

**AMHERST COUNTY HIGH SCHOOL  
PROGRAM OF STUDIES  
2015-2016**



**Amherst County  
Public Schools**

Dear Students:

The program of studies is designed to give students and their parent's information regarding graduation requirements, descriptions of courses being offered, and prerequisite requirements for each course. The program of studies is a guide to assist students as they decide which courses best fit their educational goals and objectives. Our school counselors are here to assist students in the course selection process. Their primary objectives during this process are to certify that students are enrolled in courses that meet state graduation requirements and that students select courses that are appropriate for their abilities and life goals.

The faculty and staff of Amherst County High School will continue to stress the importance of enrollment in the Pre-Advanced Placement (Pre-AP) and Advanced Placement (AP) curricula. Enrollment in these courses has proven to serve as a gauge for predicting success in college and beyond. Although we encourage students to take Pre AP and AP courses, it is important to understand that the Pre-AP and AP courses are demanding and the teachers adhere to rigorous academic standards and expectations.

All students entering ninth grade from the 2011-12 school year and beyond must pass Economics and Personal Finance in order to graduate. Students entering ninth grade beginning in 2013-14 and beyond must earn a Career and Technical Education credential in order to earn a standard diploma. School counselors will monitor students' academic and career plans to confirm students are enrolled in the necessary courses to meet the graduation requirements for their respective diploma type.

There are many opportunities for our students to achieve a successful educational experience that prepares them for life beyond high school. I encourage all students to take full advantage of the opportunities that Amherst County High School has to offer. School counselors will be available to guide students through the many decisions involved in ensuring all students are career and college ready upon graduation.

Sincerely,  
William Wells, Ed. D  
Principal

**Standard Credit and Verified Credit**

For all year-long courses, a standard unit of credit is awarded for the course in which the student successfully completes 140 clock hours of instruction. For certain year-long courses in math, science, English, and history, a verified unit of credit is awarded for the course (in addition to the standard unit of credit) if the student successfully completes the course and achieves a passing score on the related end-of-course Standards of Learning assessment. In order to receive a diploma, secondary students will be required to earn verified units of credit in addition to standard units of credit.

Students shall earn the standard units of credit and verified units of credit to meet graduation requirements as follows.

**Standard Diploma Requirements**

*Standard Diploma*

<i>Discipline Area</i>	<i>Standard Unit of Credit</i>	<i>Verified Units of Credit</i>
English	4	2
Mathematics <sup>1</sup>	3	1
Science <sup>2</sup>	3	1
Social Studies <sup>3</sup>	3	1
Health and PE	2	
Fine Arts, Foreign Language or CTE	2	
EPF	1	
Electives <sup>4</sup>	4	
Student Selected Test <sup>5</sup>		1
<b>TOTAL</b>	<b>22</b>	<b>6</b>

<sup>1</sup> Mathematics courses completed to satisfy this requirement shall be at or above the level of Algebra I and shall include at least two course selections from among Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra and Geometry.

<sup>2</sup> Science courses completed to satisfy this requirement shall include selections from at least two science disciplines: Earth Science, Biology, Chemistry, or Physics.

<sup>3</sup> Social Studies courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one World History or World Geography course.

<sup>4</sup> A student must have earned at least two sequential electives.

<sup>5</sup> A student may utilize additional assessments for earning verified credits as prescribed by the State Board of Education.

## Advanced Studies Diploma Requirements

### Advanced Studies Diploma

<i>Discipline Area</i>	<i>Standard Unit of Credit</i>	<i>Verified Units of Credit</i>
English	4	2
Mathematics <sup>1</sup>	4	2
Science <sup>2</sup>	4	2
Social Studies <sup>3</sup>	4	2
Foreign Language <sup>4</sup>	3/4	
Health and PE	2	
Fine Arts or CTE	1	
EPF	1	
Electives	3	
Student Selected Test <sup>5</sup>		1
<b>TOTAL</b>	<b>26</b>	<b>9</b>

<sup>1</sup> Mathematics courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II.

<sup>2</sup> Science courses completed to satisfy this requirement shall include selections from three different science disciplines among Earth Science, Biology, Chemistry, Physics, Chemistry II or AP Biology.

<sup>3</sup> Social Studies courses completed to satisfy this requirement shall include U.S. and Virginia History, and U.S. and Virginia Government, and two selections from among World Geography, World History I, and World History II.

<sup>4</sup> Foreign Language courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

<sup>5</sup> A student may utilize additional assessments for earning verified credits as prescribed by the State Board of Education.

### Modified Standard Diploma Requirements for students entering 9<sup>th</sup> grade prior to the 2013-14 school year

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 shall be determined by the student's Individual Education Program (IEP) team and 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 has chosen 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. The student will not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.

Students pursuing the Modified Standard Diploma must pass the eighth grade English RLR and math SOL tests.

### Modified Standard Diploma

<i>Discipline Area</i>	<i>Standard Unit of Credit</i>
English	4
Mathematics <sup>1</sup>	3
Science <sup>2</sup>	2
Social Studies <sup>3</sup>	2
Health and PE	2
Fine Arts and CTE	1
Electives <sup>4</sup>	6
<b>TOTAL</b>	<b>20</b>

<sup>1</sup> Courses completed to satisfy this requirement shall include content from among applications of Algebra, Geometry, and personal finance, and statistics in courses that have been approved by the Board.

<sup>2</sup> Courses completed shall include content from at least two science disciplines: Earth science, Biology, Chemistry, or Physics in courses approved by the Board.

<sup>3</sup> Courses completed to satisfy this requirement shall include one unit of credit in U.S. and Virginia History and one unit of credit in U.S. and Virginia Government in courses approved by the Board.

<sup>4</sup> Courses to satisfy this requirement shall include at least two sequential electives in the same manner required for the Standard Diploma.

**Diploma Requirements  
(Graduating Class of 2017 and beyond)**

Beginning with the ninth-grade class of 2013-2014 and beyond, students shall earn the required standard and verified units of credit as outlined below.

**Standard Diploma**

Credits required for graduation with a *Standard Diploma*:

<i>Discipline Area</i>	<i>Standard Unit of Credit</i>	<i>Verified Units of Credit</i>
English	4	2
Mathematics <sup>1</sup>	3	1
Laboratory Science <sup>2</sup>	3	1
History and Social Studies <sup>3,6</sup>	3	1
Health and PE	2	
Foreign Language, Fine Arts or CTE	2	
Economics and Personal Finance	1	
Electives <sup>4</sup>	4	
Student Selected Test <sup>5</sup>		1
<b>TOTAL</b>	<b>22</b>	<b>6</b>

<sup>1</sup> Courses completed to satisfy this requirement shall include at least two course selections from among: Algebra I, Geometry, Functions, and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II.

<sup>2</sup> Courses completed to satisfy this requirement shall include selections from at least two different science disciplines: Earth Science, Biology, Chemistry, or Physics.

<sup>3</sup> Courses completed to satisfy this requirement shall include United States and Virginia History, United States and Virginia Government, and one course in either courses to satisfy this requirement.

<sup>4</sup> Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

<sup>5</sup> A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the board in 8VAC20-131-110.

<sup>6</sup> Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association, or acquired a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential, or license for (i) the student-selected verified credit and (ii) 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 of Education as an additional test to verify student achievement.

**Advanced Studies Diploma**

Credits required for graduation with an *Advanced Studies Diploma*:

*Advanced Studies Diploma*

<i>Discipline Area</i>	<i>Standard Units of Credit Required</i>	<i>Verified Credits Required</i>
English	4	2
Mathematics <sup>1</sup>	4	2
Laboratory Science <sup>2</sup>	4	2
History and Social Studies <sup>3</sup>	4	2
Foreign Language <sup>4</sup>	3	
Health and PE	2	
Fine Arts or CTE	1	
Economics and Personal Finance	1	
Electives	3	
Student Selected Test <sup>5</sup>		1
<b>TOTAL</b>	<b>26</b>	<b>9</b>

<sup>1</sup> Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, Algebra II, or other mathematics courses above the level of Algebra II. The board shall approve courses to satisfy this requirement.

<sup>2</sup> Courses completed to satisfy this requirement shall include selections from at least three different science disciplines from among Earth Science, Biology, Chemistry, or Physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. The board shall approve additional courses to satisfy this requirement.

<sup>3</sup> Courses completed to satisfy this requirement shall include U.S. and Virginia History, and U.S. and Virginia Government, and two courses in either World History, or Geography or both. The board shall approve additional courses to satisfy this requirement.

<sup>4</sup> Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

<sup>5</sup> A student may utilize additional tests for earning verified credit in Computer Science, Technology, Career or Technical Education, Economics or other areas as prescribed by the board in 8VAC20-131-110.

### **Golden “A” Award**

The **Golden “A” Award** is a merit-based program designed to recognize student achievement annually with a certificate and cumulatively after four years of high school with a trophy.

The Golden “A” trophy will be awarded to students in grade 12 who have maintained a cumulative 3.70 GPA for the high school grades 9 through 12.

### **National Honor Society**

Amherst County High School actively participates in the National Honor Society. The faculty selects students for membership at the beginning of their junior year. This selection is based upon scholarship (3.5 GPA), service, leadership, and character.

### **Central Virginia Governor’s School Application Process**

The Governor’s School serves juniors and seniors from five surrounding school divisions. Students take mathematics, science, and technical courses at the Governor’s School in the morning and return to the high school in the afternoon for the remainder of their classes. The curriculum is designed to challenge students in math and science. Students apply for admission in the spring of their sophomore year. Criteria for selection include, but are not limited to the following:

1. Completed Pre-AP Algebra II during the 10<sup>th</sup> grade year.
2. Completed Chemistry during the 10<sup>th</sup> grade year.
3. PSAT scores taken in the fall of the 10<sup>th</sup> grade year.
4. Exceptional interest/aptitude in math and science.
5. High level of achievement in all courses.
6. Outstanding reading comprehension skills.
7. Teacher recommendations.
8. Ability to perform in a self-directed learning atmosphere.

Courses available at the Governor’s School are: Junior Research, Math Analysis, Physics, Dual Enrollment Calculus, Dual Enrollment Biology, Dual Enrollment Computer Science, Dual Enrollment Chemistry, Dual Enrollment Vector Calculus, Dual Enrollment Linear Algebra, Connections in Mathematics, and Senior Technology Seminar and Dual Enrollment Anatomy and Physiology.

### **The Early College Program**

The Early College Program is a unique and exciting partnership with Central Virginia Community College. Early College is a 2 year program designed to allow selected juniors who have successfully completed Algebra II to earn an Advanced Studies high

school diploma and an Associate in Arts and Science degree at the same time. The successful completion of Chemistry in Grade 10 is highly recommended. Students attend classes the morning and have the option of returning to Amherst County High School in the afternoon to take electives or additional math and science courses. Only core content courses will be weighted. Therefore, Orientation, Health, Introduction to Computer Applications, Music Appreciation, Sociology, Speech and Drama will not be weighted. Applications to this program are due in March of the sophomore year.

### **Central Virginia Community College (CVCC) Articulation and Dual Enrollment College Credit**

The Career and Technical Education /College Prep Program is a partnership between Amherst County High School and CVCC. Students successfully completing the high school portion of Career and Technical Education /College Prep program may be eligible to receive college credit for selected courses at CVCC. College level dual enrollment courses are available to students in the Career and Technical Education/College Prep Program. High School counselors can provide more information about the requirements for dual enrollment participation. Dual enrollment courses offered by ACHS or on the CVCC campus include Advanced Composition, Pre-Calculus, Precision Machining Technology (Machine Tools), Heating/Ventilation/Air Conditioning (HVAC), Microcomputer Software Applications, Emergency Medical Technician (EMT), Welding, and Drafting.

