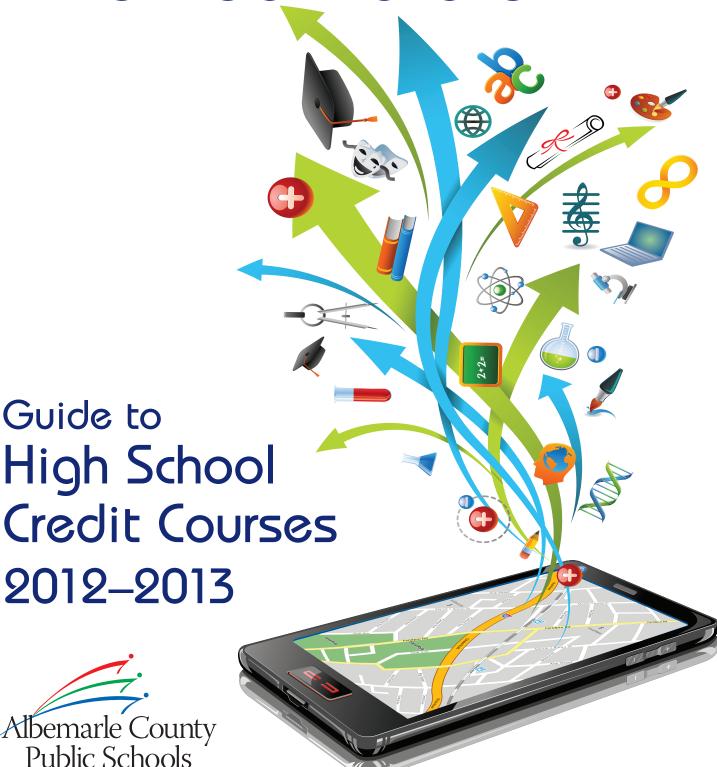
# Pathways To Your Future





#### Superintendent of Schools

**Dr. Pamela R. Moran** 401 McIntire Road Charlottesville, Virginia 22902 (434) 296-5826 www.k12albemarle.org

# Asst. Superintendent of Student Learning

John W. "Billy" Haun 401 McIntire Road Charlottesville, Virginia 22902 (434) 296-5820 www.k12albemarle.org

# Director of Secondary Education

**Dr. Matthew Haas** 401 McIntire Road Charlottesville, Virginia 22902 (434) 296-5820 www.k12albemarle.org

#### 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. These standards lead 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;
- 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;
- 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.

#### Albemarle High School

Principal: **Jay Thomas** 2775 Hydraulic Road Charlottesville, VA 22901 TEL (434) 975-9300 FAX (434) 974-4335 www.k12albemarle.org/AlbemarleHS

#### Monticello High School

Principal: **Dr. Catherine Worley** 1400 Independence Way Charlottesville, VA 22902 TEL (434) 244-3100 FAX (434) 244-3104 www.k12albemarle.org/Monticello

#### Murray High School

Principal: **Ashby Kindler** 1200 Forest Street Charlottesville, VA 22903 TEL: 434-296-3090 Fax: 434-979-6479 www.k12albemarle.org/murrayhs

#### Western Albemarle High School

Principal: **Dave Francis** 5941 Rockfish Gap Turnpike Crozet, VA 22932 TEL (434) 823-8700 FAX (434) 823-8711 www.k12albemarle.org/WesternAlbemarle

#### CATEC

(Charlottesville-Albemarle Technical Education Center) Director: Adam Hastings 1000 East Rio Road Charlottesville, VA 22901 Tel. (434) 973-4461 Fax: 973-4876 www.catec.org

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

#### INTRODUCTION

Welcome to the 2012 Guide to High School Credit Courses for Albemarle County Public Schools. This guide is provided as a tool to enable you to embrace learning, to excel in your work and readiness for a career and education beyond high school, and to own your future!

January is the time of year for students to make plans and to choose courses for the coming school year. As a part of this process, the Guide to High School Credit Courses is provided to assist you with course selections and long-term educational/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 page 3 of this guide, 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. Next, the guide is divided into department and course subject areas with a description of each course. The final sections of this guide include general information about graduation requirements, diploma options, drop and add procedures, and programs for enrichment. An alphabetical index of all courses is on page 92-93.

#### Course Descriptions

As you get further into the guide and start reading about courses, you will find that each course description has several parts. The listings for courses in this Guide to High School Credit Courses include the following information (where applicable):

- Course title
- Course level—see page 78 for an explanation of course levels
- Prerequisite(s)—courses that must be passed before taking this course
- Corequisite is a course that must be taken at the same time as another course.
- Grade level—9, 10, 11, 12
- Location—if not indicated, the course is taught at all three high schools: AHS, MoHS, and WAHS.

#### 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 and technical education and for sequential electives.

These icons indicate important information about courses.







#### The Process Timeline

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

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

- January/February . . 2. Curriculum Expos for current high school students and rising 9th graders will take place.
  - 3. Classroom Presentations and Small Group Program Planning Sessions will take place with school counselors as they visit classrooms to explain the Guide to High School Credit Courses. School counselors will begin meeting with students individually to review teacher recommendations, five year plans, and transcripts.
  - 4. Teacher recommendations will be completed for each student prior to April 1st.

**February/March** ... **5.** Students may schedule a meeting with school counselors to request courses.

May ..... 6. Copies of course requests will be sent home.

master schedule, all course request adjustments must be made by the last day

of the school year.

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



Military

**Technical Training** 

2 year school

Post Secondary Plan: 4 year school

Other

Career Pathway

Career Planning Goals

Counselor

**Current Grade** 

# Course Selection Worksheet / Career Plan

Full Name	Diploma Type
How do I start	making a career plan?

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

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

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

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

and your skill sets.

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

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Adapted from Career Planning Tools on	
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Verified Credits					
Credits					
Other Electives					
World Language/ Elective					
Health/PE Elective					
Science					
Math					
Social Studies					
English					
Grade	Middle School 6-8	6	10	=	12
				_	

# 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:

- Attend Albemarle County or Charlottesville City Schools;
- Attend neighboring high schools (admitted on space available basis);
- III. Have parental permission;
- IV. Submit application through school counselor and meet requirements for admission to programs; and
- **V**. 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 if they meet 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 either complete their program or to enter a new program must obtain a grade level of "C" or higher or get permission from the CATEC Administration;
- 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 requirements for 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; or
- **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 completion of a two-year program and no high school diploma earned.

#### **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**

Acad	emic Programs	a.m.	p.m.	Grade	Prerequisite	Course Number	Credits
	English 10 Academic/Advanced	•		10th		1149	1
Exploratory English	Trade Exploratory (Students explore possible career options by rotating through different labs—nine weeks per lab, 4 labs per year)	•		10th		9908	2
	Academic / Advanced English 10			10th	English 9	1149	1
Advanced English	Academic / Advanced English 11	•	•	11th	English 10	1159	1
	Academic / Advanced English 12	•	-	12th	English 11	1167	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 Programs	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. P/F	11-12	None	1
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. P/F	8-10		

Technic	al Programs	Course #	Industry		5	
recinit	di Programs	Course #	Certification	HS	Verified	College
Audio, Media & Communications	Music Industry Technology			2		
	Auto Body Technology I	8679		2-3		
Automotive	Auto Body Technology II	8680	NOCTI	3	1-2	
Technology	Automotive Service Technology I	8506		3		
	Automotive Service Technology II	8507	AYES	3	1-2	20 JSRCC
	Building Trades I	8575		3		3 PVCC
Engineering &	Building Trades II	8516	NCCER	3	1-2	6 PVCC
Construction	Masonry I	8512		3		3 PVCC
	Masonry II	8513	NCCER	3	1-2	3 PVCC
	Dental Assistant	8328	NOCTI Certified Dental Assistant	3	1-2	
Health Sciences	Emergency Medical Technician/ Fire Fighting	8705/ 8334	EMT Basic Firefighter I	3	1.5	6 PVCC
Jaiona	Nurse Aide	8360S/ 8362S	Industry Certification: Certified Nursing Assistant	3	1-2	
	Pharmacy Tech	8305S	State Licensure	3	1-2	
	Barbering I	8742		3		
	Barbering II	8748	State Licensure	3	1-2	
	Cosmetology I	8527		3		
Service Industries	Cosmetology II	8528	State Licensure	3	1-2	
111003(1103	Intro to Culinary Arts	8250				
	Culinary Arts I	8521		3		
	Culinary Arts II	8522	NOCTI / ServeSafe	3	1-2	

<sup>\*</sup>Note: Pass certification and be a CTE completer to earn 2 verified credits

**NOCTI** – National Occupational Competency Testing Institute Changes in scheduling may occur based on enrollment numbers  $\mbox{\bf NCCER}$  – National Center for Construction Education and Research

# Specialty Centers

MATH, ENGINEERING & SCIENCE ACADEMY



## MESA—Math, Engineering, and 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.

#### HONORS ALGEBRA II / HONORS TRIG/PRE-CALC (2 year program)

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

Co-requisite: Eng. Science & Research

**Grades: 9-10:** (students must enter the program

in their 9th grade year)

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

# HONORS PHYSICS/ HONORS EARTH SCI/CHEMISTRY (2 year program)

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

Application

**Co-requisite:** Alg II / Trig/Pre-Calc

**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.

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

# Math, Engineering, and Science Academy (MESA)

#### **ENGINEERING RESEARCH I**

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

Co-requisite: Intro to Engineering (EGR120)Grades: 11 1 Credit: (Science elective)

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

.....8454

#### **ENGINEERING RESEARCH II**

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

Co-requisite: Engineering Design (EGR 115)

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.

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# EGR 120: PVCC INTRODUCTION TO ENGINEERING

**Prerequisite:** Qualifying COMPASS, AP, SAT II 680 **Co-requisites:** Engineering Research II; Math 164;

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 students to ideas, concepts, and methods universal to all disciplines of engineering. Engineering design, analysis, and teamwork will be emphasized through a semester-long project involving the Lego® Mindstorms Robot. In addition to problem solving, this class will emphasize important skills that will be useful to students throughout their careers including technical documentation, presentation skills, and the use of software-based computational tools for solving engineering problems.

#### EGR 115: PVCC ENGINEERING DESIGN

**Prerequisite:** Introduction to Engineering, Math 164, Calculus A/B, qualifying COMPASS or SAT Score, Instructor Approval, Science, Engineering Research I (concurrently)

Co-requisite: Engineering Research II 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 handson 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.



MESA is offered at AHS; however, students from MoHS and WAHS may apply for admission to this program. **Students must** enroll as fulltime students and provide their own transportation to Albemarle High School. See your school counselor for more information.



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

# Health and Medical Sciences Academy

Inspiring Excellence, Innovation, and a Future of Service

#### Mission

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

#### **Academy Pathways**

Pathway 1: Allied Health (to include a variety of industry certification programs)

Pathway 2: Technical, Bio-Engineering, Medical Equipment

Pathway 3: Medical Doctor, DDS, RN, LPN

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

2012-13 is the inaugural year for the Health and Medical Sciences Academy. Applications for this academic year will be for rising 9th grade students. By 2015, the Academy will expand to provide opportunities for all grade levels.

During the 11th and 12th grade year, students in the Academy will have additional opportunities to support their academic aspirations in Health Science Careers that may include but are not limited to the following:

- Case Studies
- Internships
- Clinical Rotations
- Field Trips
- · Guest Speakers
- Medical Terminology
- Site Visits/Tours
- College Visits

Offered at Monticello High School, but available to all Albemarle County Public School Students. Applications should be submitted to your school counseling office by the deadline.

# HEALTH AND MEDICAL SCIENCE ACADEMY CORE I

Grade: 9 5 credits

Ninth grade students in the Health and Medical Science Academy will be enrolled in the following courses:

- Foundations of Health and Medical Sciences I
- Honors English 9
- Honors Biology
- Honors World History I
- Latin I

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

# HEALTH AND MEDICAL SCIENCE ACADEMY CORE II

**Grade: 10** (Available 2013-14); **5 credits Prerequisite:** Health and Medical Science Academy Core I.

Tenth grade students in the Health and Medical Science Academy will be enrolled in the following courses:

- Foundations of Health and Medical Sciences II
- Honors English 10
- Honors Chemistry
- AP Human Geography
- Latin II

The course curriculum will be integrated, exploring content from the core areas through the lens of Health and Medical Sciences. The goal of this integrative course is to provide an opportunity for students to focus their career options by choosing an Academy Pathway.

.....TBA

# Specialty Centers

# Murray High School



Murray High School is a non-traditional public charter school that is fully accredited by the Virginia

State Board of Education. In 2001, Murray was named the first public high school to become a Glasser Quality School. Murray High School serves approximately 110 students, grades 9 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 and the student's permanent records are then reviewed by an admissions committee that makes the decision regarding the student's appropriateness for the Murray program. Mastery learning is used, and all students must earn an 80% or better on every assignment. Instruction is differentiated according to the student's needs and interests, and project-based learning is emphasized. Murray High offers courses needed to fulfill the requirements to earn either a Standard Diploma or Advanced Studies Diploma. Murray students are encouraged to enrich their high school program through dual credit courses at PVCC, CATEC courses, senior internships, and independent studies.

Murray High School 1200 Forest Street Charlottesville, VA 22903 Phone: 434-296-3090 Fax: 434-979-6479 www.k12albemarle.org/murrayhs

#### **ENGLISH**

The English curriculum at Murray High School includes a multigrade, thematic approach. Both the Albemarle County curriculum and the Virginia Standards of Learning are included in the curriculum that emphasizes the continuous development and improvement of reading, writing, speaking, and listening skills. Students study major works of literature. 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 may 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**

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

- World History To 1500\*
- World History From 1500 To Present\*
- World Geography\*
- Virginia and United States History\*
- Virginia And United States Government: This course requires that each student complete ten hours of community service.



\* (SOL test required)

# Course Descriptions



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

#### **MATHEMATICS**

- Study Skills Math/Algebra Lab— Preparation for Algebra I
- Algebra 1\*—Prerequisites: 8th grade Math and/or teacher recommendation
- Geometry\*—Prerequisite: Algebra I
- Algebra II\*—Prerequisite: Algebra I
- Algebra Functions, And Data Analysis (AFDA) Prerequisite: Algebra I
- Algebra II/Trigonometry Prerequisite: Algebra II
- Geospatial Technology



\* (SOL test required)

#### **SCIENCE**

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\*
- Biology\*
- Oceanography
- Chemistry\*
- Physics
- Anatomy and Physiology



" (SOL test required)

#### **WORLD LANGUAGES**

The main purpose of studying a world language is to understand and communicate with peoples of different nationalities and ethnic groups and to appreciate their contributions to the development of our own nation and culture. The world languages offered at Murray HS consist of the following:

■ **Spanish I, II, and III** (There may be a workbook fee.)

#### 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 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
- PE 12

(offered based on student interests and needs.)

#### **DRIVER'S EDUCATION**

#### ■ Part I Classroom

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

#### ■ Part II Behind the Wheel

Students should be scheduled for Behind-the-Wheel training at around 16 years of age.

Murray High School does not offer Behind-the-Wheel training. Students are encouraged to sign up at their base school for this portion of driver's education.

Note: Tuition is charged for this portion of the class. Students must have completed or must have 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 before school and after school throughout the school year. Please call one of the three comprehensive high schools to take Behind-the-Wheel.

# Murray High School

#### **FINE ARTS**

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

■ Visual Arts—Art 1 through Art 4 (Drawing, painting, multimedia crafts, and sculpture are included)

#### Music

Music classes are dependent on student interest and scheduling needs. Music course offerings may include Jazz History.

