered at CATEC

Prerequisites: Must be 16 or older by start of school & 11th or 12th grader academically. Cumulative GPA 2.0 recommended. C in Biology (EMT). Other requirements as assigned by the Virginia Office of Emergency Medical Services.

First semester instruction includes fire department organization, use of various equipment, methods of entry and rescue, salvage practices and equipment, and fire and arson inspection and investigation techniques. Supervised internships are provided with fire and rescue managed by the teacher. The focus of the second semester focuses on the role and responsibilities of emergency rescue workers, basic medical terminology, and health care skills that include first aid; cardiopulmonary resuscitation; aseptic technique; and related anatomy, physiology, and disease knowledge. Course requires strenuous physical activity & occasional exposure to smoke-filled environments.

Class will run from 9:25 – 11:00 am Mon–Fri. Students can elect to take an English class at 11:00 am if they desire and earn 1 additional credit. Students not taking an English class at 11:00 am may return to their home school (must provide your own transportation).

Certifications: EMT Basic, Firefighter I
 Verified Credits: 1-2 (certification, completer)
 Fees: \$55 for uniform and shoes and \$27.50 for a workbook. \$29 for SkillsUSA due (optional).

Firefighting..... 8705S

EMT..... 8334S





A Career and Technical Education Completer (CTE Completer) is a student who completes a CTE concentration. A concentration is a coherent sequence of courses (courses totaling 2 credits) completed by a student in a specific career area or specialization and meets all high school graduation or GED requirements.

HEALTH AND MEDICAL SCIENCES I

Prerequisites: Sciences at grade level or above
Grades 9-12 **1 Credit**

Offered at MoHS, AHS

Health and Medical Science I is a survey course covering healthcare and the healthcare system. Focus on: history, structure, services, payment systems, contemporary issues and jobs and career possibilities within this system. Students are supported in understanding their interests and strengths with a goal of matching these to a particular health job/career.

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

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

I 8302Y

HEALTH AND MEDICAL SCIENCES II

2 Year Program

Prerequisites: Sciences at grade level or above
Grades: 10-12 **1 Credit**

Offered at MoHS, AHS

A continuation of HMS One with focus on anatomy and physiology, common health alterations, laboratory data and interpretation, testing modalities and their utility in healthcare. Further investigation, delineation and clarification of students' career interests with a mapping of steps to achieve their goals.

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

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

II 8303Y

PHARMACY TECHNICIAN

1 Year Program

Prerequisites: C or better in Biology
Grades: 11, 12 **2-3 Elective Credits**

Offered at CATEC

This one-year program will prepare students to perform all the tasks of a Pharmacy Technician. These tasks include assisting the licensed Pharmacist with serving patients, and ordering, stocking, and packaging prescription and over-the-counter medications. Pharmacy Tech students also study safety procedures, medication and inventory control, maintaining records, preparing labels, and processing insurance claims.

This program can prepare you to successfully complete the Certified Pharmacy Technician (CPhT) examination.

Certifications: Virginia Pharmacy Technician

Verified Credits: 1-2 (certification, completer)

..... 8305Y

NURSE AIDE

1 Year Program

Prerequisites: C or better in Biology. Ability to work and socially interact with people in a public environment.

Grades: 11, 12 **3 Elective Credits**

Offered at CATEC

This course emphasizes study of nursing occupations, 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, and patient care. Clinical experience provided in nursing homes and hospitals. Community service outreach projects are required and organized by students.

Certifications: Certified Nursing Assistant (I)

Verified Credits: 1-2 (certification, completer)

College Credits: NA

Fees: \$80 for a uniform, \$30 HOSA dues, lab kit, Mantoux testing and CPR/First Aid training.

AM. 8360S

PM. 8362S

PRACTICAL NURSING I

2 Year Program

Prerequisites: C or better in biology. Ability to work and socially interact with people in a public environment.

Grades: 11, 12 **3 Elective Credits**

Licensed Practical Nurses (LPN) work as members of a health care team under the supervision of a physician and/or registered nurse as authorized by regulations of the State Board of Nursing. Practical Nursing students study: fundamental and advanced nursing skills, the nursing process, nutrition and diet therapy, personal and environmental health, medical and surgical nursing, diseases and disorders, pharmacology, client care, development of individual and family, family and community health, and safety and the healthcare facility.

Certifications: (optional) Certified Nursing Assistant (I); LPN license

Verified Credits: 1-2 (certification, completer)

College Credits: NA

Fees: \$80 for a uniform, HOSA dues, lab kit, Mantoux testing and CPR/First Aid training. Offered at CATEC

1st semester 8357S

2nd semester 8358S

TECHNICAL DRAWING

Grades 9-12 1 Credit

Technical Drawing is an introductory course without a prerequisite. The purpose is to familiarize a student with various drafting practices, using the drawing board and a (CAD) computer-aided-drafting system. Emphasis is placed on interpretation and use of industrial prints, handbooks, and other resource materials as they adhere to established standards of technical drawing. The course covers the important aspects of the application of drafting principles of typical engineering drawings and design problems.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Architectural Drawing or Engineering Drawing.

Fee: \$20

..... 8435Y

ARCHITECTURAL DRAWING

Prerequisite: Technical Drawing

Grades 10-12 1 Credit

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. The course provides information helpful for the homeowner and is especially beneficial to the future architect, interior designer, homebuilder, or anyone planning a career in the construction industry. This course is recommended for all students, especially those interested in pursuing an architecture career or major. Completion of this course may prepare the student for industry certification.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Architecture II, Basic Technical Drawing, Engineering Drawing.

Fee: \$15 per semester

..... 8437Y

ARCHITECTURAL DRAWING ARC 121

Architectural Drafting I

Prerequisite: Technical Drawing

Grades 10-12 1 Credit (3 College Credits)

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. The course provides information helpful for the homeowner and is especially beneficial to the future architect, interior designer, homebuilder, or anyone planning a career in the construction industry. 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.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Architecture II, Technical Drawing, Engineering Drawing.

Fee: \$20

..... 8654Y

ARCHITECTURE II

Prerequisite: Architectural Drawing

Grades 11-12 1 Credit

Offered at WAHS

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 are able to create blocks with attributes and to create tiled view ports. They also study and duplicate commercial blueprints. This course is recommended for all students, especially those interested in pursuing an architecture career or major.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Architecture II, Basic Technical Drawing, Engineering Drawing.

Fee: \$20

..... 8492Y



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

CONSTRUCTION TECHNOLOGY

Prerequisite: Materials Processes

Technology or Technical Drawing

Grades 10-12 1 Credit

Offered at MoHS

Students design, build, and test scale-model structures using basic hand tools and power tools. Hands-on experiences include calculations, measurements, and problem-solving activities related to the construction industry. Students work with projects that help them gain the skills required by the construction industry. (Students who complete Construction Technology I at the home high school may be eligible to enter Carpentry II with teacher recommendation and be considered a career/technical education completer.)

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Materials and Processes Technology and/or Manufacturing Technology or Advanced Manufacturing Technology.

Fee: \$20

..... 8431Y

DIGITAL IMAGING TECHNOLOGY

Grades 9-12 1 credit

Offered at MoHS

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.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must also complete Geospatial Technology.

Fee: \$30 per semester

I..... 8456Y

II 8459Y

ENGINEERING DRAWING

DR 140 Technical Drawing

Prerequisite: Technical Drawing

Grades 10-12 1 Credit (3 College Credits)

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. Emphasis is placed on interpretation of industrial prints, ability to use handbooks along with other resource materials, and adherence to established standards of drafting. The application of drafting principles to typical engineering drawing and design problems is emphasized through CAD projects. This course is recommended for all students, especially those interested in pursuing an engineering design career or major. 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, 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.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Technical Drawing, Architectural Drawing, Architecture II, or Engineering Drawing.

Fee: \$20

..... 8655Y

GEOSPATIAL TECHNOLOGY

I and II

Prerequisites: Successful completion of Algebra I

Grades: 10—12 1 credit

Offered at MoHS, WAHS

The Geospatial Technology program provides experiences pertaining to the study of geographic information systems (GIS), global positioning systems (GPS), remote sensing (RS), digital image processing simulator (DIPS), Geodesy, Automated Cartography (Auto-Carto), Land Surveying, (LS), and navigation. Fundamentally, these technologies allow students to explore and analyze the natural and human-made world, from local to global and beyond.

Students use various tools, processes, and techniques to create, store, access, manipulate, and revise data to solve human challenges. These experiences employ real-world spatial analysis models and guidelines for integrating, analyzing, and synthesizing data, with a focus on both the implications and the limitations of such technologies. These experiences also include the interfacing to telecommunications and automated data base management systems.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must also take Geospatial Technology II or Digital Imaging Technology.

I 8430Y

II 8412Y

GRAPHIC COMMUNICATIONS

Grades 9–12 .5 Credits

Offered at: AHS, WAHS

Graphic Communications deals with printed images such as newspaper, 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.

Fee: \$10

..... 8458S

MANUFACTURING TECHNOLOGY I

Prerequisite: Materials and Processes Technology

Grades 10-12 1 Credit

Offered at WAHS

Manufacturing technology is an advanced level class for students interested in construction and materials processes. Students design, build, and evaluate all aspects of the final product. Students work with projects that help them gain advanced skills required by the construction industry.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Materials Processes Technology, Construction Technology or Advanced Manufacturing Technology I and II.

Fee: \$10

..... 8425Y

MANUFACTURING TECHNOLOGY II

Prerequisite: Materials and Processes Technology, Manufacturing Technology
Grades 11-12 **1 Credit**
Offered at WAHS

Advanced Manufacturing is designed for the student wanting to be more independent with the use of equipment and design of projects. They will build a chair or rocking chair. The self-paced curriculum allows the student the opportunity to use problem-solving skills in order to complete projects. Students gain hands on experience in a fun and challenging course as well as learn about a manufacturing system and how a company works.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Materials Processes Technology, Construction Technology or Manufacturing Technology II.

Fee: \$10 plus any additional projects; goggle fee
 **8426Y**

MATERIALS AND PROCESSES TECHNOLOGY

Grades 9-11 **1 Credit**
Offered at: MoHS, WAHS

Students focus on industrial/technical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis, the use of tools and equipment related to analysis, testing and processing of metals, plastics, woods, ceramics, and composite materials. This laboratory course is recommended for students interested in technical careers and others wishing to improve their consumer knowledge and technological literacy.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Construction Technology and/or Manufacturing Technology or Advanced Manufacturing Technology I and II.

Fee: \$10
 **8433Y**

TRADE AND INDUSTRIAL EDUCATION



Do you like working with tools, machinery, and computers?
Do you enjoy seeing the concrete result of your work?
Do you enjoy designing and problem solving?

Diploma with some training	Certification or Associate degree	College degree plus
Forklift Operator	Laser technician	Industrial Production Manager
Welder	Production Planner	Quality Assurance Specialist
Quality Control Technician	Electronics Technician	Environmental Engineer

AUTO BODY TECHNOLOGY I & II

2 Year Program

Prerequisites: Successful completion of Algebra I, good eye-hand coordination, manual dexterity, and physical strength and stamina.

Grades: 10-12 **Offered at CATEC**

I 2-3 Elective Credits*

II 2-3 Elective Credits*

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. Each student will become familiar with the latest finishes, from single-stage to multi-stage finishes. 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)

Verified Credits: 1-2 (certification, completer)

College Credits: NA

Fees: \$106 for tools and workbook. \$29 for SkillsUSA dues (optional).

* 2 elective credits taken in conjunction with a CATEC English class.

I 8679Y

II 8680Y

AUTOMOTIVE SERVICE TECHNOLOGY I & II

2 Year Program

I & II 2-3 Elective Credits*

Prerequisites: Algebra I recommended and the ability to read and understand highly technical information, use sophisticated equipment, and work independently and in groups.

Grades: 11, 12 **Offered at CATEC**

Automotive Service Technology is a two-year program for students who wish to become automotive technicians. The program is dual enrolled with J. Sargeant Reynolds Community College and Universal Technical Institute. 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, brakes, steering, and suspension. The program is designed to provide an in-depth study of the automobile and its operation systems. 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 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.

Certifications: ASE, AYES

Verified Credits: 1-2 (certification, completer)

College Credits: Students earning a B average will earn 20 dual enrollment college credits at J. Sargeant Reynolds Community College

Fees: \$120.00 for uniform and goggles. \$29 for SkillsUSA dues.

*2 elective credits if taken in conjunction with a CATEC English class.

I 8506Y

II 8507Y



Many CTE Courses charge a materials/project fee.



A Career and Technical Education Completer (CTE Completer) is a student who completes a CTE concentration. A concentration is a coherent sequence of courses (courses totaling 2 credits) completed by a student in a specific career area or specialization and meets all high school graduation or GED requirements.

BASIC PHOTOGRAPHY

Grades 9-12 1 Credit
Offered at MoHS

Students enrolled in this program will learn photographic skills such as using multiple camera formats to set up, shoot, process and present photographic images; creating images using digital technology and preparing a professional portfolio to prepare for a career in the field of photography. To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must take two years of Commercial Photography.

Fee: \$35
..... 8610Y

COMMERCIAL PHOTOGRAPHY I, II, III

Grades 10-12 1 Credit
Offered at MoHS

Students learn to shoot images using a digital camera, input digital images, produce and correct digital images, control digital output, operate air brushes, cameras, meters, and other photographic digital equipment. Instructional topics include composition and color dynamics, contact printing, enlarging and developing film, and processing microfilm. To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student may take Commercial Photography II and/or III.

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must take Commercial Photography II or III.
Fee: \$35

I 8607Y
II 8608Y
III 8609Y

BUILDING TRADES I & II

2 Year Program
I 2-3 Elective Credits*
II 2-3 Elective Credits*

Prerequisites: Students must be 16 years of age or older (read a ruler in increments of sixteenths).

Grades: 10-12 **Offered at CATEC**

This course will teach you all the basic skills of the following trade areas: carpentry, residential wiring, residential plumbing, and masonry. The safe use of hand and power tools will be emphasized with more emphasis on power equipment. Blueprint reading and drawing are introduced at the beginning of the course. The latter part of the course will focus on carpentry, from framing to the finishing trim, and roofing. Plumbing is introduced as it relates to the other trades during the year; for example, drain waste, and vent work are taught as it relates to bath-

room and kitchen plumbing. 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: Home Builders Residential Construction Academy Assessments
College Credits: One-year of credit toward the Carpentry Apprenticeship Program (upon successful completion of the certification exam)
Verified Credits: 1-2 (certification, completer)
Fees: \$60 for tools and safety gear. \$29 for Skills USA (optional).

*2 elective credits if taken in conjunction with a CATEC English class.

I 8515Y
II 8516Y

MASONRY I & II

2 Year Program
Masonry I: 2-3 Elective Credits*
Masonry II: 2-3 Elective Credits*

Prerequisites: Students with allergies (dust, etc.) should consult a physician prior to enrollment.

Grades: 10-12 **Offered at CATEC**

Students in Masonry will work with brick, concrete, glass block, tiles, terra cotta, and stone. Work can be as simple as laying a wall, or as complex as building a fireplace. The work is very physical, involving the use of hand tools, power tools, and other materials. Brick and block are laid by hand, requiring the skill of a craftsman. Students will learn to read blueprints, understand building codes, and be knowledgeable of industry safety requirements and guidelines for handling hazardous materials.

Certifications: Masonry Assessment (Home Builders Residential Construction Academy)
Verified Credits: 1-2 (certification, completer)
College Credits: One-year of credit toward the CATEC Apprenticeship Program (upon successful completion of the certification exam)

*2 elective credits taken in conjunction with a CATEC English class.

..... 8512Y
..... 8513Y



BARBERING I & II

2 Year Program

Prerequisites: C or better in Biology, Chemistry or Anatomy

Grades: 11, 12 **Offered at CATEC**

Barbering I **2-3 Elective Credits***

Barbering II **2-3 Elective Credits***

Students in this program are prepared to take the Virginia Barber examination in order to become licensed practitioners. Students gain daily practical experience working on other students and manikins. During the second year, students have the opportunity to provide services to patrons in a clinical setting; this lab is open to the public by appointment. Students also have the opportunity to do internships in local Barbershops. Good reading skills and a strong science background are recommended. Must be able to work independently.

Fees: \$260.00 for a supply kit. \$29 for SkillsUSA dues (optional). Additional supplies may be needed for 2nd year.

Certifications: State Board License

Verified Credits: 1-2 (certification, completer)

College Credits: NA

*2 elective credits taken in conjunction with a CATEC English class

I **8747Y**

II **8748Y**

COSMETOLOGY I AND II

2 Year Program

Prerequisites: C or better in Biology

Grades: 11, 12 **Offered at CATEC**

Cosmetology I: **2-3 Elective Credits***

Cosmetology II: **2-3 Elective Credits***

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

Verified Credits: 1-2 (certification, completer)

College Credits: NA

Fees: Year 1: \$260 for supply kit, and workbook. \$29 for SkillsUSA dues (optional). Year 2: \$60 for supply kit. \$29 for SkillsUSA dues (optional).

*2 elective credits taken in conjunction with a CATEC English class

I **8527**

II **8528**

TELEVISION PRODUCTION I

Grades 9-12

1 Credit

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.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must also take TV Production II or III.

..... **8688Y**

TELEVISION PRODUCTION II

Prerequisite: Television Production I

Grades 10-12

1 Credit

Students learn advanced skills in equipment operations. Learning activities include the study and operation of a character generator, telecine, audio-mixing console, audio-video patch panels, and a videotape editor/backspacer. Students learn to produce graphics, and credits for TV programs. They practice skills related to production, direction, and scripting of programs. The editing of videotape is practiced. Students study control room procedures and responsibilities.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must also take TV Production I or III.

..... **8689Y**

TELEVISION PRODUCTION III

Prerequisite: Television Production I & II

Grades 11-12

1 Credit

This course covers the post-production process and includes understanding audio and video values and standards, editing in various formats, edit logging and dubbing. Students learn how to integrate graphics, and to incorporate music voiceover and sound effects into the editing process. Methods of transition and continuity and A-B editing are explored. Students learn the elements of sound design and reinforcement for variety of production medias.

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

To be a CTE Completer and fulfill your sequential elective requirement (2 credits), a student must also take TV Production I or II.

..... **8690Y**

These courses fulfill Fine Art/Career Technical Education graduation requirement.

Unless otherwise indicated, all courses are offered at all high schools.

Course Descriptions



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. It 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 short-memory 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, CVs, 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 crystallizes one's thoughts, improving learning in such a way.
- 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

ENGLISH 9

1 Credit

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.

Standard	1132Y
Academic/Advanced	1138Y
9th	1138R
Honors	1136Y

ENGLISH 10

Prerequisite: English 9

1 Credit

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.

Standard	1142Y
Academic	1148Y
Advanced	1148R
Honors	1146Y

JUMP START ENGLISH 9

2 Credits

This double-blocked course is designed for students who can be successful at the academic level with additional, directed support in the development of their literacy skills. Students are recommended for this course by their eighth grade teachers in conjunction with a literacy specialist and/or Language coordinator. Because it is a double-blocked class, these students will benefit from the daily mentoring of a Language Arts teacher who can help them achieve success in their first year of high school.

.....	1133Y
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AMERICAN STUDIES / ENGLISH 11

Prerequisite: English 10

1 Credit



American Studies 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. Students may take these courses at different levels.

Standard	1152Y
Academic	1158Y
Advanced	1158R
Honors	1156Y

AMERICAN STUDIES / ENGLISH 11 Language And Composition, Advanced Placement

Prerequisite: English 10

1 Credit

Offered at AHS, MoHS



American Studies 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 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 are expected to take an AP exam. The exam fee is approximately \$87 per test. Students who do well on this test 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.

Advanced Placement **1196Y**

ENGLISH 241-242: Survey Of American Literature, I-II

Prerequisites: English 10; Satisfactory scores on COMPASS and complete PVCC application

Grade 11

1 Credit (6 College Credits)

Offered at MoHS



Survey of American Literature I and II examines American literary works from colonial times to the present emphasizing the ideas and characteristics of our national literature. The course involves critical reading and writing that examines and defines the literary characteristics of writings by American authors from the Colonial period to the present. Students will work to understand the relationship of these works to American history and culture and develop critical reading and writing skills through the analysis of a variety of literary genres.