### **Lynchburg Regional Governor’s School XLR8 STEM Academy**

This program will be housed at Central Virginia Community College in the Areva Technology Center. It is open to high school juniors and seniors who wish to focus on career and technical education. The goal of the program is to bridge the gap between education and industry to further the economic vitality of the region. The two identified pathways at this time are Health Care Technologies and Mechatronics (blending of mechanical and electrical engineering). Additional information about this program can be obtained from school counselors.

## ONLINE COURSES

### Virtual Virginia

Virtual Virginia provides access to online Advanced Placement and elective courses. Students who meet the prerequisites may enroll through their school counselor. [www.virtualvirginia.org](http://www.virtualvirginia.org)

### Lancer Academy

Students at ACHS may enroll and participate in Lancer Academy using an eLearning curriculum that blends the online course with teacher support. These resources may be utilized when students require credit recovery for graduation or choosing to expedite the earning of verified or standard units of credit. Students must be granted authorization form the administration before enrolling in the Lancer Academy.

### Policy for Awarding High School Units of Credit in Dual Enrollment Courses

#### Core Courses

Dual enrollment core courses are awarded one unit of high school credit regardless of whether the course is taken on or off the high school campus. Students are required to take two semesters of a course to receive one high school credit. The credit is awarded at the completion of two semesters.

#### Elective Courses

Elective dual enrollment courses are awarded ½ credit per **semester course**. These courses may be taken on and off campus.

#### Credits Required for Promotion

9<sup>th</sup> grade to 10<sup>th</sup> grade: 5 credits

10<sup>th</sup> grade to 11<sup>th</sup> grade: 10 credits

11<sup>th</sup> grade to 12<sup>th</sup> grade: 15 credits

#### Course Registration Philosophy

Students are encouraged to enroll in academically challenging courses. School counselors are available to advise students regarding course selections. However, students and their parents maintain the right to select a course at a higher level of difficulty than recommended by teachers and/or school counselors. Students and their parents will make the final decision regarding course selection.

#### Drop/Add Policy

Students who wish to drop or add a course must do so by the end of the tenth day of each semester.

Approval to withdraw from a class must be granted by the school principal.

## Course Sequence

All courses are to be taken in sequence. Students may not take sequenced courses simultaneously unless authorized by the principal or his/her designee.

## Grading Scale

<u>Symbol</u>	<u>Scale</u>	<u>Standard</u>
A+	98-100	4.0
A	95-97	4.0
A-	92-94	3.7
B+	89-91	3.3
B	86-88	3.0
B-	83-85	2.7
C+	80-82	2.3
C	77-79	2.0
C-	74-76	1.7
D+	71-73	1.3
D	68-70	1.0
D-	65-67	0.7
F	Below 64	0.0

### Advanced Placement(AP) Program

Amherst High School offers 11 Advanced Placement courses in the areas of mathematics, science, English and social studies. AP courses are sanctioned by the College Board and upon successful completion of the course and AP Exam colleges may offer course credit to students. Students completing these courses earn an additional point on the grading scale and an additional quality point in their GPA (see grading scale below). Students in grades 8, 9, and 10 take on the challenge of Pre-AP courses in the major content areas. These students earn .5 additional credit in the grading scale (see grading scale below). Please contact your child's counselor for more information regarding Pre-AP and AP coursework. **AP summer assignments will not be a barrier to enrollment in AP courses.**

### Pre-AP and AP Grading Scale

Grades for Pre-AP are based on the standard ACPS grading scale and will have the following final grade point averaging. **A = 4.5; B = 3.5; C = 2.5; D = 1.5; F = 0.**

Dual-enrollment courses offered through ACPS, Advanced Placement(AP) courses, and CVGS courses that may lead to college credit are graded on a 10 point scale and will be weighted with **A = 5; B = 4; C = 3; D = 4; F = 0.**

### **Pre-AP Grading Scale**

<u>Symbol</u>	<u>Scale</u>	<u>Standard</u>
A+	98-100	4.5
A	95-97	4.5
A-	92-94	4.2
B+	89-91	3.8
B	86-88	3.5
B-	83-85	3.2
C+	80-82	2.8
C	77-79	2.5
C-	74-76	2.2
D+	71-73	1.8
D	68-70	1.6
D-	65-67	1.2
F	Below 64	0.0

### **AP Grading Scale**

<u>Symbol</u>	<u>Scale</u>	<u>Standard</u>
A	90-100	5.0
B	80-89	4.0
C	70-79	3.0
D	60-69	2.0
F	Below 64	0.0

### **Diploma Options**

Amherst County High School currently offers the following diplomas: Standard, Advanced Studies, Modified Standard, and Special, and Certificate of Completion. See page 2 for graduation requirements. In addition, students may earn the following state seals: Career and Technical Education, Advanced Mathematics and Technology, Excellence in Civics Education, Department of Education Governor's Seal, and Board of Education Certificate.

#### **\*\*EARLY RELEASE FOR SENIORS\*\***

To be eligible for early release seniors must have met all SOL requirements (passed all assessments required by their diploma type). Remediation classes will be provided during the school day for all Seniors who need to re-take SOL assessments.

### **GRADUATION CEREMONY PARTICIPATION**

**All Seniors who wish to participate in the Graduation Ceremony must successfully complete all diploma and SOL requirements by the end of their senior year.**

# Sequence Charts

## English

A minimum of four (4) levels of English coursework must be successfully completed to meet standard graduation requirements in English

## Social Studies

A minimum of three (3) levels of Social Studies coursework must be successfully completed to meet standard graduation requirements in social studies.

## Mathematics

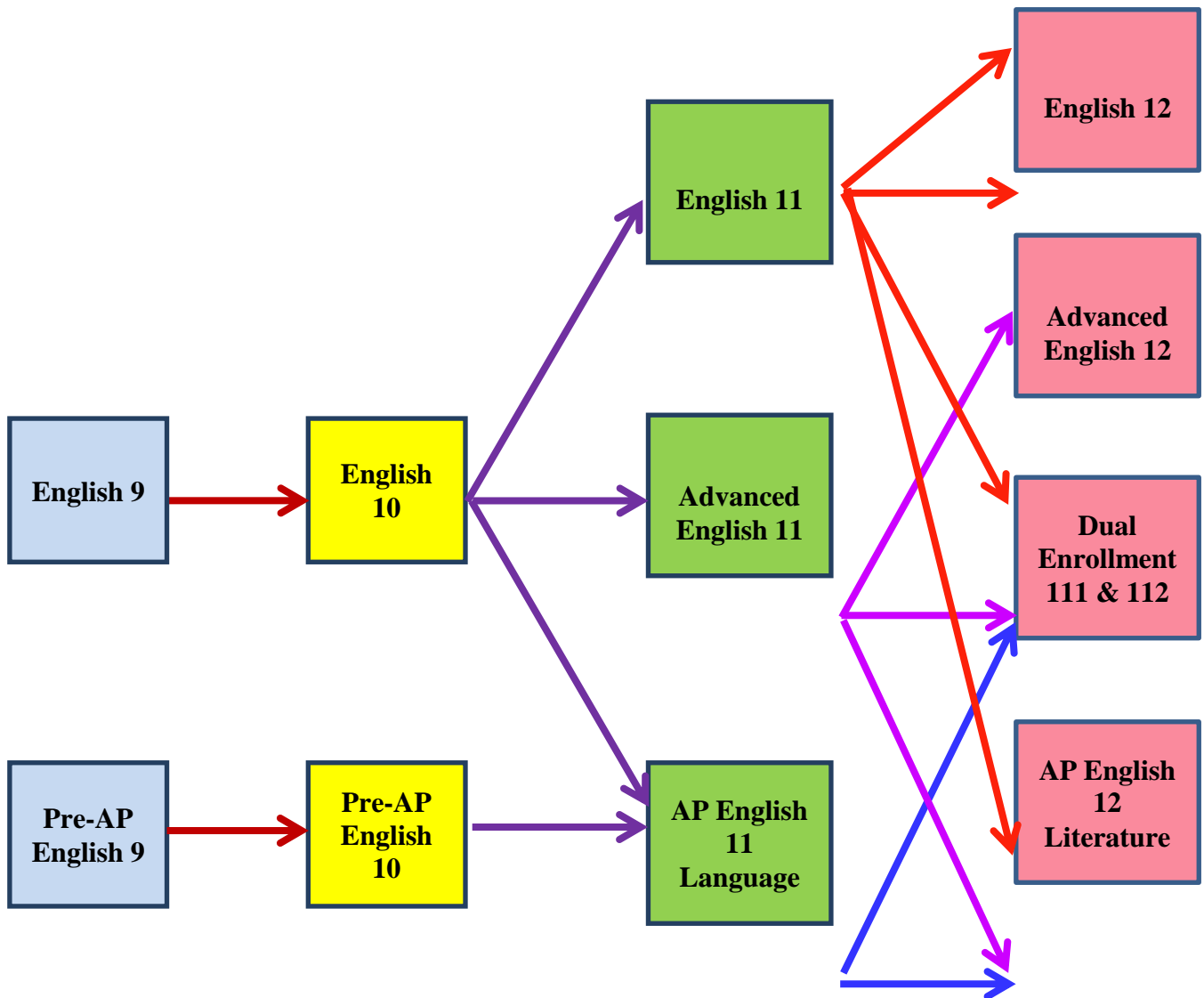
A minimum of three (3) levels of mathematics coursework must be successfully completed to meet standard graduation requirements in mathematics.