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.

Fees apply for these courses.

#### 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 to monitor student performance and to 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.

#### INDEPENDENT STUDY

Prerequisite: Teacher recommendation and proposal approval. Proposal information is available in the school counseling office.

#### 1 Credit or .5 Credit per semester

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

#### INTERNSHIP PROGRAM

An application procedure is required 1-2 Credits

All Students are encouraged to participate in a senior internship program.

Students work with professionals in the community as interns in jobs related to career objectives. Typical internships include the areas of medicine, 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. See the History/Social Sciences section for full course description.

#### COURSES THROUGH PVCC 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.



**ALL STUDENTS** are encouraged to participate in an internship program.

Students work with professionals in the community as interns in jobs related 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/finance

# Special Programs

Consider these Special Programs opportunities for enrichment, learning support, and expanded career and continuing education. When you consider a course or a program, think about the college and career readiness skills that it offers beyond what seems to be the career pathway. For example, the Air Force Junior Reserve Officer Training Corps (AFJROTC) program helps develop time management skills, team building abilities, and leadership. While many students enter the military as a career through AFJROTC, participation in this program does not require 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; and Contextual Learning Skills

#### AIR FORCE JUNIOR RESERVE OFFICER TRAINING CORPS

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.



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)

AFJROTC educates and trains high school cadets in citizenship; promotes community service; instills responsibility, character, and self-discipline; and provides instruction in air and space fundamentals. AFROTC courses are rotational and not sequential.

There are no prerequisites to participate in this course and it is offered for grades 9-12.

#### 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.

**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.

This is a dual enrollment course. Two college credits can be awarded through the University of Colorado at Colorado Springs (UCCS) or Adams State College (Colorado). The credits may be transferable throughout the U.S.

#### AIR FORCE, JR. ROTC II

Aerospace Education II: The Science of Flight is a science course to acquaint the student with the aerospace environment, the human requirements of flight, principles of aircraft flight and navigation, atmosphere and weather. Students gain an understanding of how the environment affects flight. Discussions include the forces of lift, drag, thrust, and weight. Includes a survey course on the affects of flight on human physiology.

The Leadership Education II curriculum stresses communication skills and cadet corps activities. It includes 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.

This is a dual enrollment course. Two college credits can be awarded through the University of Colorado at Colorado Springs (UCCS) or Adams State College (Colorado). The credits may be transferable throughout the U.S.

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#### AIR FORCE, JR. ROTC III

Aerospace Education III: Exploration of Space is a science course that examines the Earth, Moon and planets, the latest advances in space technology, and continuing challenges of

technology, and continuing challenges of manned spaceflight. Issues such as orbits and trajectories, unmanned satellites, space probes, and guidance and control systems are explained. It also covers international laws for the use of and travel in space.

The Leadership Education III provides information on applying for admission to college or vocational or technical school. Students will learn how to begin the job search, preparing a resumé, good interviewing skills, financial planning, real life issues, and citizen responsibilities. Apartment and independent living skills are also covered. Information is also provided for students who are interested in a career in the military, in the federal government, or in an aerospace career. This is a dual enrollment course. Two college credits

can be awarded through the University of Colorado at Colorado Springs (UCCS) or Adams State College (Colorado). The credits may be transferable throughout the United States.

#### 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. Students learn project management techniques and implement those techniques by managing a wide variety of cadet corps related projects. Working as a productive

The Leadership IV utilizes the Principles of Management textbook, which is a guide to understanding the fundamentals of management, management functions, management decisions, and managing yourself and others.

member of a cohesive team is stressed

throughout the curriculum.

Wellness Education All Air Force JROTC courses (except Drill Only Class) include a wellness component that focuses on a student's overall wellness, and includes: an assessment; an individualized exercise plan, and 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 the effectiveness of their efforts.

This is a dual enrollment course. Two college credits can be awarded through the University of Colorado at Colorado Springs (UCCS) or Adams State College (Colorado). The credits may be transferable throughout the United States.

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#### **AFJROTC DRILL ONLY CLASS**

#### 1 Credit per year

The Drill and Ceremonies course provides in-depth knowledge and realistic experience on military style drill and ceremonies. The course concentrates group precision, movements, saluting, ceremonies, protocol, reviews, parades, and development of a command voice. 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.

# AIR FORCE, JR. ROTC ADVANCED DRILL ONLY CLASS

Prerequisite: Enrollment in AFJROTC I, II, III, or IV & 1 year of the Drill Only Class Students will learn advanced military drill maneuvers, drill sequence development, individual training techniques, team building, leadership skills, and project management. Students enrolled in the Advanced Drill Only Class are eligible to participate on the AFJROTC competitive drill team.

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#### AIR FORCE JR ROTC RAIDERS PROGRAM

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

#### 1 Credit

Students will learn advanced military physical fitness, first aid, land navigation, rope construction, development of individual training techniques, team building, leadership skills, and project management. Participants learn to use leadership and interpersonal skills to develop a cohesive team of four to twelve students. Students enrolled in the Raiders Program are eligible to participate on the AFJROTC competitive Raiders 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.

1 Credit

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.

# 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 recommendation letter), be enrolled in 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.

#### 1 Credit

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 must apply for the Honors and Technology Camp between Dec 1 and Jan 30.

# SUMMER LEADERSHIP SCHOOL JUNIOR COURSE

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

#### 1 Credit

Held in-residence on a university campus, the course is for students who have demonstrated leadership and a 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 receive 80 hours of instruction.

# SUMMER LEADERSHIP SCHOOL SENIOR COURSE

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

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 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.

This is a dual enrollment course. 1-2 college credits can be awarded through the University of Colorado at Colorado Springs (UCCS) or Adams State College (Colorado). The credits are transferable throughout the United States.

#### C-QUEST

Prerequisite: Teacher Recommendation
Grades: 11 1 Credit
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. Students complete applications, essays, recommendation requests, and scholarship/financial aid paperwork and are assisted in communicating with schools of interest. ......9865

#### INDEPENDENT STUDY

Prerequisite: Teacher recommendation and proposal approval. Grades: 9-12 1 credit or 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 school faculty or community members. Students may orient independent studies toward research, special experiences, or performance. Students submit a proposal to be considered for independent study. The proposal should include a commitment from a mentor and a plan for carrying out the independent study. Proposal information is available in the school counseling office or online at www.k12albemarle.org/instruction/gifted ......9930

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 Virginia Standards of Learning (SOL). Instructional support is provided in the core areas of reading, math, social studies, and science to assure success on the SOL test. Additionally students will focus on study skills.

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#### **MEDIATION TRAINING I**

Grades: 9-12 1 Credit Offered at MoHS

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. 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.

#### MEDIATION II

Prerequisite: Teacher Recommendation Grades: 10-12 1 Credit Pass/Fail Grading Students serve as peer mediators.

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# TEACHING FELLOWS PROGRAM

Grades: 11-12 1 Credit Offered at WAHS, AHS

This program is designed for juniors and seniors who are interested in working with students with disabilities. Each teaching fellow will be responsible for assisting a special needs student in an elective class. Responsibilities include not only assisting but also direct teaching and modifying assignments, when needed, to fit the student's needs in order to promote success or mastery. Teaching fellows become a mentor, teacher, and friend.

#### **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 AHS offers 9th, 10th and 11th only

**AVID 9 and 10** are designed with a focus on organization and academic skills to help students transition into high school and to be successful in rigorous college preparatory classes.

**AVID 11** continues to build on academic skills, but the focus changes to college readiness. Students review career goals and begin to design education plans that involve college exploration, test preparation, and financial aid awareness.

**AVID 12** begins the transition to post-secondary educational planning. Students focus on taking the SAT/ACT, exploring college, and completing college and financial aid applications. Students are given support as they engage in college prep courses. Students in AVID 12 must have completed a previous AVID class.

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

#### **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 including, but not be limited to; world languages, mathematics, science, and social studies. Tutors will receive instruction and training using the inquiry method that encourages higher level thinking by students.

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# special Education



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, and 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 of disability as defined by federal and state law: Autism, deaf-blindness, developmental delay, emotional disability, hearing impairment (including deafness), intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury or visual impairment (including blindness).

#### Contact:

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

## **SPECIAL EDUCATION PROGRAMS**

#### 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).

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

#### **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 the Graduation Requirements section.

#### Special IEP Diploma

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

# Special Education Course Delivery Models

#### Consultation/Monitor

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

#### Study Skills

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

#### Collaborative Classes—Credit

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

## Departmentalized Model/Self-Contained Core Classes—Credit

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

## Departmentalized Model/Self-Contained Elective Classes—Credit

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

# Course Descriptions

#### **BASIC COMPUTER SKILLS**

#### 1 credit Offered at MoHS, AHS

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.

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#### **COMMUNICATION MATTERS**

#### Grades 9-12 1 credit Offered at AHS

This course is designed to help students who have difficulty passing the Virginia English end-of-year Writing SOL test. Students will write extensively using the writing process to improve writing skills and to understand how proper writing helps them communicate more clearly. Students will work independently a great deal while the teacher provides one-on-one instruction in specific areas of need

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# HOME IMPROVEMENT AND MAINTENANCE

## Prerequisites: Teacher Recommendation Grades 9-12 1 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.

#### **PERSONAL LIVING AND FINANCE**

#### Grades 9 –12 1 Elective Credit\*

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

#### **MATH SKILLS**

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

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

#### **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. 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.

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

9.													7847
													7846
11													7850
12													7853

#### **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.

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

**FUNCTIONAL ENGLISH** 

#### Grades 9-12 1 Elective Credit

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

<sup>\*</sup> This course does not meet the graduation requirement for a standard, advanced, or technical diploma.

# Special Education

# COMMUNITY BASED INSTRUCTION PROGRAM (CBIP)

#### Non-Credit

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

#### **FUNCTIONAL MATH**

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

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

#### 

#### **FUNCTIONAL SOCIAL STUDIES**

#### Grades 9-12 1 Elective Credit

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

#### 

#### **HEALTH / RECREATION**

#### 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.

#### 

#### PRACTICAL SCIENCE I

#### Grades 9-12 1 Elective Credit

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

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PRACTICAL SCIENCE II

## Grades 9-12 1 Elective Credit Offered at MoHS

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

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#### **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 needed.

#### 

#### **SERVE SAFE**

#### Grades 9-10 1 Credit

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

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#### **EDUCATION FOR EMPLOYMENT I**

#### Grades 9-12 1 Elective Credit

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

#### 

#### **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 improve vocational opportunities.

#### 

#### **WORK STUDY**

#### Grades 9-12 1 Elective Credit Pass/Fail

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

#### 

# COMMUNITY BASED WORK ADJUSTMENT

## Grades 11-12 1 Elective Credit Offered at MoHS

This course is designed to help students develop vocational skills and formulate plans to prepare for and obtain successful employment in the community. Individuals may work in Goodwill Stores and area businesses where real-world opportunities are offered to assess a person's abilities, interests and job skills. On-site support is offered to improve vocational skills to improve job readiness for future vocational experiences. Participants are expected to be able to function in a small-to-medium sized group independently as well as follow multi-step directions.

#### .....TBA

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

#### **CTE Sequential Electives**

Students qualifying for a Standard Diploma 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.

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

#### OFFICE SPECIALIST I. II. III

## Grades 9–12 1 Credit each Offered at AHS, MoHS

Students develop skills in areas including word processing, office procedures, and record management. Communication skills are developed through reading, writing, and speaking activities focused around office and business scenarios. 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 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 that provides training to help the student reach his/her career goal.

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

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

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# PRINCIPLES OF BUSINESS AND MARKETING

#### Grades 9-10 1 Credit Offered at MoHS, WAHS

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

# Career and Technical Education

#### **BUSINESS MANAGEMENT**

Grades 9-12

1 Credit

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 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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1 Credit

#### **BUSINESS COOPERATIVE EDUCATION (CO-OP)**

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

#### **Grades 11-12**

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 parttime work experience. A coordinator along with the employer provide the student with an individualized training plan. The student must be employed for a semester and abide

by the Cooperative Training Agreement. 

#### PRINCIPLES OF MANAGEMENT, BUS 200



Prerequisite: Bus Mgmt recommended Grade 12 1 Credit Offered at AHS

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

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#### APPLIED MANAGEMENT PRINCIPLES, BUS 202

Prerequisite: Principles of Management Grade 12 1 Credit Offered at AHS

This course focuses on management practices and issues and may use case studies and/or management decision models to analyze and develop solutions to management problems.

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#### **DESIGN, MULTIMEDIA, AND** WEB TECHNOLOGIES I and II

Grades 9-12 1 Credit each

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

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

To be a CTE Completer and fulfill sequential elective requirement (2 credits), a student may take one of these classes—Design Multimedia and Web Technologies I or 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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#### **WEB DESIGN I**



Prerequisite: Design, Multimedia, and Web Technologies II

#### **Grades 11–12** 1 Credit Offered at WAHS

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

#### **WEB DESIGN II**



Prerequisite: PVCC Web Design I

Grade 12 1 credit Offered at WAHS

This course incorporates advanced techniques in web sites planning, design, usability, accessibility, advanced site management and maintenance; utilizing web editor software.

#### MICROSOFT® INFORMATION TECHNOLOGY ACADEMY

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

#### MS IT: I

#### Grades 9-12 1 credit Offered at MoHS and AHS

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

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#### MS IT: II

Prerequisite: MS IT: I

Grades 9-12 1 credit
Offered at MoHS and AHS

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

**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. 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 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.

# 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 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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# PRINCIPLES OF INFORMATION SYSTEMS, ITE 120

**Prerequisite:** Satisfactory COMPASS score and PVCC Application

Grades 10–12 1 Credit Offered at MOHS

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

# MUSIC INDUSTRY TECHNOLOGY



Grades 11, 12 2 Credits
Offered at CATEC PM only, no English

Working in conjunction with the Music Resource Center, this course is designed to provide in-depth instruction on music industry elements. Students will also be exposed to musical theory, computer use, and instrument understanding and function. Projects will include recording of instruments. arranging recording tracks plus incorporate advertising and marketing aspects in these projects. Students will study the possible careers available in the field.

Independent Study (MoHS) . . . . . 8442



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

#### MARKETING I (co-op available)

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

Students examine activities in marketing and business that are important for success in marketing employment and postsecondary education. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOLs). 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 (see note below).

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

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

Marketing I . . . . . . . . . . . . . . . . 8120

#### **MARKETING II** (co-op available)

**Prerequisite:** Successful completion of Marketing I

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

Students build on knowledge gained in a prior marketing course. Students participate in supervisory management activities. Students will prepare for advancement in marketing careers and postsecondary education. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOLs). 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 (see note below). Industry Certification/Credentialing Exam is required for all students at the end of this course.

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



The cooperative education method combines classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.



# Student Organizations that Focus on CTE

There are several co-curricular student organizations 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 and to 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.

These organizations include:

- FBLA—Future Business Leaders of America;
- FCCLA—Family, Career and Community Leaders of America;
- DECA—Distributive Education Clubs of America;
- TSA—Technology Students Association;
- HOSA—Health Occupation Students of America; and
- SkillsUSA

#### INTERNET MARKETING THROUGH SOCIAL AND NEW MEDIA

Grades 10-12 1 Credit
Offered at AHS

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

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The cooperative education method combines classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

# SPORTS, ENTERTAINMENT, AND RECREATION MARKETING

(co-op available) Grade 10-12

1 Credit

This introductory course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports, entertainment, and recreation industries. The course supports career development skills and explores career options. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. The cooperative education method is available for this course (see note at left).

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

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

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# SPORTS, ENTERTAINMENT, AND RECREATION MARKETING II

(co-op available)

**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. 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 (see note at left).