Note: The student is responsible for purchasing the college textbook associated with this course.

I	1322S
II	1323S



**Indicates
PVCC Dual
Enrollment**



Dual Enrollment offers the student credit through Piedmont Virginia Community College (PVCC), as well as high school credit, for courses offered during the regular school day at the high school. Dual Enrollment/Credit courses taken in the core areas (English, History/Social Sciences, Science and Mathematics) are weighted as college/dual enrollment courses. Students taking Dual Enrollment courses follow the college add/drop policy and deadlines. See your school counselor for more information.



All courses are offered at all three high schools unless otherwise indicated.



The listings for courses include the following information (where applicable):

- Course title
- Course level
- Course number
- Prerequisite(s) (courses that must be passed before taking this course)
- Grade level (9, 10, 11, 12)
- Credit (unless otherwise noted, .5 credit is awarded at the end of each semester)



**Indicates
Standards of
Learning Test**

ENGLISH 12

Prerequisite: English 11

1 Credit

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.

Standard 1162Y
Academic 1168Y
Advanced 1168R

ENGLISH 12

Advanced Placement

Prerequisite: See School Counselor

Grade 12 **1 Credit**

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 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. Students are expected to take an AP exam. The exam fee is approximately \$87 per test.

Advanced Placement 1195Y

ENGLISH 111



College Composition I

Prerequisite: Satisfactory scores on COMPASS and complete PVCC application

Grade 12 **.5 Credit (3 College Credits)**

A college-level course, English 111 develops students' abilities to write and read effectively for study, work, and pleasure. Students compose essays, letters, abstracts, annotations, and other nonfiction prose for a variety of purposes and audiences. 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 are expected to integrate skills of reading, writing, critical thinking, listening, and speaking.

Note: The student is responsible for purchasing the college textbook associated with this course.

..... 1320S

ENGLISH 112



College Composition II

Prerequisite: English 111 or division approval. Satisfactory scores on COMPASS and complete PVCC application.

Grade 12 **.5 Credit (3 College Credits)**

A college-level course, English 112 develops students' abilities to write and read effectively for study, work and pleasure. Students read prose, fiction, drama, and poetry. 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.

Note: The student is responsible for purchasing the college textbook associated with this course.

Exam Option: Students completing English 111 and English 112 may elect to take the AP exam for AP English language and Composition. The exam fee is approximately \$87 per test. Students who do well on this test receive college credit or superior placement at participating colleges.

..... 1321S

LANGUAGE!

Prerequisite: Teacher recommendation

This course should be in addition to a student's English class.

Language! Is a highly-structured, research-based intervention that offers an accelerated, sequential approach to literacy while addressing the components of a balanced literacy diet. This course offers students who have experienced difficulty with reading skills an opportunity to break apart the structures of language to gain deep understanding of how words, sentences, and paragraphs work and how authors use structures to create meaning. Students read and write extensively in non-fiction forms; other genres are experienced through read-alouds, literature circles, and independent reading. Based on extensive pre-assessments, students are placed in mixed-grade ability groups to accelerate mastery of specific skills.

Grades 9/10 1485Y

Grades 11/12 1483Y

3 1486Y

4 1487Y

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL) For Newcomers

Prerequisite: Teacher recommendation and assessment

Grade 9-12 **3 Credits**
(English 9 and/or 10, World Language, CATEC Exploratory and/or Elective Credit)

Offered for all high schools but housed at CATEC

The Newcomer Program is designed specifically for beginning English language learners who are new to US schools and may have experienced interrupted schooling in their home language(s). Students attend a half-day ESOL program at the Charlottesville/Albemarle Technical Education Center (CATEC) that may include a CATEC exploratory rotation. The program is designed to foster rapid language learning through targeted instruction in critical skills needed to succeed in school as well as cross-cultural communication and social adjustment skills. Students take electives during the second half of their day in their home high schools.

..... 5723Y

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)

Prerequisite: Teacher recommendation and assessment

Grade 9-12 **1 Credit**
(English 9 and/or 10, World Language, or Elective Credit)

ESOL courses are designed for students whose primary language is not English. The courses provide students with targeted language instruction designed to prepare students to meet the same rigorous standards as all students are expected to meet. Levels I and II students work to develop the basic reading, writing, speaking and listening skills through the content areas of social studies, science, math, and language arts. Students are expected to draw upon previous experience and background and receive support with cultural adjustment and cross-cultural communication skills. Level III and Level IV students continue to hone their language skills and receive targeted content area support with a focus on reading, and writing and development of academic vocabulary.

I	5724Y
II	5729Y
III	5732Y
IV	5733Y

ESOL STUDY / ORGANIZATIONAL SKILLS

Grades 9-12 **Credit:1 Elective**

AHS only offers 1 course,
MoHS only offers I-III

This ESOL course is designed as a writing-intensive resource class to support English Language Learners (ELL) 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.

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

SKILLS DEVELOPMENT READING/Writing

Prerequisite: Teacher Recommendation
Grades 9-12 **1 Credit**

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, and usage/mechanics.

I	1112Y
II	1113Y
III	1114Y

AFRICAN-AMERICAN LITERATURE

Grades 9-12 **.5 Credit**
Offered at MoHS

Students in this survey course explore the literature and language of African-Americans. By examining various influences on the literature over time, students develop an understanding of the progress and successes of African-American culture. This analysis informs the critical writing, thinking, and discussion of the literature that takes place. Students analyze poetry, short stories, novels, and non-fiction pieces. Students write for a variety of purposes and audiences.

..... 2369S

SAT PREP/SUCCESSFUL STRATEGIES FOR COLLEGE

Grades 10, 12 **.5 Credit**

This class prepares students to take the SAT. Students learn and practice with a variety of reading strategies necessary to effectively interact with college-level text. They also gain experience with writing on demand, thus preparing them for timed writing situations. The development of study skills and habits essential for success in college are stressed.

..... 9915S

WOMEN IN ART AND LITERATURE

Grades 10-12 **.5 or 1 credit**
Offered at WAHS

Students study a selection of female authors, poets, and artists from various cultures and time periods. They analyze the development of common themes and study the ways women revolutionized particular genres within their historical context. The class will be an open forum for discussion and interpretation. Students write informal and formal pieces in response to text.

..... 1495S
..... 1495Y



ESOL courses may be counted for English 9 and/or English 10 credit. They may also be counted for World Language Credit or as an elective credit. Credit for a single ESOL class may be given only once. If a student receives World Language credit for and ESOL course, then he or she may not receive credit for the same course in the area of English or electives.

Decisions about how to distribute ESOL credits should be collaborative and involve the ESOL Coordinator or designee, school counselor, parent, and student.

Course Descriptions

Courses offered at all schools. Additional courses may be offered at individual schools.



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). A course may satisfy the requirement for Fine Art or Career/Technical Education credit and for sequential electives. Sequential elective courses may be taken in consecutive years or any two semester/year of high school.

INSTRUMENTAL

Instrumental Sequence of Courses

Concert Band I	Jazz Band I	Symphonic Band I	String Ensemble I
Concert Band II	Jazz Band II	Symphonic Band II	String Ensemble II
Concert Band III	Jazz Band III	Symphonic Band III	String Ensemble III
Concert Band IV	Jazz Band IV	Symphonic Band IV	String Ensemble IV

CONCERT BAND

Prerequisite: One year minimum previous instrumental training or permission of the instructor

Grades 9-12 1 Credit
(student can earn credit each year he/she takes the course)

The 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, some district events, and are eligible to audition for district and regional honors and Albemarle County Honors Band.

Fees: \$30 (uniform maintenance);
\$75 (instrument rental);
\$25 (percussion fee)

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



CONCERT STRINGS

Prerequisite: By audition only

Grades 9-12 1 Credit Offered at AHS

Student must provide own instrument. Large instruments may be rented from the school.

String Ensemble: standard violin, viola, cello, bass instrumentation. This group studies and performs more advanced works for string orchestra from the Baroque through the Modern

Fees: \$30 (uniform maintenance);
\$75 (instrument rental)

I	9238Y
II	9239Y

JAZZ BAND

Prerequisite: Previous instrumental training, approval of Band Director, audition

Grades 9-12 1 Credit

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 on evenings and weekends. Jazz Band members are eligible to audition for district and regional honors and for the Albemarle County Honors Band.

Rehearsal schedules vary from school to school:

AHS: Scheduled during the 7 period day
MoHS: Tue & Thur from 7:30 – 9:00 am, all year
WAHS: Tuesday through Friday from 8 – 9 am

Fee: \$30 (uniform maintenance);
\$75 (instrument rental, if necessary)

I	9296Y
II	9299Y
III	9298Y
IV	9262Y

FINE & PERFORMING ARTS

MARCHING BAND

Prerequisite: Recommendation of band director

Grades 9-12 .5 Credit

Offered at MoHS, AHS

The Marching Band is a competition quality field show ensemble. The Marching Band performs at marching band competitions, parades, and home football games. Band members are required to attend band camp in the summer. The Albemarle Band rehearses at zero period and some Tuesday afternoons. The Monticello Band will meet during the school day and on Friday afternoons of home football games.

Fee: \$30 (uniform maintenance)

..... 9297S

MUSIC THEORY 111



Prerequisite: Students should be able to read music and perform on an instrument

Grades 10 – 12 1 Credit (COLLEGE CREDIT?)

Offered at WAHS

This is a dual enrollment course receiving both WAHS and PVCC credit. The course includes instruction in the fundamentals of music including pitch, notation, key signatures, scales, modes, intervals, chords, chord progression, inversions, melodic organization, voice learning, rhythmic patterns, meters and basic analysis. It is the foundation course for study of all areas of music. Students achieve skills in keyboarding, sight singing, and ear training. The student is responsible for the college textbook associated with this course.

Fee: \$15 (theory workbook)

PVCC 9225A

MUSIC 605

PVCC 9225B

PERCUSSION ENSEMBLE

Prerequisite: One year minimum previous instrumental training

Grades 9-12 1 Credit
(student can earn credit each year he/she takes the course)

Offered at MoHS & WAHS

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, ear-training, and music history. The Percussion Ensemble performs winter and spring concerts and at other times at the discretion of the director.

Fees: \$30 (uniform maintenance);
\$25 (percussion fee)

..... 9242Y

STAGE BAND

Prerequisite: One year of previous instrumental training.

Grades 9-12 1 Credit

Offered at MoHS

This class meets every Wednesday and Friday morning from 7:30 to 8:45. The group will practice and perform various styles of music, including jazz, pop, and rock. Students may also participate in competitions during the school year as well as several concerts. No audition is required and all instruments are welcome.

Fee: \$5

..... 9202Y



Participation in any of these courses fulfills the Fine Arts requirement.

Some Fine and Performing Arts Courses may charge a materials/project fee.



**Indicates
PVCC Dual
Enrollment
See page xx
for more
information**

STRING ENSEMBLE

Prerequisite: Minimum two years of private instruction

Grades 9-12 **1 Credit**

Student must provide own instrument. Large instruments may be rented from the school.

String Ensemble: standard violin, viola, cello, bass instrumentation. This group studies and performs works for string orchestra from the Baroque through the Modern period.

Fees: \$30 (uniform maintenance);
\$75 (instrument rental)

I..... 9241Y
II..... 9266Y
III..... 9267Y
IV..... 9268Y

SYMPHONIC BAND

Prerequisite: Two years previous instrumental training and/or approval of the band director. An audition is required.

Grades 9-12 **1 Credit – (student can earn credit each year he/she takes the course)**

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.

Fees: \$30 (uniform maintenance);
\$75 (instrument rental);
\$25 (percussion fee)

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

WIND ENSEMBLE

Prerequisite: Previous instrumental training, teacher recommendation, and audition

Grades 9-12 **1 Credit**

Offered at AHS, MoHS

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.

Fees: \$30 (uniform maintenance); \$75 (instrument rental); \$25 (percussion fee); \$15 (theory workbook)

..... 9243Y

PUBLISHING

Publishing Sequence of Courses

Journalism I	Yearbook I	Film Studies/Filmmaking
Journalism II	Yearbook II	
Journalism III	Yearbook III	
Journalism IV	Yearbook IV	

CREATIVE WRITING I

Grades 9-12 **.5 - 1 Credit**

Students may earn credit each semester the course is taken.

Offered at AHS, MoHS

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

I..... 1171S
II..... 1174Y

CREATIVE WRITING II

Prerequisite: Teacher recommendation
Grades 10-12 **1 Credit**
Offered at AHS

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. In previous years, students in this class have won local and state-wide creative writing contests.

Fee: \$10 (supplies)

II..... 1174Y
III..... 1176Y
IV..... 1178Y



CREATIVE WRITING/ LITERARY MAGAZINE

Grades 10-12

.5 Credit

Offered at MoHS, WAHS

Students may earn credit each semester the course is taken.

This course is designed for students with special interest in writing original poetry, short stories, essays, scripts, and novels. Strategies and techniques used by successful authors are studied. Students also read and discuss all submissions to The Myriad and select and edit the works to be included. The magazine itself is laid out by students, using available computer technology that includes various word processing and desktop publishing programs, scanners and the digital camera. 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.

..... 1172S

FILM STUDIES / FILMMAKING

Grades 10-12 1 Credit at WAHS and MoHS

.5 Credit at AHS

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.

..... 1451S

..... 1451Y

HUMANITIES

Grades 9-12

1 Credit

Offered at AHS, MoHS

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

I 1515Y

II 1516Y

III 1518Y

JOURNALISM

Grades 9-12

1 Credit

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 35mm automatic or manual camera. The focus of photography study is on the content of good news photos.

I 1200Y

II 1210Y

III 1211Y

IV 1212Y

YEARBOOK

Grades 9-12

1 Credit

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 computer skills. Assignments in writing and photography require a significant portion of work outside of class. For photography assignments, students need a 35mm automatic or manual camera. The focus of photography study is on the content of good news photos.

I 1470Y

II 1221Y

III 1222Y

IV 1223Y



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). A course may satisfy the requirement for Fine Art or Career/Technical Education credit and for sequential electives. Sequential elective courses may be taken in consecutive years or any two semester/year of high school.



Fine Arts courses stimulate creativity, develop critical thinking skills, impart technical knowledge, and expand expressive skills. An academic curriculum coupled with creative assignments and authentic production and performance opportunities are the foundation of fine arts electives.

Participation in any of these courses fulfills the Fine Arts requirement.

THEATRE COURSES

Theatre Sequence of Courses

Drama I	Yearbook I	Speech and Communication
Drama II	Yearbook II	
Drama III	Yearbook III	
Drama IV	Yearbook IV	

BASICS OF TECH THEATER

Grade 9-12

1 Credit

Offered at MoHS

Basics of Technical Theater is an introductory course covering theater and stage history, aspects of stage management, lighting for the stage, audio and sound for stage, basic set design and scenery construction, and safety issues as they relate to each of these areas. Students in this course will be involved in the technical aspects of various productions and events throughout the school year.

..... 1435Y

DEBATE I

Prerequisite: Instructor's recommendation

Grades 9-12

.5 Credit

Offered at AHS, MoHS

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.

..... 9918Y

SPEECH AND COMMUNICATION

Grades 9-12

.5 Credit

Students learn:

- 1) the basic principles of public speaking,
- 2) to evaluate their own and others' speeches,
- 3) to use technology to produce a computer-generated slide show,
- 4) to become critical listeners, and
- 5) to analyze important speeches from history and current events.

..... 1303S

DRAMA I

Grades 9-12

1 Credit

This course explores the fundamentals of the theater and theater history and prepares students for extracurricular participation in dramatic productions (although not required). Students gain a better understanding of the many activities involved in the production of a play and have actual production experience.

..... 1430Y

DRAMA II

Prerequisite: Drama I or teacher recommendation

Grades 10-12

1 Credit

This course is an in-depth study of theater production techniques for those students seriously interested in theater as an extracurricular activity or career.

..... 1440Y

DRAMA III

Prerequisite: Drama II or teacher recommendation

Grades 11-12

1 credit

This is an advanced course in theater production and dramatic techniques. It includes an introduction

to writing for dramatic performance.

..... 1442Y

DRAMA IV

Prerequisite: Previous drama courses and teacher recommendation

Grade 12

1 Credit

This is a very advanced performance class for experienced, mature actors. Students form a repertory company responsible for performing one-act plays for high school theater competitions held throughout the year.

..... 1444Y

VISUAL ARTS COURSES

Visual Arts Sequence of Courses

Art I	Ceramics I	Multi-media Crafts I	Photography I	Digital Imaging I
Art II	Ceramics II	Multi-media Crafts II	Photography II	Digital Imaging II
Art III	Ceramics III	Multi-media Crafts III	Photography III	Digital Imaging III
Art IV	Ceramics IV	Multi-media Crafts IV	Photography IV	
Studio Art AP			Photographic	



Some Fine and Performing Arts Courses may charge a materials/project fee.

ART I

Prerequisite: None; for 2nd semester enrollment, the student must have completed the 1st semester.

Grades 9-12 **1 Credit**

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 sculpture. The course stimulates creative thinking and problem solving, imparts technical knowledge, and develops expressive skills.

Fee - \$25 per year

..... 9120Y

ART II

Prerequisite: Teacher recommendation; Art I

Grades 10-12 **1 Credit**

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

Fee - \$25 per year

..... 9130Y

ART III

Prerequisite: Teacher recommendation; Art II

Grades 11-12 **1 Credit**

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.

Fee \$25 per year

..... 9140Y

ART IV

Prerequisite: Teacher recommendation; Art III

Grade 12 **1 Credit**

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 apply art knowledge and techniques for personal expression.

Fee \$25 per year

..... 9154Y

ART HISTORY, Advanced Placement

Grade 11-12 **1 Credit**

Offered at AHS, WAHS

Building on a strong foundation in world history, students explore western and non-western 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. Students are expected to take the AP test.

Fee: \$15 and AP test fee approximately

\$87 per test

..... 9151Y



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). A course may satisfy the requirement for Fine Art or Career/Technical Education credit and for sequential electives. Sequential elective courses may be taken in consecutive years or any two semester/year of high school.

CERAMICS I

Prerequisite: Teacher recommendation – not recommended for those with manicured nails; short fingernails are required.

Grades 9-12 **1 Credit**

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.

Fee: \$25

..... 9110Y

CERAMICS II

Prerequisite: Ceramics I

Grade 10-12 **1 Credit**

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

Fee: \$25

..... 9112Y

CERAMICS III

Prerequisite: Ceramics II

Grade 11-12 **1 Credit**

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 decoration are introduced.

Fee: \$25

..... 9114Y

CERAMICS IV

Prerequisite: Ceramics III

Grade 12 **1 Credit**

Offered at AHS, MoHS

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.

Fee: \$25

..... 9115Y

DIGITAL IMAGING I

Grade 9 -12

1 credit

Offered at WAHS

This is a full year course. Students will work on images from digital cameras or from film photographs. These images will be manipulated 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.

Fee: \$30 for the year

..... 9191Y

DIGITAL IMAGING II

Prerequisite: Digital Imaging I

Grade: 10-12 **1 credit**

Offered at WAHS

This is a full year course continuing the study of digital imaging. An emphasis will be placed on using Photoshop to study design and digital production. Students will learn more advanced skills within Photoshop.

Fee: \$30 for the year

..... 9181Y

DIGITAL IMAGING III

Prerequisite: Digital Imaging I & II

Grade: ??? **1 credit**

Offered at WAHS

This is a full year course designed for students who want an 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.

Fee: \$30 for the year

..... 9183Y

MULTIMEDIA CRAFTS I

Grades 9-12 **1 Credit**

Offered at MoHS, WAHS

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 many different types of baskets. Both the functional aspects of crafts and the nontraditional creative approach is stressed.