## Science

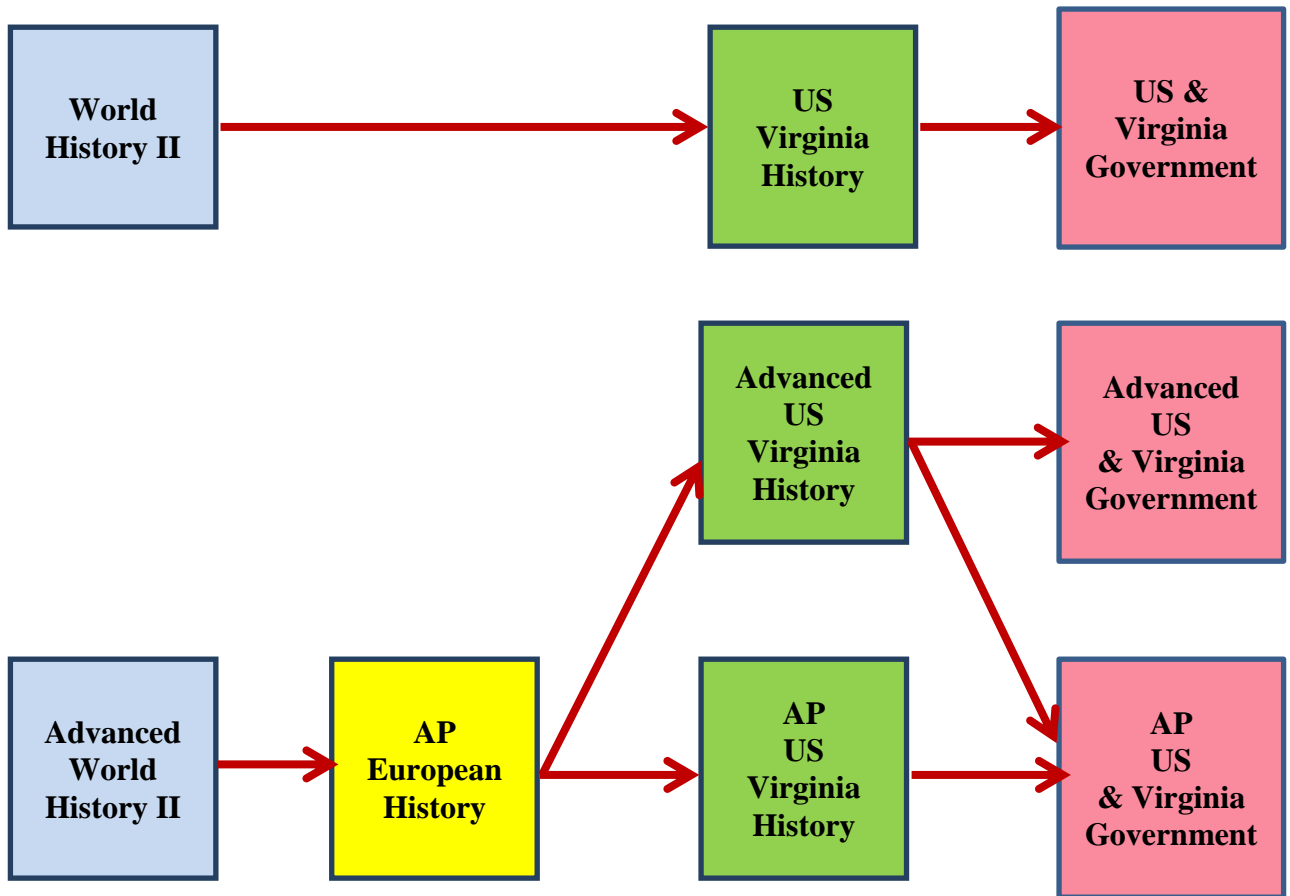
A minimum of three (3) levels of science coursework, in two scientific areas, must be successfully completed to meet standard graduation requirements in science.

\* \* \* \* \*

## English Sequence



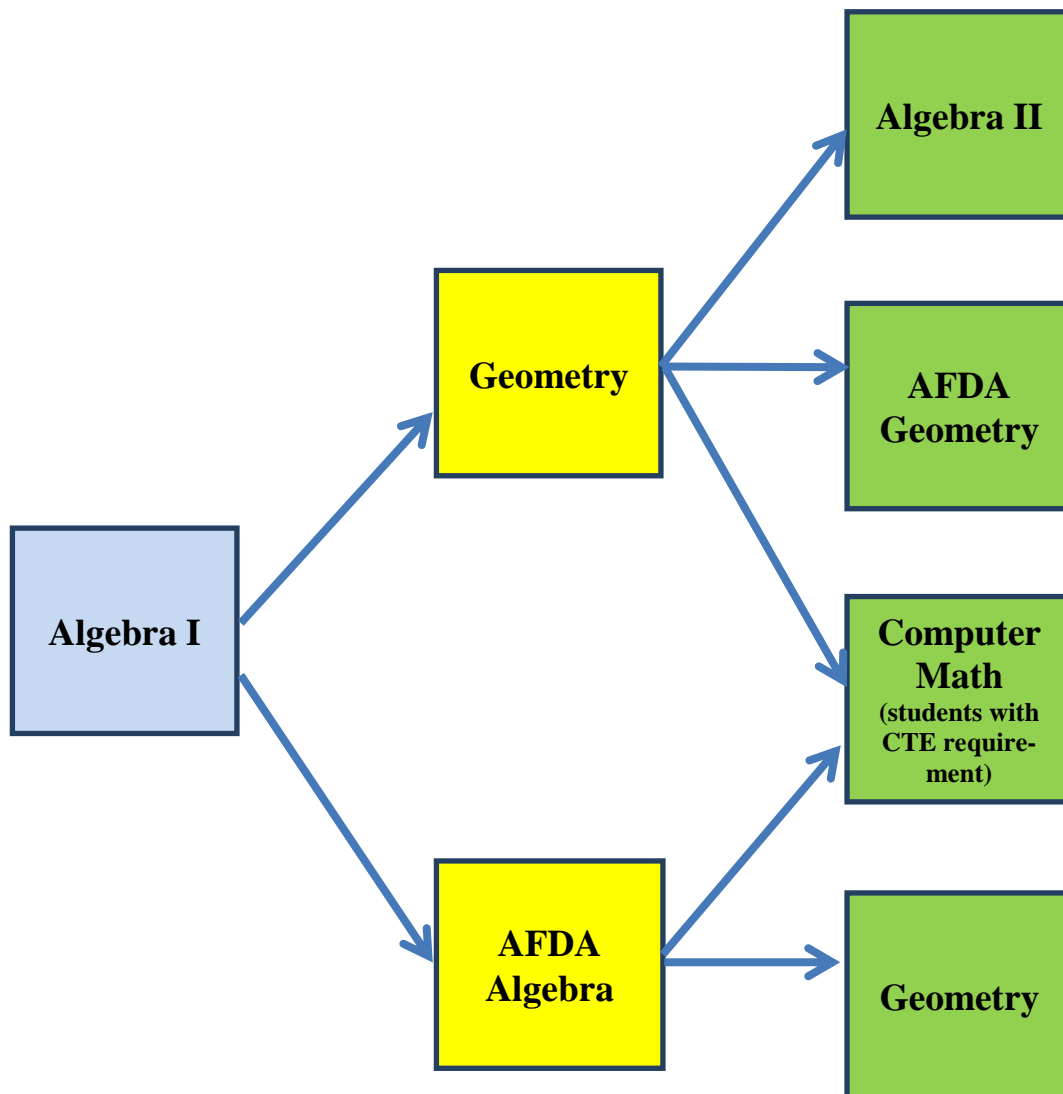
## *Social Studies Sequence*



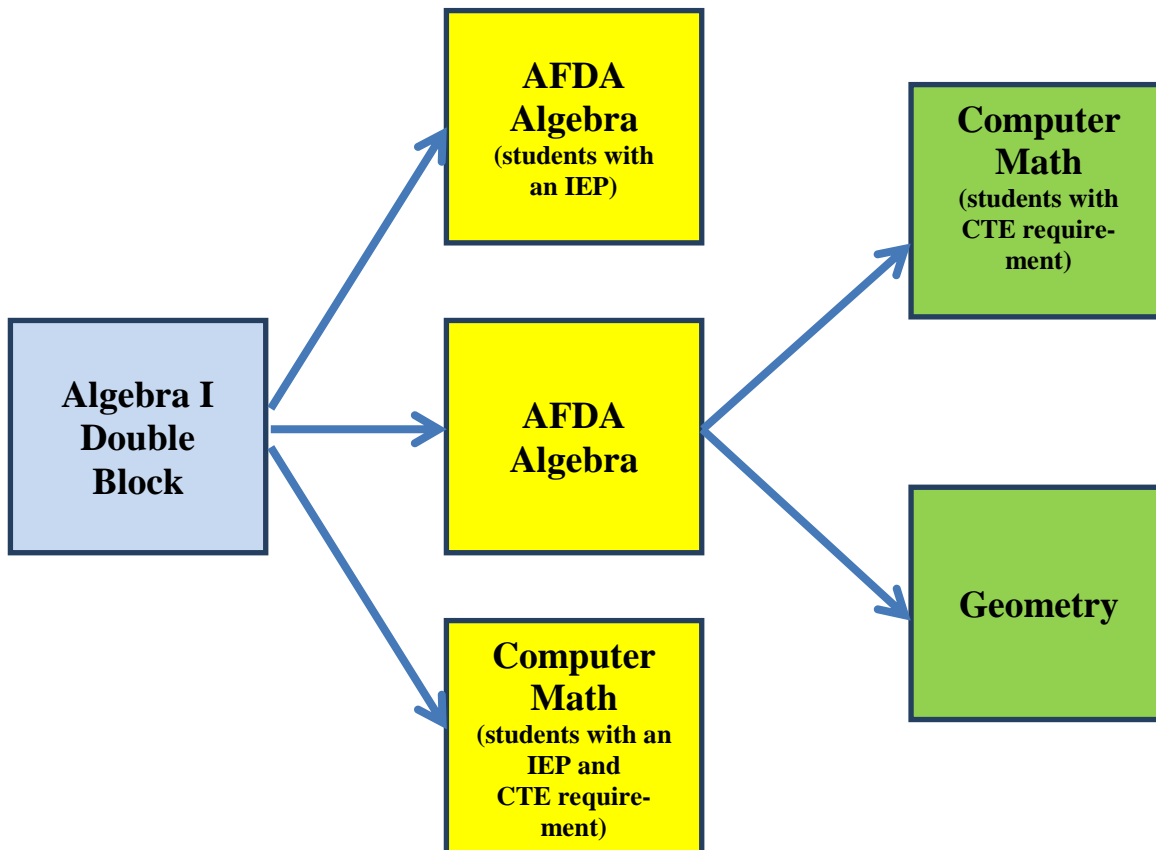
*Students may take AP European History concurrently with AP US Virginia History or AP US Government.*



*Math Sequence – Standard Diploma  
(Beginning with Algebra I)*



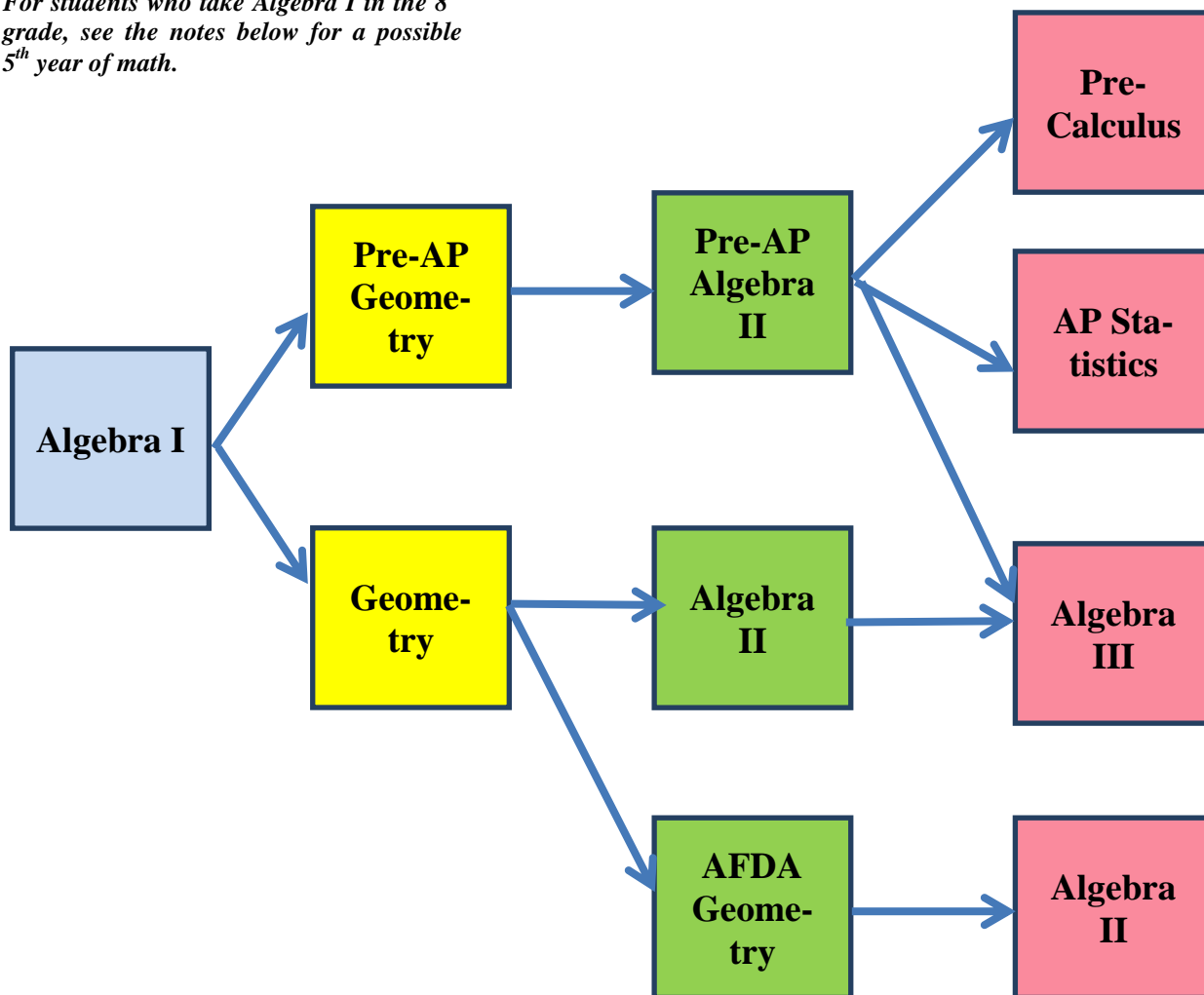
***Math Sequence – Standard Diploma  
(Beginning with Algebra I Double Block)***