Industry Certification/Credentialing Exam is required for all students at the end of this course. To be a CTE Completer and fulfill sequential elective requirement (2 credits), a student may take Sports, Entertainment, and Recreation Marketing, Marketing I or Marketing II.

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#### **FASHION MARKETING I**

Grades 10-12 1 Credit
Offered at AHS

In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in the apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. 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 year.

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#### **FASHION MARKETING II**

Grades 10-12 Offered at AHS 1 Credit

Students gain in-depth knowledge of the apparel and accessories industry and skills important for employment in marketing of apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotions, buying, merchandising, marketing research, product/service technology, and supervision as well as academic skills related to the content are part of this course. Computer and technology applications are 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.

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#### **CAREER CONNECTIONS**

# **ECONOMICS**AND PERSONAL FINANCE\*

Grades 9-12

1 Credit

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

\* Graduation requirement for students entering the 9th grade in 2011 and beyond.

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# HOSPITALITY, TOURISM, AND RECREATION

Grades 9-12 Offered at AHS 1 Credit

Students focus on developing professional skills and using emerging technologies to prepare for diverse, global, career opportunities. The program offers instruction in the industries of food and beverage, travel and tourism, recreation and fitness, and lodging. The course will consist of classroom instruction and supervised on-the-job training if a cooperative education placement is available.

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# 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. All students complete the application packet. See your high school counselor for more information.

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# VIRGINIA TEACHERS FOR TOMORROW I & II SDV Orientation To Teaching As A Profession



Grades 11-12 Credit: 1 credit
(3 college credits for Teachers For Tomorrow I)

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

Virginia Teachers for Tomorrow aims to attract high school junior and seniors to the field of education through participation in a rigorous, world-class curriculum and field experiences related to teaching. As part of that professional experience, students will be required to create a personal portfolio.

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

This state program requires students to submit an application and recommendations and to meet specific criteria. See your school counselor or Teachers for Tomorrow instructor for more information.

I ......9062
II .....9067
(Level II is not a PVCC dual-enrollment course)

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



Interested in Teaching? See the Special Programs Section (page 16) for information on the Teaching Fellows Program offered at AHS and WAHS for Juniors and Seniors interested in working with students with disabilities.



#### INTERNSHIPS: Typical internships can be developed in areas of:

- medicine
- architecture
- law
- law enforcement
- television production
- journalism
- finance
- accounting

- veterinary medicine
- business management
- computer technology
- engineering, and many more

#### FAMILY AND CONSUMER SCIENCE

#### **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 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. Fees apply for this course.

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#### LIFE MANAGEMENT

#### Grades 9 12 1 Credit Offered at AHS, MoHS

This introductory course explores life management skills that will enhance a happy healthy life-style. Topics include personal finance, nutrition, housing, clothing and managing a household. Food labs and opportunities for sewing or clothing repair are included. The course reinforces basic skills of math, science, and communication when related to the content.

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

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

Fees apply for this course.

# INTRODUCTION TO CULINARY ARTS

#### Grades 9–12 Offered at MoHS

1 Credit

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

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

Fees apply for this course.

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#### **CULINARY ARTS I**

# Prerequisite: Intro to Culinary Arts (*above*) Grades 10-12 Offered at MoHS

This course continues the studies of "Introduction to Culinary Arts". Students will learn advanced culinary concepts and skills required for careers in the food industry. Class time is used for teaching new concepts, reinforcing important skills, and assisting students with cooking projects. Emphasis is placed on sanitation, nutrition, food preparation, catering, purchasing, and inventory control in addition to food presentation and service. Pastry skill development and preparation of international foods will also be explored.

#### INTERNATIONAL FOODS

#### Grades 9-12 Offered at AHS

1 Credit

In addition to teaching 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.

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.

Fees apply for this course.

# INTRODUCTION TO CULINARY ARTS



**Prerequisites:** Students must provide their own transportation to and from their workstudy site if applicable.

# Grades 10-12 3 Credits Offered at CATEC AM only, no English

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.

#### **CULINARY ARTS I & II**



2 Year Program 2-3 Elective Credits\*

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

# INTRODUCTION TO FASHION DESIGN

Grades 9–12 Offered at AHS, MoHS 1 Credit

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

To be a CTE Completer and fulfill 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.

Fees apply for this course.

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# INTRODUCTION TO INTERIOR DESIGN AND HOUSING

Grades 9–12 1 Credit Offered at AHS, MoHS

This course focuses on identifying and exploring the individual careers in all areas of housing, residential, and commercial interior design. Topics include construction, real estate, home design, and home 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 sequential elective requirement (2 credits), a student may take a combination of Life Management I, International Foods, or Early Childhood Development.

Fees apply for this course.

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

#### HEALTH AND MEDICAL 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	Surgical Technician, Biotechnology Technician	Radiation Therapist
certification or college degrees	Fitness Trainer, Physical/Occupational Therapy Assistant	Physical/Occupational Therapist, Athletic Trainer

# 6

#### **DENTAL ASSISTANT**

1 Year Program Prerequisites:

C or better in Biology recommended.

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

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)

# EMERGENCY MEDICAL TECHNICIAN & FIREFIGHTING

1 Year Program

Firefighting 1.5 Elective Credits EMT 1.5 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 and procedures. Supervised internships are provided with fire and rescue and are managed by the teacher. The second semester focuses on the role and responsibilities of emergency rescue workers. Course requires strenuous physical activity & occasional exposure to smoke-filled environments.

Certifications: EMT Basic, Firefighter I Verified Credits: 1-2 (certification, completer)

 Firefighting.
 8705

 EMT
 8334



Interested in Health and Medical Sciences? See the new Health and Medical Sciences Academy in the "Specialty Centers" section on page 10

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.



Indicates this course is offered at CATEC

#### **INTRODUCTION TO** HEALTH AND MEDICAL SCIENCES

Prerequisites: Sciences at grade level or above Grades 9-12 1 Credit Offered at MoHS, AHS

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

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

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

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#### **HEALTH AND** MEDICAL SCIENCES

**Grades: 10–12** Offered at MoHS. AHS 1 Credit

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

#### PHARMACY TECHNICIAN

1 Year Program

Prerequisites: C or better in Biology recommended. 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. Students also study safety procedures, medication and inventory control, maintaining records, preparing labels, and processing insurance claims.

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

Certifications: Virginia Pharmacy Technician Verified Credits: 1-2 (certification, completer) 

#### **NURSE AIDE**

1 Year Program



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

Grades: 11-12 3 Elective Credits

#### Offered at CATEC, no English

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 is 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) Fees apply for this course.

#### **SPORTS MEDICINE I**

Prerequisite: Biology I recommended

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

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

#### **SPORTS MEDICINE II**

Prerequisite: Sports Medicine I Grade 12 1 credit Offered at MoHS

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

#### **TECHNOLOGY EDUCATION**

#### **TECHNICAL DRAWING**

Grades 9-12

1 Credit

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

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

Fees apply for this course.

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#### ARCHITECTURAL DRAWING

Prerequisite: Technical Drawing
Grades 10-12 1 Credit

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

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

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# ARCHITECTURAL DRAWING PVCC ARC 121 Architectural Drafting I

**Prerequisite:** Technical Drawing, COMPASS Test and PVCC application

#### **Grades 10-12 1 Credit (3 PVCC 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. 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 sequential elective requirement (2 credits), a student may take Architecture II, Technical Drawing, Engineering Drawing.

Fees apply for this course.

#### **ARCHITECTURE II**

Prerequisite: Technical Drawing and Architectural Drawing/CAD
Grades 11-12 1 Credit
Offered at WAHS and MoHS

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

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

To be a CTE Completer and fulfill sequential elective requirement (2 credits), a student may take Architectural Drawing, Basic Technical Drawing, Engineering Drawing. Fees apply for this course.



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



# DIGITAL IMAGING TECHNOLOGY I and II

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 sequential elective requirement (2 credits), a student must also complete Digital Imaging II.

Fees apply for this course.

# DIGITAL IMAGING TECHNOLOGY III

Prerequisite: Digital I and II

Grades 10-12 1 Credit
Offered at MoHS

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

Fees apply for this course.

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#### **GRAPHIC COMMUNICATIONS**

#### Grades 9–12 1 Credit Offered at AHS

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

Fees apply for this course.

# 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. 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 sequential elective requirement (2 credits), a student may take Construction Technology and/or Manufacturing Technology or Advanced Manufacturing Technology I and II.

Fees apply for this course.

#### **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. 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 Building Trades II with teacher recommendation and be considered a career/technical education completer.

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

Fees apply for this course.

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# GEOSPATIAL TECHNOLOGY I and II

**Prerequisites:** Successful completion of Algebra I

Grades: 10-12 1 Credit Offered at WAHS (I offered at MoHS)

The Geospatial Technology program introduces students to Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technology. Students learn to integrate these technologies to collect, analyze, and display a variety of data to solve real life problems. Students are trained in the latest ESRI ArcMap software in a variety of scenarios.

Classes have the opportunity to partner with James Madison University, allowing students to earn transferable college credit from JMU through its "Geospatial Semester" program. In these classes there is a focus on learning and applying the software through a variety of local projects that are connected with the community. Industry Certification/Credentialing Exam may be required at the end of this course.

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

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

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# ENGINEERING DRAWING DR 140 Technical Drawina



**Prerequisite:** Technical Drawing, COMPASS Test and application

## Grades 10-12 1 Credit (3 PVCC 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. This course is dual enrolled with PVCC as DR 140 Technical Drawing. DR 140 enhances the principles learned that are related directly to the field of drafting and design; gives a more in-depth exposure to detail and working drawings, dimensioning, tolerancing, and conventional drafting practices; teaches CAD modeling; and may include parametric modeling. Students will earn 3 college credits that will transfer to the two year Associate's Degree at PVCC. These credits will not transfer to the four year college/university.

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

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

Fees apply for this course.

#### 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 sequential elective requirement (2 credits), a student may take Materials Processes Technology, Construction Technology or Manufacturing Technology I and II. Fees apply for this course.

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#### MANUFACTURING TECHNOLOGY II

Prerequisite: Materials and Processes
Technology, Manufacturing Technology I
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. Students 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 sequential elective requirement (2 credits), a student may take Materials Processes Technology, Construction Technology or Manufacturing Technology I.

Fees apply for this course.

#### 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:** Good eye-hand coordination, manual dexterity, physical strength and stamina recommended.

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. 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

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

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I														8680

# AUTOMOTIVE SERVICE TECHNOLOGY I & II



2 Year Program

I & II 2-3 Elective Credits\*

**Prerequisites:** Algebra I recommended, ability to read and understand highly technical information, use of 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. 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: AYES

Verified Credits: 1-2 (certification, completer) College Credits: Students earning a B average and having passing COMPASS scores will earn 20 dual enrollment college credits at J. Sargeant Reynolds Community College

Fees apply for this course.

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

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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.

#### BUILDING TRADES I & II

2 Year Program

Prerequisites: Students must be 16 years of age or older.

Grades: 10-12 Offered at CATEC

2-3 Elective Credits\* 2-3 Elective Credits\*

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

Certifications: NCCER, Construction Academy Assessments

College Credits: PVCC 9 credits

Verified Credits: 1-2 (certification, completer) \*2 elective credits if taken in conjunction with a CATEC English class.

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#### MASONRY I & II



2 Year Program

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

Grades: 10-12 Offered at CATEC Masonry I: 2-3 Elective Credits\* Masonry II: 2-3 Elective Credits\*

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: NCCER

Verified Credits: 1-2 (certification, completer)

College Credits: PVCC 6 credits

\*2 elective credits taken in conjunction with a CATEC

English class.

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#### **TELEVISION PRODUCTION** I, II, III and IV

Grades 9-12 1 Credit each

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 sequential elective requirement (2 credits), a student must also take TV Production II or III.

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#### **FILMING AND** DIGITAL VIDEO EDITING

Prerequisites: TV Production I or Digital

**Imaging Technologies** 

Grades: 10-12 1 Credit

Offered at MoHS

Students learn basic camera movements, operations and shots used in studio shooting, use and implementation of the action line, care and maintenance of the digital video camcorder, the importance of video logs, interpretation of storyboards into camera shots, and movements and basic editing techniques. This course covers video editing techniques using Final Cut Pro, After Effects, Garage Band, Motion, and more to create short films and

\*(This course will cover all workplace readiness skills mandated by the Commonwealth)

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#### BARBERING I & II

2 Year Program



Grades: 11–12 Offered at CATEC

Barbering I 2-3 Elective Credits\* 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 apply for this course.

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 ......8747 II ......8748

#### COSMETOLOGY I AND II



2 Year Program

Prerequisites: C or better in Biology recommended
Grades: 11–12
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 apply for this course.

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

# 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. Reading enriches their vocabularies and improves their writing skills.

- Reading enriches the inner world of a person and improves grammar and spelling.
- Through reading, people learn to understand different ways of thinking and feelings of other people and become more flexible and open-minded.
- Avid readers not only read and write better than those who read less but also process information faster. The research presented by the <u>Journal of</u> <u>Abnormal Child Psychology</u> 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, resumes, cover letters, and even e-mails often have to represent an individual. In such cases the person's writing is to form the reader's opinion about the individual's personality and abilities.
- Excellent writing is sure to earn respect. Poor writing will, on the contrary, be difficult to understand and will leave a bad impression about the individual.
- Writing structures and crystallizes one's thoughts, improving learning.
- Writing improves the effectiveness of the person's word usage in both written and oral speech.
- A survey conducted among 64
   American companies revealed that half of them pay attention to writing when considering a person for employment or promotion.
- According to Roger Howe, a former chairman and CEO of U.S.
   Precision Lens, the majority of the successful people are clear and persuasive in their writing.
- Developed reading skills lead to the development and improvement of writing skills.
   Regular readers' comprehension skills (ability to compare and contrast, evaluate and summarize, identify specific features and genres, make analogies) serve as a basis for good writing.

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	ı															113	32
Academ	ic	/	A	d	V	a	n	C	e	d						113	38
Honors																113	36

#### **ENGLISH 10**

**ENGLISH 9** 

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, tenthgrade students read extensively in a variety of genres and practice comparative analysis skills. Students write and speak for a variety of audiences and purposes, applying and refining written and oral communication using a range of literary and persuasive techniques.

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

Standard	. 1142
Academic/Advanced	. 1148
Honors	. 1146

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

### English

### **ENGLISH 11**

Prerequisite: English 10 1 Credit



English 11 is an integrated course designed to help students develop a comprehensive view of American literature, history, and culture. In gathering together the many threads of

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

Standard	ı. k							1152
Academ	ic/A	dva	nce	d.				1158
Honors							 	1156

### **ENGLISH LANGUAGE Advanced Placement**

Prerequisite: English 10 1 Credit Offered at AHS & MoHS



This is an integrated course designed to help students develop a comprehensive view of American literature, history, and culture. This highly rigorous course prepares students to take AP exams.

Students concentrate on reading and analyzing historical material, weighing historical evidence and interpretation, and synthesizing and evaluating information in analytical writing. Students study American literary eras, reading from a variety of disciplines and contexts. They compose for a variety of purposes and audiences. Reading and writing experiences help students understand the concepts of communication, individual development and identity, aesthetics, and universality.

Students 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.

### **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														116	2
Academic	/	A	d	v	a	n	c	P	ŀ					116	R

### **ENGLISH LITERATURE Advanced Placement**

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 it requires high-quality work in and out of class. Students read works of literature analytically and critically, and they respond with increasing sensitivity and discrimination of language. Essays focus on literary analysis but students have some opportunity to practice creative writing. Students are expected to take an AP exam.