Fee \$30

..... **9160Y**

MULTIMEDIA CRAFTS II

Prerequisite: Teacher recommendation; Multimedia Crafts I

Grades 10-12 **1 Credit**

Offered at MoHS, WAHS

This course is designed 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.

Fee \$30

..... **9161Y**

MULTIMEDIA CRAFTS III

Prerequisite: Teacher recommendation; Multimedia Crafts II

Grades 11-12 **1 Credit**

Offered at MoHS, WAHS

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 to enhance the previous knowledge of the materials and techniques taught in Multimedia Crafts II. Emphasis is on individual artistic and aesthetic growth and development.

Fee \$30

..... **9104Y**

MULTIMEDIA CRAFTS IV

Prerequisite: Teacher recommendation; Three years of Multimedia Crafts

Grade 11-12 **1 Credit**

Offered at MoHS, WAHS

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. Emphasis is on individual artistic and aesthetic growth and development.

Fee \$30

..... **9166Y**

PHOTOGRAPHY I

Grades 9-12 (10 – 12 at WAHS)

1 Credit

This beginning course in black-and-white photography introduces to photographic equipment, materials, processes, and ideas. The emphasis is on basic 35mm camera techniques and darkroom skills, including developing negatives and making enlargements. Students also prepare work for exhibits throughout the year. Considerable outside time is required to complete projects. Students will need a MANUAL 35mm camera with a built-in light meter. A single lens reflex is preferable. A limited number of cameras are available for loan. Limited financial assistance may be available

Fee: \$35 per semester (The additional cost to the student for supplies and materials is approximately \$100 per semester)

..... **9193Y**

PHOTOGRAPHY II

Prerequisite: Teacher recommendation; Photography I

Grades 10-12 **1 Credit**

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.

Fee: \$35 per semester (The additional cost to the student for supplies and materials is approximately \$100 per semester)

Required Equipment - Manual 35 mm camera with a built-in light meter.

..... **9180Y**

PHOTOGRAPHY III

Prerequisite: Teacher recommendation; Photography I and II; portfolio

Grades 11-12 **1 Credit**

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.

Fee: \$35 per semester (The materials and supplies will cost approximately \$100 per semester.)

..... **9182Y**

PHOTOGRAPHIC EXPLORATIONS

Prerequisite: Teacher recommendation

Grades 9-12 **.5 Credit**

Offered at AHS

This course is designed for students who wish to learn the lifelong skill of photography. Students work with digital or point and shoot film cameras to record their community, school, friends, and family. Students also work with computer software to manipulate images and to design photo journals.

Fee: \$15 supplies

..... **9197S**



Fine Arts courses stimulate creativity, develop critical thinking skills, impart technical knowledge, and expand expressive skills. An academic curriculum coupled with creative assignments and authentic production and performance opportunities are the foundation of fine arts electives.

Participation in any of these courses fulfills the Fine Arts requirement.

STUDIO ART, Advanced Placement

Prerequisite: Teacher recommendation; two years of art

Grade 11-12

1 Credit

The emphasis of the AP Studio Art course is for the students to produce twenty-four high quality, original pieces of art that meet the Advanced Placement Art Portfolio guidelines. Students choose one of the following three portfolios: Drawing, 2-D Design, or 3-D Design. In early May, work is digitally submitted to the AP Review Board along with a written statement. In addition, five matted or mounted works are sent to the AP Review Board to complete the portfolio. This work is returned during the summer. Creating art outside the classroom setting is required. Students are expected to submit portfolios to the AP Review Board. One half to three quarters of the work for this class is done outside the classroom setting.

Fee \$25 and AP test fee (fee does not include matting, film or film processing for slides.)

..... 9149Y



VOCAL MUSIC COURSES

Vocal Music Sequence of Courses

Chorus I	Concert Choir
Chorus II	
Chorus III	
Chorus IV	

CHORUS

Prerequisite: None; Middle School chorus recommended

Grades 9-12 **1 Credit**
(student can earn credit each year he/she takes the course)

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.

Fee: \$30 (uniform maintenance)

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

CONCERT CHOIR

Prerequisite: Chorus I and/or teacher recommendation

Grades 10-12 **1 Credit**
(student can earn credit each year he/she takes the course)

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).

Fee: \$30 (uniform maintenance)

..... 9277Y

MEN'S ENSEMBLE

Grades 9-12 **1 Credit**
Offered at AHS, WAHS

Students concentrate on all genres of men's music. Students perform three major concerts, with the possibility of several smaller performances. Students have the opportunity to participate in District Choir, District Choral Festival, and the Spring Competition.

Fee: \$30 (uniform maintenance)

..... 9271Y

SHOW CHOIR

Prerequisite: One year of Chorus, Vocal and Choreography audition

Grades 9-12 (Girls only) **1 Credit**
Offered at AHS, MoHS

Students concentrate on show choir techniques: blocking, choreography, staging, and microphone techniques. Students demonstrate an advanced knowledge of basic singing skills: pitch-matching, 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.

Fee: \$30 (uniform maintenance)

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

VOCAL JAZZ

Prerequisite: Teacher recommendation and Vocal Audition

Grade 9-12 **1 Credit**
Offered at AHS, MoHS

Students perform standard and contemporary vocal jazz repertoire, with an emphasis on jazz technique. Students demonstrate an advanced knowledge of basic singing skills: pitch-matching, 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 the Spring Competition.

Fee: \$30 (uniform maintenance)

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

WOMEN'S ENSEMBLE

Prerequisite: Vocal audition and knowledge of music reading

Grades 9-12 **1 Credit**
Offered at AHS

Students concentrate on all genres of treble music. Students must demonstrate an advanced knowledge of basic singing skills: pitch-matching, 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 the Spring Competition.

Fee: \$30 (uniform maintenance)

I	 9270Y
II	 9251Y
III	 9252Y
IV	 9253Y

WOMENS ENSEMBLE-ADVANCED

Prerequisite: Teacher recommendation and audition

Grades 9-12 **1 Credit**
(Students can earn credit each year this course is taken) **Offered at MoHS**

This ensemble is composed of the most advanced singers performing a variety of musical styles and singing with choreographed movement.

Fee: \$30 (uniform maintenance)

..... 9270Y

HEALTH, PHYSICAL EDUCATION AND DRIVER'S EDUCATION



Physical education plays a vital role in the students' 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 students' 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 through out 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 like basketball, volleyball, and running -just to name a few, are more confident with themselves according to most social school studies. In school, the physical education program introduces these 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 skill.

Most physical education programs are holistic. The program allows students to interact together 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.*

HEALTH, PHYSICAL EDUCATION AND DRIVER'S EDUCATION

PHYSICAL EDUCATION I

Grades 9-12 .5 Credit

Required for Graduation

Physical Education I builds on the fundamental skills and skill combinations learned in previous years. 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/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.

..... 7310S

PHYSICAL EDUCATION II

Grades 9-12 .5 Credit

Required for Graduation

Physical Education II builds on the fundamental skills and skill combinations learned in previous years. 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/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.

..... 7410S

HEALTH EDUCATION I

Grades 9-12 .5 Credit

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.

Standard 7320S

HEALTH EDUCATION II

Grades 10-12 .5 Credit

Prerequisite: Prior approval by High School Counseling Director is required for 9th graders to enroll. Students should see the high school counselor for information.

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 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 Drivers Education. Effective July 1, 2007 – Temporary Driver Licenses are issued for 180 days

Effective January 1, 2008 – Driver Education In-Car tuition will be \$255.00. Summer tuition will be \$350.00

Fee: \$2.50 for Drivers Education workbook

Standard 7425S



Unless otherwise indicated, all courses are offered at all high schools. Classes are scheduled by semester so that the health and the physical education components occur and are graded separately. Students may elect to complete the required semesters of health and physical education in the same year or in any of the four years of high school.

AFRICAN CULTURE, MUSIC & DANCE

Grades 10-12

.5 Credit

Offered at WAHS (both semesters)

This course is for students interested in learning about the culture of West Africa through music and dance. Previous dance experience is not required. Students study dance styles and rhythms indigenous to various ethnic groups from Senegal, Gambia, Ghana, Guinea, and Mali as well as some Caribbean rhythms which have a West African influence. They also choreograph dances, design costumes based on traditional dress, build props, and perform for the school community.

Note: This course may not be substituted for PE I or PE II.

Fee: \$10 for materials and supplies

I 9321S

II 9323S

FITNESS/YOGA

Prerequisite: Approval of instructor; PE I and/or PE II

Grades 11-12

.5 Credit

Offered at AHS

Fitness Yoga is an elective course for upper-classmen that have completed PEI and PEII. 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. Students who have not previously received credit for Weight Training will be given scheduling priority.

..... 7670S

NUTRITION / EXERCISE / WELLNESS / FITNESS

Grades 9-12

.5 Credit

Offered at WAHS (both semesters)

This course is designed for students with an active interest in nutrition, exercise, wellness and personal fitness. Using the Healthy Eating Pyramid, the five components of Fitness and the 6 Aspects of Wellness along with their own personal goals, students learn and then create their personal fitness and wellness plan. Each Block class consists of two parts: a short lecture and Physical Activity. The first part of the class is a lecture on materials combining nutrition, exercise methodology and wellness components. Students then utilize what they have learned and do a fitness assessment/evaluation. The eighteen-week result is student created a yearlong personal wellness plan based on their strengths, weaknesses and sport specific goals. The Monday classes are always a fitness circuit utilizing different exercises and equipment to give the students ideas for planning their own program.

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.

No fee will be charged but appropriate attire for class is required.

..... 8228S

INTRODUCTION TO SPORTS MEDICINE

Prerequisite: Teacher recommendation, Biology I

Grades 11-12

1 Credit

Offered at MoHS

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.

..... 7680Y

FITNESS / WEIGHT TRAINING I

Prerequisite: PE I and/or PE II, Approval of instructor

Grades 11-12

.5 Credit

This is a weight lifting class designed to teach weight lifting theory and technique in combination with personal fitness training. Students establish personal weight lifting goals and design and implement individual weight lifting 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.

..... 7676S

FITNESS / WEIGHT TRAINING II-IV

Prerequisite: PE I and PE II; Completion of Fitness/Weight Training I and teacher recommendation

Grades 11-12

.5 Credit per semester

This course is designed as a continuation of the previously taken Fitness/Weight Training class. Students are required to demonstrate maximum lifts, keep a journal, lift independently and write a personal program.

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.

II 7677S

III 7675Y

IV 7678Y

Course Descriptions



“History Is Useful in the World of Work”

—Peter Sterns, American Historical Association

History is useful for work. Its study helps create good business people, professionals, and political leaders. The number of explicit professional jobs for historians is considerable, but most people who study history do not become professional historians.

Professional historians teach at various levels, work in museums and media centers, do historical research for businesses or public agencies, or participate in the growing number of historical consultancies. These categories are important—indeed vital—to keep the basic enterprise of history going, but most people who study history use their training for broader professional purposes.

Students of history find their experience directly relevant to jobs in a variety of careers as well as to further study in fields like law and public administration. Employers often deliberately seek students with the kinds of capacities historical study promotes. The reasons are not hard to identify: students of history acquire, by studying different phases of the past and different societies in the past, a broad perspective that gives them the range and flexibility required in many work situations.

They develop research skills, the ability to find and evaluate sources of information, and the means to identify and evaluate diverse interpretations. Work in history also improves basic writing and speaking skills. It is directly relevant to many of the analytical requirements in the public and private sectors, where the capacity to identify, assess, and explain trends is essential. Historical study is unquestionably an asset for a variety of work and professional situations; even though it does not, for most students, lead as directly to a particular job slot, as do some technical fields. But history particularly prepares students for the long haul in their careers, its qualities helping adaptation and advancement beyond entry-level employment.

There is no denying that in our society many people who are drawn to historical study worry about relevance. In our changing economy, there is concern about job futures in most fields. Historical training is not, however, an indulgence; it applies directly to many careers and can clearly help us in our working lives.

Adapted from *History is Useful in the World of Work* by Peter Sterns at www.AmericanHistoricalAssociation.com

Grade Level	Courses Sequence
6	US History I
7	US History II
8	Civics and Economics
9	World History I
10	World History I
	AP European History (WaH, MoHS)
	AP World History
11	US History
	AP US History
	Dual Enrollment US History
12	Government
	AP US Government
	Dual Enrollment Government

HISTORY / SOCIAL SCIENCES

AFRICAN - AMERICAN STUDIES

Grades 10-12 .5 Credit

Offered at AHS, MoHS

This course focuses on the history, culture, arts and literature of Africans and African-Americans. The major goal of the course is to begin to develop an appreciation for the diversity of intellectual and artistic forms as a prelude to interdisciplinary multi-cultural activities.

2371S

AMERICAN STUDIES/VIRGINIA AND UNITED STATES HISTORY

Grade 11 1 Credit



American Studies 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 integrated standards from English 11 and Virginia and United States History, thus preparing students for End-of-Course tests in each subject. Students may take these courses at different levels.

Fee: \$20-60 for reader.

Standard 2360Y
Academic..... 2358Y
/Advanced 2358R

AMERICAN STUDIES/VIRGINIA AND UNITED STATES HISTORY, Advanced Placement

Grade 11 1 Credit - Sequential

AP score of 2-5 satisfies this requirement



American Studies 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 are expected to take the AP exam. The exam fee is approximately \$87 per test. Students who do well on this test 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.

Fee: \$20-60 for reader

..... **2319Y**

EUROPEAN HISTORY, Advanced Placement

Prerequisite: See School Counselor

Grades 10 - 12 1 Credit – Sequential

Offered at MoHS



AP European History is designed to challenge the highly motivated student who wants to experience college level work while still in high school. 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 are expected to take the AP exam. The exam fee is approximately \$87 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.

..... **2399Y**



Unless otherwise indicated, all courses are offered at all high schools



Standards of Learning Test required.

GOVERNMENT AND POLITICS, ADVANCED PLACEMENT

Prerequisite: See School Counselor

Grade 12 1 Credit - Sequential

The 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.

Students are expected to take the AP Exam. The exam fee is approximately \$87 per test.

Fee \$ 25-\$60 for a reader

..... 2445Y

HISTORY 121/122 UNITED STATES HISTORY

.5 credit each semester

(3 PVCC credits each semester)

This college course surveys United States History from the beginnings to the present. The student is responsible for purchasing the college textbook associated with this course.

121 2366S

122 2367S

HISTORY THROUGH FILM

Grades 10-12 1 Credit

Offered at AHS

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 on a "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.

..... 2453Y

LEADERSHIP

.5 or 1 Credit

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.

I 8288Y

II 8287Y

III 8289Y

IV 8290Y

MODEL UNITED NATIONS

Grades 10-12 1 Credit

Offered at MoHS

Model United Nations (MUN) is a simulation of the UN General Assembly and other multilateral bodies. In Model UN, students step into the shoes of ambassadors from UN member states to debate current issues on the organization's agenda. While playing their roles as ambassadors, student "delegates" make speeches, prepare draft resolutions, negotiate with allies and adversaries, resolve conflicts, and navigate the Model UN conference rules of procedure – all in the interest of mobilizing "international cooperation" to resolve problems that affect countries all over the world. Students are expected to attend a MUN conference for the semester that they attend but it is not mandatory. Those students attending a MUN conference are responsible for the registration fee.

..... 2825Y

PHILOSOPHY

Grades 10-12 1 Credit

Offered at MoHS, WAHS

This class explores Western philosophy from the Greeks to the present. Students explore ethics, epistemology, civitas, religion, freedom and responsibility as central ideas or "themes." Individual readings are required and activities include group discussions, problem solving and several short writing assignments.

..... 2950Y

POLITICAL SCIENCE 211/212 U. S. GOVERNMENT

Grade 12

.5 credits each semester

(3 PVCC credits each semester)

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. The student is responsible for purchasing the college textbook associated with this course.

211 2456S

212 2457S

PRACTICAL LAW

Grades 10-12 .5 Credit

Offered at AHS, WAHS

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.

..... 2420S

PSYCHOLOGY

Grades 11-12 1 Credit

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 these, 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.

..... 2900Y



Indicates PVCC Dual Enrollment

Dual Enrollment offers the student credit through Piedmont Virginia Community College (PVCC), as well as high school credit, for courses offered during the regular school day at the high school. Dual Enrollment/Credit courses are weighted as college/dual enrollment courses. See your school counselor for more information.

PSYCHOLOGY

Advanced Placement

Prerequisite: See School Counselor

Grade 12 1 Credit Sequential

This course provides an introduction to the psychological topics and principles taught in an introductory psychology class at the college level. Specific topics addressed are: 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. Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

..... 2930Y

SOCIOLOGY

Grades 10-12 .5 Credit

Offered at AHS, WAHS

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.

..... 2500S

VIRGINIA AND UNITED STATES GOVERNMENT

Grade 12 1 Credit

Subject matter covers 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.

Standard 2440Y.....

Academic/Advanced 2444Y /2444R

WORLD HISTORY to 1500

1 Credit

This is a broad survey course designed to provide each student with an historical overview 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. Through their studies, students learn to identify and analyze significant events, people and ideas throughout the course of history. Concepts, historical trends, and cycles are emphasized.

Standard 2343Y

Academic/Advanced 2346Y/2346R

Honors 2350Y

WORLD HISTORY from 1500 to PRESENT

1 Credit

This is a broad survey course designed to provide each student with an historical overview of the major political, social and economic events of the world. Students trace the major patterns of world history from about 1500 BC through current times. Through their studies, students learn to identify and analyze significant events, people and ideas throughout the course of history. Concepts, historical trends, and cycles are emphasized.

Standard 2334Y

Academic/Advanced 2338Y/ 2338R

Honors 2349Y

WORLD HISTORY, Advanced Placement

Prerequisite: World History to 1500; See School Counselor

Grades 10-12

Credits ?

Offered at AHS

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 \$87 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.

..... 2339Y



It is recommended that students planning to take both World History courses take World History to 1500 prior to World History from 1500 to Present.



Standards of Learning Test required.

Course Descriptions

A true story from Jeff Prillaman at AHS.

“When will I ever use this?” asked a student.
“Whenever you want to,” another student replied.

Who commonly uses math?

Everybody uses math whether they realize it or not. Shoppers use math to calculate change, tax, and sales prices. Cooks use math to modify the amount a recipe will make. Vacationers use math to find time of arrivals and departures to plan their trips. Homeowners use math to determine the cost of materials when doing projects.

Can I get a good job without learning a lot of math?

In all honesty, anything is possible. However, less and less labor-intensive jobs are available. Workers in those fields are being replaced by machinery and robotics. Even when those jobs are available, the pay is usually substandard. In order to gain successful employment, technical skills must be learned. Someone has to fix all of those machines and robots.

What are employers looking for?

Employers are looking for three basic traits. They want their employees to be able to reason, work with technical equipment, and communicate their thoughts with other employees. It is clear that math deals with developing reason and working with technical equipment. It is not so clear how math affects communication. Successfully using math can improve the ability to speak and write more clearly. Language, at least the type needed for work, tends to be extremely structured and mathematical ability helps deal with that structure.



Which professions use Math?

Here is a small list of math-orientated careers:

Accountants assist businesses by working on their taxes and planning for upcoming years. They work with tax codes and forms, use formulas for measuring interest, and spend a considerable amount of energy organizing paperwork.

Agriculturists determine the proper amounts of fertilizers, pesticides, and water to produce bountiful foods. They must be familiar with mixture problems.

Architects design buildings for structural integrity and beauty. They must know how to calculate loads for finding acceptable materials in design.

Biologists use proportions to count animals as well as use statistics/probability.

Chemists find ways to use chemicals to assist us which entails purifying water, dealing with waste management, researching superconductors, analyzing crime scenes, making food products...

Computer Programmers create complicated sets of instructions called programs/software to help us use computers to solve problems. They must have strong logic skills.

Engineers (Chemical, Civil, Electrical, Industrial, Material) build products/structures/systems like automobiles, buildings, computers, machines, and planes- to name just a few examples. They cannot escape the frequent use of calculus!

Geologists use mathematical models to find oil and study earthquakes.

Lawyers argue cases using complicated lines of reason. That skill is nurtured by high level math courses. They also spend a lot of time researching cases.