# Math Sequence – Advanced Studies Diploma

*This sequence begins with Algebra I in the 9<sup>th</sup> grade.*

*For students who take Algebra I in the 8<sup>th</sup> grade, see the notes below for a possible 5<sup>th</sup> year of math.*



*Students who successfully complete Algebra III may take either Pre-Calculus or AP Statistics.*

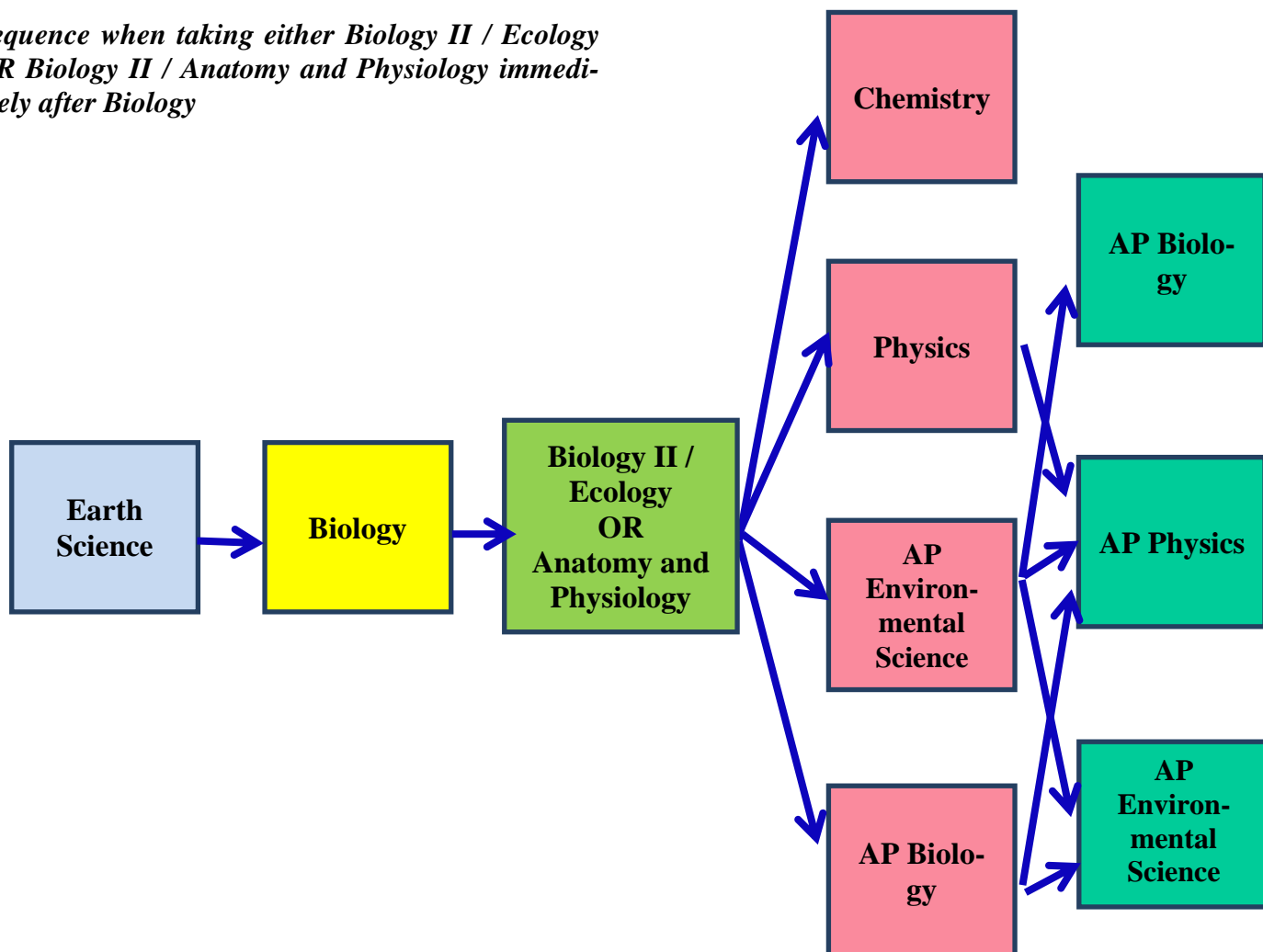
*Students who successfully complete Algebra III with an “A” may possibly take AP Calculus.*

*Students who successfully complete Pre-Calculus may take either AP Calculus or AP Statistics.*

*Please contact the student’s current teacher to discuss other options not listed.*

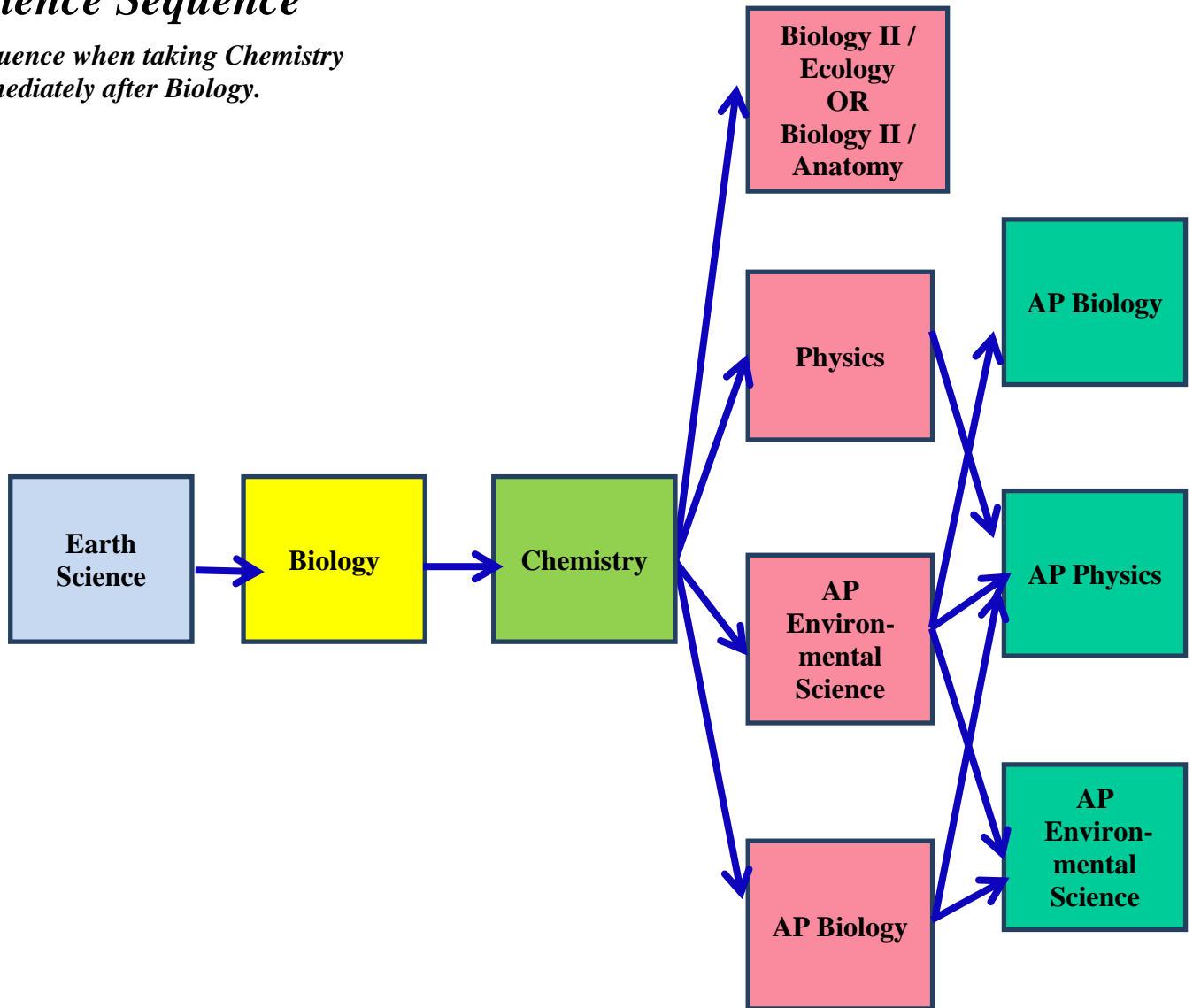
# Science Sequence

Sequence when taking either Biology II / Ecology  
OR Biology II / Anatomy and Physiology immediately after Biology



# Science Sequence

Sequence when taking Chemistry immediately after Biology.



## Course of Study

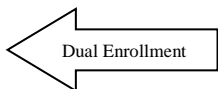
**Note: Due to staffing, budget changes or low enrollment, some courses may not be offered in the 2015-2016 school term.**

### Legend

**SOL Test**



**Dual Enrollment**



**Online Course**



### ART

Students are required to provide their personal supplies; instructional materials will be provided by the instructor. Supply lists can be found on the school website.

#### ART 1

Prerequisite: None

Semester – ½ Credit

Students are working with various media and laying a foundation of concepts, vocabulary and Art History that are required to move on to Art II. Students will define the elements of art and recognize some famous artists and their works. They will learn drawing techniques, design and color theory. The course features painting, chalk pastel, and intro to sculpture. Students will practice discussing and writing about artwork.

#### ART II

Prerequisite: A grade of “C” or higher in Art I and/or instructor permission

Year – 1 Credit

Students explore different cultures worldwide such as South Pacific, Asian, African, Native and South American Art. Drawing concepts will expand upon the basic concepts and vocabulary. Mixed media projects including painting, sculpture, clay, pastel and fibers will accompany the study of each culture. Art criticism and comparison will continue to be discussed and students will develop a binder displaying styles of art.

#### ART III

Prerequisite: Art II and instructor permission

Year – 1 Credit

Students learn advanced techniques in two and three-dimensional media. They will compile a binder of major Art movements throughout history and create multi-media projects based on each section. Projects may include drawing, painting, architecture, print-making and fibers. Students are required to participate in critiques and enter art shows.