The exam fee is approximately \$87 per test.

Advanced Placement . . . . . . . . . . . . 1195



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)







## ENGLISH 111/112 PVCC College Composition I and II

**Prerequisite:** Satisfactory scores on COMPASS and complete PVCC application

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

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

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

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П														1194

### SAT PREP/SUCCESSFUL STRATEGIES FOR COLLEGE

Co-Requisite: Algebra II

Grades 10–12 1 Credit

This class prepares students to take the SAT. Students learn and practice 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 is stressed.

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### **AFRICAN-AMERICAN LITERATURE**

Grades 9-12 Offered at MoHS 1 Credit

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.

### WOMEN IN ART AND LITERATURE

Grades 10-12 Offered at AHS 1 Credit

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

#### PRACTICAL LANGUAGE

**Prerequisite:** Teacher recommendation This course should be in addition to a student's English class.

#### Offered at AHS

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

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2														1	48	3
3														1	48	6
4														1	49	7

### SKILLS DEVELOPMENT READING/WRITING I, II, III, IV

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, usage, and mechanics.

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П																													11	13	3
																													11		
١V																													11	15	5

## 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 crosscultural communication and social adjustment skills. Students take electives during the second half of their day in their home high schools.

### **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. Levels III and IV students continue to hone their language skills and receive targeted content area support with a focus on reading, writing, and development of academic vocabulary.

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### **ESOL STUDY / ORGANIZATIONAL SKILLS**

Grades 9-12 1 Elective Credit

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.

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I	V															5728



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 an 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



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.

Courses are taught at all three High School—AHS, WAHS and MoHS, unless otherwise noted.

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

### PERFORMING ARTS —INSTRUMENTAL MUSIC

#### STRING ENSEMBLE

**Prerequisite:** Minimum two years of private instruction

### Grades 9–12 1 Credit

String Ensemble: standard violin, viola, cello, bass instrumentation. This group studies and performs works for string orchestra from the Baroque through the Modern period. Student must provide own instrument. Large instruments may be rented from the school.

rees apply for	this course.	
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II		9266
III		9267
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### **CONCERT STRINGS**

Prerequisite: By audition only

Grades 9-12 1 Credit Offered at AHS

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

Fees apply for this course.	
I	9238
II	9239
III	9215
IV	9216

### CONCERT BAND

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

### Grades 9-12 1 Credit per year at AHS .5 Credit per year at MoHS

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 apply for this course.	
1	9233
II	9246
III	9247
IV	9248



### SYMPHONIC BAND

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

### Grades 9-12 1 Credit per year at AHS .5 Credit per year at MoHS

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 apply for this course.

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Ш	١.																	92	63
IV	٠.		_	_			_				_				_	_	_	92	64

#### MARCHING BAND

Prerequisite: Recommendation of band director

Grades 9-12 .5 Credit

#### Offered at MoHS, AHS

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.

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### Fine & Performing Arts

#### PERCUSSION ENSEMBLE

**Prerequisite:** One year minimum previous instrumental training

Grades 9-12 1 Credit per year

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

Fees apply for this course.

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### **GUITAR**

### Grades 9–12 1 Credit Offered at WAHS, AHS

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

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#### 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.

Fees apply for this course. ..... 9202

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

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### WIND ENSEMBLE

**Prerequisite:** Previous instrumental training, teacher recommendation, and audition

Grades 9-12 1 Credit per year at AHS .5 Credit per year at 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 apply for this course. ..... 9243

### **MUSIC THEORY**

### (Advanced Placement Available)

**Prerequisite:** Music Theory or 3 years music performance .

Grades 9-12 1 Credit
Offered at MoHS 1 year course

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

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### PERFORMING ARTS —DANCE

#### BALLET

**Prerequisite:** None (previous dance training preferred)

### Grades 9-12 1 Credit Offered at MoHS

Students will learn sound technique to understand and perform dance and ballet. This course offers a daily ballet class (strenuous workout/physical activity) and students will be introduced to dance performance through an end of semester dance production. The course will focus on understanding cultural context and history of dance, judgment and criticism of dance, and aesthetics. Students will develop skills for expressive artistic dance performance. Course could be for students of diverse ability.

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### PERFORMING ARTS— THEATRE

### **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.

### **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.

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### **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.

### DRAMA IV and V

**Prerequisite:** Previous drama courses and teacher recommendation

### Grade 12 1 Credit Drama V offered at AHS, MoHS

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.

#### BASICS OF TECH THEATER

### Grade 9-12 1 Credit Offered at MoHS, WAHS

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

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### HISTORY OF MUSICAL THEATRE

Grades 9–12 1 Credit

#### Offered at AHS

Students study the origin and development of musical theatre over the past 100 years beginning with Vaudeville and silent movies. Theatre enthusiasts, Broadway lovers, and potential Spring Play participants will benefit from the course.

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### IMPROVISATION AND COMEDY

### Grades 9–12 1 Credit Offered at MoHS

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

### **SPEECH AND COMMUNICATION**

#### Grades 9-12 1 Credit

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

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#### **DEBATE I**

Prerequisite: Instructor's recommendation
Grades 9-12

1 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.

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### VISUAL THINKING / INTRO TO FILM

### Grades 10–12 1 Credit Offered at AHS, MoHS

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

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### PERFORMING ARTS —VOCAL MUSIC COURSES

### **CONCERT CHOIR**

**Prerequisite:** None; Middle School chorus recommended

### Grades 9-12 1 Credit/year

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.

Fees apply for this course.

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### ADVANCED CONCERT CHOIR

**Prerequisite:** Chorus I and/or teacher recommendation

### Grades 10-12 1 Credit/year Offered at AHS

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).

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### **SHOW CHOIR**

Fees apply for this course.

**Prerequisite:** One year of Chorus, Vocal and Choreography audition

### Grades 9-12 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: pitchmatching, tonal memory, sight reading, theory, and harmony. Students perform three major concerts with the possibility of several smaller performances. Students have the opportunity to participate in District Choir, All-State Chorus, District Choral Festival, and a spring competition.

Fees apply for this course.

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#### **VOCAL JAZZ**

**Prerequisite:** Teacher recommendation and vocal audition

### Grade 10-12 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. 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.

Fees apply for this course.

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### **WOMEN'S ENSEMBLE**

**Prerequisite:** Vocal audition and knowledge of music reading

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

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

Fees apply for this course.

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#### ADVANCED WOMEN'S ENSEMBLE

**Prerequisite:** Teacher recommendation and audition

#### Grades 10-12 1 Credit/year

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

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### MEN'S ENSEMBLE

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

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

### TREBLE JAZZ I and II

**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. Students have the opportunity to perform in local, regional, and state-wide Choral events.

#### CHAMBER MUSIC ENSEMBLE

**Prerequisite:** Teacher recommendation and audition required

### Grades 10-12 1 credit Offered at MoHS

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

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### **VISUAL ARTS COURS€S—ART**

#### **ART I**

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

### **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 sculpting. An in-depth exploration of a variety of media allows students to develop a personal style and to compile a portfolio.

### **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.

### **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 to apply art knowledge and techniques for personal expression.



### 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 24 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.

### ART HISTORY, Advanced Placement

Grade 11-12 1 Credit

### Offered at 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.

Fees apply for this course. 9151

### **CERAMICS I**

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.

Fees apply for this course.

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### **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.

Fees apply for this course.

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### **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 decorating are introduced.

Fees apply for this course.

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### **CERAMICS IV**

Prerequisite: Ceramics III

Grade 12

1 Credit

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.

Fees apply for this course.

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### ADVANCED FUNCTIONAL CERAMICS

Prerequisite: Ceramics IV or teacher

recommendation

Grade 11–12 1 Credit Offered at MoHS

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

ADVANCED SCULPTURAL CERAMICS

**Prerequisite:** Ceramics IV or teacher recommendation

Grade 11–12

1 Credit

Offered at MoHS

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

### **PRINTMAKING**

Prerequisite: Art I

Grade 10–12 1 Credit

Offered at AHS

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

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

Fees apply for this course.

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### **DIGITAL IMAGING II**

Prerequisite: Digital Imaging I
Grade: 10-12 1 Credit
Offered at WAHS

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

Fees apply for this course.

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### **DIGITAL IMAGING III**

Prerequisite: Digital Imaging I & II
Grade: 11-12 1 Credit
Offered at WAHS

This course is 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.

Fees apply for this course.

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### **VISUAL ARTS COURSES—ART (Continued)**

### **MULTIMEDIA CRAFTS/ DESIGN**

### 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 basketry. Both the functional aspects of crafts and the nontraditional creative approach are stressed.

Fees apply for this course.

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### **MULTIMEDIA CRAFTS II**

**Prerequisite:** Teacher recommendation; Multimedia Crafts/ Design

### 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.

Fees apply for this course.

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#### 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.

Fees apply for this course.

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### **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.

Fees apply for this course.

#### **PHOTOGRAPHY I**

### Grades 9–12 (10–12 at WAHS) 1 Credit

This beginning course in black-and-white photography introduces 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.

Fees apply for this course.

Required Equipment: A digital or a manual 35mm camera (single lens reflex (SLR) is preferable) with a built-in light meter. A limited number of school-owned cameras may be available for loan.

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#### **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.

Fees apply for this course.)

Required Equipment: A digital or a manual 35 mm camera (single lens reflex (SLR) is preferable) with a built-in light meter. A limited number of school-owned cameras may be available for loan.

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#### 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.

Fees apply for this course.

Required Equipment: A digital or a manual 35 mm camera (single lens reflex (SLR) is preferable) with a built-in light meter. A limited number of school-owned cameras may be available for loan.

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#### **PHOTOGRAPHY IV**

Prerequisite: Photography III

Grades 10-12 1 Credit Offered at AHS, MoHS

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

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### VISUAL ARTS COURSES—PUBLISHING

### **CREATIVE WRITING I, II**

Grades 9–12 1 Credit 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.

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### **CREATIVE WRITING III, IV**

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.

Fees apply for this course.	
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### **CREATIVE WRITING/ LITERARY MAGAZINE**

Grades 9-12 1Credit Offered at WAHS

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

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### **HUMANITIES**

Grades 9-12 1 Credit Offered at AHS, (Level I only at MoHS)

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

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#### **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 digital, a 35mm , or manual camera. The focus of photography study is on the content of good news photos.

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### **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 digital, a35mm automatic, or manual camera. The focus of photography study is on the content of good news photos.

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### **SCREEN AND STAGE WRITING**

Grades 9-12 1 credit Offered at MoHS

This course will begin with the study of contemporary dramatic literature and screenplays. We will analyze the elements of script writing (short plays as well as one acts and full length pieces) such as plot, theme, action, characterization, and powerful and evocative dialog. Students will learn to move their ideas into play writing format with the use of formatting software such as Celtix. They will study the importance of stage directions and how it affects characterization. Students will submit entries into a variety of script writing contests. As a culminating activity, we will hold a film and stage festival showcasing student work.

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### **FILM STUDIES / FILMMAKING**

Grades 10-12 1 Credit

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.

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# course Descriptions

### HEALTH, PHYSICAL EDUCATION AND DRIVER'S EDUCATION



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

1. Health and PE are linked to good health.

The value of physical fitness can never be overstated. In physical educational classrooms, students learn the value of taking care of themselves through proper grooming, healthy eating, and regular exercise.

2. Health and PE are a preventive measure against disease.

Physical education in school is a preventive measure to teach students the value of regular exercise and healthy eating habits.

3. Health and PE are programs for muscle strength and fitness.

Physical education develops the student's motor skills and hand-eye coordination.

4. Health and PE promote academic learning.

Physical health allows students to function even better in classrooms. A good cardiovascular system developed from regular exercise promotes excellent blood and oxygen circulation. This means more nutrients circulate throughout the body, which includes the brain. This circulation produces longer attention span during classes.

5. Health and PE build self-esteem.

Students who are active in physical activities are more confident with themselves, according to most social school studies. In school, the physical education program introduces 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 skills.

Most physical education programs are holistic. The program allows students to interact toward a common goal.

7. Health and PE promote a physically active lifestyle.

The purpose of physical education is to instill in students, at an early age, the value of self-preservation and choosing a lifestyle that is good for both the mind and body.

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

# Physical Education, Health, 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 selfselect 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 decisionmaking 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.

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### 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.

.....7410

### **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.

### HEALTH EDUCATION II

**Grades 10-12** 

.5 Credit

**Prerequisite:** Approval by High School Counseling Director is required for 9th graders. For 9th graders to be considered, they must have turned 15 by September 1st. Enrollment also based on space availability. 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 Driver's Education. Effective July 1, 2007 Temporary Driver Licenses are issued for 180 days. See below for more information about Driver's Ed. Fees apply for this course.

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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.



Health Education II includes the classroom portion of Driver's Education.

#### **DRIVER'S EDUCATION**

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

#### ■ Part II Behind-the-Wheel

Students should be scheduled for Behind-the-Wheel 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. Students may get a learner's permit from DMV at 15½ years of age.

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

**Note:** Parents are required to attend a free seminar before their child takes the Behind-the-Wheel portion of driver's education (see box below). Temporary Driver Licenses are issued for 180 days.



### Parental Requirements and Driver's Education

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

### AFRICAN CULTURE, MUSIC & DANCE

Grades 10-12 1 Credit
Offered at WAHS

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.

Fees apply for this course.

Ι.														9321
Ш														9323

#### FITNESS / YOGA

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

Grades 11-12 1 Credit

### Offered at AHS, WAHS

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

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

......7670

### **FITNESS / WEIGHT TRAINING**

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

### Grades 11-12 1 Credit per year

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

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

### INTRODUCTION TO SPORTS MEDICINE

Prerequisite: Teacher recommendation; Biology I

Grades 11-12 1 Credit
Offered at WAHS

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.



Interested in Sports Medicine? Monticello High School offers 2 Sports Medicine courses. You can find more information in the Health and Medical Sciences subsection of the Career and Technical Education (CTE) section of this book. (See page 28).



# Course Descriptions

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



### "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 skills 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. History particularly prepares students for the long haul in their careers, its qualities helping adaptation and advancement beyond entrylevel 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

### **WORLD HISTORY I to 1500**

#### Grade 9

1 Credit



This is a broad survey course designed to provide each student with a historical overview and analysis of the major political, social, and economic events of the world.

Students trace the major patterns of world history from the prehistoric period through the European Middle Ages. Concepts, historical trends, and cycles are emphasized.

Standard	 ٠.		 	2343
Academic/Advanced	 		 	2346
Honors	 	 	 	2350

### WORLD HISTORY II from 1500 to PRESENT

#### Grade 10

1 Credit



This is a broad survey course designed to provide each student with a historical overview and analysis of the major political, social, and economic events of the world.

Students trace the major patterns of world history from about 1500 CE (Middle Ages) through current times.

Standard	ł															2334
Academi	ic	/	A	d	V	a	n	C	e	d						2338
Honors																2349

### WORLD HISTORY, Advanced Placement

**Prerequisite:** World History I at AHS; See School Counselor 1 Credit

#### Grades 10-12; Grade 9 only at MoHS



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. At MoHS this course is taken in place of World History I.

### History / Social Sciences

### **EUROPEAN HISTORY,**Advanced Placement

Prerequisite: See School Counselor Grades 10-12 1 Credit Offered at MoHS, WAHS



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.

### VIRGINIA AND US HISTORY

Grade 11

1 Credit

American Studies is an integrated course designed to help students develop a comprehensive view of American literature, history,

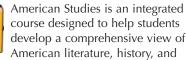
and culture. In gathering together the many threads of American culture, students leave this course with a better understanding of who they are and what it means to be an American. Through a variety of learning experiences, students discover relevant connections among movements in American art, literature,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

Fees apply for this course.