Managers maintain schedules, regulate worker performance, and analyze productivity.

Medical Doctors must understand the dynamic systems of the human body. They research illnesses, carefully administer the proper amounts of medicine, read charts/tables, and organize their workload.

Meteorologists forecast the weather for agriculturists, pilots, vacationers, and those who are marine dependent.

Military Personnel carry out a variety of tasks ranging from aircraft maintenance to following detailed procedures.

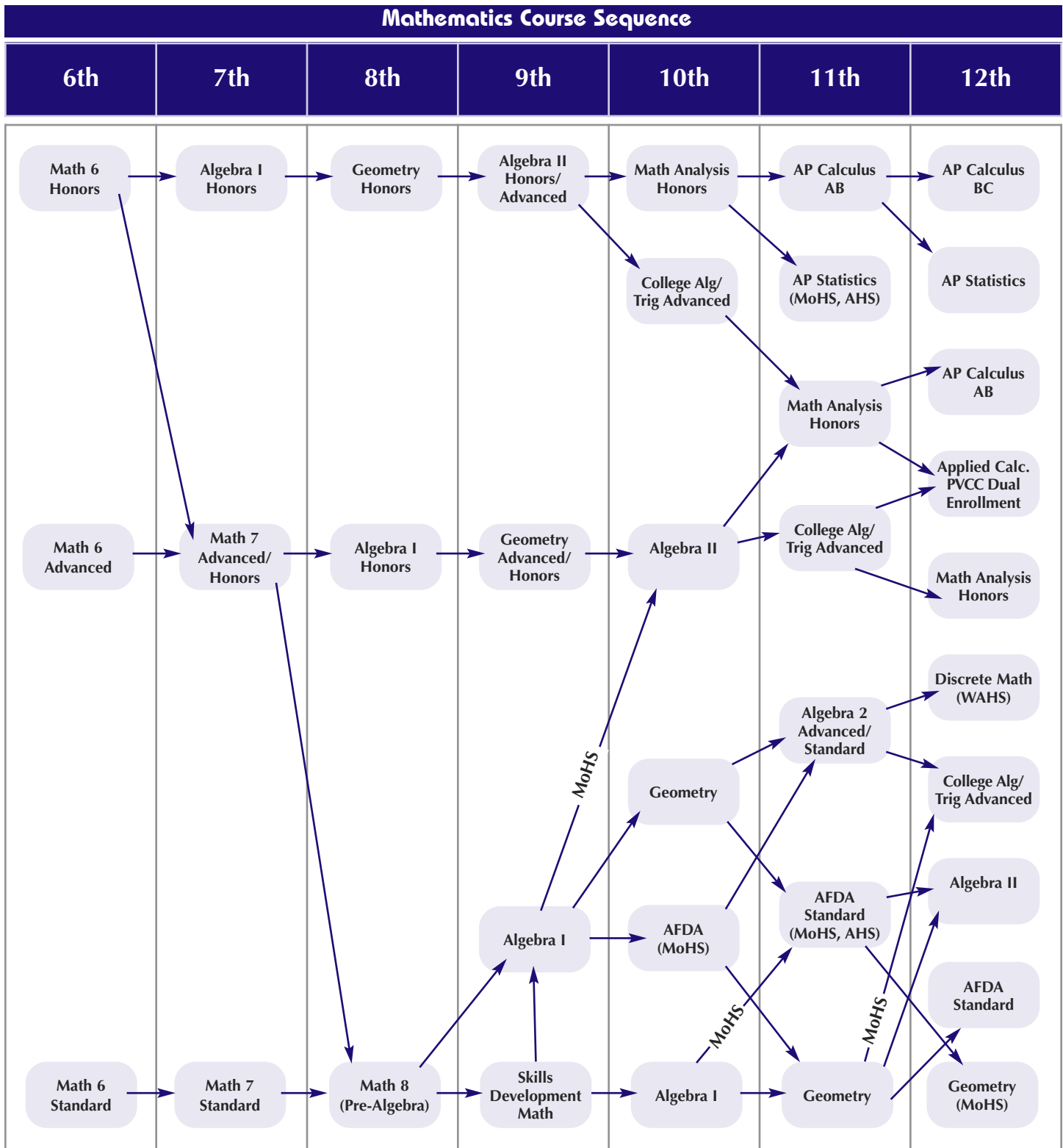
Nurses carry out the detailed instructions doctors give them. They adjust intravenous drip rates, take vitals, dispense medicine, and even assist in operations.

Politicians help solve the social problems of our time by making complicated decisions.

Technicians repair and maintain the technical gadgets we depend on like computers, TV's, VCR's, cars, refrigerators... They are always reading measuring devices, referring to manuals, and diagnosing system problems.

Tradesmen (carpenters, electricians, mechanics, and plumbers) estimate job costs and use technical math skills specific to their field. They deal with slopes, areas, volumes, distances and must have an excellent foundation in math.

Adapted from Why must I learn math? by Mark Karadimos www.mathguide.com, October 28, 2009





NOTE: In mathematics the county curriculum is the same regardless of level. Classes are to complete the same objectives each semester whether standard, advanced, or honors. It is the depth of theory and sophistication in the teaching and assignments that differentiates the levels of instruction. Due to the sequential nature of math courses, it is important that students have solid foundations in the algebra courses.

Unless otherwise indicated, all courses are offered at all high schools



Standards of Learning Test required.

ALGEBRA I

Prerequisites: Standard: 8th grade Math and teacher recommendation; Advanced: Teacher recommendation

Grades 9-12 1 Credit Sequential

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.

Standard 3130Y
Advanced..... 3136Y
9th..... 3136R

ALGEBRA I PART II

Grades 10-12 1 credit

Part II is the second year course for students who took Algebra I- Part I. Students will explore topics from ALGEBRA 1 PART 1 as well as systems of equations; linear, exponential, and quadratic functions; polynomials; factoring.

Note: Students are required to take both Algebra I, Part I, and Algebra I, Part II, to satisfy the Algebra I graduation requirement.

Standard 3132Y

ALGEBRA II

Prerequisites: Teacher recommendation; Algebra I

Grades 9-12 1 Credit Sequential

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.

Most students need a "B or better" average in previous math courses to be successful in the following higher-level mathematics courses.

Standard 3135Y
Advanced..... 3102R
Honors..... 3104Y

ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (AFDA)

Prerequisite: Algebra I

Grades 9-12 1 Math Credit

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. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.

..... 3134Y

COLLEGE ALGEBRA AND TRIGONOMETRY

Prerequisites: Teacher recommendation; Algebra II and Geometry

**Grades 11-12 1 Credit Sequential
 Offered Standard at AHS & MoHS**

The emphasis is on functions and their graphs, including the six trigonometric functions and their applications. After a review of fundamental concepts of the real-number system and of functions, 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.

Standard 3171Y
Advanced..... 3164Y, 3164R

GEOMETRY

Prerequisites: Teacher recommendation; Algebra I

Grades 9-12 1 Credit Sequential

The properties of plane and three-dimensional figures are studied in this course. Specifically, students 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; 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.

Standard 3143Y
Advanced 3145Y/ 3145R
Honors 3147Y

MATH ANALYSIS (Pre-Calculus)

Prerequisite: Teacher recommendation; Algebra II or College Algebra and Trigonometry

Grades 11-12 1 Credit Sequential

This course covers many of the topics previously introduced in the algebra courses but in much greater depth and with more emphasis on derivation and analysis of function. The course includes a review of the properties of the real and rational number systems, the conic sections and their properties, and various functions and their properties. Students are introduced to several other types of functions including polynomials, logarithmic and exponential, and circular and trigonometric. Students work with complex numbers and with the polar coordinate system. 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 derivative. Basic differential calculus and its applications are introduced as well. The course emphasizes problem solving and analysis by integrating the use of technology, including the graphing calculator.

Honors 3162Y

MATHEMATICAL INFERENCE AND APPLICATIONS (Discrete Math)

Prerequisite: Teacher recommendation and Geometry and Algebra II

Grades 12 .5 or 1 Credit
Offered at WAHS

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.

Standard 3119Y
Advanced 3120Y/ 3120R

CALCULUS



All students, who are recommended for Calculus, will take AB Calculus following the Honors Math Analysis course.

Those students who are juniors or younger, may take BC Calculus as a SEQUENTIAL course to AB Calculus.

For those few students who are extremely talented and gifted in mathematics, they have the option of taking the BC exam at the end of the AB Calculus Course. If a 4 or 5 is received (this would be the same requirement if a student went to UVA), those students may skip the BC Calculus course and go immediately into the Multivariable Course and/or the Differential Equations Course

CALCULUS Advanced Placement AB

Prerequisite: Teacher recommendation; Math Analysis
Grade 12 1 Credit Sequential

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. Students are expected to take the AP exam. The AP exam fee is approximately \$87 per test.

..... 3177Y

CALCULUS Advanced Placement BC

Prerequisite: Teacher recommendation-Math Analysis
Grade 12 1 Credit Sequential

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 (parametric equations, polar curves, infinite series, L'Hospital'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 multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.

Students are expected to take the BC AP exam. The exam fee is approximately \$87 per test.

..... 3178Y



Indicates PVCC Dual Enrollment

Indicates PVCC Dual Enrollment

Dual Enrollment offers the student credit through Piedmont Virginia Community College (PVCC), as well as high school credit, for courses offered during the regular school day at the high school. Dual Enrollment/Credit courses are weighted as college/dual enrollment courses. See your school counselor for more information.

CALCULUS, HONORS

Prerequisite: Honors Math Analysis
Grade 12 **1 Credit Sequential**
Offered at MoHS

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.

Students who are extremely successful in this course are expected either to take the AP Exam or to enroll in AP Calculus AB the following year.

..... 3175Y

COMPUTER SCIENCE A, Advanced Placement

Prerequisite: Algebra II or programming
Grades 10-12 **1 Credit**
Offered at AHS, MoHS

This course covers a large subset of the "object-bases" approach to programming, emphasizing data abstraction and encapsulation in JAVA. AP Computer Science includes a more formal and a more in-depth study of algorithms and data structures (e.g. binary trees). The use of recursive data structures and dynamically allocated structures is fundamental to AP Computer Science.

Students are expected to take the A.P. exam. The exam fee is approximately \$87 per test.

..... 3291Y

MTH 163 PRECALCULUS I

Prerequisite: either a) MTH 04, b) a score of at least 50 on the College Algebra portion of the COMPASS Placement test, or c) a score of at least 520 on the Math II/SAT II

.5 Credit (3 College Credits)

Offered at AHS, MoHS

This course covers topics in algebra, such as equations and inequalities, graphing and functions, exponents and logarithms, systems of equations, inequalities, linear programming, and matrices. This course prepares students for MTH 271. The student is responsible for purchasing the college textbook associated with this course.

The student is responsible for purchasing the college textbook associated with this course.

Honors 3169S

MTH 164 PRECALCULUS II

Prerequisite: either a) MTH 163, b) a score of at least 51 on the College Algebra portion of the COMPASS Placement test, or c) a score of at least 680 on the Math II/SAT II.

.5 Credit (3 College Credits)

Offered at AHS, MoHS

This course presents trigonometry, analytical geometry, and sequences and series.

The student is responsible for purchasing the college textbook associated with this course.

Honors 3170S

MTH 173 CALCULUS WITH ANALYTIC GEOMETRY I

Prerequisite: Honors Math Analysis, and either a) a score of at least 51 on the College Algebra portion and at least 50 on the Trigonometry portion of the Compass Placement Test, or b) a score of at least 680 on the Math II/SAT II

1 credit (5 college credits)

Offered at AHS, MoHS

This course presents analytic geometry and the calculus of algebraic and transcendental functions including the student of limits, derivatives, differentials, and introduction to integration along with their applications. It is designed for mathematical, physical, and engineering science programs.

The student is responsible for purchasing the college textbook associated with this course.

..... 3376Y

MATH 174: CALCULUS II

Prerequisites: MATH 173 or 3 or more in AP Calculus AB or BC

Frequency: Every semester

.5 Credit (4 College Credits)

Offered at AHS, MoHS

The course continues the study of analytic geometry and calculus of algebraic and transcendental functions including rectangular, polar, and parametric graphing, indefinite and definite integrals, methods of integration, and power series along with applications. Designed for mathematical, physical, and engineering science programs.

The student is responsible for purchasing the college textbook associated with this course.

Honors 3172S

MTH 271 APPLIED CALCULUS

Prerequisite: Appropriate placement score or MTH 163 (or MTH 166).

.5 Credit (3 College Credits)

Offered at AHS, MoHS

This course covers topics in applied calculus for business, life sciences, and social sciences. Includes description and application of functions, limits, derivatives, graphing, and integrals.

The student is responsible for purchasing the college textbook associated with this course.

Honors 3180S

MATH 277: CALCULUS III

Prerequisites: MATH 174 or 4 or better AP BC calculus

Frequency: Every semester

.5 Credit (4 College Credits)

Offered at AHS, MoHS

This course presents vector valued functions, partial derivatives, multiple integrals, matrices, vector spaces, determinants, solutions of systems of linear equations, basis and dimension, eigen values, and eigen vectors. It is designed for mathematical physical, and engineering science programs.

The student is responsible for purchasing the college expenses associated with this course.

..... 3173S

PROBABILITY AND STATISTICS

Prerequisite: Teacher recommendation; Algebra II

Grades 12

1 Credit Sequential

Offered at AHS, WAHS

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.

Standard 3190Y

Advanced 3193Y/3193R

SKILLS DEVELOPMENT MATH

Grade 9

5 or 1 Elective Credit

An individualized and comprehensive review of the concepts and skills necessary to be successful in any standard level Algebra I course. Enrollment is limited.

Entrance into this course will be based on multiple criteria from among the following:

- enrollment Standard Level Algebra I
- failure on the 8th grade SOL in math
- scores obtained on the Iowa Algebra Aptitude Test (IAAT) fall at the fifth stanine and below
- completion of teacher recommendation form.

I 3301Y

II 3302Y

STATISTICS, Advanced Placement

Prerequisite: Teacher recommendation; Algebra II

Grades 11-12

1 Credit

Topics for the course are grouped around four themes--exploratory analysis, planning a study, and probability and statistical inference. Within each theme, the topics stress statistical thinking and use technology, primarily the graphing calculator and computers with appropriate software. This course prepares students to take the Advanced Placement Statistics exam.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

..... 3192Y



Do you love Math and try to figure out how things work? Find out about Albemarle County's Math, Engineering and Science Academy (MESA) on page 10.

Academy students explore science and mathematics through the lens of engineering research and design.

Course Descriptions



Why study science?

Should gifted and talented students be the only students to receive a dose of science? What value could science have for all other students? Although not voiced in newspapers, these questions exist in almost every community we have traveled to. Science is tolerated as a necessity because it makes our lives more comfortable, yet many don't see why most students need to learn science.

Science is a method, process, procedure, and system used to study the physical world. If you can see, feel, hear, taste, smell or measure something, science will investigate. Science will not take a stand on an issue.

Scientists ask questions about how the world works then gather data to answer the question. They should not attempt to find an answer to support any one person or groups' viewpoint because this clouds their perspective. Good science can only happen when an answer to a question is backed up by the data from many scientists. The Scientific Method and problem solving behind scientific investigations is extremely important to students. The increasing reliance on computers and robots to minimize physical labor in the workplace will place more students in problem solving jobs, which science is well suited for.

A critical place for science knowledge is the process of "discernment." From the young to the old, people constantly examine information and discern its truth. The ability to accomplish this with accuracy using science can make an individual successful. The internet is a great example. Anyone can put false information on the internet and make it look truthful. You need to be able to discern the difference between truth and fiction. Another example are those who twist facts creating misleading stories to make a sale. The better prepared students are with a knowledge of science, the more capable they are at distinguishing fact from fancy.

Sports are usually seen as a part of an education that leads to improved dexterity and physical skill. This is true for large motor skills, but science experiments can fine tune small motor skills, like using an eye dropper, pouring small amounts of liquid, or increased ability to measure. Finally, science is fun, exciting, and interesting. We live in an age where society has set very high standards for children's behavior. Keeping kids busy in science activities will keep kids engaged many hours. Help your children in the discovery of science and it will bring great rewards to them as adults. Learn physics and they will drive safer; chemistry and they will cook better; biology and they will live healthier.



The introductory science courses do not have to be taken in the order below. However, science teachers do recommend the following sequence. A student who starts the science sequence with Earth Science has the possibility of earning a verified credit for the course and needs only one additional verified science credit. By starting with Biology, the science sequence must include Chemistry and Physics.

9th grade - Earth Science
10th grade - Biology
11th grade - Chemistry
12th grade - Physics

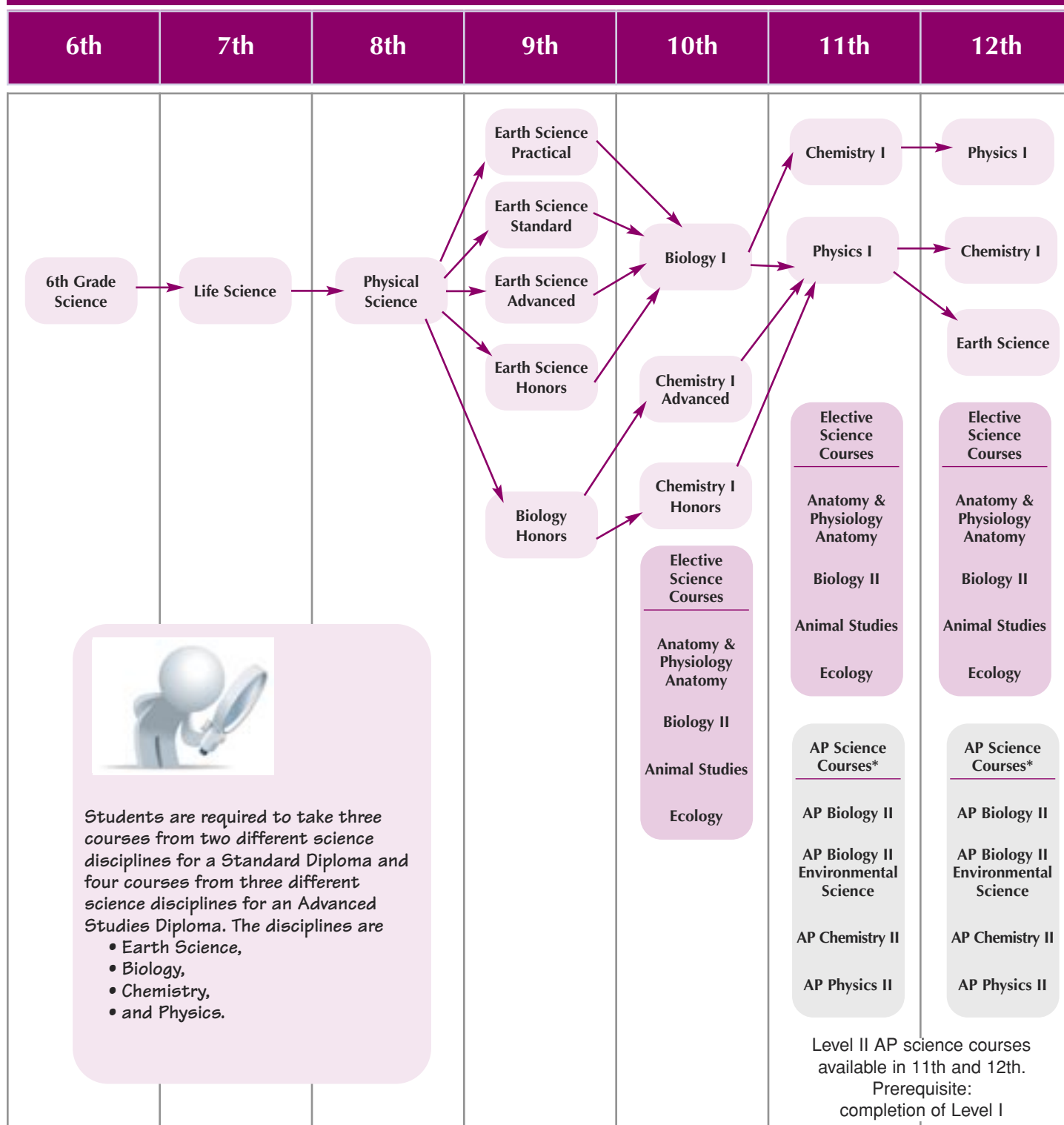
The math prerequisite for Biology I (Algebra I) allows the student to continue in the chemistry/physics sequence. Due to the mathematical nature of chemistry and physics, there are math prerequisites for these courses. Students have either completed or are taking Algebra II for enrollment in Chemistry. Students who elect to take Biology in the 9th grade must have teacher recommendation, Algebra I and are only eligible for Honors Biology.