#### ART IV

Prerequisite: Art III and instructor permission

Year – 1 Credit

This course is for students who have considerable drawing experience. It stresses individual development and encourages experimentation with a variety of media and techniques. Students will develop a portfolio of class work and may also be involved in special projects around the school and community, such as mural painting.

#### ART V

Prerequisite: Art IV and instructor permission

Year -1 Credit

Students with a strong interest in the visual arts may work on in-depth studies in various media. The class is conducted on an “independent study” level; student input will help to create a curriculum based on their interests and talents. Students are encouraged to display art in the community throughout the year and will develop a professional portfolio.

#### CERAMICS I

Prerequisite: None

Semester – ½ Credit

Students will use clay to create a variety of different projects. They will learn various hand-building techniques to construct their projects and will explore many surface-decorating methods for the finish of the projects.

#### CERAMICS II

Prerequisite: Ceramics I

Semester – ½ Credit

Students will build on previously learned skills by designing and constructing more advanced clay projects. They will employ greater exploration of hand-building techniques and use of the potter’s wheel. A wider variety of surface-decorations and firing methods will be explored.

#### CERAMICS III

Prerequisite: Ceramics II and teacher recommendation

Year – 1 Credit

Students will further their ceramic education, experience and personal artwork. The students will work on completing portfolio of work. The students will

learn more of the chemical and historical aspects of the ceramic arts. Glaze and slip formulation will be required of the student to investigate and research. Students will also be required to enter into art shows and work on gallery research and representation. The class objectives will change each semester and with each student. This course may be repeated for credit.

## ENGLISH

Students must take their English courses in sequence with only one English course per year. Exceptions may be considered provided the student can meet the credit requirements for graduation. A student may not enroll in more than two grade levels of English.

### ENGLISH 9

Prerequisite: None

Year – 1 credit

This course is a combined study of reading skills, literature, use of information sources, intensive word study and discussion.

### Pre-AP ENGLISH 9

Prerequisite: Successful completion of the English 8 SOL reading and writing tests.

Year – 1 credit; 4.5 Weighted Grading Scale

This class will help students succeed in college and rigorous high school courses, such as those offered in the Advanced Placement Program. The class will be literature based, and in-depth class discussions will be an integral part of that study. Outside reading will be assigned each nine weeks. Creative writing will be an on-going requirement of the class, and students will learn to analyze the literature they are reading through critiquing rather than summarizing. Vocabulary study will focus on analogies and usage rather than on spelling and definitions.

### ENGLISH 10

Prerequisite: English 9

Year – 1 credit

This course is a combined study of world literature, narrative and expository composition, library, research, technical and computer skills, and grammatical usage.

### PRE-AP ENGLISH 10

Prerequisite: Pre-AP English 9 or English 9

Year – 1 credit; 4.5 Weighted Grading Scale

This advanced level course will help students to expand their skills in reading, writing and research. In their study of literature, students will use critical thinking skills to recognize all universal literary themes. Students will spend time developing a personal writing style using analysis and reasoning techniques. This course will prepare students for the Ad-

vanced Placement courses. At the discretion of the teacher, major writing projects may also be incorporated into the class. Vocabulary study will prepare students for AP and SAT/ACT assessments.

### ENGLISH 11 SOL ENRICHMENT

Prerequisite: Administration/School Counselor Recommendation



SOL Test

Semester ½ credit

This course is designed for students who have successfully completed English 11, but who have not successfully completed the accompanying Standards of Learning assessment. The course focuses on reinforcing the skills needed to pass the reading and writing portion of the Virginia Standards of Learning English 11 End of Course test. Emphasis will be placed on writing, reading, literature, and research skills. The course will utilize SOL English materials. Emphasis will also be placed on familiarizing students with the end of course (EOC) test format and test-taking strategies in order to maximize their scores on the accompanying Standard of Learning assessment.

### ENGLISH 11

Prerequisite: English 10

Year – 1 credit

This course is a combined study of American literature, impromptu speaking, expository and research composition, and grammatical usage. Students are required to pass (400 and above) SOL Assessments in Reading and Writing.

### ADVANCED ENGLISH 11

Prerequisite: English 9 and 10

Year – 1 credit

This class is designed for students who have successfully completed English 9 and 10. This is a survey course of American Literature from 1607 to the present. This course involves a more in-depth look at the literature as well as additional reading and writing. Students are required to pass (400 and above) SOL assessments in Reading and Writing.

### AP ENGLISH 11 – LANGUAGE AND COMPOSITION

Prerequisite: It is strongly suggested that students have taken Pre-AP English in the 9<sup>th</sup> and 10<sup>th</sup> grades.



SOL Test

Year - 1 credit; 5.0 Weighted Grading Scale

AP Language and Composition follows the Advanced Placement English curricula. It is an intensive study of literature, with a focus on American literature and writing. Various types of writing, rhetoric, and parallel readings will be emphasized. Upon completion of this course students will demonstrate

their writing skills in various rhetorical modes. Students are expected to take the College Board Exam in addition to fulfilling all English 11 curriculum requirements. Students are required to pass (400 and above) SOL assessments in Reading and Writing.

## **ENGLISH 12**

Prerequisite: English 11

Year – 1 credit

This course will study British Literature and literature of other cultures. Students will focus on organizational skills, vocabulary, grammar, and verbal and non-verbal presentation skills. Students will produce technical, expository, and analytical writing as well as a documented research paper and an oral presentation.

## **ADVANCED ENGLISH 12**

Prerequisite: English 11 or Advanced English 11

Year – 1 credit

This is a survey course of British Literature from Anglo-Saxon to the present. An in-depth look at literature as well as additional reading and writing are required. Students will be required to complete a documented research paper and other analyses of classic works.

## **AP ENGLISH 12**

### **LITERATURE AND COMPOSITION**

Prerequisite: Advanced English 11 or AP Language and Composition

Year – 1 credit; 5.0 Weighted Grading Scale

This course challenges students to read and interpret a wide range of imaginative works. Students will be exposed to a variety of genres and literary periods and will be expected to write clearly about the literature they study. The course focuses on critical thinking, reading and writing skills. Students are expected to take the College Board Exam in addition to fulfilling all requirements for Grade 12 English.

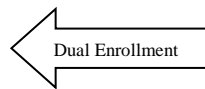
## **ADVANCED COMPOSITION/CVCC**

*Six CVCC College Credits,  
One High School Credit*

Prerequisite: Seniors - CVCC Approval and CVCC Placement Test Scores, and Approved Writing Sample; successful completion of the English 11 SOL reading and writing tests.

Year – 1 credit; 5.0 Weighted Grading Scale

Course 111 of Advanced Composition is designed to teach students to read, write, and think critically and analytically. An argument-based text is used to teach a persuasive, rhetorical writing style. Students will study writing models, discuss issues, and write papers using the various methods of argument. Students will



also study grammar, style, and word choice. Students will purchase secondary texts to read, discuss, and analyze.

In course 112 of Advanced Composition, a college-level study of world literature is explored. Critical analyses, discussion, and a research paper are required. Students will also read classic literature for outside reading. Students must complete semester I (course 111) with a grade of C or above in order to enroll in semester II (course 112).

## **DRAMA**

Prerequisite: None

Semester – ½ credit

This course will introduce the student to all aspects of theatre, theatre jargon, production practices, and theatre games, formal presentations, and technical theatre.

## **THEATRE ARTS**

Prerequisite: Drama

Semester – ½ credit

This intermediate course involves improvisation, theatre history, and performance. The student will perform formal scenes and participate in peer assessment. The course will focus on the study of famous actors, playwrights, and directors.

## **ADVANCED THEATRE ARTS**

Prerequisite: Drama and Theatre Arts; **Audition is required**

Year – 1 credit

This course concentrates on direction, set design, and theater theory. Content also includes scene and advanced acting skills. This course may be repeated for credit.

## **TECHNICAL THEATRE**

Prerequisite: None

Semester – ½ credit

This class will focus on the technical aspects of a production. Students will learn the responsibilities of stage managing, lighting, set design, carpentry, electricity, props and grip. The course will allow students to explore the opportunities available in theatre.

## **TECHNICAL THEATRE II**

Prerequisite: Technical Theatre I

Semester – ½ credit

Students will be involved in the technical aspects of theatre with a more concentrated study of design concepts. Students design and implement their set creation, light plot, or sound plot to be a practical application used in productions at Amherst County High School. This course may be repeated for credit.



## **SPEECH**

Prerequisite: None

Semester - ½ credit

Content includes instruction and practice in clarity of oral expression, logical reasoning, and proper organization of material. The students will learn to prepare and deliver speeches.

## **ADVANCED SPEECH**

Prerequisite: Speech

Semester – 1/2 credit

The course is designed to enhance and refine skills learned in Speech. The focus will be on advanced skill levels in oral expression, logical reasoning, and organization. The students will prepare and deliver formal presentations.

## **MYTHOLOGY**

Prerequisite: None

Semester – ½ credit

Content includes study of classical mythology, as well as Norse, Celtic, and Egyptian myths and legends. Also covered in the course are fairy tales, American Indian mythology, and legends of King Arthur.

## **YEARBOOK**

Prerequisite: An application is required.

Year – 1 credit

Students should have proficient writing skills and have successfully completed previous English classes. The content includes preparation, design, editing and publication of the yearbook. This course may be repeated for credit.

## **JOURNALISM**

Prerequisites: Students should have proficient writing skills.

Year – 1 credit

This course is an introduction to the news media. Study includes the history of the press and censorship. Emphasis will be placed on writing articles for publication. This course may be repeated for credit.

## **CREATIVE WRITING**

Prerequisite: None

Semester – ½ credit

This class emphasizes student writing. Students will receive instruction in critiquing and selecting literary work, magazine layout, and the publication of the School Literacy Magazine. This course may be repeated for credit.

## **COLLEGE PREP**

Prerequisite: Students should have completed English 9, 10, and Geometry and be enrolled in grade 11.

Semester – ½ credit

This class is divided into two 9-week blocks. There will be 9 weeks of verbal preparation and 9 weeks of math preparation for SAT and ACT. Emphasis will be placed on improving scores of the SAT/ACT. Algebra I and Geometry will be reviewed. Concepts are reviewed, not introduced. This course is for college bound 11<sup>th</sup> grade students.

## **FOREIGN LANGUAGE**

### **SPANISH I** 📖

Prerequisite: None

Year – 1 credit

In Spanish I students learn the basics of reading, writing, understanding, and speaking Spanish. Students acquire a basic vocabulary for daily use and gain an understanding of some of the cultures and customs of the Hispanic world. Students communicate orally and in writing using simple structures and vocabulary. They practice listening skills with the aid of taped recordings and videos of native speakers.

### **SPANISH II** 📖

Prerequisite: Spanish I

Year – 1 credit

Grade of C or above in Level I is recommended. Students review and add to the four language skills learned in Spanish I. Listening, speaking, reading, and writing are taught concurrently with the culture of Spanish-speaking people. Emphasis is on the use of the language. A more formal study of grammar reinforces skills already learned in Spanish I. Visuals, tapes, and records supplement the textbook.

### **SPANISH III**

Prerequisite: Spanish II

Year – 1 credit

Grade of C or above in Level II is recommended. Spanish III continues the four basic language skills with added emphasis on reading and writing. Independent reading, writing and conversation are encouraged. An understanding of the people and culture of Spanish-speaking countries is stressed.