## VIRGINIA AND UNITED STATES HISTORY, Advanced Placement

Grade 11

1 Credit



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. Fees apply for this course.

### HISTORY 121/122 PVCC UNITED STATES HISTORY

1 Credit

(3 PVCC credits each semester) Offered at AHS & MoHS

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

121		 	 	 	. 2366
122		 	 	 	. 2367
121	& 122	 	 	 	. 2363

### **AFRICAN-AMERICAN STUDIES**

Grades 10-12 Offered at AHS, MoHS 1 Credit

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.

### GOVERNMENT AND POLITICS, Advanced Placement

Prerequisite: See School Counselor

Grade 12 1 Credit

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.

Fees apply for this course.

## COMPARATIVE GOVERNMENT AND POLITICS Advanced Placement

Prerequisite: World History at MoHS; this course follows Government

Grades 11–12 1 Credit

Students acquire a theoretical framework to compare international political systems. The course follows the AP curriculum focusing on the history, politics, and institutions of six countries: Britain, Russia, China, Mexico, Iran, and Nigeria. Students prepare to take the spring AP exam. Additionally, this course guides students' participation in the global community and economy.

## POLITICAL SCIENCE PVCC U.S. GOVERNMENT 211/212

Grade 12 1 Credit (3 PVCC credits each semester) Offered at AHS & MoHS

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										2456
212										2457
211	& 212									2458

### HUMAN GEOGRAPHY Advanced Placement

Grades 9–12 1 Credit Offered at MoHS

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

### AMERICA'S WARS: VIETNAM AND THE CIVIL WAR

Grades 11-12 1 Credit
Offered at AHS

During the course of United States history, wars helped shape this country into what it is today. The United States evolved from fighting a war for independence to the world's sole superpower of the early 21st-Century. Two pivotal wars in that period contributed to the identification of the United States: the American Civil War and The Vietnam War. The first half of this course will focus on the American Civil War and the second half of the course will focus on the American involvement in Vietnam. Students will study the political, social, economic, and military impact of these wars. The course will also focus on how these wars formed American memory and shaped the cultural legacy of these conflicts.

......2978

### MACRO ECONOMICS Advanced Placement

Prerequisite: World History
Grades 10–12 1 Credit
Offered at AHS

Instruction provides a comprehensive understanding of the economic principles applicable to individual decision makers and an economic system. Topics include: nature and functions of product markets; factor markets; role of government in promoting economic efficiency and equity; national income; price-level determination; economic performance measures; financial sectors; stabilization policies; economic growth; and international economics.

......2803

### PRACTICAL LAW

Grades 10–12 1 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.

### ISSUES OF THE MODERN WORLD

Grades 11-12 1 Credit
Offered at AHS

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

......2978

### HISTORY THROUGH FILM

Grades 11-12 1 Credit Offered at AHS, WAHS

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

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 but it is not mandatory. Those students attending a MUN conference are responsible for the registration



### LEADERSHIP

#### 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														8288
П														8287
Ш														8289
IV														8290

### SOCIOLOGY

### Grades 10–12 1 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.

### 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.

1 Credit

### **PSYCHOLOGY**

#### Grades 10–12

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.

### PSYCHOLOGY Advanced Placement

Prerequisite: See School Counselor Grade 10–12 1 Credit

This course provides an introduction to the psychological topics and principles taught in an introductory psychology class at the college level. Specific topics addressed include: the biological bases of behavior; sensation and perception; states of consciousness; learning, memory, and intelligence; language development; motivation and emotion; human development; personality theory; social psychology; abnormal psychology and methods of therapy; current issues; and applications of the discipline. Emphasis will be placed on reading and writing, evaluating and conducting research, and completing independent projects. Students are expected to take the AP exam. The exam fee is approximately \$87 per test.

# Course Descriptions

A true story from an AHS math teacher:

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



### Which professions use math?

Here is a small list of math-oriented 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.

- <u>Agriculturists</u> 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.
- <u>Biologists</u> use proportions to count animals as well as use statistics/probability.
- <u>Chemists</u> find ways to use chemicals to assist us which entails purifying water, dealing with waste management, researching superconductors, analyzing crime scenes, and making food products. Mathematical equations are used often.
- <u>Computer Programmers</u> 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!
- <u>Geologists</u> use mathematical models to find oil and study earthquakes.

- <u>Lawyers</u> argue cases using complicated lines of reason. That skill is nurtured by high level math courses. The 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.
- <u>Nurses</u> carry out the detailed instructions doctors give them. They adjust intravenous drip rates, take vitals, dispense medicine, and even assist in operations.
- <u>Politicians</u> help solve the social problems of our time by making complicated decisions.
- <u>Technicians</u> repair and maintain the technical gadgets we depend on like computers, TV's, cars, refrigerators. They are always reading measuring devices, referring to manuals, and diagnosing system problems.
- <u>Tradesmen</u> (carpenters, electricians, mechanics, and plumbers) estimate job costs and use technical math skills specific to their field. They deal with slopes, areas, volumes, and 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

### Mathematics

### 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, fewer laborintensive jobs are available in today's economy. 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.

### ALGEBRA I

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

Grades 9-12 1 Credit



Algebra I develops the properties and structure of the real-number system. Content includes linear equations, functions, inequalities, polynomials, special products, graphs, and quadratic equations.

Graphing calculators are used and problem-solving techniques are stressed. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.

Standard .										3130
Advanced.										3136

### SKILLS DEVELOPMENT MATH / ALGEBRA LAB

Grade 9

1 Math Elective Credit

An individualized and comprehensive course covering the concepts and skills necessary to be successful in Algebra I.

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П																		3302
Al	g	el	bı	ra	ı	L	al	b										3306

### **ALGEBRA II**

Prerequisites: Teacher recommendation; Algebra I
Grades 9-12

1 Credit



The development of the topics of Algebra I is continued in greater depth in Algebra II. There is a more in-depth examination of relations and functions including linear, quadratic, polynomial,

radical, exponential, and logarithmic functions, conic sections, and matrices. The course also includes irrational numbers, properties of radicals, systems of linear equations, and linear inequalities. There is extensive use of technology, including the graphing calculator, and emphasis is placed on problem solving. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.

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

Standard											3135
Advanced											3102
Honors											3104



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.

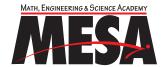


Standards of Learning Test required.



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 8.

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



### ALGEBRA, FUNCTIONS, AND DATA ANALYSIS (AFDA)

Prerequisite: Algebra I
Grades 9-12 1 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.

......3134

### COLLEGE ALGEBRA AND TRIGONOMETRY

**Prerequisites:** Teacher recommendation; Algebra II and Geometry

Grades 10-12 1 Credit

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

 Standard
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### GEOMETRY

**Prerequisites:** Teacher recommendation; Algebra I

Grades 9-12 1 Credit

The properties of plane and threedimensional figures are studied in this course. Students will learn constructions, logical and deductive reasoning, angle

relationships, parallel and perpendicular line relationships; congruence and similarity of polygons, triangle relationships and inequalities, and attributes and properties of quadrilaterals. Also included are properties and attributes of polygons; right triangle theorems and relationships; applications and practical problems involving circles and chords; tangents, secants; area, volume, and surface area of three dimensional objects; drawing two dimensional figures from three dimensional objects; perspective and scale drawings; coordinate geometry and symmetry, rotation, and reflection of an object. Technology is used to reinforce geometric concepts throughout the course. The Geometry SOL test is given upon completion of this course. A student can earn one math credit and one verified mathematics credit upon successful completion of the course and the SOL test.

 Standard
 3143

 Advanced
 3145

 Honors
 3147

### HONORS TRIGONOMETRY

Prerequisite: Algebra II

Grades 9-12 1 Credit

The course involves a comprehensive study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. There is additional emphasis on oral and written communication related to the language of mathematics, logic of procedure, and interpretation of results. Students use graphing calculators, computers, and other materials in learning activities. Further, graphing utilities enhance students' understanding of realistic applications through modeling and aid in the investigation of trigonometric functions and their inverses. They also provide a powerful tool for solving/verifying trigonometric equations and inequalities.

......3155

### 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, probability and statistical inference. Within each theme, the topics stress statistical thinking and use of technology, primarily the graphing calculator and computers with appropriate software. This course prepares students to take the Advanced Placement Statistics exam.

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

.....3192

### PROBABILITY AND STATISTICS

**Prerequisite:** Algebra II; Teacher recommendation

Grade 12 1 Credit Offered at AHS,

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
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 3190

 Advanced
 ...
 3193

### **APPLIED COLLEGE MATHEMATICS**

Prerequisite: Algebra II
Grade 12 1 Credit
Offered at WAHS

Applied College Mathematics is a course that contains high-interest contextualized content. The course will add to students' preparation for college and the workplace by enhancing skills in number and quantity, functions and algebra, geometry, and statistics and probability; through skills essential for college and workforce success such as adaptability, flexibility, creativity, innovation, leadership, team work, collaboration, and work ethic. Students will research, collect, and analyze data; develop and support ideas and conjectures; investigate, evaluate, and incorporate appropriate resources; and determine appropriate problemsolving approaches and decision-making algorithms in a variety of real-world contexts and applied settings.

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### MATHEMATICAL INFERENCE AND APPLICATIONS (Discrete Math)

**Prerequisite:** Teacher recommendation and Geometry and Algebra II

Grade 12 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
 3119

 Advanced
 3120

### MATH ANALYSIS (Pre-Calculus)

**Prerequisite:** Teacher recommendation; Algebra II or College Algebra and Trigonometry or Honors Trigonometry (for students entering High School in 2010)

#### Grades 11-12 1 Credit

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 polynomial, 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......3162



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



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 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 college-level calculus courses.

### **CALCULUS, HONORS**

Prerequisite: Honors Math Analysis Grade 11–12 1 Credit 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.

### CALCULUS

### Advanced Placement AB

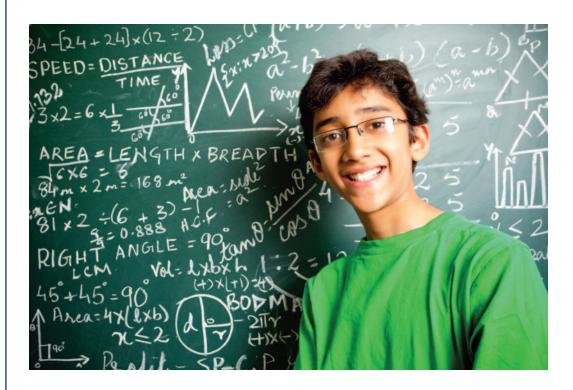
**Prerequisite:** Math Analysis; Teacher recommendation

Grade 11–12 1 Credit

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.

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### CALCULUS Advanced Placement BC

**Prerequisite:** Calculus AB; Teacher

recommendation Grade 12

verbally.

1 Credit

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'Hopital's Rule, and vectors). The course will also explore the rudiments of multivariable calculus and differential equations (sequential courses to BC Calculus). Similar to AB Calculus, BC is also concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and application. This course emphasizes a multi-representational

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

graphically, numerically, analytically, and

......3178

approach to calculus, with concepts,

results, and problems being expressed

## MTH 163 PRECALCULUS I PVCC



**Prerequisite:** either a) MTH04, 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. Algebra II

### Grade: 12 1 Credit (6 College Credits) Offered at AHS

MTH 163 covers topics in algebra, such as equations and inequalities, graphing and functions, exponents and logarithms, systems of equations, inequalities, linear programming, and matrices. This course prepares students for MTH 271.

MTH 271 covers topics in applied calculus for business, life sciences, and social sciences. It includes description and application of functions, limits, derivatives, graphing, and integrals.

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





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.

# course Descriptions



### Why study science?

Should gifted and talented students be the only students to receive a dose of science? What value does science have for all

other students? Although not voiced in newspapers, these questions exist in almost every community to which we have traveled. Science is a necessity because it makes our lives more comfortable, yet many still 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 but will present facts. 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 group's 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 are 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, for which science is well-suited. Science courses teach students how to think.

A critical place for science knowledge is the process of "discernment." From the young to the old, people constantly examine information and discover 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 is 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 increasing 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.

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



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 and 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.

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

Standard	ŀ															4212
Academ	ic	:/.	A	d	v	a	n	C	e	d						4215
Honors																4216

#### **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** 



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						4312
Academic/Advanced						. 4318
Honors						. 4316

#### CHEMISTRY I

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

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

Grades 10-12

1 Credit



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 .										4410
Advanced										4412
Honors										4414

#### 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

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											4510
Advanced											4512
Honors											4514



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

Students are required to take three courses from two different science disciplines for a Standard Diploma and four courses from three different science disciplines for an Advanced Studies Diploma. The disciplines are

- Earth Science
- Biology
- Chemistry
- and Physics

### GEOLOGY

Grades 9–12 1 Credit Offered at MoHS, AHS

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

### **ECOLOGY**

Prerequisite: Biology
Grades 10–12 1 Credit

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.												41	02
Advanced												41	06

### BIOLOGY, 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

### BIOLOGY-ECOLOGY COOPERATIVE

Grades 10–12 2 Credits Offered at MoHS

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

### GEOLOGY-EARTH SCIENCE COOPERATIVE

Grades 9–12 2 Credits

Offered at MoHS

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

### INTRODUCTION TO SCIENTIFIC RESEARCH

Prerequisite: Algebra II (concurrent)

Grades 9–12 1 Credit Offered at AHS

Students develop scientific research strategies to facilitate entering competitions such as the International Science and Engineering Fair and Virginia Junior Academy of Science. Students and Research: Practical Strategies for Science Classrooms and Competitions provide the class sequence and activities. The work of Julia Cothron, Virginia Mathematics and Science Center; Dr. Richard Rezba, Virginia Commonwealth University; and Dr. Ron Giese, College of William and Mary provide the course fundamentals.



### 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.

### CHEMISTRY, 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.

### HONORS ORGANIC CHEMISTRY

**Prerequisite:** Honors Chemistry I or teacher recommendation

### Grades 10-12 1 credit Offered at WAHS

Organic Chemistry is a broad field, including diverse topics such as the synthesis and function of bio-molecules; the study of polymers; investigations into the synthesis and use of pharmaceuticals, soaps, flavors, and fragrances; and the study of petroleum products. This course fosters an understanding of the world around us, particularly compounds that contain the element carbon. Targeted toward college-bound students who wish to pursue a science-related degree.



Science experiments can fine tune small motor skills like using an eye dropper, pouring small amounts of liquid, or increased ability to measure.

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.



Students are required to take three courses from two different science disciplines for a Standard Diploma and four courses from three different science disciplines for an Advanced Studies Diploma. The disciplines are

- Earth Science
- Biology
- Chemistry
- and Physics

### PHYSICS B, 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.

### 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

### METEOROLOGY

Grades 10–12 1 Credit Offered at AHS

The course covers the composition and structure of the atmosphere, flows of atmospheric energy, and resulting motions produced from small to planetary scales. Instruction stresses the physical principles of atmospheric phenomena and their impacts on humans. Students examine current meteorological data to develop analytical methods.

### **ANIMAL STUDIES**

Prerequisite: Biology I

Grades 11–12 1 Credit Offered at MoHS, WAHS

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.

### PHYSICAL OCEANOGRAPHY

**Prerequisite:** Earth Science & Algebra II (may be concurrent)

Grades 11–12 1 Credit Offered at AHS

This course focuses on world oceans' physical characteristics including the formation of oceans, ocean floors, ocean circulation, wave characteristics, tides, seawater properties, and coastal dynamics. Students learn the history of oceanography such as modern oceanographic expeditions, discoveries and the JASON project. They also study related environmental issues.