NOTE: The county science curriculum is the same regardless of level. Classes are to complete the same basic objectives each semester regardless of level. It is the depth of theory and sophistication in the teaching and assignments that differentiates the levels of instruction.

Adapted from Why Learn Science? on www.Wonderama.com

Unless otherwise indicated, all courses are offered at all high schools

Science Course Sequence



ANATOMY AND PHYSIOLOGY

Prerequisites: Teacher recommendation; Biology; strong laboratory skills

Grades 10-12 1 Credit

Offered at AHS, MoHS

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.

Fee: \$25

..... 4600Y

ASTRONOMY

Prerequisite: College Algebra and Trigonometry recommended (may be taken concurrently), Advanced/Honors Physics recommended

Grades 10-12 1 Credit (College Credit 8)

Offered at WAHS, AHS

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, 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, 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.

The student is responsible for purchasing the college textbook associated with this course.

..... 4651Y

BIO 101 GENERAL BIOLOGY

Prerequisites: See your school counselor

Credit: 1 credit (4 College Credits)

Offered at MoHS

This course explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. It introduces the student to the diversity of living organisms, their structure, function, and evolution. Lecture and lab must be taken concurrently.

The student is responsible for purchasing the college textbook associated with this course.

..... 4351Y

BIOLOGY I

Prerequisites Honors: Algebra I,

Advanced/Honors level: Geometry taken concurrently; teacher recommendation; only level available to incoming 9th graders

Grades 9-12: (Grade 9 with strong teacher recommendation)

1 Credit Sequential

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.

Standard 4312Y

Academic/Advanced 4318Y/

4318R 4316Y

Honors 4316Y

BIOLOGY II Advanced Placement

Prerequisites: Biology I, Chemistry, Algebra II and teacher recommendation

Grades 11-12 1 Credit

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.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

Note: Most students need a "B or better" average in math and science courses to be successful in this course.

..... 4340Y

BIOLOGY II—ENVIRONMENTAL SCIENCE, Advanced Placement

Prerequisite: Biology I, Algebra I, and teacher recommendation

Grades 10-12 1 Credit

Offered at AHS, MoHS

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 is closely followed in this course. This outline is available from College Board. 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. Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

Note: Most students need a "B or better" average in math and science courses to be successful in this course.

..... 4270Y

BIOLOGY II—ANIMAL STUDIES

Prerequisite: Biology I

Grades 11-12 1 Credit

Offered at MoHS

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.

Academic. 4325Y



Students in Science classes would benefit from having their own calculator. Calculators are required in chemistry and physics classes.

CHM 101 GENERAL CHEMISTRY

Prerequisites: See your school counselor

Credit: 1 credit (4 College Credits)

Offered at MoHS

This course emphasizes experimental and theoretical aspects of inorganic, organic, and biological chemistry. Students discuss general chemistry concepts as they apply to issues within our society and environment. This course is designed for science technology, applied science and non-science majors.

The student is responsible for purchasing the college textbook associated with this course.

..... 4421Y

CHEMISTRY I

Prerequisites: Teacher Recommendation; Standard Algebra, Functions, and Data Analysis or Algebra II taken concurrently.

Advanced or Honors: Teacher recommendation, Standard Algebra II taken concurrently

Grades 10-12 1 Credit Sequential

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

Standard 4410Y

Advanced 4412Y/4412R

Honors 4414Y

CHEMISTRY II

Advanced Placement

Prerequisite: Teacher recommendation; Chemistry I and College Algebra and Trigonometry (or other higher math) taken concurrently

Grades 11-12 1 Credit

This advanced placement course is the equivalent of a non-calculus-based college freshman course. Theory is developed in the first part of the course. 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.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

Note : Most students need a "B or better" average in math and science courses to be successful in this course.

..... 4440Y

EARTH SCIENCE

Grades 9-12

1 Credit

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 encourage students to become responsible citizens. Laboratory experiments are used to teach conceptual themes.

Standard 4212Y

Academic/Advanced 4215Y/4215R

Honors 4216Y

ECOLOGY

Prerequisite: Biology

Grades 10-12

1 Credit

Sequential

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.

Standard 4102Y

Advanced 4106Y/4106R

ENVIRONMENTAL SCIENCE: BIO 107

Prerequisite: Biology

Grades 10-12 4 college credits

Offered at MoHS, AHS?

This course presents the basic concepts of environmental science through a topical approach. It includes the scientific method, population growth and migration, use of natural resources and waste management, ecosystem interactions, recovery, evolution, biogeochemical cycles, photosynthesis and global warming, geological formations, atmosphere and climate, and ozone depletion. The student is responsible for purchasing the college textbook associated with this course.

..... DE 4112Y



**Standards of Learning
Test required.**

PHY 201 GENERAL COLLEGE PHYSICS

Prerequisites: See your school counselor

Credit: 1 credit (4 College Credits)

Offered at MoHS

This course teaches fundamental principles of physics. It covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics.

The student is responsible for purchasing the college textbook associated with this course.

..... 4541Y

PHYSICS I

Prerequisites: Standard: Teacher recommendation; Algebra, Functions, and Data Analysis or Algebra II taken concurrently

Advanced or Honors: Teacher recommendation; College Algebra and Trigonometry or higher, taken concurrently; and Chemistry recommended

Grades 10-12 1 Credit - Sequential

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.

Standard 4510Y

Advanced 4512Y

/4512R.....

Honors 4514Y

PHYSICS II Advanced Placement

Prerequisite: Teacher recommendation; Math Analysis, Physics I

Grades 11-12 1 Credit

This course is the equivalent of a non-calculus college course in physics. The course provides a foundation in physics for students in the life sciences, pre-medicine, and some applied sciences, as well as other fields not directly related to science. Utilizing a problem-solving approach, students study classical as well as modern physics.

Students are expected to take an AP exam. The exam fee is approximately \$87 per test.

..... 4540Y

Course Descriptions



Albemarle County Schools are 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 education 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, parents, and the student involved. Often instruction is carried out both in the 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 as defined by federal and state law: autism, deaf-blindness, deafness, developmental delay, hearing impairment, mental retardation, multiple disabilities, orthopedic impairment, other health impairment, serious emotional disturbance, severe and profound disability, specific learning disability, speech or language impairment, traumatic brain injury or visual impairment including blindness.

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 models of instruction: Consultation/ Monitor, Resource, Collaborative, Departmentalized, and Individual Education Program (IEP) diploma classes (Self-Contained).

Special Diploma Options

In addition to the Advanced and Standard Diploma, students with disabilities who receive special education services have available to them an additional diploma option described below.

Modified Standard Diploma

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. Eligibility and participation in the Modified Standard Diploma program are determined by the student's Individualized Education Program (IEP) team including the student, where appropriate, at any point after the student's eighth grade year. The school must secure the informed written consent of the parent/guardian and the student to choose this diploma program after review of the student's academic history and the full disclosure of the student's options. The student who chooses to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard or Advanced Studies Diploma at any time throughout that student's high school career. Students pursuing the Modified Standard Diploma must pass the 8th grade Standards of Learning tests in reading and mathematics. The student shall not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.

For details about the course credits required for a Modified Standard Diploma, see page 72 in the Graduation Requirements section.

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 credit-bearing classes.

Collaborative Classes – Credit

Regular and special education teachers work together to teach core subjects. Registration MUST note that a collaborative section is needed.

Departmentalized Model/Self-Contained Core Classes – Credit

These classes are taught at the standard level by special education teachers. These classes 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. These classes 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 PROGRAMS

Unless otherwise indicated, all courses are offered at all high schools

BASIC COMPUTER SKILLS

1 credit

Students will learn basic keyboarding and introductory typing skills as well as proper typing technique, basic typing position, posture, 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.

..... 7874Y

COMMUNICATION MATTERS

Grades 9-12 1 credit

This course designed to help students who have difficulty writing pass the Virginia English end of year Writing SOL. Through extensive work on various grammar rules and terminology, students will understand how having a greater knowledge of the proper way to write helps them to communicate themselves more clearly. Students will also write extensively in this class. Through independent writing projects students will learn how to apply their cognitive strengths in conjunction with various writing process strategies. Students will learn to use a writing process, including prewriting, drafting and editing, that helps them best communicate their ideas. Students will work independently a great deal in this class while the teacher gives students one-on-one instruction in specific areas of need.

..... 1460Y

HOME IMPROVEMENT AND MAINTENANCE

Prerequisites: Teacher Recommendation
Grades 9-12 .5 and 1.0 credit
Offered at AHS

Students will study identification and use of tools, basic measurement, basic safety, wood identification, fasteners, painting and staining, plumbing and electricity. Students will also address Workplace Readiness Skills and demonstrate competencies through projects, hands on activities, field trips, and community service. Also students will develop a portfolio.

I..... 8477S/8477Y

MATH SKILLS

Prerequisite: Math 8
Grade: 9-10 1 Elective Credit
Offered at MoHS

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.

7859Y

PERSONAL FINANCE

Grades 9 –12 1 Credit – Elective, Sequential

Personal Living and Finance objectives give instruction in those skills necessary to manage personal finances and make sound financial decisions. The objectives are to compute and understand taxes; prepare and balance a personal/family budget; manage debt, including retail and credit card debt; examine and compare various savings options; and identify consumer rights and responsibilities. This course serves as a math credit for the Modified Standard Diploma.

..... 7819Y

READING SKILLS

1 Credit Offered at MoHS

This course is offered for students whose reading ability is significantly below grade level. It is designed to develop fundamental reading skills. Course content will focus on word study, vocabulary development, reading comprehension, and fluency. 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.

..... 7803Y

STUDY/ORGANIZATIONAL SKILLS

Grades 9-12 1 Elective Credit

Students are provided support in reading, writing, spelling, grammar, language, and vocabulary. They will investigate effective methods of studying in order to improve their academic performance. This course includes such topics as test-taking skills, test preparation, reports and note-taking skills, organizational skills, and time management. A percentage of class time is devoted to applying these skills to core subjects.

9 7847Y
10 7846Y
11 7850Y
12 7853Y

WRITING SKILLS

1 Credit Offered at MoHS

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.

..... 7801Y

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 LIFE SKILLS

Grades 10-12 1 Elective Credit

Students are taken on daily trips 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 exiting high school and are trained to use alternative methods of transportation.

..... 7814Y

EDUCATION FOR EMPLOYMENT I

Grades 9-12 1 Elective Credit

Students explore reasons for working; examine their own vocational interests, and the role that attitudes and behaviors play in determining success or failure on the job. Students become familiar with the types of jobs available in the community and the skills needed to perform them. Filling out job applications, learning interview techniques, and locating job openings are covered.

..... 7876Y

EDUCATION FOR EMPLOYMENT II

Grades 9-12 1 Elective Credit

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 improving vocational opportunities.

..... 7877Y

FUNCTIONAL ENGLISH I-IV

Grades 9-12 1 Elective Credit

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

..... 7840Y

FUNCTIONAL MATH I-IV

Grades 9-12 1 Elective Credit

I-III offered at MoHS

This course focuses on the basic operations of math in a consumer and life-skills setting. Review and remediation is provided in basic skills while also stressing earning money, budgeting, banking, shopping for food and clothing, buying and maintaining an automobile, paying rent and/or maintaining a home, traveling, paying taxes and insurance, and preparing for a career.

..... 7841Y

HEALTH/RECREATION I-II

Grades 9-12 1 Elective Credit

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

..... 7844Y

LEGAL ISSUES

Grades 9-12 1 Elective Credit

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 necessary. Topics studied include contracts, property, marriage, wills, civil and criminal procedure, and consumer protection.

..... 7842Y

PRACTICAL SCIENCE I

Grades 9-12 1 Elective Credit

Offered at MoHS and WAHS

This class explores basic science topics in the areas of earth science, biology, and physics as they relate to the students. Areas of focus are Earth Science and Physical Science.

..... 7861Y

PRACTICAL SCIENCE II

Grades 9-12 1 Elective Credit

Offered at MoHS and WAHS

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

..... 7863Y

SOCIAL STUDIES

Grades 9-12 1 Elective Credit

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

..... 7837Y

WORK STUDY

Grades 9-12 1 Elective Credit

Pass/Fail

This program provides vocational training and transitional assistance. Vocational counseling, help with job training/place-ment, job monitoring and follow-up are provided for students identified as appropriate through the IEP process. Education For Employment is a prerequisite unless taken concurrently with permission of the teacher.

..... 7878Y

COMMUNITY BASED INSTRUCTION PROGRAM

Non-Credit

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 students' interests, and as deemed appropriate through the I.E.P. 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.

Course Descriptions

WORLD LANGUAGES

World Language Study is Brain Exercise

When we speak our native languages, we know where to place our verbs and adjectives without even thinking about it. When we study a world language, however, we have to really think about what we're doing.

World language study forces us to think about the structure and role of language in a whole new way. This deliberate examination of language gives your brain a workout. Many students find that their native language skills improve greatly after they've learned a world language.

World Language Fluency Will Improve Your College Application

Want to really stand out to college officials? Find a way to flaunt your world language skills.

It's true that most students take a World language in high school, so taking classes alone won't do the trick. But learning a World language and really putting it to work—that will make you stand out.

For example, you can volunteer to answer phones in your church or local community or you can assist second language students in a nearby pre-school or medical office.

If you don't like to work with the public, you can translate written work in your spare time. You can definitely use this to impress college officials.

Adapted from Foreign Language Study: What's the Point? by Laura Fleming on www.About.com

BEGINNING RUSSIAN

Prerequisite: Teacher recommendation

.5 Credit per semester **Offered at MoHS**

The Beginning Russian course emphasizes the essential skills of reading, speaking, and writing Russian. Mischa Fayer's text "Basic Russian" and teacher-prepared handouts are used. This course is taught as independent study and may be offered during the zero period.

..... 5401Y
..... 5401R

CHINESE

Prerequisite: Teacher Recommendation

Grades 9-12 **1 Credit Sequential**

Offered at MoHS

Strong emphasis is given to reading, writing and speaking Mandarin Chinese. Teng Ssu Yu's "Conversational Chinese" and teacher-prepared handouts are used during the course.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in English/Language Arts courses to be successful in this course.

Advanced I 5810Y/ 5810R
Advanced II 5820Y/5820R
Advanced III 5830Y/5830R

FRENCH I

Prerequisite: Teacher Recommendation

Grades 9-12 **1 Credit Sequential**

Strong emphasis is given to speaking, listening, reading and writing the language, as well as to studying the national culture. Basic vocabulary and essential grammar are taught to enable students to communicate in simple sentences in directed activities and survival settings. Students demonstrate understanding of words and expressions in varied contexts. They read for functional purposes and write paragraphs. The culture surrounding the language is studied and the students gain insight into the way of life of other people.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in English/Language Arts courses to be successful in this course.

Academic/Advanced 5114Y /5114R

FRENCH II

Prerequisite: Teacher recommendation

Grades 9-12 **1 Credit Sequential**

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.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in French I (Advanced) to be successful in this course.

Academic/Advanced 5124Y/5124R

FRENCH III

Prerequisite: Teacher recommendation

Grades 9-12 **1 Credit Sequential**

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.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in French II (Advanced) to be successful in this course.

Academic/Advanced 5134Y/5134R

FRENCH IV

Prerequisite: Teacher recommendation

Grades 9-12 **1 Credit Sequential**

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.

Workbook: \$15-\$35

Note: Most students need a "B or better" average in French III (Advanced) to be successful in this course.

Honors 5140Y



Increase Your Career Opportunities With World Language Skills

There's no doubt about it: World language skills are becoming more and more important in today's society.

In the United States, Spanish language skills are becoming essential in the workplace. In Canada, French skills are important. If you think about it, World language skills are important in most occupations these days, such as the following:

- **Academic World:** Professors often travel to foreign countries to attend conferences and share research.
- **Business:** Global communication is essential in business today.
- **Communication and Media:** Your skills will be so valuable to any organization when you can increase communication. You may be interested in translating documents or working on TV or Radio.
- **Education:** Just think—you could teach anywhere in the world. Think big!
- **Government Services:** Some studies show that 80 percent of government jobs require World language skills.
- **Travel Industry:** Do you love to travel? With an exciting career in the travel industry you can work and play at the same time!
- **Intelligence/Law Enforcement:** Ever dreamed of becoming an international spy? You can—if you study World languages.

As you can see, World language skills will open your eyes to new sights, opportunities, and experiences around the world. The possibilities are endless!

Adapted from Foreign Language Study: What's the Point? by Laura Fleming on www.About.com

FRENCH V Advanced Placement

Prerequisite: Teacher recommendation

Grade 12 1 Credit Sequential

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.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

Workbook: \$15-\$35

Note: Most students need a "B or better" average in the French IV (Honors) to be successful in this course.

Advanced Placement 5170Y

GERMAN I

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

Strong emphasis is given to speaking, listening, reading and writing the language, as well as to studying the national culture. Basic vocabulary and essential grammar are taught to enable students to communicate in simple sentences in directed activities and survival settings. Students demonstrate understanding of words and expressions in varied contexts. They read for functional purposes and write paragraphs. The culture surrounding the language is studied and the students gain insight into the way of life of other people.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in English/Language Arts courses to be successful in this course.

Advanced 5210Y/5210R

GERMAN II

Prerequisite: Teacher recommendation

Grades 9-12 1 Credit Sequential

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.

Workbook: \$15-\$17

Note: Most students need a "C or better" average in German I (Advanced) to be successful in this course.

Advanced 5220Y /5220 R

GERMAN III

Prerequisite: Teacher recommendation

Grades 10-12 1 Credit Sequential

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.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in German II (Advanced) to be successful in this course.

Advanced 5230Y/ 5230R

GERMAN IV

Prerequisite: Teacher recommendation

Grades 11-12 1 Credit Sequential

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. The exam fee is approximately \$87 per test.

Workbook: \$15-\$35

Note: Most students need a "B or better" average in German III (Advanced) to be successful in this course.

Honors 5240Y

GERMAN V Advanced Placement

Prerequisite: Teacher recommendation, German IV

1 Credit Sequential

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.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

Note: Most students need a "B or better" average in German IV (Honors) to be successful in this course.

Advanced Placement 5250Y

JAPANESE I

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

Strong emphasis is given to speaking, listening, reading and writing the language, as well as to studying the national culture. Basic vocabulary and essential grammar are taught to enable students to communicate in simple sentences in directed activities and survival settings. Students demonstrate understanding of words and expressions in varied contexts. They read for functional purposes and write paragraphs. The culture surrounding the language is studied, and the students gain insight into the way of life of other people.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in English courses to be successful in this course.

Note: This course is offered as Independent Study through DOE Satellite program at MoHS.

Advanced..... 5910Y/5910R

JAPANESE II

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

Continued emphasis is given to speaking, listening, reading and writing the language, as well as to studying the national culture. Vocabulary and essential grammar are taught to enable students to communicate in simple sentences in directed activities and survival settings. Students demonstrate understanding of words and expressions in varied contexts. They read for functional purposes and write paragraphs. The culture surrounding the language is studied, and the students gain insight into the way of life of other people.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in Japanese II (Advanced) to be successful in this course.

Note: This course is offered as Independent Study through DOE Satellite program at MoHS.