### **SPANISH IV**

Prerequisite: Spanish III

Year – 1 credit

Grade of B or above in Level III is recommended. In Spanish IV students work to increase the skills of reading, speaking, listening, and writing. Students read a variety of works by Hispanic authors, write on different topics using a variety of tenses, and gain a

deeper understanding of Hispanic culture. Grammar learned in previous years of Spanish is reviewed and amplified, and vocabulary is strengthened and expanded.

### **SPANISH V**

Prerequisite: Spanish IV

Year – 1 credit

Grade of B or above in Level IV is recommended.

Students who elect to take Spanish V should be able to work independently and should have a firm background in the basics of Spanish grammar, reading, and writing. Students read and discuss modern literary works by Hispanic authors and write compositions based on the readings. Grammar concepts are reviewed, and additional concepts are added, with written work showing the application of grammatical skills. Classroom discussions provide opportunities for speaking practice, and the use of English is limited.

### **FRENCH I**

Prerequisite: None

Year – 1 credit

The four language skills - listening, speaking, reading, and writing are taught concurrently with an introduction to the culture of the French-speaking people. Use of the language is emphasized. Students spend much class time speaking and listening to French. The textbook is supplemented with workbooks, videos, and tapes.

### **FRENCH II**

Prerequisite: French I

Year – 1 credit

Grade of C or above in Level I is recommended.

Students review and add to the four language skills learned in French I. Listening, speaking, reading and writing are taught concurrently with the culture of French-speaking people. Again, emphasis is on the use of the language. A more formal study of grammar reinforces skills already learned in French I. Workbooks, tapes, and videos supplement the textbook.

### **FRENCH III**

Prerequisite: French II

Year – 1 credit

Grade of C or above in Level II is recommended.

French III continues the four basic language skills with added emphasis on reading, writing and conversation. An understanding of the people and culture of French-speaking countries is stressed.

### **FRENCH IV**

Prerequisite: French III

Year – 1 credit

Grade of B or above in Level III is recommended.

French IV provides a wide variety of experiences in all aspects of language learning: vocabulary development, reading comprehension, literature, civilization and culture, grammar review and enrichment, and everyday conversation.

### **FRENCH V**

Prerequisite: French IV

Year – 1 credit

Grade of B or above in Level IV is recommended.

This course will continue the development of written and conversational skills in French. Students are required to spend a considerable amount of time working independently. . Students read and discuss modern literary works by French authors and write compositions based on the readings. Grammar concepts are reviewed, and additional concepts are added, with written work showing the application of grammatical skills.

## **HEALTH & PHYSICAL EDUCATION**

### **HEALTH & PE 9**

Prerequisite: None

Year – 1 credit

Topics include appearance, bone and muscles, food, tissue maintenance, sense organs, nervous system, heart, vessels, and blood. Activities include physical fitness, weights, basketball, volleyball, soccer, track, softball, and group games.

### **HEALTH & PE 10**

Prerequisite: Health & PE 9

Year – 1 credit

Topics include behavior, emotions, mental disorder, alcohol and drug abuse, tobacco, safety, first aid, and public health. Activities include softball, tennis, volleyball, soccer, track, table tennis, and group games.

### **DRIVER EDUCATION**

Prerequisite: None (non-credit)

This course is taught in conjunction with Health & PE 10 and includes instruction on developing proper driving techniques and attitudes essential to safe driving. Emphasis is placed on traffic knowledge, manipulative skills, and a proper attitude toward the use of motor vehicles. Students will be provided the opportunities to practice their driving skills on the range after school for a fee of \$175.00. Students must sign up for and are selected for road and range driving according to their eligibility date which is nine months after their learners permit is issued.

## WEIGHT TRAINING AND CONDITIONING

Prerequisite: Grades 9-11

PE/Weight Training; Instructor Recommendation

Semester – ½ credit per semester; 1 credit year long

Students may take two semesters per year for four years. This course will concentrate on strengthening students physically and mentally. The main concentration will be on the correct technique of lifting, the cycling of different routines and plyometrics.

## ADVANCED WEIGHT TRAINING

Prerequisite: Weight Training; Grade 12

Year – 1 credit

This course is designed to promote life fitness behaviors for the well-being of the individual. Students will develop lifelong fitness skills, personal fitness goals and basic principles of wellness. Students will develop resistance training knowledge, cardiovascular endurance and personal fitness plans.

## MATHEMATICS

### ALGEBRA I

Year – 1 credit

Algebra I provides the foundation for the more advanced mathematics courses. It broadens and strengthens the basic concepts of arithmetic and provides an understanding of the terminology, notation, and symbolism of Algebra. Content includes the basic language of Algebra, operations with real numbers, solving equations and problem solving, and the study of inequalities and related problems. The study of functions, rational and irrational expressions, and polynomials is included. Students will take the Algebra I SOL test at the end of the course.



### ALGEBRA I / ENRICHMENT

Prerequisite: Teacher Recommendation

Year – 2 credits (1 math, 1 elective) (2 periods)

This course is designed for students who struggle with the Pre-Algebra concepts and need more reinforcement of the Pre-Algebra skills. Because the Algebra I material is covered in two periods, Algebra I/Enrichment allows students more time to learn the Algebra I skills and provides the foundation for the more advanced mathematics courses. It broadens and strengthens the basic concepts of arithmetic and provides an understanding of the terminology, notation, and symbolism of Algebra. Content includes the basic language of Algebra, operations with real numbers, solving equations and problem solving, and the study of inequalities and related problems. The study of functions, rational and irrational expressions, and polynomials is included. Students will take the Algebra I SOL test at the end of the course.



### ALGEBRA SOL ENRICHMENT

Prerequisite: Algebra I

Administration/School Counselor

Recommendation

Semester – ½ credit

This course is required for students who have successfully completed Algebra I but have not successfully completed the Algebra I End of Course Standards of Learning assessment. The goal of this class is that each student be able to relate Algebra skills to real world applications and use these skills to solve problems. Graphing calculators and SOL resource materials will be used extensively. Emphasis also will be placed on familiarizing students with the end of course (EOC) test format and test-taking strategies in order to maximize their scores on the EOC Algebra I test. All students enrolled in this class will take the Algebra I EOC test.



### COMPUTER MATHEMATICS

Prerequisite: Successful completion of Algebra I

Year – 1 credit

This course will include learning that incorporates computer math standards using the graphing calculator as the primary computing device. This course gives students the opportunity to think through math problem solving through computer programming while avoiding the need to be in a computer lab.

**This class does not satisfy the Advanced Diploma requirement for mathematics and cannot be taken after Algebra II. This course cannot be taken for a math credit unless student is a CTE program completer.**

### ALGEBRA FUNCTIONS AND DATA ANALYSIS Algebra (AFDA A)

Prerequisite: Algebra I

Year – 1 credit

This course is designed for students who require additional instruction in the reinforcement of the Algebra I skills before proceeding to another math course. AFDA Algebra will provide remediation for students who have passed the Algebra I course, but not the Algebra I SOL. The course will be structured based on a modified version of the AFDA standards focusing on the skills required to pass the Algebra I SOL test and strengthening Algebra I skills for higher level math courses. Students who have completed Algebra II may not take this course.

### GEOMETRY

Prerequisite: Algebra I

Year – 1 credit

Geometry extends the skills and concepts developed in Algebra I through the study of concepts involved with plane and solid figures. Topics include a review



of real numbers, segment and angle measurement, angle relationship, parallel and perpendicular lines, convex polygons, and congruent triangles. Also emphasized are circles, construction, coordinate geometry, area and volumes of solid figures.

### PRE-AP GEOMETRY

Prerequisite: Pre-AP Algebra I or Algebra I with Teacher Recommendation



Year – 1 credit; 4.5 Weighted Grading Scale

Course content will include concepts taught in regular geometry with more emphasis on proofs, coordinate geometry, and area and volume of polygons. More real world applications will be incorporated into this course.

### ALGEBRA FUNCTIONS AND DATA

#### ANALYSIS Geometry (AFDA G)

Prerequisite: Algebra I and Geometry

Year - 1 credit

This course is designed for students who have completed Geometry, but need some additional reinforcement of their Algebra skills before proceeding to Algebra II. This course is a bridge to help students prepare for the rigor of the Algebra II course. Students in this course will study functions and their behaviors, systems of inequalities, probability, data analysis and statistics, and simple experimental design. This course may NOT be taken if a student has already completed AFDA A.

### ALGEBRA II

Prerequisite: Algebra I and Geometry



Year – 1 credit

Grade of C or above in Algebra I and successful completion of Geometry is recommended.

Algebra II is for students who wish to advance their mathematics knowledge in algebraic concepts at a moderate pace without the study of trigonometry. Topics include linear equations and inequalities, problem solving, polynomials and factoring, rational expressions, arithmetic and geometric progressions.

### PRE-AP ALGEBRA II

Prerequisite: Geometry or Pre-AP Geometry and a grade of B or above in Algebra I



Year – 1 credit; 4.5 Weighted Grading Scale

Pre-AP Algebra II will present a wider variety of topics and a more in-depth approach than Algebra II. It will include a transformational approach to graphing functions. Graphing utilities will be used to enhance understanding through modeling and aid in the study of functions and their inverses. Students will be required to perform mathematical calculations without the use of a calculator. Opportunities to develop con-

ceptual understanding in addition to mastery of basic skills will be provided.

### ALGEBRA III

Prerequisite: Algebra II or Pre-AP Algebra II

Year – 1 credit

Grade of C or above in Algebra II or Pre-AP Algebra II is recommended.

Content includes the review of topics from Algebra II and Geometry and introduces new topics such as linear relations and functions, systems of equations and inequalities, matrices, polynomial and rational functions, exponential and logarithmic functions, trigonometry, conics, sequences, and series. The course is for students who intend to continue their study of mathematics in college. Students may not enroll in Algebra III after receiving credit for Pre-Calculus. Students will be required to have a graphing calculator.

### AP STATISTICS

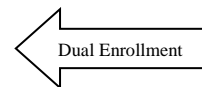
Prerequisite: Pre-AP Algebra II, Algebra III or Pre-Calculus

Year – 1 credit; 5.0 Weighted Grading Scale

Students are introduced to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad concepts: exploring data; describing patterns and departures from patterns, sampling and experimentation; planning and conducting a study, anticipating patterns; exploring random phenomena using probability and simulation, and statistical inference; estimating population parameters and testing hypotheses. Students are expected to take the College Board AP Exam.

### PRE-CALCULUS (CVCC)

Prerequisites: Pre-AP Algebra II or Algebra III; Successful completion of the CVCC Math Placement Test



Year – 1 credit; 5.0 Weighted Grading Scale

This course is two dual-enrolled classes for a total of six college credits. No graphing calculator is allowed. Only a scientific calculator will be allowed. Students will be expected to perform mathematical calculations without the use of any type of calculator. First semester topics include college algebra, matrices, and algebraic, exponential and logarithmic functions. Second semester encompasses trigonometry, analytic geometry, and sequences and series. Students must complete semester I with a grade of C or above in order to enroll in semester II.

## **AP CALCULUS**

Prerequisite: Pre-Calculus with a grade of "B" in the course

Year – 1 credit; 5.0 Weighted Grading Scale

Calculus studies limits, the derivative, application of the derivative and integration, application of integration, and volumes of revolution. This course is designed to help students prepare for college level math, make connections in math courses they have studied in high school and prepare for the AP Exam. Students are expected to take the College Board AP Exam.

## **MUSIC**

All band classes at the high school are performance oriented. Participation in performances and rehearsals outside school hours is required. Non-band students are eligible to try out for marching band as flag corp members.