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### CHEMICAL QUANTITATIVE AND QUALITATIVE ANALYSIS

Prerequisite: Algebra II & Chemistry
Grades 11–12 1 Credit
Offered at AHS

Students learn the chemistry and laboratory techniques used in chemical quantitative and qualitative analysis. They use milligram balances, spectrophotometers, pH meters, potentiometers, centrifuges, vacuum filtration apparatus, distillation apparatus, and graphing calculators and apply statistical measures to their findings. Students communicate results through oral and written reports.



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

### Grades 10-12 1 Credit (8 College Credits) Offered at WAHS, AHS

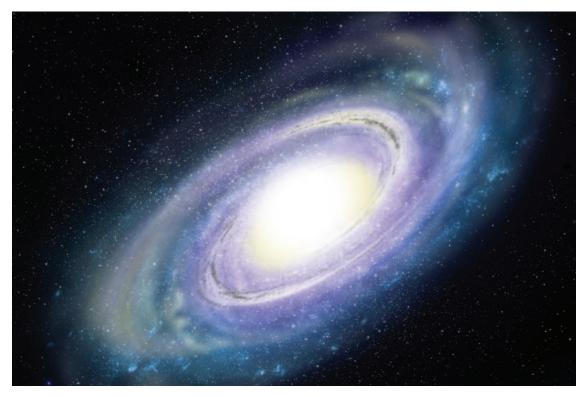
First Semester: Solar System Astronomy

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

### Second Semester: Stellar Astronomy and Cosmology

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

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





# Course Descriptions

### 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. 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



# 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.
- Education: Just think—you could teach anywhere in the world. Think big!
- 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.
- 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 language.

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

### World Languages

#### **FRENCH I**

Prerequisite: Teacher Recommendation
Grades 9-12 1 Credit

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.

Fees apply for this course.

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

### **FRENCH II**

Prerequisite: Teacher recommendation Grades 9-12 1 Credit

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.

Fees apply for this course.

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

#### FRENCH III

Prerequisite: Teacher recommendation Grades 9-12 1 Credit

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.

Fees apply for this course.

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

### FRENCH IV, HONORS

Prerequisite: Teacher recommendation

Grades 9-12 1 Credit

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.

Fees apply for this course.

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

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### FRENCH LANGUAGE Advanced Placement

Prerequisite: Teacher recommendation

Grade 12 1 Credit

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.

Fees apply for this course.

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



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, and are at the Academic/
Advanced level.



Students in Advanced Placement Courses are expected to take the AP exam. There is a fee for this exam.

Many World Language courses have a fee to cover the cost of Workbooks.

#### **SPANISH I**

Prerequisite: Teacher Recommendation 1 Credit

Grades 9-12

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.

Fees apply for this course.

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

#### SPANISH II

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit

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.

Fees apply for this course.

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

#### **SPANISH III**

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit

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.

Fees apply for this course.

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



### **SPANISH IV, HONORS**

Prerequisite: Teacher Recommendation Grades 9-12 1 Credit

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 selfinstruction, 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.

Fees apply for this course.

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

### SPANISH CONVERSATION AND WRITING FOR THE **BUSINESS WORLD**

Prerequisite: Spanish IV

Grades 9-12 1 Credit Offered at AHS

This multi-disciplinary way to develop oral and written language fluency is geared to the world of work. Students will prepare business letters, learn office procedures, and develop specific vocabulary for working in the health care, law enforcement, educational and other business settings

### SPANISH LANGUAGE, Advanced Placement

Prerequisite: Teacher Recommendation1 Credit

This class is to prepares students to take the Advanced Placement test for college credit. The emphasis is on listening to native speakers, reading literature intended for native speakers, writing compositions several paragraphs in length, and orally communicating facts and ideas. Includes a thorough review of grammar.

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.

### SPANISH LITERATURE, Advanced Placement

Prerequisite: Teacher Recommendation
1 Credit Offered at WAHS, AHS

This AP Spanish Literature course is comparable to a third-year college introduction to Hispanic literature course. The required reading list of literary significance represents various historical periods, literary movements, genres, geographic areas, and groups within the Spanish-speaking world. The course will help students to interpret and analyze literature in Spanish.

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.

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## ADVANCED SPANISH CONVERSATION Composition and Culture through Film Study

Prerequisite: Spanish IV

Grades 10–12 1 Credit Offered at AHS

Students will view, discuss, and analyze a variety of Latin American and Spanish films as the impetus for studying and discussing cultural conflict, including identifying a person's identification with his heritage, a study of immigration, cultural issues that have led to war, and the value of life and friendship. In addition to viewing several films on each aspect of the theme, students will investigate authentic resources or pieces of literature that will round out their understanding of the situations under investigation and provide further stimuli for discussion.

### SPANISH FOR FLUENT SPEAKERS I

Prerequisite: Teacher recommendation

#### 1 Credit

Emphasis will be placed on literacy in reading and writing. Students will learn the phonetic and verb systems and practice with level-appropriate texts and vocabulary lists as determined by diagnostic assessment.

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### **CHINESE**

Prerequisite: Teacher Recommendation
Grades 9-12 1 Credit
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.

Fees apply for this course.

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

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The ability to speak and understand other languages is an essential skill in today's global business economy.

#### **GERMAN I**

Prerequisite: Teacher recommendation
Grades 9-12 1 Credit

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 and 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. Fees apply for this course.

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

### **GERMAN II**

Prerequisite: Teacher recommendation
Grades 9-12

1 Credit

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. Fees apply for this course.

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

### GERMAN INVENTORS, MOVERS, AND SHAKERS

Prerequisite: German I and II

Grades 9-11 1 Credit
Offered at AHS

Open to students who have completed German II, this elective will provide opportunities for students to increase their German speaking, reading, writing, and listening proficiency, as well as increase their active vocabulary, through daily conversation and the study of German inventors and other German movers and shakers. It will act as a bridge course for students between years of German who want to continue their study of German and begin to delve in to the importance of German historical figures. Class will be conducted in German.

#### **GERMAN III**

Prerequisite: Teacher recommendation
Grades 10-12 1 Credit

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. Fees apply for this course.

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

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### **GERMAN IV, HONORS**

Prerequisite: Teacher recommendation

**Grades 11-12** 

1 Credit

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.

Fees apply for this course.

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

..... 5240

### GERMANY from 800 AD to the Present

Prerequisite: German IV

Grades 10–12 1 Credit Offered at AHS

This course is a survey of German history and culture, up to and including modern day current events, politics, and issues affecting Germany and German speaking countries. It includes the study of literature, art, music, and contributions made by Germans and is a companion class to German IV or A.P. German. Taken in conjunction with a 4 x 4 or AB schedule, it will prepare students both for the A.P. examination and for German study in college.

### GERMANY from the beginning of

the 20th Century to Today

Prorequisite: Corman I II and III

Prerequisite: German I, II, and III
Grades 10–12 1 Credit
Offered at AHS

This course offers an in-depth look at issues affecting Germany today, concentrating on current events, history, culture, literature, art, music, film, politics, and social issues. This elective can either replace or be collapsed together with the first history proposal and taught with A.P. German as a companion class on the AB schedule. It is open to students who have completed German III or German IV and will help prepare students for AP German and for further German study in college. Class will be conducted in German.

### GERMAN LANGUAGE Advanced Placement

Prerequisite: German IV;
Teacher recommendation 1 Credit

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

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.

#### JAPANESE I

Prerequisite: Teacher Recommendation Grades 9-12 1 Credit

#### Offered at AHS, WAHS

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.

Fees apply for this course.

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

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#### JAPANESE II

Prerequisite: Teacher Recommendation Grades 9-12 1 Credit Offered at AHS, WAHS

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

Fees apply for this course.

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

#### JAPANESE III

Prerequisite: Teacher Recommendation Grades 9-12 1 Credit Offered at WAHS, AHS

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

Fees apply for this course.

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

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#### JAPANESE IV, HONORS

Prerequisite: Teacher Recommendation

Grades 9-12 1 Credit Offered at WAHS, AHS

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.

.....5940

#### **LATIN I**

**Prerequisite:** A good knowledge of English grammar

Grades 9-12 1 Credit

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.

......5310

#### LATIN II

Prerequisite: Teacher Recommendation
Grades 9-12

1 Credit

In the first half of Latin II, students review Latin I (if needed). Stories about Roman life and customs are translated in the second half of Latin II. Emphasis on vocabulary and word study is continued and an understanding and appreciation of the history and civilization of Rome is gained through various readings.

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

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#### **LATIN III**

Prerequisite: Teacher recommendation
Grades 9-12

1 Credit

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.

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## LATIN THROUGH THE AGES: FROM ANTIQUITY TO TODAY

**Prerequisite:** Latin III or teacher recommendation

#### 1 Credit Offered at MoHS

This course will acquaint students with the Latin writings of historians, poets, scientists, and thinkers. Students will read in Latin selections from authors from antiquity through the 19th century. In reading and examining Latin writings, students both strengthen their handle on the Latin language and gain a further understanding of the history of the Western World. Students will also use Latin as a living language. Students will engage in Latin conversations covering a variety of topics. Students will model their conversational Latin from a variety of sources including Roman comedians, playwrights and letter writers. Students will become acquainted with modern uses of Latin such as legal language, medical terminology, and taxonomy. Students will discover and participate in the world-wide community of living Latin enthusiasts.

**LATIN IV, HONORS** 

Prerequisite: Teacher Recommendation Grades 9-12 1 Credit

......5305

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.

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#### VIRGIL, Advanced Placement

**Prerequisite:** Teacher recommendation: Latin IV

1 Credit 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.

# General Information

#### **GRADUATION REQUIREMENTS**

#### For students entering the 9TH GRADE PRIOR TO 2011

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.



#### **Graduation Requirements**

	Standard	Diploma	Advanced Stu	dies Diploma
COURSES	Units of Credit Required	Verified Credit Required	Units of Credit Required	Verified Credit Required
English	4	2	4	2
Mathematics <sup>1</sup>	3	1	4	2
Laboratory Science 2,5	3	1	4	2
World History I & II / World Geography⁵	1	1 of any	2	2 of any
US/VA History	1	history	1	history
US/VA Government	1		1	
World Languages	_		3 or 46	
Health and Physical Education	2		2	
Fine Arts or Career/Technical Education	1		1	
Electives <sup>3</sup>	6		2	
Student Selected Test 4	_	1	_	1
TOTAL CREDITS	22	6	24	9

#### **NOTES**

- 1 Math courses must be at or above the level of algebra and shall include different course selections among Algebra I, Geometry, Algebra II, or others above the level of Algebra II.
- 2 Science courses must be taken from at least two disciplines for standard diploma, at least three disciplines for advanced studies: Earth Science, Biology, Chemistry or Physics.
- 3 At least two electives must be taken sequentially to provide a foundation for further education or training or preparation for employment for standard and modified diplomas.
- 4 A student may utilize additional tests for earning verified credit in computer science, technology, and career and technical education.
- 5 Students who complete a career and technical education (CTE) program sequence and pass an examination or occupational competency assessment or credential or acquire 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/social science verified credit when the certification, license, or credential confers more than one verified credit.
- 6 Three years of one language or two years of two different languages are required. All students are encouraged to take one or more world language courses.

# Graduation Requirements and Diplomas



#### GRADUATION REQUIREMENTS

#### for students entering the 9TH GRADE IN 2011 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.

#### **Graduation Requirements**

	Standard	Diploma	Advanced Stu	Advanced Studies Diploma	
COURSES	Units of Credit Required	Verified Credit Required	Units of Credit Required	Verified Credit Required	
English	4	2	4	2	
Mathematics 1	3	1	4	2	
Laboratory Science 2,5	3	1	4	2	
World History I & II/ World Geography	1	1 of any history	2	2 of any history	
US/VA History	1	,	1	,	
US/VA Government	1		1		
World Languages	16		3 or 4 <sup>7</sup>		
Health and Physical Education	2		2		
Fine Arts or Career/Technical Education	1		1		
Economics or Personal Finance	1		1		
Electives	43		3		
Student Selected Test <sup>4</sup>	_	1	_	1	
TOTAL CREDITS	22	6	26	9	

#### **NOTES**

- 1 Math courses must be at or above the level of algebra and shall include different course selections among Algebra I, Geometry, Functions and Data Analysis, Algebra II, or others above the level of Algebra II.
- 2 Science courses must be taken from at least two disciplines for standard diploma, at least three disciplines for advanced studies: Earth Science, Biology, Chemistry or Physics.
- 3 At least two electives must be taken sequentially to 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.
- 5 Students who complete a career and technical education (CTE) program sequence and pass an examination or occupational competency assessment or credential or acquire 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/social science verified credit when the certification, license, or credential confers more than one verified credit.
- 6 Students can choose to take an additional Fine Arts or Career/Technical Education course instead of a World Language course.
- 7 Three years of one language or two years of two different languages are required. All students are encouraged to take one or more world language courses.



#### ADDITIONAL DIPLOMAS — Technical Diploma

Students entering the 9th grade in 2011 and thereafter will also have an opportunity to pursue two new diplomas: Standard Technical Diploma and Advanced Technical Diploma.

#### Graduation Requirements—Technical Diploma

	Standard Tech	Standard Technical Diploma		hnical Diploma
COURSES	Units of Credit Required	Verified Credit Required	Units of Credit Required	Verified Credit Required
English	4	2	4	2
Mathematics <sup>1</sup>	3	1	4	2
Laboratory Science <sup>2</sup>	3	1	4	2
World History I & II / World Geography⁵	1	1 of any	2	2 of any
US/VA History	1	history	1	history
US/VA Government	1		1	
Health and Physical Education	2		2	
World Languages	_		3 or 4 <sup>5</sup>	
World Languages or Fine Arts	1		_	
Fine Arts or Economics	_		1	
Economics or Personal Finance	1		_	
Career & Technical Education <sup>3</sup>	4		4	
Electives	1		_	
Student Selected Test 4	_	1	_	1
TOTAL CREDITS	22	6	26	9

#### **NOTES**

- 1 Math courses must be at or above the level of algebra and shall include different course selections among Algebra I, Geometry, Functions and Data Analysis, Algebra II, or others above the level of Algebra II.
- 2 Science courses must be taken from at least three disciplines— Earth Science, Biology, Chemistry or Physics, or completion of the sequence of science courses are 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 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. 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 as prescribed by the board.
- 5 Three years of one language or two years of two different languages are required. All students are encouraged to take one or more world language courses.

#### 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 <sup>1</sup>	3
Science <sup>2</sup>	2
History and Social Sciences <sup>3</sup>	2
Health and Physical Education	2
Fine Arts or	
Career and Technical Education	1
Electives <sup>4</sup>	6
Total Credits	20

#### Notes

- <sup>1</sup> 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.
- <sup>3</sup> 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.

#### **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 (6 or more credits) behind 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; and
- complete a career-aptitude 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 for 2 full credits chosen from a concentration of courses that provide a foundation for further education, training, or preparation for employment. A course may satisfy the requirement for 1 credit in a fine art or career and technical education course and for sequential electives.

#### **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" (3.0 unweighted GPA) or better and
- 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" (3.5 unweighted GPA) shall receive a Board of Education Seal on the diploma.