Advanced 5920Y/5920R

JAPANESE III

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

Offered at WAHS

Continued emphasis is given to speaking, listening, reading and writing the language, as well as to studying the national culture. Vocabulary and essential grammar are taught to enable students to communicate in simple sentences in directed activities and survival settings. Students demonstrate understanding of words and expressions in varied contexts. They read for functional purposes and write paragraphs. The culture surrounding the language is studied, and the students gain insight into the way of life of other people.

Workbook: \$15-\$35

Note : Most students need a "C or better" average in Japanese II (Advanced) to be successful in this course.

Advanced..... 5931Y/5931R

JAPANESE IV

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Offered at WAHS

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 on various topics.

Honors 5940Y

LATIN I

Prerequisite: A good knowledge of English grammar

Grades 9-12 1 Credit Sequential

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.

Note: Most students need a "C or better" average in English/Language Arts courses to be successful in this course.

Advanced 5310Y / 5310 R

LATIN II

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

In the first half of Latin II, students review Latin I (if needed), including mastery of constructions necessary to comprehend and translate various Latin texts. Stories about Roman life and customs are translated in the second half of Latin II. Emphasis on vocabulary and word study is continued as well as the ability to translate English to Latin and an understanding and appreciation of the history and civilization of Rome through various readings.

Note: Most students need a "C or better" average in Latin I (Advanced) to be successful in this course.

Advanced 5320Y / 5320R

LATIN III

Prerequisite: Teacher recommendation

Grades 9-12 1 Credit Sequential

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.

Note: Most students need a "B or better" average in Latin II (Advanced) to be successful in this course.

Honors 5330Y



Are you struggling with verb conjugation and wondering why you're putting yourself through this? In truth, world languages may well be the single most valuable skill you can develop in today's society.

Unless otherwise indicated, all courses are offered at all high schools

LATIN IV

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

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

Note: Most students need a "B or better" average in Latin III (Advanced) to be successful in this course.

Honors 5340Y

LATIN IV, Advanced Placement

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

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.

Students may earn college credit through the Advanced Placement examinations in Latin Poetry

This course may be offered in alternate years

Note: Most students need a "B or better" average in Latin III (Advanced) to be successful in this course.

Advanced Placement 5341Y

LATIN V Advanced Placement

Prerequisite: Teacher recommendation:
Latin IV

1 Credit Sequential

Offered at MoHS & WAHS

The purpose of this class is to prepare students to take the Advanced Placement test for college credit.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

Note: Most students need a "B or better" average in Latin IV (Honors) to be successful in this course.

Advanced Placement 5371Y

SPANISH I

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

Strong emphasis is given to speaking, listening, reading and writing the language, as well as to studying the national culture. Basic vocabulary and essential grammar are taught to enable students to communicate in simple sentences in directed activities and survival settings. Students demonstrate understanding of words and expressions in varied contexts. They read for functional purposes and write paragraphs. The culture surrounding the language is studied, and the students gain insight into the way of life of other people.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in English/Language Arts courses to be successful in this course.

Academic/Advanced 5514Y/ 5514R

SPANISH II

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

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.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in Spanish I (Advanced) to be successful in this course.

Academic/Advanced 5525Y/5525R

SPANISH III

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

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.

Workbook: \$15-\$35

Note: Most students need a "C or better" average in Spanish II (Advanced) to be successful in this course.

Academic/Advanced 5531Y / 5531R

SPANISH IV

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Sequential

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.

Workbook: \$15-\$35

Note: Most students need a "B or better" average in Spanish III (Advanced) to be successful in this course.

Honors 5540Y

SPANISH V: SPANISH LANGUAGE AP

Prerequisite: Teacher Recommendation
1 Credit Sequential

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.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test

Note: Most students need a "B or better" average in Spanish IV (Honors) to be successful in this course.

Advanced Placement 5570Y

SPANISH LITERATURE AP

Prerequisite: Teacher Recommendation
1 Credit Sequential
Offered at AHS, WAHS

An AP Spanish Literature course is comparable to a third-year college introduction to Hispanic literature course. It is based on a required reading list. The works on the list are of literary significance and represent various historical periods, literary movements, genres, geographic areas, and population groups within the Spanish-speaking world. The objective of the course is to help you interpret and analyze literature in Spanish.

Students are expected to take the AP exam. The exam fee is approximately \$87 per test

Note: Most students need a "B or better" average in Spanish IV (Honors) to be successful in this course.

Advanced Placement 5570Y

General Information

GRADUATION REQUIREMENTS

For students entering the 9th Grade prior to 2010

The requirements for a student to earn a diploma are those in effect when the student enters ninth grade for the first time. The Standards of Accreditation require that students take Standards of Learning end-of-course tests, or approved substitute tests, in specified courses in English, mathematics, science, and history/social sciences.

Courses requiring a Standards of Learning test are identified in the course description section.

Standard Diploma For students entering the 9th grade prior to 2010

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	3	1
Laboratory Science ^{2,5}	3	1
World History I & II / World Geography ⁵	1	1 of any of these ↓
US/VA History	1	↓
US/VA Government	1	↓
Health and Physical Education	2	↓
Fine Arts or Career Technical Education	1	↓
Electives ³	6	(2 credits must be sequential)
Student Selected Test ⁴		1
Total Credits	22	6

NOTES

- At least two math courses from Algebra I, Geometry, Algebra II, or other mathematics courses above the level of algebra and geometry
- Science courses from at least two science disciplines—Earth Science, Biology, Chemistry or Physics
- This requirement must include at least 2 sequential elective courses that shall provide a foundation for further education or training or preparation for employment
- A student may utilize additional tests for earning verified credit in computer science, technology, and career and technical education
- Students who complete a career and technical education (CTE) program sequence and pass an examination or occupational competency assessment or credential or acquires a professional license in a CTE field, from the Commonwealth of Virginia, may substitute the certification, credential or license for (1) the student selected verified credit and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit.

Advanced Studies Diploma Entering the 9th grade prior to 2010

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
World History I & II / World Geography	2	2 of any of these ↓
US/VA History	1	↓
US/VA Government	1	↓
World Language (3 years of 1 language or 2 years each of 2 languages)	3 or 4	↓
Health and Physical Education	2	↓
Fine Arts or Career and Technical Education	1	↓
Electives	2	↓
Student Selected Test ³		1
Total Credits	24	9

NOTES

- Courses shall be at or above the level of algebra and shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or others above the level of Algebra II
- Science courses from at least three science disciplines – Earth Science, Biology, Chemistry or Physics
- A student may utilize additional tests for earning verified credits in computer science, technology, and career and technical education.

General Information

GRADUATION REQUIREMENTS

for students entering the 9th grade in 2010 and Beyond

The requirements for a student to earn a diploma are those in effect when the student enters ninth grade for the first time. The Standards of Accreditation require that students take Standards of Learning end-of-course tests, or approved substitute tests, in specified courses in English, mathematics, science, and history/social sciences.

Courses requiring a Standards of Learning test are identified in the course description section.



Verified credits are earned by passing both the course and the end of course Standards of Learning test

Standard Diploma For students entering the 9th grade in 2010 or beyond

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	3	1
Laboratory Science ^{2,5}	3	1
World History I & II / World Geography ⁵	1	1 of any of these ↓
US/VA History	1	↓
US/VA Government	1	↓
Health and Physical Education	2	↓
Fine Arts or Career and Technical Education	1	↓
Economics, or Personal Finance	1	↓
World Language, Economics, or Personal Finance	1	↓
Electives ³	4	(2 credits must be sequential)
Student Selected Test ⁴		1
Total Credits	22	6

Notes

¹ At least two math courses from Algebra I, Geometry, Algebra, Functions, and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II.

² Science courses from at least two science disciplines—Earth Science, Biology, Chemistry or Physics

³ This requirement must include at least 2 sequential elective courses that shall provide a foundation for further education or training or preparation for employment

⁴ A student may utilize additional tests for earning verified credit in computer science, technology, and career and technical education, economics, or other areas prescribed by the board.

⁵ Students who complete a career and technical education (CTE) program sequence and pass an examination or occupational competency assessment or credential or acquires a professional license in a CTE field, from the Commonwealth of Virginia, may substitute the certification, credential or license for (1) the student selected verified credit and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit.

Advanced Studies Diploma Entering the 9th grade in 2010 or beyond

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
World History I & II / World Geography	2	2 of any of these
US/VA History	1	↓
US/VA Government	1	↓
World Language (3 years of 1 language or 2 years each of 2 languages)	3 or 4	↓
Health and Physical Education	2	↓
Fine Arts or Career and Technical Education	1	↓
Economics or Personal Finance	1	↓
Electives	3	↓
Student Selected Test ³		1
Total Credits	26	9

Notes

¹ Courses shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or others above the level of Algebra II

² Science courses from at least three science disciplines—Earth Science, Biology, Chemistry or Physics

³ A student may utilize additional tests for earning verified credits in computer science, technology, and career and technical education, economics, or other areas prescribed by the board.

Graduation Requirements

ADDITIONAL DIPLOMAS

Students entering the 9th grade in 2010 and thereafter will also have an opportunity to pursue two new diplomas: Standard Technical Diploma and Advanced Technical Diploma

Standard Technical Diploma For students entering the 9th grade in 2010 and beyond

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	3	1
Laboratory Science ²	3	1
World History I & II / World Geography	1	1 of any of these ↓
US/VA History	1	↓
US/VA Government	1	↓
Health and Physical Education	2	↓
Fine Arts or World Language	1	
Economics or Personal Finance	1	↓
Career and Technical Education ³	4	↓
Electives	1	↓
Student Selected Test ⁴		1
Total Credits	22	6

NOTES

1 At least two math courses from Algebra I, Geometry, Algebra, Functions and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II.

2 Science courses from at least three science disciplines – Earth Science, Biology, Chemistry or Physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma.

3 Courses must include a career concentration as approved by the board. For concentrations that require less than four courses students must complete additional courses that are related to the student's career concentration. Students who complete a career and technical education program sequence and pass an examina-

tion or occupational competency assessment or credential or acquires a professional license in a CTE field, from the Commonwealth of Virginia, may substitute the certification, credential or license for (1) the student selected verified credit and (2) either a science or history and social science verified credit when the certification, license, or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the board. If a career concentration includes a specific assessment approved by the board, then the student must take this assessment.

4 A student may utilize additional tests for earning verified credit in computer science, technology, and career and technical education, economics, or other areas prescribed by the board.

Advanced Technical Diploma* Entering the 9th grade in 2010 and beyond

Discipline Area	Standard Units of Credit Required	Verified Credits Required
English	4	2
Mathematics ¹	4	2
Laboratory Science ²	4	2
World History I & II / World Geography	2	2 of any of these ↓
US/VA History	1	↓
US/VA Government	1	↓
World Language (3 years of 1 language or 2 years each of 2 languages)	3 or 4	↓
Health and Physical Education	2	↓
Fine Arts or Economics	1	↓
Career and Technical Education ³	4	↓
Student Selected Test ⁴		1
Total Credits	26	9

*Any student who meets the requirements for both the Advanced Studies and the Advanced Technical Diploma may choose between the two diplomas.

NOTES

1 Courses shall be at or above the level of algebra and shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or others above the level of Algebra II

2 Science courses from at least three science disciplines – Earth Science, Biology, Chemistry or Physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma.

3 Courses must include a career concentration as approved by the board. For concentrations that require less than four courses students must complete additional courses that are related to the student's career concentration. If a career concentration includes a specific assessment approved by the board, then the student must take this assessment.

4 A student may utilize additional tests for earning verified credits in computer science, technology, and career and technical education, economics or other areas as prescribed by the board.

MODIFIED STANDARD DIPLOMA

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. Eligibility and participation in the Modified Standard Diploma program is determined by the student's Individualized Education Program (IEP) team including the student, where appropriate, at any point after the student's eighth grade year. The school must secure the informed written consent of the parent/guardian and the student to choose this diploma program after review of the student's academic history and the full disclosure of the student's options. The student who chooses to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard or Advanced Studies Diploma at any time throughout that student's high school career. Students pursuing the Modified Standard Diploma must pass the 8th grade Standards of Learning tests in reading and mathematics. The student shall not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.

Modified Standard Diploma

Discipline Area	Standard Units of Credit Required
English	4
Mathematics ¹	3
Science ²	2
History and Social Sciences ³	2
Health and Physical Education	2
Fine Arts or Career and Technical Education	1
Electives ⁴	6
Total Credits	20

Notes

¹ Must include content from among applications of algebra, geometry, personal finance, and statistics

² Must include content from at least two of the following: applications of Earth Science, Biology, Chemistry or Physics

³ Must include one unit of credit in U.S. and Virginia History and one credit in U.S. and Virginia Government

⁴ Courses to satisfy this requirement shall include at least 2 sequential electives that shall provide a foundation for further education or training or preparation for employment

SPECIAL 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 DIPLOMA OPTIONS

In addition to the Advanced and Standard Diploma, students with disabilities who receive special education services have available to them additional diploma options described below.

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 an educational experience for students at-risk of dropping out of school 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:

- be currently enrolled in an Albemarle County High School
- be at least 16 and 1 year behind (6+) their entering class in credits earned
- achieve minimum entry test scores (a minimum of 410 on each of the 5 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
- complete a career-aptness assessment

Each ISAEP has three components:

- (1) academic preparation for the GED exam,
- (2) career guidance and exploration, (demonstrate proficiency in Virginia's Workplace Readiness Skills -13) and (3) occupational experience and/or training.

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.

SEQUENTIAL ELECTIVES

Students qualifying for a Standard Diploma or a Modified Standard Diploma must successfully complete two sequential electives 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. Sequential elective courses may be taken in consecutive years or any two years of high school.

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.



DIPLOMA SEALS

Students who demonstrate academic excellence and/or outstanding achievement may be eligible for one (or more) of the following awards:

Governor's Seal for Advanced Studies Diploma

To receive the Governor's Seal on an advanced studies diploma, students must complete the following:

- All requirements for an Advanced Studies Diploma with an average grade of "B" or better
- Successfully complete college-level coursework that will earn the student at least 9 transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses.

Virginia Board of Education Seal

Students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A" shall receive a Board of Education Seal on the diploma.

Virginia Board of Education's Seal for Career and Technical Education

The Board of Education's Seal for Career and Technical Education is awarded to students who complete the following:

- Requirements for a Standard or Advanced Studies Diploma,
- Complete a prescribed sequence of courses in a career and technical education concentration or specialization
- And either maintain a "B" or better average in those courses; or pass an examination or an occupational competency assessment in a career and technical education concentration or specializa-

tion that confers certification or occupational competency credential from a recognized industry, trade or professional association; or acquire a professional license in that career and technical education field from the Commonwealth of Virginia.

The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

Virginia Board of Education's Seal of Advanced Mathematics and Technology

The Board of Education's Seal of Advanced Mathematics and Technology is awarded to students who complete the following:

- Requirements for either a Standard or Advanced Studies Diploma
- Satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a "B" average or better,
- And either pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association; acquire professional license in a career and technical education field from the Commonwealth of Virginia; or pass an examination approved by the Board that confers college-level credit in a technology or computer science area.

The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

Virginia Board of Education's Seal for Excellence in Civics Education

The Board of Education's Seal for Excellence in Civics Education is awarded to students who complete the following:

- Requirements for either a Standard or Advanced Studies Diploma
- Complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher
- Have good attendance and no disciplinary infractions as determined by local school board policies
- Complete 50 hours of voluntary participation in community service or extracurricular activities.*

* Activities that would satisfy the requirements of clause (iii) of this subdivision include: (a) volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; (b) participating in Boy Scouts, Girl Scouts, or similar youth organizations; (c) participating in JROTC; (d) participating in political campaigns or government internships, or Boys State, Girls State, or Model General Assembly; or (e) participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

VERIFIED CREDITS

- Verified credits are earned by passing both the course and the end of course Standards of Learning test.
- The Board of Education has approved substitute tests for verified credit. See your school counselor for more information about these tests.
- Students who have not been successful on the Standards of Learning tests are offered remediation opportunities and/or tutorial programs in preparation for the Standards of Learning tests.

Locally Verified Credits for Standard Diploma Only

The Virginia Department of Education has adopted a policy that allows local school divisions to award locally verified credits in science and history/social science to students pursuing a Standard Diploma. To be eligible a student must have passed the high school course and not passed the related Standards of Learning test. Students must have taken the SOL test two times scoring within 375-399 on one administration of the test. Locally verified credits cannot be applied to an advanced diploma.

Students transferring into Albemarle County Schools

Students transferring into Albemarle County Public Schools from a home-school or private school environment, who enroll in public school and wish to receive Carnegie unit credit for courses taken, shall be awarded credit if one of the following conditions is met:

- Courses taken through an accredited correspondence/on-line high school program that generates a student transcript that records the grade and credit for the course.

Number of Verified Credits Required for Transfer Students

Discipline	Entering* during 9th or at the beginning** of 10th grade		Entering* during 10th or at the beginning** of 11th grade		Entering* during 11th or at the beginning** of 12th grade	
English	2	2	1	2	1	1
Math	1	2	1	1		
Science	1	2	***1	1		
Social Studies	1	2	***1	1		
Student Choice	1	1		1	1	3
Diploma Type	STD	ADV	STD	ADV	STD	ADV
Total	6	9	4	9	2	4

STD: Standard ADV: Advanced

* "During" the school year— enters on or after the 27th school day.

** "Beginning" – before the 27th school day.

*** Students who complete a CTE program sequence and pass an exam or occupational competency assessment may substitute the certification, competency credential, or license for (1) the student selected verified credit and (2) either a science or history/social science verified credit when the credential confers more than one verified credit.

- A Student portfolio that supports sufficient mastery of the content of a course, for which credit is sought, must be submitted to the Director of Secondary Education for review.
- The student will further be required to pass the SOL Exam if one is associated with the course.
- The student may additionally be required to pass a comprehensive exam for any course for which credit is sought. Credit granted on this basis will be recorded as "Pass" on the student transcript.

CORE COURSES / LEVELS

Levels have been identified for courses in English, Mathematics, Science, Social studies, and World languages. Elective courses are not leveled but may require prerequisites. Teachers make recommendations for both course selection and placement based on student interest and performance. Students are urged to read course descriptions carefully and select the level that best suits their ability and needs and challenges them in each subject area. The decision should be reached through consultation with parents, school counselors, and teachers. Competitive colleges expect student transcripts to show enrollment in advanced offerings in each content area. The Albemarle County curricula are designed to allow students to complete the Standards of Learning as defined by the State of Virginia.

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.
2. This recommendation 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. This recommendation provides schools the flexibility to combine levels identified by schools through the school improvement process. 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 unleveled.

The 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.

The Academic level is offered as a college preparatory/school-to-work program. Students in Academic classes are engaged in a rigorous curriculum designed to stimulate and encourage academic growth and performance.

The Advanced level is offered as a college preparatory/school-to-work program. Students in Advanced classes are engaged in a rigorous curriculum designed to stimulate and encourage academic growth and performance.

The 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.



Levels have been identified for courses in English, Mathematics, Science, Social studies, and World languages.

Students are urged to read course descriptions carefully and select the level that best suits their ability and needs and challenges them in each subject area.

There are 4 Levels of Core Courses (in addition to AP and Dual Enrollment):

- Standard
- Academic
- Advanced
- Honors

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.
- Students are taking college courses for dual credit according to the Virginia accreditation standards.

PROMOTION TO GRADE LEVELS

A student's class standing in grades 9, 10, 11, and 12 is determined by the number of credits he/she has earned. (The credits assigned are included with each course description.)

Grade classifications for students are as follows:

Grade 10: 6 credits

Grade 11: 12 credits

Grade 12: minimum of 15 credits and enrolled in all required classes for graduation.

Note: According to Virginia State Law, students must attend school until their eighteenth (18th) birthday. However, students, who have not reached twenty years of age, on or before August 1st of the school year, have the right to a free public education. If English is a second language for the student, then the student may remain in school through the age of 21.

RANK IN CLASS, WEIGHTED GRADES, AND GRADE POINT AVERAGE

Grade Point Average (GPA)

GPA is determined by dividing the total grade points received by the total number of credits attempted in earning the points. The points are 4 for A, 3 for B, 2 for C, 1 for D, and 0 for F. The highest possible unweighted GPA is 4.0.