Chorus classes at the High School include both introductory and performance oriented programs. Several activities require participation in performances and rehearsals outside school hours.

### **CONCERT BAND**

Prerequisite: Completed Middle School Band

Year – 1 credit

This course is open to students who have completed the middle school band program. If not, students must audition or have the recommendation of the band director to enroll. The primary focus of this course is on the performance of Grade 4 concert music. This course may be repeated for credit.

### **JAZZ ENSEMBLE**

Prerequisite: None

Year – 1 credit

This course is open to students who have completed the middle school band program. If not, students must audition or have the recommendation of the band director to enroll. The primary focus of this course is on the jazz performance. We will learn and study styles complementary to the jazz band. Some after school rehearsals will be required. This course may be repeated for credit.

### **BEGINNING PIANO**

Prerequisite: None

Semester – ½ credit

A short history of the piano will be taught as well as note names and placements on the piano and rhythms. A method workbook will be individually purchased and used in conjunction with piano sheet music in order to be able to play in a final class recital.

## **INTRODUCTORY MUSIC THEORY**

Prerequisite: Beginning piano

Semester – ½ credit

This course is for students who want to have a basic knowledge of music. It will involve the reading, studying, and analyzing of music. A workbook and staff paper will need to be purchased for this class. Prior musical experience is helpful but not necessary.

### **WIND ENSEMBLE**

Prerequisite: Audition

Year – 1 credit

This class will focus on advanced music and members will be required to participate in the marching band. This course may be repeated for credit.

### **PERCUSSION CLASS (Drums and Mallets)**

Prerequisite: Play percussion in the middle school band (drums).

Year – 1 credit

The class will focus on marching, concert and percussion ensemble music. This course may be repeated for credit.

### **MAC MUSIC-TECHNICAL BAND**

Prerequisite: None

Semester – ½ credit

Mac Music will introduce students to the study of music technology, music recording, music business, and music fundamentals. Instruction includes introduction to computer applications in Garage Band, Finale, Sibelius, Pro Logic Audio; basic music literacy (reading and writing music); music technology related history, music recording concepts, terminology and other applications.

### **ACHS CHORUS**

Prerequisite: None

Year – 1 credit

This is a general music/chorus workshop class offered to the student who enjoys singing but may not have extensive performing experience or the time to participate in many extracurricular concerts. Singing and performance techniques, including choreographed movement, beginning theory and analysis of music, and a general overview of music development through history will be studied. Careers in music will also be explored. Participation in a concert performance may be a requirement for the class grade. This course may be repeated for credit.

### **ADVANCED WOMEN’S ENSEMBLE**

Prerequisite: Audition; Grades 9-12 female students  
Year – 1 credit

This class can be repeated for credit. Vocal and choreographed movement techniques will be a main emphasis of study, and will be developed through the use of different styles of music arranged for female voices. Time will be given to the study of music theory, analysis, history and careers, particularly as they affect the studied repertoire. Participation in extracurricular performances is a requirement for the class grade. This course may be repeated for credit.

### **BELLES OF AMHERST**

Prerequisite: Audition; Grades 9-12 female students  
Year – 1 credit

This class can be repeated for credit. Vocal and choreographed movement techniques will be a main emphasis of study, and will be developed through the use of different styles of music arranged for female voices. Time will be given to the study of music theory, analysis, history and careers, particularly as they affect the studied repertoire. Participation in extracurricular performances is a requirement for the class grade. This course may be repeated for credit.

### **AMHERECHOS**

Prerequisite: Audition  
Year – 1 credit

An audition is necessary for this advanced-level choir. Choreographic and performance techniques for concert and show choir will be the main emphasis of study. Time will be given to the study of music theory, analysis, history and careers particularly as they affect the studied repertoire. Participation in all concerts will be a mandatory part of the grade. This course may be repeated for credit.

## **SCIENCE**

### **EARTH SCIENCE**

Prerequisite: None  
Year – 1 credit

Earth Science is a foundation science that helps students understand the processes that continue to shape our planet. The Virginia Standards of Learning detail the areas of geology, astronomy, meteorology, and oceanography that are to be covered. Topics include studies of space objects, fossils, weathering, soil and cave formation, internal and surface features of earth, weather systems, plate tectonics, and the physical and biological characteristics of the oceans. The interpretation of maps, charts, and graphs is stressed. The development of logical thought process is encouraged through the performance of appropriate labs and activities in which data is collected and analyzed.



### **PRE-AP EARTH SCIENCE**

Prerequisite: None  
Year – 1 credit;

4.5 Weighted Grading Scale

This course is designed for students who are highly motivated and desire a more detailed study of geology, astronomy, meteorology, and oceanography. The Virginia Standards of Learning designated for Earth Science will be covered. In addition, students will be expected to complete in-depth study of selected topics through at least two of the following three assignments: a minimum of one research paper, an analysis of one scientific work, and/or an experimental research project



### **BIOLOGY**

Prerequisite: Earth Science  
Year – 1 credit

Through laboratory work, students discover the parts and processes of living things and their interactions with each other. Representative organisms from the six kingdoms are examined and unifying concepts such as cell structure, genetics, evolution, reproduction, and life characteristics are explored. The course gives students a better understanding and appreciation of their physical selves and the world around them.



### **PRE-AP BIOLOGY**

Prerequisite: Earth Science or  
Pre-AP Earth Science

Year – 1 credit; 4.5 Weighted Grading Scale

The Virginia Standards of Learning designated for biology will be covered; however, students will be expected to complete in-depth study of selected topics through at least two of the following: research paper, analysis of one scientific work, and/or an experimental research project. The course will guide students through investigations of living organisms and will cover topics such as ecology, cell structure, plants, animals, and genetics.



### **AP ENVIRONMENTAL SCIENCE**

Prerequisite: None

Year-1 credit; 5.0 Weighted Grading Scale

This course provides an in-depth study of ecosystems, matter, energy transfer and community interactions. The causes and effects of pollution, habitat destruction and resource depletion on our planet will be analyzed in detail. Students will be expected to read and write extensively while conducting a variety of research projects. Students are expected to take the College Board AP Exam.

## **BIOLOGY II/ECOLOGY**

Prerequisite: Biology

Year – 1 credit

This course is the study of how organisms interact with each other and with the environment. Major topics to be investigated include terrestrial and aquatic ecosystems, matter and energy transfer, and community interactions. The effects of pollution, habitat destruction, and resource depletion on our planet and its organisms will also be studied.

## **BIOLOGY II/ANATOMY AND PHYSIOLOGY**

Prerequisite: Biology

Year – 1 credit

This is an introductory course to human anatomy and physiology. The course is designed to provide an in-depth overview for students interested in pursuing a medical career. It will focus on building basic knowledge and understanding of the human body and its systems. The primary area of interest will be the skeletal and muscular systems, somatic and autonomic nervous systems including spinal and cranial nerves, the cardiovascular system from blood components to the heart, and the digestive and respiratory systems. In addition it will encompass the effects of aging and response to stress on the body and various ailments and diseases. This course will also incorporate hands-on activities and labs.

## **AP BIOLOGY/RESEARCH**

Prerequisite: Biology II or Pre-AP Biology

Year – 2 credits (2 class periods); 5.0 Weighted Grading Scale

The AP Biology course is designed to be the equivalent of a college introductory course for university-bound seniors. The college course in biology differs significantly from the usual first high school course in biology with respect to the type of textbook used, the range and depth of the topics covered, the kind of laboratory work done by students, and the time and effort required of students. The AP Biology course aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. An integral part of the course is the completion of an independent experimental research project. Students are expected to take the College Board AP Exam.

## **CHEMISTRY**

Prerequisites: Biology, Algebra II or Pre-AP Biology, Pre-AP Algebra II

Year – 1 credit

This course for college-bound students is based on the study of the nature and properties of matter. Aspects of chemistry to be studied include atomic struc-

ture in relation to the periodic table, types of bonds, chemical reactions, mole-based calculations, kinetic theory and gas laws. Emphasis is placed on problem-solving techniques and higher-level thinking skills. Laboratory emphasis is on learning safe lab skills, data collection and problem solving. Chemistry is a math-oriented class.

## **PRE-AP CHEMISTRY**

Prerequisites: Biology, Algebra II or Pre-AP Biology, Pre-AP Algebra II or

 SOL Test

enrolled in Pre-AP Algebra II

Year – 1 credit; 4.5 Weighted Grading Scale

This course is designed to be the equivalent of an introductory first year course in College Chemistry. This course is for college-bound students who wish to earn a college credit by passing the AP Exam. Topics include chemical formulas, such as chemical formulas and equations, stoichiometry, polyatomic ions, solubility rules, etc.

## **AP CHEMISTRY**

Prerequisites: Pre-AP Chemistry and Pre-AP Algebra II

Year – 1 credit; 5.0 Weighted Grading Scale

AP Chemistry assumes knowledge of the principles learned in Chemistry such as chemical formulas and equations, stoichiometry, polyatomic ions, solubility rules, etc. Topics such as hybridization, the molecular orbital theory, organic chemistry, chemical kinetics, chemical equilibrium, and thermo-chemistry will be introduced. Students will conduct advanced labs, prepare lab reports, complete problem sets, take unit exams, and complete an individual research project. Students should be comfortable with solving advanced mathematical concepts with and without a calculator. Problem solving strategies will be emphasized. An independent research project is required. Students are expected to take the College Board AP Exam.

## **PRE-AP PHYSICS**

Prerequisite: Algebra II

Year – 1 credit; 4.5 Weighted Grading Scale

This course stresses practical application of physics in other areas of science and technology. Areas covered are force and motion, kinetic molecular theory, energy transformation, wave phenomena, and the electromagnetic spectrum, light, electricity, fields, and non-Newtonian physics. Students will gain an understanding of experimentation, data analysis, and the use of reasoning and logic to evaluate evidence.

## AP PHYSICS

Prerequisite - Algebra II, Pre-AP Algebra II, and Pre-AP Physics

Year – 1 credit; 5.0 Weighted Grading Scale

Physics develops awareness of the mathematical nature of laws underlying the physical world through study of a traditional sequence of topics: motion, heat, waves, electricity and the atom. The understanding of these principles is reinforced through lab experiences and problem solving using techniques of Algebra and Geometry. This course is appropriate for college-bound students and students preparing for a technical career. Completion of an independent project is required. Students are expected to take the College Board AP Exam.

## SOCIAL STUDIES

### WORLD HISTORY PART II – 1500 AD TO THE PRESENT

Prerequisite: None

Year – 1 credit

Students will study the history and geography of the world from the late Middle Ages (1500 AD) to the present with an emphasis on Western Europe. Geographic influences on history will be explored including political boundaries that developed with evolution of nation-states. This course will cover ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. The people and events of the nineteenth and twentieth centuries will be emphasized for their strong connection to contemporary issues.



### ADVANCED WORLD HISTORY PART II - 1500 AD TO THE PRESENT

Year – 1 credit

Projects, writing assignments, additional reading assignments and research are requirements of this course. Students will examine eras of western civilization from early ages to the nuclear age, and the relationship among social, economic, and geopolitical developments in the times and places in which they occurred. Students will use the process of conceptual and critical thinking to analyze historical and contemporary issues. Students are encouraged to think independently while developing group processing skills.



### WORLD AFFAIRS (Pending Approval)

Prerequisite: None

Grade: 9

Year – 1 credit

This elective course is strongly encouraged for students who wish to enhance the skills needed to succeed in social studies courses on the high school level as well as become informed citizens in a global society. Students will analyze current issues as they examine people, places, and environments throughout the world. A variety of resources and technologies will be utilized with emphasis on developing critical thinking skills.