#### Career and Technical Education— Virginia Board of Education's Seal

The Board of Education's Seal for Career and Technical Education is awarded to students who meet the following:

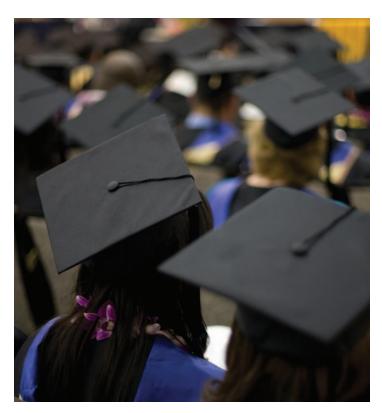
- Requirements for a Standard or Advanced Studies Diploma;
- A prescribed sequence of courses in a career and technical education concentration or specialization; and
- Maintain a "B" (3.0 unweighted GPA) or better average in those courses or pass an examination or an occupational competency assessment in a career and technical education concentration or specialization 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.

#### Advanced Mathematics and Technology— Virginia Board of Education's Seal

The Board of Education's Seal of Advanced Mathematics and Technology is awarded to students who meet the following:

- Requirements for either a Standard or Advanced Studies Diploma;
- Mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a "B" average (3.0 unweighted GPA) or better; and
- 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.

#### Excellence in Civics Education— Virginia Board of Education's Seal

The Board of Education's Seal for Excellence in Civics Education is awarded to students who meet the following:

- Requirements for either a Standard or Advanced Studies Diploma;
- Virginia and United States History and Virginia and United States Government courses with a grade of "B" (3.0 unweighted GPA) or better;
- Good attendance and no disciplinary infractions as determined by local school board policies; and
- 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.

#### **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 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. 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. If a student drops a Virtual Virginia Course, there is a \$75 fee. Courses pursued through this method are those courses that are not offered at the high school. 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 to encourage eligible high school seniors to complete requirements for a high school diploma and concurrently earn at least 15 hours of transferable credits toward a college degree. This results in a more productive senior year and reduces the amount of college tuition for families. See your school counselor for more information.

#### **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: http://www.doe.virginia.gov/instruction/grad uation/early\_college\_scholars/index.shtml

#### **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 1 credit. See your school counselor for additional details.

#### **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 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	
Diploma Type	STD	ADV	STD	ADV	STD	ADV
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
Total	6	9	4	6	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 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 abilities 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.

**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/Advanced level is offered as a college preparatory/ school-to-work program. Students in Academic/Advanced classes are engaged in a rigorous curriculum designed to stimulate and encourage academic growth and performance.

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.

- 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. 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.

#### STUDENT COURSE LOAD

All students through grade 12 shall maintain a full-day schedule of classes unless:

- A waiver is granted by the Superintendent/Designee;
- A recommendation of the principal and acceptance by a college or university has qualified a student to be released during school hours to take college or university courses. Tuition and transportation for these courses are the responsibility of the student; or
- Students are taking college courses for dual credit according to the Virginia accreditation standards.

#### 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.

#### **GRADING SCALE**

The Division's grading scale is:

Grade	Range
A	90–100
В	80–89
C	70–79
D	60–69
F	0–59

#### GRADE POINT AVERAGE, WEIGHTED GRADES, AND RANK IN CLASS

#### 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. 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

GPA will 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 the second semester of the senior year when final class rank is determined.

Grade	Standard/ Academic/ Advanced	Honors / AP Dual Credit/ Dual Enrollment
Α	4	5
В	3	4
C	2	3
D	1	2
F	0	0

## EARLY HIGH SCHOOL PROGRAM COMPLETION:

A student planning to satisfy all graduation requirements established by the Commonwealth of Virginia and Albemarle County Public Schools prior to his or her cohort's graduation date may petition the school principal for early graduation. The student must write a plan in collaboration with school counseling staff and his or her parent or guardian including courses and other requirements to be fulfilled. The plan must also outline the student's reason for requesting early graduation. Reasons may range from hardships to plans for early college attendance. A request for early graduation will be approved at the discretion of the school principal. Students wishing to graduate in a time period of less than four years must be able to show that they can meet their graduation requirements. In addition, students must show that they have a sustainable post graduation plan. Students whose plans are approved will be remain enrolled at the school through their graduation date unless special circumstances are determined by the principal.

#### REGULATIONS GOVERNING THE SECONDARY SCHOOL TRANSCRIPT

On March 29, 2007, the Virginia Board of Education adopted amended regulations governing the Secondary School Transcript. These revisions were made in order to strengthen the transcript regulations and to bring them into conformity with amended or new state and federal laws as well as the needs of higher education. The secondary school transcript regulations became effective for students taking secondary courses for credit beginning in the 2008-2009 school year.

When parents request a transcript from the high school, the student's "test record" is required by law to be on it as described here from the regulations.

Test record, to include at least the highest score earned, if available, on college performance-related standardized tests such as SAT and ACT, excluding Standards of Learning (SOL) test scores.

#### **COURSE AND ATTENDANCE PROCEDURES**

#### **Add/Drop Procedures**

Course selection for the upcoming year is an opportunity for each student to think carefully about interests, achievement, and educational and career goals. Give very serious consideration to this registration process. Research indicates that college success is strongly related to the level of difficulty of high school courses.

Teacher recommendations for course selection and placement are based on students' interests, ability, and performance. School counselors use these recommendations to assist each student in planning a program of study and selecting of courses for the next school year.

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 for year-long classes, and five (5) school days have passed for semester classes.

#### Other considerations:

- Due to budget and staffing guidelines, course selections are finalized by the end of the preceding school year.
- Selected courses may be offered during zero period, which meets before school.
   Students who register for these courses must provide their own transportation.
- A course is offered only if enough student requests support that course.
- Many courses list prerequisites for enrollment.
- Electives: alternate choices are made, as the school reserves the right to assign students the alternate choice if necessary or if scheduling conflicts occur.
- Corrections to student schedules must take place on or before the 5th day of the semester for semesterlong courses and on or before the 10th day of each semester for year-long courses,

to a prevent penalty or notation on the student's transcript.

- Added Classes: Classes may only be added under extenuating circumstances and must take place on or before the 5th day of the semester for semester-long courses and on or before the 10th day of each semester for year-long courses.
- Dropped Classes: Classes dropped after the 5th day of the semester for semester-long courses and after the 10th day of each semester for year-long courses but before the 2nd week after the 1st interim period will have a "W" (withdraw) noted on the transcript. The "W" is not factored into the GPA. Permission of the Principal is required.
- Under extenuating circumstances, exceptions may be considered by the Principal for a class to be dropped after the above dates. A withdrawn failure (WF) is recorded on the student's transcript. The withdrawn failure (WF) is included in the GPA calculation.
- An appeal of this policy may be considered by the Principal for the student to receive a Withdrawn (W) on their transcript and not have the course included in the GPA calculation.
- Dual Enrollment/College courses follow the college 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.

#### **Loss of Credit**

Loss of credit occurs when the student fails to meet attendance requirements. Each time loss of credit occurs, the student, parent/guardian, and teacher is informed in writing. No Credit (NC) appears where the grade is listed. The grade is not included in the calculation of the GPA.

#### Translation of Pass/Fail Grades

Students receiving a "Pass" in a course designated as pass/fail are credited with completion of the course, but the grade from such a course is not included in the calculation of the GPA. Students receiving a "Fail" in a pass/fail course receive a grade point of 0, which is included in calculations of the GPA.

# Transcript Evaluation of Foreign Study Grades

Transcripts of foreign study for students transferring for the first time require evaluation to determine standard units of credit that may count toward graduation. In order for foreign records to be considered official, they must be received sealed by the Albemarle County Public Schools, International, and ESOL Office from the foreign school. Documentation must include:

- courses;
- grades and a grading scale; and
- the number of minutes in a class, the number of times each class meets weekly, and the number of weeks in a school year.

Evaluation must be completed and standard units of credits awarded within the first semester of enrolling in an Albemarle County school. The responsibility for obtaining clarification from the foreign site rests with the parents and students.

#### Attendance

School attendance is critical to academic achievement and preparing students for the world of work and personal success. Each parent or guardian having charge of a child within the compulsory attendance age is responsible for the child's regular and punctual attendance at school as required under provisions of state law.

#### Class Absences

Absences are recorded by individual classes, not by school day. The principal has the discretion to deny credit for the semester to a student who misses more than 4 single instructional blocks during a semester (1/2 of the course). A note that includes the date(s) of absence(s) and reason for absence should be sent to the school upon the student's return. All notes are retained for the use of the Attendance Committee. Should an appeal be necessary, students must submit an attendance appeal to the Appeals Committee beginning with the first absence over the limit.

#### Pre-Arranged Absences

Requests for extended absence because of travel, college visits, etc., should be submitted in writing prior to the absence. The dates to be missed and the nature of the absence should be included in the requests. Vacations and appointments should be scheduled outside of class time whenever possible. Pre-arranged absences do count toward absences for attendance.

#### School-Related Absences

Absences that result from school-related activities do not count toward absences for attendance. These include but are not limited to the following: field trips, homebound instruction, sport activities, guidance or group meetings, late bus.

A school-related absence includes participation in a regional, state, and/or national competition in an activity that is not offered by the school. The activity fosters the development of the student's physical, academic, performing, or exhibition art talents, which is the culmination of a year's participation, and the student's participation reflects favorably on the school and the community.

#### **Out-of-School Suspension**

After the third calendar day of absences resulting from out-of-school suspension, days of subsequent suspension count against the limit of absences for earning credit. The Attendance Committee gives special attention to these absences and may withhold a final decision on loss of credit until the end of the semester or the current school year, as appropriate. During this time, the student's behavior is monitored to assess progress.

#### **Early Dismissal**

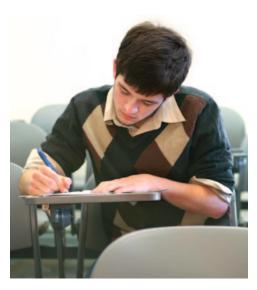
If a class is missed due to early dismissal, it is considered an absence. As noted previously, absences are recorded by individual classes not by school day. Three early dismissals equals an absence in the applicable class(es).

#### Tardy to Class

An absence is assigned each time a student is tardy to class three times during a semester. These absences do count toward absences for attendance and possible denial of credit.

#### **Loss of Credit**

Loss of credit occurs when the student fails to meet attendance requirements. Each time loss of credit occurs, the student, parent/guardian,



and teacher is informed in writing. No Credit (NC) appears where the grade is listed. The grade is not included in the calculation of the GPA.

#### Make-up Work

Students who have been absent or are suspended are responsible for the work missed. See student handbook for details.

#### **Appeals Process**

Loss of credit may be appealed to the School Attendance Committee. The principal makes decisions regarding loss of credit. Any decision to deny credit or promotion may be appealed to the Superintendent or her designee for final disposition.

#### **Exams**

Exams are a valuable cumulative learning experience for all students. Exams are designed to cover the objectives of the curriculum; the actual design of the exam is the instructor's professional decision. Exams are scheduled each semester. All year-long courses have exams at mid-term and at the end of the year. Exams count 20% of the grade.

#### Exam Exemptions

As an incentive for students to attend school regularly and consistently perform well, exam exemptions can be earned by students who meet the following criteria for grades, attendance, and behavior during the final semester of the course.

- **Grades**—The student must have a grade of 90 or higher in the class.
- **Behavior**—No student is eligible for exemptions who has had an in-school or out-of-school suspension.

# SUBSTITUTION OF SOL TEST RESULTS FOR THE SEMESTER EXAM

Final exams continue to count 20% of the final semester grade.

#### Standard, Academic, Advanced Level Courses

Schools have the option of allowing students enrolled in Standard, Academic, Advanced level courses to substitute an SOL end-of-course exam for the final exam. This should be a team/ department level decision. If this option is chosen by a school team/department, a 4th nine weeks cumulative performance task shall be developed to engage students during the 4th nine weeks in assessments that will demonstrate learning through research papers, investigative labs, presentations, or performance task.

If this option is utilized at the school level, students enrolled in Honors/AP, dual enrollment courses, and those courses without SOL tests, still will be able to exempt final exams under an exam exemption procedure through which students have a 90 semester average in the course prior to the exam and meet the behavioral criteria. Students who do not meet the exemption criterion will be required to take a final exam.

#### Honors/AP

High school staff will use the school improvement process to determine second semester exam practices and will communicate exam expectations and procedures to students and parents at the beginning of the second semester.

#### ATHLETIC ELIGIBILITY

#### Virginia High School League Eligibility

To be eligible for participation on athletic teams, the Virginia High School League (VHSL) requires that students be enrolled in five (5) credits (in progress) and have passed five (5) classes (earned credits for 5 classes) the previous semester. Repeating a course for which a passing grade was received does not count toward the required five courses for athletic eligibility. First semester 9th graders are eligible on the basis of their promotion from the 8th grade the previous semester. See Athletic Handbook for details.

- Any course in which a student receives a full credit during one semester may be doubled and counted as such for eligibility purposes.
- Any course taken every day or every other day (for an extended block i.e. an A-B block) for the entire year counts as a stand alone course for one credit.
- Any semester course taken for partial credit counts as one course.

- In the case of hybrid schedules one must count the courses based upon what is outlined above. Here are some scenarios:
  - Straight 4 x 4 (four courses taken each semester– each for one credit)
     These are double and as such a student must past a minimum of three each semester to be eligible
  - 2. 4x4 plus year long courses or semester courses: Student is taking three 4 x 4 courses and 3 year long or semester courses. If the student fails one of the 4 x 4 courses (equivalent of four courses), he/she must pass at least one year long courses to attain the required "pass five" standard. If a student fails two of the 4 x 4 courses (equivalent of two courses), he/she must pass all three of the year long courses to attain 5 courses passed for credit.

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 —Academic Eligibility Requirements

Students entering a Division I or Division II College who wish to participate in NCAA athletics are required to meet certain academic eligibility standards for incoming Freshman. Students enrolling at an NCAA institution for the first time need to also complete the amateurism questionnaire through the Eligibility Center Web site. Students need to request final amateurism certification prior to enrollment.

#### **Core Courses**

Be sure to look at your high school's list of NCAA-approved core courses (English, History, Math, Science and World Language) on the Eligibility Center's Website to make certain that courses being taken have been approved as core courses. It is recommended that student athletes interested in Division I or Division II college sports not take core courses through online credit-recovery programs. NCAA guidelines state that courses taken through credit recovery programs might not meet NCAA core-course requirements. Any student who hopes to participate in Division I or Division II sports in college will have his or her transcript reviewed by the NCAA Clearinghouse. Go online to www.eligibilitycenter.org for details on core course requirements.

#### **Test Scores**

- The SAT score used for NCAA purposes includes only the critical reading and math sections. The writing section of the SAT is not used.
- The ACT score used for NCAA purposes is a sum of the four sections on the ACT: English, Mathematics, Reading, and Science.
- All SAT and ACT scores must be reported directly to the NCAA Eligibility Center by the testing agency. Test scores that appear on transcripts will not be used. When registering for the SAT or ACT, use the Eligibility Center code of 9999 to make sure the score is reported to the Eligibility Center.

For more information regarding the rules, please go to www.NCAA.org. Click on "Academics and Athletes" then "Eligibility and Recruiting" or visit the Eligibility Center Website at www.eligibilitycenter.org or you may call the NCAA Eligibility Center if you have questions: 1-877-262-1492

#### NCAA Division I —Academic Eligibility Requirements

#### **16 Core Course Rule**

Students are required to completed 16 core courses as listed below.

- 4 years English.
- 3 years Mathematics (Algebra I or higher)
- **2** years of Natural/Physical Science (1 year of lab if offered by high school).
- 1 years of additional English, Mathematics or Natural/Physical Science.
- 2 years History or Government
- **4 years of additional courses** (from any area above, world language or nondoctrinal religion/philosophy).