Weighted Grades/Rank in Class—current high school students entering grade 12

Class rank is computed using the following weighted course system

- Standard level = no differential
- Advanced level = + .5
- Honors/Advanced Placement = + 1.0
- Classes are weighted only for the purpose of determining class rank

Students ranked in the top 10% of the school's graduating class, on the basis of the un-weighted and weighted GPA, are recognized as "honor graduates."

Weighted Grades for the entering 9-11th grade classes.

- Students entering the 9th grade in 2008-09, and beyond, will use the following weighted scale:

Grade	Standard / Academic / Advanced	Honors / AP Dual Credit / Dual Enrollment
A	4	5
B	3	4
C	2	3
D	1	2
F	0	0

- Continue the practice of identifying and recognizing the top 10% (weighted and un-weighted) of each graduating class as honor graduates, effective for the 2007-08 school year and beyond.
- GPA will continue to be calculated by dividing the total grade points received by the total number of credits attempted. Rank in class will be calculated using the weighted scale and reported by decile until February of the senior year when final class rank is determined, effective for the 2007-08 school year and beyond.

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:

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. Based on their performance on AP Examinations, students may earn college credit. Advanced Placement courses are offered in these areas: English, Mathematics, Science, History, Government, Psychology, Art history, Art portfolio, and World languages. 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. For more information, students should consult with their school counselor. Students are expected to take the AP exam. The exam fee is approximately \$87 per test. Financial assistance is available for economically disadvantaged students. See a school counselor for more information.

Dual Credit may be earned for courses taken on the college campus. Credit appears on both the high school and college transcript. Students who pursue this option do so in order to add an enriching and rigorous course to their high school program of study that is not available at the high school. Students must obtain permission from the school principal/ designee, prior to enrollment, to ensure appropriate high school credit for the college course. The student is responsible for the expenses associated with any course.

Dual Enrollment offers the student credit through Piedmont Virginia Community College (PVCC), as well as high school credit, for courses offered during the regular school day at the high school. The student must complete the necessary entrance requirements for PVCC and have principal approval. Course offerings vary from year-to-year. See your school counselor for more information. Dual Enrollment/Credit courses taken in the core areas (English, History/Social Sciences, Science and Mathematics) are weighted as college/dual enrollment courses. Students taking Dual Enrollment courses follow the college add/drop policy and deadlines.

Distance Learning/Online Courses may also be taken to enrich and add rigor to the high school program. Courses pursued through this method are courses that are not generally offered at the high school. Students who pursue this option to repeat a course may do so at the Standard level. Students must obtain permission from the principal/designee prior to enrolling in a correspondence or online course to ensure the proper awarding of credit. All tests are administered under the supervision of the base high school during regular school hours. The student is responsible for all expenses associated with any course.

Note: 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.

Virtual Virginia School 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. High schools must have a facilitator on hand to proctor tests, provide help and support to students, and forward information to the instructor. Courses pursued through this method are those courses that are not offered at the high school. Information on specific course offerings can be found at www.virtualvirginia.org.

Governor's Senior Year Plus: Early College Scholars Agreement is intended to allow and 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.

Commonwealth Scholars Program is a national program that partners with businesses to motivate students to complete a rigorous course of study in high school. Course requirements for this program include the following: 4 English Courses, 3 mathematics courses (Algebra I, II and Geometry), 3 laboratory science courses (Biology, Chemistry and Physics) 3.5 history and social science courses (World History I, US/VA History, US/VA Government, World History II, AP European, Economics) and 2 years of a World Language.

Commonwealth College Course Collaborative supports students earning college credit during the high school years. Most of Virginia's public colleges and universities now allow students to earn college credit, and fully transfer as requirements and degree credits, AP psychology and dual credit/enrollment classes in biology and U. S. History. More information can be found at www.virginiamentor.org/planning/cccc.sap

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. Students who participate in an internship will earn .5 credit for each semester. See your school counselor for additional details.

ATHLETIC ELIGIBILITY/
NCAA INFORMATION

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.

NCAA Division I
Academic Eligibility Requirements:

If you are planning to enter a Division I College, in order to be classified as a “qualifier”, you are required to complete the following:

- Graduate from High School
- Successfully complete a core curriculum of at least 13 academic courses as follows:
 - English—4 years
 - Mathematics—2 years (at or above the level of Algebra I)
 - Natural or physical science—2 years (including at least one laboratory science)
 - English, Mathematics, Natural or Physical science—1 additional year
 - Additional academic courses in any of the above areas or foreign language, computer science, philosophy, or non-doctrinal religion—2 years
- Have a core-course grade point average (based on a maximum of 4.00) and combined score on the SAT verbal and math sections or a sum score on the ACT based on the qualifier index scale. Please refer to the NCAA Guide for additional information on Division I, II, and III, and for partial qualifier requirements. Below is a partial list of the Division I qualifier index.

Core GPA	ACT	SAT
Sum of Scores		
2.5 and above	68	820
2.25	77	920
2.0	86	1010

See your counselor or www.eligibilitycenter.org for details.

ADD/DROP PROCEDURES

Course selection for the upcoming year is an opportunity for each student to think carefully about interests, achievement, 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 selection of courses for the next school year.

The Recommendation/Registration Forms are brought home for parental review and signature, and returned to the school counselor within three 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.

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 10th day of each semester, without 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 10th school day of each semester.
- Dropped Classes: Classes dropped after the 10th day of the semester, 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 Director of School Counseling is required.
- Under extenuating circumstances, exceptions may be considered by the Director of School Counseling, with principal/designee approval, 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 High School Counseling Director with principal/designee approval 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 add/drop policy and deadlines.

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.

Career Planning



All Albemarle County high school students will graduate with a Career Plan

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 education plans that reflect rigorous academics in students' chosen career directions;
- Participate in electives, extra-curricular activities, and community service projects supporting students' career directions;
- Include internships or cooperative work experiences during the 11th or 12th grades.



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 sixteen career clusters from the State 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

CAREER PATHWAYS

VIRGINIA'S SIXTEEN CAREER CLUSTERS & ALBEMARLE'S 6 CAREER PATHWAYS

Career clusters are broad groupings of occupations and broad industries based on commonalities among job responsibilities. They provide an organizing tool for students to investigate their career pathways. Career pathways help students identify a focused direction for planning a course schedule. The chart below shows how Virginia's 16 Career Clusters relate to Albemarle County's 6 Career Pathways.



HOW CAN CAREER PATHWAYS HELP?

Students will:

- have a clearer picture of their careers of interest
- select classes that match their career interests
- choose outside learning experiences that enrich career understanding
- develop foundational knowledge and career skills

Virginia's 16 Career Clusters		Albemarle County's 6 Career Pathways	
1	Arts, AV, Technology & Communications	1	Arts, AV, Communications & Humanities
2	Health Science	2	Health Services
3	Hospitality & Tourism	3	Hospitality & Tourism Services
4	Education & Training	4	Legal, Protective, Education, & Human Services
5	Human Services		
6	Law, Public Safety, Corrections & Security		
7	Government & Public Administration		
8	Business Management & Administration	5	Business, Finance, Marketing & Information Technology
9	Finance		
10	Information Technology		
11	Marketing, Sales, & Service		
12	Agriculture, Food & Natural Resources	6	Engineering, Technology, Science & Natural Resources
13	Architecture & Construction		
14	Transportation, Distribution & Logistics		
15	Manufacturing		
16	Science, Technology, Engineering & Mathematics		

VIRGINIA'S 16 CAREER CLUSTERS

1. Arts, Audio/Visual Technology And Communication



Do you enjoy creative activities such as music, writing, entertainment and art?
Do you like to communicate ideas?
Are you a creative thinker?
Do you like to be in the spotlight?

Diploma with some training	Certification or Associate degree	College degree plus
Printing Press Operator	Desktop Publisher, Stylist	Graphic Artist, Illustrator
Live Sound Engineer	TV/Broadcast Technician	Reporter, Newscaster
Actor, Dancer, Musician	Photographer	Film Editor, Director, Producer

4. Education and Training



Are you friendly, outgoing, understanding?
Are you good at explaining things?
Do you enjoy helping others meet their goals?
Do you like working with adults or children?

Diploma with some training	Certification or Associate degree	College degree plus
Child Care Worker	Teacher's Aide, Preschool Teacher, Fitness Instructor	Teacher
Library Assistant	Most careers in this field require 4+ years of college.	School Counselor, Career Counselor, School Psychologist

2. Health Science



Do you like to care for sick people or help them stay well?
Are you interested in diseases and in how the body works?
Do you like to provide a service to people?
Do you like science and lab experiments?

Diploma with some training	Certification or Associate degree	College degree plus
Dental Assistant	Dental Hygienist	Dentist
Home Health Aide, Nurse Aide	LPN, Registered Nurse, EMT	Physician
(Most careers in Health Science require certification or college degrees)	Surgical Technician, Biotechnology Technician	Radiation Therapist
	Fitness Trainer, Physical/Occupational Therapy Assistant	Physical/Occupational Therapist, Athletic Trainer

5. Human Services



Do you like to help people solve problems or reach goals?
Do you enjoy providing a service to others?
Is it important to you to do something that helps others?
Are you friendly, outgoing, a good listener, and understanding?

Diploma with some training	Certification or Associate degree	College degree plus
Personal Care Aide, Hair Stylist	Welfare Eligibility Worker & Interviewer	Psychologist
Customer Service	Social & Human Services Assistant	Social worker
Recreation Worker	Residential Counselor	Counselor

Most careers in this field require 4+ years of college

3. Hospitality and Tourism



Do you like to be with people?
Do you enjoy playing or teaching sports?
Do you like to travel or work at a resort?
Do you like to prepare meals?

Diploma with some training	Certification or Associate degree	College degree plus
Tour Guide	Travel Agent	Meeting/Event Planner
Guest Service Representative	Hotel Manager, Flight Attendant	Resort Manager, Marketing Manager
Cook, Caterer	Chef, Food Service Manager	Coach, Athletic Trainer

6. Law, Public Safety, Corrections and Security



Are you good at dealing with people in stressful situations?
Are you good at controlling your own emotions to help others?
Are you a good role model?

Diploma with some training	Certification or Associate degree	College degree plus
Security Guard	Police Officer	Lawyer
Emergency Dispatcher	Paralegal	Federal Investigator
Firefighter	Private Investigator	Probation Officer

Jobs in these fields are also available in the military.

VIRGINIA'S 16 CAREER CLUSTERS

7. Government and Public Administration



Are you interested in politics?
Do you like to help the public?
Do you want to get involved in local issues?

Diploma with some training	Certification or Associate degree	College degree plus
Postal clerk	Eligibility worker	City Manager
The range of government jobs is enormous. Workers can obtain a job in an assortment of career paths.		County Executive
		Urban/Regional Planner
		Legislative Staffer

10. Information Technology



Are you patient, precise, and attend to detail?
Do you like working with people to solve their computer problems?
Are you curious about how computer games and programs work?
Are you a logical and analytical thinker?

Diploma with some training	Certification or Associate degree	College degree plus
Computer Operator	Computer Technical Support Specialist	Computer Software Engineer, Geographic Information Systems Specialist (GIS)
Computer Service Technician	Computer Network Support Technician	Computer Game Developer, Web Developer

8. Business, Management and Administration



Have you ever thought of starting your own business?
Do you like working in an office and using computers?
Do you enjoy dealing with the public?
Do you communicate effectively?

Diploma with some training	Certification or Associate degree	College degree plus
Customer Service Representative	Office Manager	Human Resources Specialist
Bookkeeper, Fiscal Tech.	Property Manager	Management Analyst
Medical Administrative Specialist	Administrative Assistant, Secretary	Chief Executive Officer (CEO)

11. Marketing, Sales and Service



Do you enjoy providing a service to others?
Can you write a good advertisement?
Do you like helping people find solutions to their problems?
Are you good at persuading people to make purchases and convincing people to do things?
Are you a creative person?

Diploma with some training	Certification or Associate degree	College degree plus
Vehicle Sales	Real Estate Sales Agent	Sales Engineer, Buyer
Sales Associate/Assistant Manager	Sales Representative, Store/Regional Manager	Marketing Manager, Public Relations Representative
Telemarketer	Auctioneer, Merchandise Display Artist	Market Research Analyst

9. Finance



Do you like working with numbers?
Do you have excellent attention to detail?
Do you enjoy tracking financial information?

Diploma with some training	Certification or Associate degree	College degree plus
Bank Teller	Securities Sales Assistant	Accountant, Loan Officer
Customer Service Representative	Tax preparer	Stock Broker, Bank Manager
Insurance Clerk	Insurance Sales Agent	Insurance Adjuster, Underwriter

12. Agriculture, Food and Natural Resources



Do you have a green thumb?
Do you love working with animals?
Is protecting the environment one of your passions?

Diploma with some training	Certification or Associate degree	College degree plus
Vet Assistant, Dog Groomer	Veterinary Technician	Veterinarian, Zookeeper
Arborist, Logger	Environmental Technician, Water Treatment Plant Operator	Agricultural Scientist, Environmental Scientist
Groundskeeper, Florist	Farm Manager, Fish/Game Warden	Forester, Park Ranger

13. Architecture and Construction



Do you like reading blueprints and drawing building structures?

Do you appreciate the pride of building something that will stay?

Do you like working with tools?

Are you willing to work outside?

Diploma with some training	Certification or Associate degree	College degree plus
Architectural Drafter	Architectural Technician	Architect
Floor Layer, Construction Helper	Electrician, Plumber, Carpenter	Construction Manager
Surveying Assistant	Civil Engineering Tech., Surveyor Technician	Civil Engineer

15. Manufacturing



Do you like working with tools, machinery, and computers?

Do you enjoy seeing the concrete result of your work?

Do you enjoy designing and problem solving?

Diploma with some training	Certification or Associate degree	College degree plus
Forklift Operator	Laser technician	Industrial Production Manager
Welder	Production Planner	Quality Assurance Specialist
Quality Control Technician	Electronics Technician	Environmental Engineer

14. Transportation, Distribution & Logistics



Do you like working on or operating cars, trucks, or airplanes?

Do you understand how things work?

Do you like moving or handling material, products, or people?

Diploma with some training	Certification or Associate degree	College degree plus
Dispatcher	Flight Attendant	Pilot
Auto Detailer, Tire Repairer/Changer	Automobile or Auto Body Technician, Aircraft Mechanic	Air Traffic Controller
Shipping and Receiving Clerk	Flight Attendant	Manager: Airport, Fleet

16. Science, Technology, Engineering & Mathematics



Do you have talent in math and science?

Are you good at abstract thinking?

Do you like to explore new ideas and test them methodically?

Diploma with some training	Certification or Associate degree	College degree plus
Drafter	Electronics Technician	Engineer
Field Crew Surveyor	Civil Engineering Technician, Aerospace Technician	Meteorologist
Lab Animal Caretaker	Biological Technician	Anthropologist, Archaeologist



Creativity and Career Planning

A well rounded high school program involves the careful planning of electives. The 21st century work place requires new multidisciplinary 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!

ELECTIVES AND CAREER PATHWAYS LISTED BY SCHOOL

Please refer to the Course Description Section for complete listings, descriptions, prerequisites and credits information.

Albemarle High School (AHS)

www.k12albemarle.org/AlbemarleHS

ART, AV, COMMUNICATION & HUMANITIES

African American Studies	10-12
Art I-IV	9-12
Art History (AP)	11-12
Ceramics I-III	9-12
Chorus I-IV	9-12
Concert Band I-IV	9-12
Concert Strings	9-12
Contemporary Literature	9-12
Creative Writing I-IV	9-12
Debate	9-12
Design, Multimedia & Web Tech I-II	11-12
Drama I-IV	9-12
Early Morning Marching Band	9-12
Fashion Design	11-12
Film Studies/Filmmaking	10-12
Graphic Communications	9-12
History Through Film	10-12
Humanities I-III	9-12
Intro to Interior Design & Housing	11-12
Jazz Band I-IV	9-12
Journalism I-IV	9-12
Men's Ensemble/ Women's Ensemble I-IV	9-12
Music Industry Technology CATEC	11-12
Photographic Explorations	9-12
Photography I-III	10-12
Psychology & AP	11-12
Show Choir I-IV	9-12
Sociology	10-12
Speech & Communication	9-12
String Ensemble I-IV	9-12
Studio Art Portfolio (AP)	11-12
Symphonic Band I-IV	9-12
TV Production I-III	9-12
Vocal Jazz	9-12
Wind Ensemble	9-12
World Languages	9-12
Yearbook I-IV	9-12

BUSINESS, FINANCE, MARKETING & INFORMATION TECHNOLOGY

Business Cooperative Ed.	11-12
Business Management	9-12
Computer Info Systems I-II	9-12
Computer Science I-II	9-12
Computer Science Adv.	10-12
Design, Multimedia & Web Tech I-II	9-12
Graphic Communications	9-12
Marketing I-II	10-12
Marketing Cooperative Ed.	11-12
Principles of Business & Marketing	9-12
Psychology	11-12
Speech & Communication	9-12
Sports, Enter. & Rec. Marketing I-II	11-12
Statistics (AP)	11-12
World Languages	9-12

ENGINEERING, TECHNOLOGY, SCIENCE & NATURAL RESOURCES

Air Force Junior ROTC I-IV @MoHS	9-12
Architectural Drawing/ARC 121 PVCC	10-12
Auto Body Technology I-II CATEC	11-12
Auto Service Technology I-II CATEC	10-12
Biology II AP	11-12
Biology II AP Environmental Science	10-12
Building Trades I-II CATEC	10-12
Computer Science	9-12
Computer Science Adv.	10-12
Computer Science AP A	11-12
Design, Multi-Media & Web Tech I-II	9-12
Ecology	10-12
Engineering Drawing/DR 140 PVCC	10-12
Environmental Science PVCC	11-12
Horticulture Science/Landscaping	10-12
Masonry I-II	10-12
Math 163 Pre-Calculus I	PVCC
Math 164 Pre-Calculus II	PVCC
Math 173 Calculus w/Analytic Geometry I PVCC	
Math 174 Calculus II	PVCC
Math 271 Applied Calculus	PVCC
Math 277 Calculus III	PVCC
Math Analysis	11-12
Physics II (AP)	11-12
Statistics (AP)	11-12
Technical Drawing	9-12
World Languages	9-12

HEALTH SCIENCES

Anatomy & Physiology	10-12
Biology II (AP)	11-12
Calculus (AP) BC	12
Chemistry II (AP)	11-12
Dental Assistant I CATEC	11-12
Early Childhood Dev.	9-12
Emergency Medical Tech. & Firefighter CATEC	11-12
Fitness/Weight Training I-IV	11-12
Fitness/Yoga	11-12
Health & Medical Sciences I-II	9-12
Life Management I-II	9-12
Math 163 Pre-Calculus I	PVCC
Math 164 Pre-Calculus II	PVCC
Math 173 Calculus w/Analytic Geometry I PVCC	
Math 174 Calculus II	PVCC
Math 271 Applied Calculus	PVCC
Math 277 Calculus III	PVCC
Nurse Aide CATEC	11-12
Pharmacy Tech	11-12
Physics II AP	11-12
Practical Nursing CATEC	11-12
Psychology & AP	11-12
Sociology	10-12
World Languages	9-12

HOSPITALITY & TOURISM SERVICES

Barbering I-II CATEC	11-12
Business Management	9-12
Cosmetology I-II CATEC	11-12
Culinary Arts I-II CATEC	11-12
Fitness/Weight Training I-IV	11-12
International Foods	9-12
Intro to Culinary Arts CATEC	10-12
Intro to Interior Design & Housing	11-12
Life Management I-II	9-12
Marketing I-II	10-12
Principles of Business & Marketing	9-12
Sports, Enter.& Rec. Marketing I-II	11-12
World Languages	9-12

LEGAL, PROTECTIVE, EDUCATION & HUMAN SERVICES

Air Force Junior ROTC I-IV @MoHS	9-12
Barbering I-II CATEC	11-12
Business Management	9-10
Computer Info Systems I-II	9-12
Cosmetology I-II CATEC	9-12
Debate	9-12
Early Childhood Dev.	9-12
Emergency Medical Tech. & Firefighter	11-12
Fitness/Weight Training I-IV	11-12
Fitness/Yoga	11-12
Health & Medical Sciences I-II	9-12
Leadership I-II	9-12
Mediation Training I-II	9-12
Practical Law	10-12
Psychology	11-12
Sociology	10-12
Speech & Communication	9-12
Virginia Teachers for Tomorrow I-II	11-12
World Languages	9-12

All students are expected to have a community based learning experience by the time they graduate.

Business or Marketing	
Cooperative Education	11 - 12
Independent Study	9 - 12
Internship	11 - 12
Smart Money Management/ Economics	11 - 12

ELECTIVES AND CAREER PATHWAYS LISTED BY SCHOOL

Please refer to the Course Description Section for complete listings, descriptions, prerequisites and credits information.

Monticello High School (MoHS)

www.k12albemarle.org/Monticello

ART, AV, COMMUNICATION & HUMANITIES

African-American Literature	9-12
African-American Studies	10-12
Art I-IV	9-12
Studio Art (AP)	11-12
Basics of Tech Theater	9-12
Ceramics I-IV	9-12
Chorus I-IV	9-12
Concert Band	9-12
Concert Choir	10-12
Creative Writing Literary Magazine	10-12
Creative Writing I, II	9-12
Debate	9-12
Design, Multi-Media & Web Tech. I, II	9-12
Digital Imaging Technology I, II	9-12
Drama I-IV	9-12
Film Studies/Filmmaking	10-12
Fashion Design	11-12
Humanities I-III	9-12
Intro. To Interior Design & Housing	11-12
Jazz Band I-IV	9-12
Journalism I-IV	9-12
Marching Band	9-12
Model United Nations	10-12
Multimedia Crafts I-IV	9-12
Music Industry Technology (CATEC)	11-12
Percussion Ensemble	9-12
Philosophy	10-12
Photography I-III	9-12
Psychology	11-12 & AP 12
Show Choir	10-12
Speech & Communication	9-12
Stage Band	9-12
String Ensemble I-IV	9-12
TV Production I, II, III	9-12
Vocal Jazz Ensemble	9-12
Wind Ensemble	9-12
Women's Ensemble-Advanced	9-12
Yearbook I-IV	9-12
World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12

BUSINESS, FINANCE, MARKETING, & INFORMATION TECHNOLOGY

Business Management	9-12
Classes in Art	9-12
Computer Info Systems I, II	9-12
Computer Science A (AP)	10-12
Computer Science I, II	9-12
Design, Multi-Media & Web Tech. I, II	9-12
Digital Imaging Technology I, II	9-12
Marketing I, II	10-12
Model United Nations	10-12
Office Specialist I, II, III	9-12
Principles of Business & Marketing	9-10
Smart Money Management/Economics	9-12
Sports, Entertain. & Rec. Marketing I, II	10-12
Yearbook I-IV	9-12
World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12
Cooperative Education (Coop)- Business & Marketing	11-12

ENGINEERING, TECHNOLOGY, SCIENCE, & NATURAL RESOURCES

Air Force Junior ROTC I-IV	9-12
Air Force ROTC Drill	9-12
Anatomy & Physiology	10-12
Arch. Drawing I & ARC 121 (PVCC-DE)	10-12

Auto Body Tech I, II (CATEC)	10-12
Auto Service Tech I, II (CATEC)	11-12
Biology II (AP-Environmental Science)	10-12
Biology II Animal Studies	11-12
Building Trades I, II (CATEC)	10-12
Classes in Art	9-12
Computer Science A (AP)	10-12
Computer Science I, II	9-12
Construction Technology	10-12
Design, Multi-Media & Web Tech. I, II	9-12
Digital Imaging Technology I, II	9-12
Ecology	10-12
Engineering Drawing DR 140 (PVCC-DE)	10-12
Environmental Science (PVCC-Ecology-DE)	10-12
Horticultural Sc./ Landscape Design (CATEC)	10-12
Masonry I, II (CATEC)	10-12
Materials & Processes Technology	9-11
Technical Drawing	9-12
World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12

*Certain science courses geared towards the environment and animal studies have been included in the list above as an example of some of our science courses. Numerous AP and PVCC Dual Enrollment Science and Math courses are also offered. These college-level courses are recommended for students who plan to pursue careers in Engineering, Science, and Math. For a complete list of our science and math courses, refer to the Program of Studies.

LEGAL, PROTECTIVE, EDUCATION & HUMAN SERVICES

Air Force Junior ROTC I-IV	9-12
Barbering I, II (CATEC)	11-12
Business Management	9-12
Classes in Art	9-12
Computer Info. Systems I, II	9-12
Cosmetology I, II (CATEC)	11-12
Debate	9-12
EMT & Firefighter(CATEC)	11-12
Health & Medical Sciences I, II	9-12
Mediation Training I	9-12
Model United Nations	10-12
Principles of Business & Marketing	9-10
Psychology & AP	11-12
Speech & Communication	9-12
Virginia Teachers for Tomorrow I-II(PVCC-DE)	11-12
World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12
Cooperative Education (Coop)- Business & Marketing	11-12

HEALTH SERVICES

Anatomy & Physiology	10-12
Biology II Animal Studies	11-12
Culinary Arts (Introduction)	9-12
Culinary Arts (Introduction-CATEC)	10-12
Culinary Arts I, II (CATEC)	10-12
Dental Assistant (CATEC)	11-12
EMT & Firefighter (CATEC)	11-12
Fitness/Weight Training I-IV	11-12
Health & Medical Sciences I, II	9-12
Life Management I	9-12
Mediation Training I	9-12
Nurse Aide (CATEC)	11-12

Pharmacy Technician (CATEC)	11-12
Physics I	10-12
Physics II AP	11-12
Psychology	11-12
Psychology AP	11-12
Sports Medicine (Introduction)	11-12
World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12

**Students interested in medical careers should consider taking chemistry & other higher level sciences in high school.

HOSPITALITY & TOURISM SERVICES

Barbering I, II (CATEC)	11-12
Business Management	9-12
Cosmetology I, II (CATEC)	11-12
Culinary Arts (Introduction)	9-12
Culinary Arts (Introduction-CATEC)	10-12
Culinary Arts I, II (CATEC)	10-12
Fashion Design	11-12
Fitness/Weight Training I-IV	11-12
International Food	9-12
Interior Design & Housing (Intro.)	11-12
Life Management I	9-12
Marketing I, II	10-12
Principles of Business & Marketing	9-10
Sports, Entertain. & Rec. Marketing	10-12
World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12
Cooperative Education (Coop) Business & Marketing	11-12

ADDITIONAL ELECTIVES, ENRICHMENT, & CAREER EXPERIENCES

World Languages: (French, Spanish, Russian, Chinese, Latin, German, Japanese)	9-12
Air Force Junior ROTC I-IV and ROTC Drill (zero period)	9-12
*C-Quest	11-12
*AVID	11-12
Math, Engineering and Science Academy	11-12
Internship	11-12
Independent Study	9-12
Leadership I-IV	9-12
Cooperative Education (Coop)- Bus. & Mark.	11-12
Model United Nations	10-12
SAT Prep/Successful Strategies for College	10-12
10th Grade Vocational Exploratory (CATEC) includes English 10 and Trade Exploratory Education for Employment & Work Study	11-12
*ESOL	11-12
Smart Money Management/Economics	9-12
Summer Internships (CATEC) – Health and Medical Science or Information Technology fields (CATEC)	11-12
Summer Camps (CATEC)– Architecture and Construction:	8th-10th
Culinary Arts and Cosmetology	8th-10th

* admission criteria apply

All students are encouraged to have a community based learning experience by the time they graduate. For example: Internship, Cooperative Education, Virginia Teachers For Tomorrow, Independent Study, Community Service, Work Study

ELECTIVES AND CAREER PATHWAYS LISTED BY SCHOOL

Please refer to the Course Description Section for complete listings, descriptions, prerequisites and credits information.

Western Albemarle High School (WAH)

www.k12albemarle.org/AlbemarleHS

ART, AV, COMMUNICATION & HUMANITIES

African Culture, Music and Dance I, II	10-12
Art I-IV	9-12
Art History AP	11-12
Art Portfolio AP	11-12
Ceramics I	10-12
Chorus I-IV	9-12
Concert Band I-IV	9-12
Concert Chorus	10-12
Creative Writing/Literary Magazine	10-12
Digital Imaging I, II	10-12
Drama I-IV	9-12
European History AP	10-12
Film Studies/Filmmaking	10-12
Jazz Band I-IV	9-12
Journalism I-IV	9-12
Men's Ensemble (Chorus)	9-12
Multimedia Crafts I-IV	9-12
Music Theory	10-12
Music Industry Technology (CATEC)	11-12
Photography I,II,III	9-12
Probability and Statistics	12
Philosophy	10-12
Psychology	11-12
Psychology AP	12
Sociology	10-12
Speech & Communication	9-12
Statistics AP	11-12
String Ensemble I- IV	9-12
Symphonic Band I-IV	9-12
Teacher Fellows	11-12
TV Production I, II, III	9-12
Virginia Teachers for Tomorrow I, II	11-12
Women in Art and Literature	10-12
World Languages I-IV (French, German, Latin, Japanese, Spanish)	9-12
Yearbook I-V	9-12

BUSINESS, FINANCE, MARKETING, & INFORMATION TECHNOLOGY

Business Co-op	11-12
Computer Science I	9-12
Graphic Design, Web Design I, II	9-12
Design Multi-Media & Web Tech. I, II	10-12
Digital Imaging	10-12
Geospatial Technology I, II	10-12
Graphic Communications	9-12
Information Technology Fundamentals	9-12
Marketing I-II (Co-op available)	10-12
Principles of Business & Marketing	9-12
Probability and Statistics	11-12
Smart Money Management/Economics	9-12
Sports Marketing (Co-op available)	10-12
World Languages I-IV (French, German, Latin, Japanese, Spanish)	9-12
Yearbook I-IV	9-12

ENGINEERING, TECHNOLOGY, SCIENCE, & NATURAL RESOURCES

Architectural Drawing I, II	10-12
Astronomy	10-12
Auto Body Tech I, II (CATEC)	10-12
Auto. Service Tech I, II (CATEC)	11-12
Biology II AP	11-12
Building Trades I, II (CATEC)	10-12
Calculus AP-AB, BC	11-12
Chemistry II AP	11-12
College Algebra/Trigonometry	11-12

Computer Science I	9-12
Graphic Design, Web Design I, II	9-12
Design Multi-Media & Web Tech. I, II	12
Discrete Mathematics	10-12
Ecology	10-12
Engineering Drawing	10-12
Geospatial Technology	10-12
Graphic Communications	9-12
Horticultural Science/Landscape Design	CATEC
Manufacturing Technology I, II	10-12
Math Analysis	11-12
Materials & Processes Technology	9-11
Masonry I, II	(CATEC)
Physics II AP	11-12
Probability and Stats	11-12
Statistics (AP)	12
Technical Drawing	9-12

LEGAL, PROTECTIVE, EDUCATION & HUMAN SERVICES

Barbering I, II (CATEC)	11-12
Cosmetology I, II (CATEC)	11-12
Dental Assistant (CATEC)	11-12
EMT & Firefighter(CATEC)	11-12
Health & Medical Sciences I, II	9-12
Mediation Training I, II	9-12
Pharmacy Tech (CATEC)	11-12
Psychology & AP	11-12
Speech & Communication	9-12
Teacher Fellow I, II	11-12
Virginia Teachers for Tomorrow I, II	11-12

HEALTH SERVICES

Biology II AP	11-12
Chemistry II (AP)	11-12
Dental Assistant (CATEC)	11-12
Emergency Med. Tech. & Firefighter	(CATEC)
Fitness/Weight Training I-IV	11-12
Health & Medical Sciences I, II	9-12
Mediation Training I, II	9-12
Nurse Aide (CATEC)	11-12
Nutrition, Exercise, Wellness	9-12
Pharmacy Tech (CATEC)	11-12
Physics I	10-12
Physics II AP	11-12
Practical Nursing (CATEC)	11-12
Psychology	11-12
Psychology AP	12
World Languages I-IV (French, German, Latin, Japanese, Spanish)	9-12

HOSPITALITY & TOURISM SERVICES

African Culture, Music and Dance I,II	10-12
Barbering I, II	(CATEC)
Cosmetology I, II (CATEC)	11-12
Culinary Arts I, II (CATEC)	10-12
Fitness/Weight Training I-IV	11-12
Introduction to Culinary Arts (CATEC)	10-12
Marketing I, II, Co-op available	10-12
Nutrition, Exercise, Wellness	9-12
Principles of Business & Marketing	9-12
World Languages I-IV (French, German, Latin, Japanese, Spanish)	9-12

ADDITIONAL ELECTIVES, ENRICHMENT & Career Experiences That Can Apply To Any Career Pathway

Vocational Exploratory Cooperative	
Education-Business, Marketing	
Independent Study (CATEC)	10
Internship	10-11
Leadership	9-12
SAT Prep/Successful Strategies for College	10-12
Summer Internship (CATEC)	11-12
Summer camp (CATEC) in	
Architecture and Construction	9-12
Health and Medical Science	9-10
*Education for Employment & Work Study	
*ESOL	
*AVID	
* admission criteria apply	
All students are expected to have community-based learning experiences before graduation: independent study, community service, internship, cooperative education, Virginia teachers for tomorrow, teacher fellows	

Index of Courses

COURSE	OFFERED AT	PAGE	COURSE	OFFERED AT	PAGE
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African American Studies	AHS, MoHS		Calculus Advanced Placement BC		
African Culture, Music, and Dance I, II	WAHS		Calculus I-Pre Math 163 – PVCC DE		
Air Force, Jr. ROTC I	MoHS		Calculus II-Pre Math 164 – PVCC DE		
Air Force, Jr. ROTC II	MoHS		Calculus and Geometry I – Math 173 PVCC DE		
Air Force, Jr. ROTC III	MoHS		Calculus Applied Math 271 PVCC DE		
Air Force, Jr. ROTC IV	MoHS		Calculus III Math 277 PVCC DE		
Air Force, Jr. ROTC Drill only	MoHS		Ceramics I, II, III		
Air Force, Jr. ROTC Advanced Drill only	MoHS		Ceramics IV	AHS, MoHS	
Air Force, Jr. ROTC-410	MoHS		Chemistry I		
Algebra I			Chemistry II AP		
Algebra I, Part II			Chemistry 101 General PVCC DE	MoHS	
Algebra II			Chinese I, II, III	MoHS	
Algebra, Functions, and Data Analysis			Chorus I, II, III, IV		
American Studies/English 11			College Algebra and Trigonometry		
American Studies/English 11 AP	AHS, MoHS		Communication Matters		
American Studies/VA & US History			Community Based Instructional Program		
American Studies/VA & US History, AP			Community Life Skills		
Anatomy and Physiology	AHS, MoHS		Computer Information Systems I, II		
Architectural Drawing			Computer Science I		
Architectural Drawing (ARC 121)- Dual enrollment			Computer Science II	AHS, MoHS	
Architecture II	WAHS		Computer Science A, AP	AHS, MoHS	
Art I, II, III, IV			Concert Band I, II, III, IV		
Art History-Advanced Placement	AHS, WAHS		Concert Choir		
Astronomy-PVCC Dual Enrollment	WAHS		Concert Strings I, II, III, IV	AHS	
Auto Body Technology I, II	CATEC		Construction Technology	MoHS	
Automotive Service Technology I, II	CATEC		Cosmetology I, II	CATEC	
AVID	MoHS, WAHS		Creative Writing I, II, III, IV	AHS (I-IV)	
AVID Tutor	MoHS, WAHS		MoHS (I-II)		
Barbering I, II	CATEC		Creative Writing /Literary Magazine	MoHS, WAHS	
Basic Computer Skills			Culinary Arts-Introduction	MoHS	
Basics of Tech Theater	MoHS		Culinary Arts-Introduction	CATEC	
Basic Photography	MoHS		Culinary Arts I, II	CATEC	
Beginning Russian	MoHS		Debate I	AHS, MoHS	
Biology I			Dental Assistant	CATEC	
Biology II- AP Environmental Science	AHS, MoHS		Design, Multimedia, and Web Technologies I		
Biology II Advanced Placement			Design, Multimedia, and Web Technologies II		
Biology II Animal Studies	MoHS		Digital Imaging I, II, III	WAHS	
Biology 101- General PVCC DE	MoHS		Digital Imaging Technology	MoHS	
Building Trades I, II	CATEC		Discrete Math (Mathematical		
Business Cooperative Education (CO-OP)			Inference and Applications)	WAHS	
Business Management	AHS, MoHS		Drama I, II, III, IV		
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Calculus Honors	MoHS		Drivers ED- Part II-Behind the Wheel		

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Early Childhood Development	.AHS	
Earth Science		
Ecology		
Education for Employment II		
Emergency Medical Technician & Firefighter I	.CATEC	
Engineering, Algebra II/Math Analysis	.AHS	
Engineering, Analysis & Applications EGR 120	.AHS	
Engineering, Analysis & Applications EGR 115	.AHS	
Engineering Science and Research	.AHS	
Engineering Drawing (DR 140)		
English 9		
English 10		
English 10 Advanced Placement		
English 11 Advanced Placement		
English 111 College Composition. I PVCC DE		
English 112 College Composition. II PVCC DE		
English 12		
English 12 Advanced Placement		
English 241-242 American Lit I-II PVCC DE	.MoHS	
English For Speakers of Other Languages (ESOL)		
English For Speakers of Other Languages–Newcomers		
ESOL Language	.AHS	
ESOL Study Skills I, II, III, IV	.AHS, MoHS	
Environmental Science-Ecology-PVCC DE	AHS, MoHS	
European History, Advanced Placement	.MoHS	
Fashion Design	.AHS, MoHS	
Film Studies/Filmmaking	.AHS, WAHS, MoHS	
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Health Education II		
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History Through Film	.AHS	
Home Improvement and Maintenance I	.AHS	
Humanities I, II, III	.AHS, MoHS	
Honors and Technology Camps	.MoHS	
Independent Study		
Information Technology Fundamentals	.WAHS	
International Foods	.AHS, MoHS	
Introduction to Interior Design and Housing	.AHS, MoHS	
Introduction to Sports Medicine	.MoHS	
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Jazz Band I, II, III, IV		
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Junior/Senior Internship Program		
Language!		
Latin I, II, III		
Latin IV, Honors/AP	.AHS	
Latin V, AP	.MoHS, WAHS	
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Manufacturing Technology I & II	.WAHS	
Marching Band	.AHS, MoHS	
Marketing I		
Marketing II		
Masonry I, II	.CATEC	
Materials and Processes Technology	.MoHS, WAHS	
Math Analysis		
Math Skills	.MoHS	
Mediation Training I & II		
Men's Ensemble	.AHS, WAHS	
Model United Nations	.MoHS	
Multimedia Crafts I, II, III	.MoHS, WAHS	
Multimedia Crafts IV	.MoHS, WAHS	
Music Industry Technology	.CATEC	
Music Theory	.WAHS	
Nurse Aide	.CATEC	
Nutrition/Exercise/Wellness/Fitness	.WAHS	
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Percussion Ensemble I	.MoHS	
Personal Finance		
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Photography Commercial I, II, III	.MoHS	
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Physics II Advanced Placement		
Physics 101 General College PVCC DE	.MoHS	
Political Science. 211/212 US Government PVCC DE		
Practical Law	.AHS, WAHS	
Practical Nursing	.CATEC	
Practical Science I	.MoHS, WAHS	
Practical Science II	.MoHS, WAHS	
Principles of Business and Marketing		
Probability and Statistics	.WAHS	
Psychology		
Psychology AP		
Reading Skills	.MoHS	
SAT Prep/Successful Strategies for College		
Science/Engineer Research Methods, Part I	.AHS	
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