#### **Test Scores**

Division I has a sliding scale for test scores and grade-point average. A selection of the sliding scale for those requirements is shown in the chart below.

#### **Grade-Point Average**

Only core courses are used in the calculation of the grade-point average. See sliding scale below.

Sliding Scale for NCAA Eligibility Division I					
Core GPA	SAT combined score	ACT combined score			
3.5 or above	420	39			
3.0	620	52			
2.75	720	59			
2.5	820	68			
2.25	920	77			
2.0	1010	86			

#### NCAA Division II —Academic Eligibility Requirements

#### 14 Core Course Rule:

Students are required to complete 14 core courses as listed below. Beginning August 1, 2013, Division II will require 16 core courses.

- 3 years English.
- 2 years Mathematics (Algebra I or higher)
- 2 years of Natural/Physical Science (1 year of lab if offered by high school).
- 2 years of additional English, Mathematics or Natural/Physical Science.
- 2 years History or Government
- **3 years of additional courses** (from any area above, world language or nondoctrinal religion/philosophy).

#### **Test Scores**

Division II requires a minimum SAT score of 820 and a minimum ACT sum score of 68.

#### **Grade-Point Average**

Division II requires a minimum grade-point average of 2.0. Only core courses are used in the calculation of the grade-point average.

# 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; and
- 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 (see opposite page).

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 16 CAREER CLUSTERS AND ALBEMARLE COUNTY'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.

	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			
5	Human Services	4	Legal, Protective, Education,	
6	Law, Public Safety, Corrections & Security	7	& Human Services	
7	Government & Public Administration			
8	Business Management & Administration			
9	Finance	5	Business, Finance, Marketing	
10	Information Technology	J	& Information Technology	
11	Marketing, Sales, & Service			
12	Agriculture, Food & Natural Resources			
13	Architecture & Construction			
14	Transportation, Distribution & Logistics	6	Engineering, Technology, Science & Natural Resources	
15	Manufacturing			
16	Science, Technology, Engineering & Mathematics			



### 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

#### 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	Surgical Technician, Biotechnology Technician	Radiation Therapist
certification or college degrees)	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?

ı	Diploma with	Certification or	College degree
ı	some training	Associate degree	plus
	Vehicle Sales	Real Estate Sales Agent	Sales Engineer, Buyer
	Sales Associate/Asst. Manager	Sales Representative, Store/Regional Manager	Marketing Manager, Public Relations Representative
	Telemarketer	Auctioneer, Merchandise Display Artist	Market Research Analyst
ш			

#### 9. Finance



Do you like working with numbers?

Do you have excellent attention to detail?

Do 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

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.



#### VIRGINIA'S 16 CAREER CLUSTERS

#### 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

#### 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

#### 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

#### 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 multi-disciplinary and creative

ways of thinking about problem solving and managing knowledge. Thus, we suggest that students think creatively about how a variety of electives, especially in the areas of art, business, engineering, and human relations, can support their career goals. Remember, creativity is the key to success in the 21st century!

#### **ELECTIVES AND CAREER PATHWAYS LISTED BY SCHOOL**

Please refer to the Course Description Section for complete listings, descriptions, prerequisites and credits information.

www.k12albemarle.org/AlbemarleHS

Pathway / Course	Pathway / Course	Pathway / Course
ART, AV, COMMUNICATION & HUMANITIES	Principles of Business & Marketing 9-10	Physics B (AP)
Advanced Concert Choir	Principles of Management, Bus 200	Psychology (AP)
African American Studies	Probability and Statistics	Sociology
American Wars: Vietnam & Civil War 11-12	Psychology11–12	World Languages
Art I–IV9–12	Spanish Conversation and Writing	vvolid Languages
Art History (AP)11–12	for the Business World	
Ceramics I–IV9–12	Speech & Communication9–12	HOSPITALITY & TOURISM SERVICES
Concert Band I–IV9–12	Sports, Enter. & Rec. Marketing I–II 10–12	Barbering I-II (CATEC)11–1
Concert Choir I-IV9-12		Business Management9–1
Concert Strings9–12	Statistics (AP)	Cosmetology I–II (CATEC)11–1
Creative Writing I–IV9–12	World Languages9–12	Culinary Arts I–II (CATEC)
Debate9–12		Fitness/Weight Training11–1
Design, Multimedia & Web Tech I–II 11–12	ENGINEERING, TECHNOLOGY,	Fitness/Yoga
Drama I–IV9–12	SCIENCE & NATURAL RESOURCES	Hospitality, Tourism and Recreation9-1
Drama V	Air Force Junior ROTC I–IV @MoHS 9–12	International Foods9–1
Ensemble— Men's and Women's I–IV 9–12	Architectural Drawing10–12	Intro to Culinary Arts (CATEC)10–1
Ensemble—Women's Advanced9–12	Architectural Drawing/	Intro to Interior Design & Housing9–1
Fashion Marketing10-12	ARC I21 Architectural Drafting I (PVCC) 10–12	Life Management I–II9–1
Film Studies/Filmmaking	Astronomy	Marketing I–II
German Inventors, Movers and Shakers9–11	Auto Body Technology I–II (CATEC)10–12	Spanish Conversation and Writing
Germany (800 AD to Present)	Auto Service Technology I–II (CATEC)11–12	for the Business World 9–1
Germany (20th Century to Today) 10-12	Biology AP11–12	Sports, Enter.& Rec. Marketing I-II
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History Through Film	Qualitative Analysis	LCCOL DOCTCOTING
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		Comparative Govt & Politics
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World Languages9–12	Calculus (AP) AB	ODDITIONAL CHAICHMANT
Yearbook I–IV	Calculus (AP) BC	ADDITIONAL ENRICHMENT
	Chemistry (AP)	& CAREER EXPERIENCES
	Dental Assistant I (CATEC)	*AVID9–1
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	Fitness/Weight Training	Economics and Personal Finance9–1
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Comparative Govt & Politics	Health & Medical Science Academy	* admission criteria apply
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Design, Multimedia & Web Tech I–II 9–12	Intro to Health & Medical Science 9-12	All students are expected to have a community

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Graphic Communications ......9–12
Macro Economics AP ..............10–12

 based learning experience by the time they

graduate.

#### **ELECTIVES AND CAREER PATHWAYS LISTED BY SCHOOL**

Please refer to the Course Description Section for complete listings, descriptions, prerequisites and credits information.

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Pathway / CourseGrade Level	Pathway / Course	Pathway / Course
ART, AV, COMMUNICATION & HUMANITIES	ENGINEERING, TECHNOLOGY,	Pharmacy Technician (CATEC)
African-American Literature9–12	SCIENCE, & NATURAL RESOURCES	Physics I
African-American Studies	Air Force Junior ROTC I –IV9–12	Physics B (AP)11–12
Art I–IV9–12	Air Force ROTC Drill9–12	Psychology &AP10–12
Ballet I, II9–12	Anatomy & Physiology10–12	Sports Medicine I,II11-12
Studio Art (AP)	Animal Studies	World Languages9v12
Basics of Tech Theater9–12	Arch. Drawing I, II & ARC 121 (PVCC)10–12	<b>Note</b> : Students interested in medical careers
Ceramics I–IV and Advanced9–12	Auto Body Tech I, II (CATEC)10–12	should consider taking chemistry & other higher
Concert Band9–12	Auto Service Tech I, II (CATEC)11–12	level sciences in high school.
Concert Choir	Biology—Ecology Cooperative10–12	Ü
Creative Writing I, II9–12	Building Trades I, II (CATEC)10–12	HOSPITALITY & TOURISM SERVICES
Debate9–12	Classes in Art	Barbering I, II (CATEC)11–12
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Digital Imaging I–III9–12	Construction Technology10–12	Business & Marketing Cooperative11–12
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Filming & Digital Video Editing	Ecology10–12	Culinary Arts (Introduction-CATEC) 10–12
Fashion Design11–12	Engineering Drawing DR 140 (PVCC) 10–12	Culinary Arts I (MoHS)
Improvisation and Comedy9–12	Environmental Science AP	Culinary Arts I, II (CATEC)
Interior Design & Housing Introduction11–12	Geology9–12	Fashion Design (Intro.)
Jazz Band9–12	Geospatial Technology9–12	Fitness/Weight Training
Journalism I–IV	Geospatial Technology (CATEC)11–12	Interior Design & Housing (Intro.)
Marching Band9–12	Masonry I, II (CATEC)10–12	Life Management I9–12
Model United Nations10–12	Materials & Processes Technology 9–11	Marketing I, II
Multimedia Crafts I–IV9–12	Microsoft IT I,II9-12	Principles of Business & Marketing 9–10
Music Industry Technology (CATEC/MoHS) 11–12	Music Industry Technology (CATEC/MoHS) 11–12	Sports, Entertain. & Rec. Marketing 10–12
Music Theory (AP available)9–12	Principles of Info Systems ITE 120 (PVCC) 10–12	World Languages9–12
Percussion Ensemble9–12	Technical Drawing9–12	vvolid Languages 12
Philosophy	World Languages9–12	ODDITIONAL CLECTIVES CHALCHMENT
Photography I–IV9–12		ADDITIONAL ELECTIVES, ENRICHMENT,
Psychology & AP	LEGAL, PROTECTIVE,	& CAREER EXPERIENCES
Screen/Stage Writing9-12	EDUCATION & HUMAN SERVICES	Air Force Junior ROTC Courses & Camps9–12
Show Choir	Air Force Junior ROTC I-IV9–12	*AVID
Speech & Communication9–12	Classes in Art9–12	Business & Marketing Cooperative11–12 *C-Quest
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String Ensemble9–12	Business Management9–12	Education for Employment & Work Study9–12
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Visual Thinking & Intro. to Film 10–12	EMT & Firefighter( CATEC)11–12	*Independent Study
Vocal Jazz Ensemble9–12	Health/Medical Sciences (Intro) 9-12	Leadership I–IV
Wind Ensemble9–12	Health/Medical Sciences (PVCC) 10-12	*Math, Engineering and
Women's Ensemble-Advanced9–12	Mediation Training I, II9–12	Science Academy (MESA)9–12
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World Languages9–12	MS IT I,II	SAT Prep/Successful
	Principles of Business & Marketing9–10	Strategies for College
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Microsoft IT I,II9-12	Culinary Arts (Introduction - MoHS) 9–12	World Languages9–12
Office Specialist I, II, III9–12	Culinary Arts (Introduction-CATEC) 10–12	vvolid Languages
Principles of Business & Marketing 9–10	Culinary Arts I (MoHS)	*admission criteria apply
Principles of Info Systems ITE 120 PVCC .10–12	Culinary Arts I, II (CATEC)	астизают спена арргу
Sports, Entertain. & Rec. Marketing I, II 10–12	Dental Assistant (CATEC)	All students are encouraged to have a community
Yearbook I–IV	EMT & Firefighter (CATEC)11–12	based learning experience by the time they
World Languages9–12	Fitness/Weight Training	graduate. For example: Internship, Cooperative
Business & Marketing Coop11-12	Health/Medical Sciences (Intro)	Education, Virginia Teachers For Tomorrow,
	Health/Medical Sciences (PVCC)	Independent Study, Community Service, Work
	Life Management I9–12	magandent study, community service, work
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Nurse Aide (CATEC) ......11–12

#### **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 (WAHS)

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Art I–IV	9–12
Art Studio (AP)	11–12
Art History (AP)	11-12
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Ceramics I–IV	9–12
Concert Choir I–IV	9-12
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Creative Writing / Literary Magazine	10-12
Digital Imaging I–III	9-12
Drama I–IV	9–12
European History (AP)	10–12
Film Studies/Filmmaking	10–12
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History Through Film	10–12
Jazz Band I–IV	9–12
Journalism I–IV	9–12
Men's Ensemble (Chorus)	
Multimedia Crafts I–IV	9–12
Music Industry Technology (CATEC)	11–12
Photography I–III	9–12
Percussion Ensemble	9–12
Philosophy	10–12
Psychology (AP)	11–12
Psychology (AP)	10-12
Speech & Communication	10–12
Speech & Communication	9–12
Statistics (AP)	11–12
String Ensemble I–IV	
Symphonic Band I–IV	9–12
Teacher Fellows	
TV Production I–IV	9–12
Virginia Teachers for Tomorrow I, II	
Women's Ensemble (Chorus)	9-12
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Japanese, Latin, Spanish)	9–12
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## BUSINESS, FINANCE, MARKETING, & INFORMATION TECHNOLOGY

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Design Multi-Media & Web Tech. I, II9-12
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Principles of Business & Marketing 9–12
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Web Design I, II (PVCC)11–12
World Languages I-IV (French, German,
Japanese, Latin, Spanish)9–12
World Languages AP (French, Spanish Language,
Spanish Literature, Latin) grades vary
Vearbook I_IV 9_12

r ddiwdy / course
ENGINEERING, TECHNOLOGY, SCIENCE, & NATURAL RESOURCES
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Architectural Drawing I (PVCC), II 10–12
Architectural Drawing I (FVCC), II10–12
Astronomy PVCC) 10–12
Auto Body Tech I, II (CATEC)10–12
Auto. Service Tech I, II (CATEC)
Biology II (AP)11–12
Building Trades I, II (CATEC)10–12
Calculus (AP) AB, BC11–12
Chemistry II (AP)11–12
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Ecology10–12
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### LEGAL, PROTECTIVE, EDUCATION & HUMAN SERVICES

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Cosmetology I, II (CATEC)11	-1.
Dental Assistant (CATEC)11	-1
EMT & Firefighter(CATEC)11	-1.
Pharmacy Tech (CATEC)11	-1
Psychology (AP)10	)–1
Speech & Communication	<del>)</del> –1.
Teaching Fellows I, II11	-1.
Virginia Teachers for Tomorrow I, II 11	-1
<u>g</u>	

### **HEALTH SERVICES**Biology II (AP) .

HOSPITALITY & TOURISM SERVICES
African Culture, Music and Dance I,II10-12
Barbering I, II (CATEC)11–12
Cosmetology I, II (CATEC)11–12
Culinary Arts I, II (CATEC)10–12
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Summer Internship (CATEC)11–1
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*Education for Employment & Work Study .9-1
*ESOL
*AVID9–1
* admission criteria apply

All students are expected to have community—based learning experiences before graduation: independent study, community service, internship, coop

# Index of Courses

Course titles are listed here in alphabetical order. Go to the page number for detailed information on course descriptions, prerequisites, grade levels, schools where offered, and credits.

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AFJROTC Drill only
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# VISION

All learners believe in their power to embrace learning, to excel, and to own their future.

# MISSION

The core purpose of
Albemarle County Public Schools
is to establish a community
of learners and learning,
through rigor, relevance, and
relationships, one student at a time.

# VALUES

**EXCELLENCE**:

We believe in meaningful learning that stretches people to the frontiers and boundaries of their abilities.

YOUNG PEOPLE: We believe young people

deserve the best we have to offer. Each individual child is capable and has the right to safety, mutual respect, and learning.

**COMMUNITY**: We believe in our

collective responsibility to work together in a cooperative effort to achieve common goals by building communities of practice, establishing a high quality learning community, and listening to the community.

RESPECT: We believe in treating

all individuals with honor

and dignity.

# GOALS

Goal 1: Prepare all students to succeed as members of a global community and in a global economy.

Goal 2: Eliminate the Achievement Gap.

Goal 3: Recruit, retain and develop a diverse cadre of the highest quality teaching personnel, staff and administrators.

Goal 4: Achieve recognition as a world-class educational system.

**Goal 5:** Establish efficient systems for development, allocation and alignment of resources to support the Division's vision, mission and goals.