## AP EUROPEAN HISTORY

Prerequisite: None

Year – 1 credit; 5.0 Weighted Grading Scale

This course follows a program of study that has been reviewed and approved by the College Board of Advanced Placement Program. Students will study the history of Europe since 1450 with an emphasis on the cultural, economic, political and social developments that helped shape our contemporary world. This is intended to be a college introductory level course and, as such, students will be expected to read and analyze supplemental sources and write with clarity and synthesis of large historical themes. This course will provide students with the skills and confidence to take future AP level courses. Students are expected to take the College Board AP Exam and have the opportunity to earn college credit.

### UNITED STATES AND VIRGINIA HISTORY

Prerequisite: None

Year – 1 credit

This course presents in chronological sequence the political, economic, social and cultural development of life in the United States with special emphasis on life in Virginia. Units of study include the Revolutionary War, the Constitution, the Civil War, the Industrial Age, the Roaring Twenties, the Depression and Post-Depression, and America as an international power.



### ADVANCED UNITED STATES AND VIRGINIA HISTORY

Prerequisite: Successful completion of two of the following and each corresponding SOL assessment: Advanced World Geography, World History I, Advanced World History II

Year – 1 credit

This course provides a more in depth coverage of the political, economic, social and cultural development of life in the United States with special emphasis on life in Virginia. Because this course requires more extensive writing, research, and reading, it is recommended for college bound students.





## AP UNITED STATES HISTORY

Prerequisite: Successful completion of two of the following and each corresponding SOL assessment ADV World Geography, World History I, ADV World History II  
Year – 1 credit; 5.0 Weighted Grading Scale



The Advanced Placement History course follows the national Advanced Placement curricula and students in this course have an opportunity to earn college credit. Students are required to read and write extensively, interpret primary sources and write document-based essays, and complete an independent research project every nine weeks. Summer reading and projects may be suggested. Students are expected to take the College Board AP Exam.

## UNITED STATES AND VIRGINIA GOVERNMENT

Prerequisite: 12<sup>th</sup> grade status  
Year – 1 credit

This course examines the origins and foundations of American constitutional government, the structure and powers of government on the federal, state and local levels, and the policymaking process at all levels of government. Students will also examine the electoral process, civil rights and liberties, and comparative governments and economics with special emphasis on the free enterprise system. Attention will be given throughout the course to current issues and to the development of skills and attitudes needed for effective participation in American civic life.

## ADVANCED UNITED STATES AND VIRGINIA GOVERNMENT

Prerequisite: Successful completion of three of the following and each corresponding SOL test: Advanced World Geography, World History I, Advanced World History II, Advanced US/VA History  
Year – 1 credit

This course would be a continuation of study for students who take Advanced Geography and Advanced United States History. This course is designed for college bound students. Course requirements include writing, research, and reading to prepare students for college.

## AP GOVERNMENT

Prerequisite: Successful completion of three of the following and each corresponding SOL assessment: Advanced World Geography, Advanced World History II, and Adv. US/VA History  
Year – 1 credit; 5.0 Weighted Grading Scale

This course is designed for students who have a keen interest in American government and who desire a chance to earn college credit in high school. Students are expected to read and write with depth and under-

standing. Supplementary reading and writing assignments, including a summer project may be required. Students are expected to take the College Board AP Exam.

## LAW RELATED EDUCATION

Prerequisite: Grade 10 -12  
Semester – ½ credit

An opportunity is given for students to become actively involved with the legal community. Guest speakers inform the students of their legal responsibilities and then students take part in a mock trial. Students also become familiar with their legal rights as consumers.

## SOCIOLOGY

Prerequisite: Grade 10 - 12  
Semester – ½ credit

Sociology is the scientific study of human society and social behavior. In this one-semester elective, students will become familiar with the basic concepts in sociology and the basic principles of sociological research. Topics include, but are not limited to: culture, social groups, socialization and personality development, social change, crime, and major social institutions such as family.

## ETHNIC MINORITY STUDIES (2016-2017)

Prerequisite: None  
Semester – ½ credit

This course is a social studies elective that examines the influence of the major ethnic groups and their history in the U.S. Emphasis is placed on the appreciation of group diversity and individual accomplishment. The course provides in-depth coverage of the role each group plays in the development of our national culture. **Offered in alternating years with African American Studies.**

## COMPARATIVE RELIGION

Prerequisite: None  
Semester – ½ credit

The course provides an overview of the world's religions. Students will not only examine the history and spread of religions, but will also learn about the beliefs, symbols, and distinguishing features of each. Among the religions studied in this class are Hinduism, Jainism, Buddhism, Taoism, Confucianism, Shintoism, Zoroastrianism, Judaism, Christianity, Islam, Sikhism, as well as other religious movements.

## AFRICAN AMERICAN STUDIES (2015-2016)

Prerequisite: None  
Semester – ½ credit

This course is a survey of African –American history from 1620 to the present. Topics that students will

explore include: the cultural, political and economic impact of slavery; segregation, the struggle for political, social and economic equality; and the status of African-Americans in contemporary America. Emphasis will be given to the contributions of Africans and African-Americans to the cultural development of the United States. Student presentations and Internet activities will supplement teacher prepared lessons. **Offered in alternating years with Ethnic Minority Studies.**

## **CAREER AND TECHNICAL EDUCATION PATH OF STUDIES**

The Career and Technical Education (CTE) program provides opportunities for students to discover career options available as well as providing the career pathways through high school for possible postsecondary education and/or job placement. Our staff works directly with local business and industry to ensure that our CTE programs are developing our students with the skills, credentials and technical knowledge necessary to meet the needs of our local workforce.

## **BUSINESS MANAGEMENT AND ADMINISTRATION**

### **PRINCIPLES OF BUSINESS AND MARKETING**

Prerequisite: None

Grades 9-10

Semester – ½ credit

Introduction to Business is an elective for grade 9 and grade 10 students. It is designed to focus on business and government roles in the economy. Students will study personal budgeting, credit, loans, bank accounts, small business opportunities and personal investments.

### **ACCOUNTING**

Prerequisite: None

Grades 11-12

Year – 1 credit

Students learn and apply the basic principles, concepts, and practices of acceptable accounting procedures using a manual system and an automated system. Students analyze transactions, prepare and interpret financial statements. Business simulations are used. Homework is given regularly and is an important part of learning the material.

## **ENTREPRENEURSHIP EDUCATION**

**(Pending Approval)**

Prerequisite: None

Grades 10-11

Year – 1 credit

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle.

## **ENTREPRENEURSHIP EDUCATION, ADVANCED (Pending Approval)**

Prerequisite: Entrepreneurship Education

Grades 11-12

Year – 1 credit

This course is designed for students who wish to concentrate on advanced strategies for entrepreneurship, building upon concepts introduced in Entrepreneurship (9093). The focus of the course is on development of a business plan and small business management. Students will establish, market, and maintain a business.

## **BUSINESS LAW**

Prerequisite: Grades 10-12

Semester – ½ Credit

Business Law introduces students to the foundations of the American legal system as they explore economic and social concepts as they relate to legal principles and to business and personal laws. Topics examined include contracts, cyber law, criminal law, consumer protection, wills/estates, property law, civil law, employment law, unions, and credit obligations. Students discuss and analyze real legal cases.

## **OFFICE SPECIALIST**

Prerequisite: None

Year – 1 credit

This course is designed for students who have not taken Keyboarding classes. Students will develop skills in keyboarding, computer skills, communication skills, using telecommunications and preparing for employment.

## **ECONOMICS and PERSONAL FINANCE ■**

Prerequisite: None

Recommended Grade 10

Year – 1 credit

The focus of this course will be to assist students with learning how to successfully manage their time, money and resources to become informed citizens in a globally interdependent society. The course centers on the development of thinking skills and analysis of real world situations. Students will also study basic economic theories and principles in order to under-

stand how economics affects our lives. Students will also concentrate on the Virginia Workplace Readiness Skills and the Wise assessment for certification.

## HOSPITALITY AND TOURISM

### INTRODUCTION TO CULINARY ARTS

Prerequisite: Grade 9 and 10 only

Semester – ½ credit

Students will be exposed to careers in the food service industry, tools and small equipment, yeast breads, and quick breads. Students will have hands-on experience in the lab. This class is an introduction to the two-year culinary arts program.

### CULINARY ARTS I

Prerequisite: Successful completion of Introduction to Culinary Arts

Year – 2 credits (2 periods)

Culinary Arts I is a class that will expose students to the many facets of the food service industry. Students will be required to cook a variety of foods with a concentration on the Science of Baking. Students will be required to purchase a chef's coat and apron at the cost of twenty dollars.

### CULINARY ARTS II

Prerequisite: Culinary Arts I

Year – 2 credits (2 periods)

Culinary Arts II is a progression from Culinary Arts I. Students are exposed to an intensive in-depth look at meats, poultry, fruits, and vegetable cookery. The class will also cover customer service and restaurant management. Students will be required to purchase a chef's coat and apron at the cost of twenty dollars.

## HEALTH SCIENCES

### INTRODUCTION TO HEALTH CAREERS AND MEDICAL SCIENCES

Prerequisite: Grade 10 or higher

Semester – ½ credit

Introduction to Health Careers is a one-semester course that introduces the high school student to a variety of occupations currently offered in the health care field. Students will read about, discuss and interview personnel who are currently employed in health care positions. They will complete a project on a health career, and present their findings to classmates.

A major portion of the course involves learning about the different body systems and what they do. Students also explore ways for keeping body systems healthy, and they learn how to take blood pressure, pulse and respiration. Students learn communication skills, from developing a resume to conducting them-

selves in an interview, and they also learn about employability skills and professionalism. Current events related to health care research or treatments are an integral part of the course.

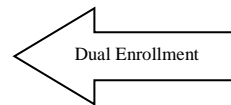
### HEALTH ASSISTING CAREERS

Prerequisite: None

Year – 2 credits

It is recommended that students take "Introduction to Health Occupations" prior to enrolling in this course. Chemistry and Biology are also recommended. Students will submit an application and be interviewed by nursing faculty prior to being enrolled in this course. Graduates will be required to take the Nurse's Aide certification exam at the cost of \$90 or more. It is strongly recommended that only students interested in a health career apply to take this course. Because of the interaction with nursing home residents during the clinical portion of this course, a student's behavior, prior discipline record and attendance will be examined before being considered for enrollment.

### EMERGENCY MEDICAL TECHNICIAN-BASIC (EMT-B)/CVCC



Prerequisite: Enrolled in 11<sup>th</sup> or 12<sup>th</sup> grade, between ages 16-18; enrolled per policy for dual enrollment at CVCC; TB skin test as required by the State Board of Health; Application required.

Year – 2 credits

This year-long course provides basic emergency, pre-hospital care to patients involved in accidents, injuries, or sudden illness. Course consists of 110 classroom hours and 10 clinical hours to be completed outside of class. To obtain certification a student must pass EMT-B course as well as state written and practical exam to be taken outside of classroom. Students are encouraged to volunteer with local EMS agencies.

### SPORTS MEDICINE I

Prerequisite: Health & PE 9; 10<sup>th</sup> grade status

Year – 2 credits

This course is designed for students interested in the medical profession and athletics. The material presented will combine medical principles with the athletic setting. Specific topics will include human anatomy, injury prevention and identification, medical documentation, first aid, and rehabilitation guidelines. Special topics/current issues in health care will also be discussed. Students will participate in hands-on learning activities and be expected to perform practical skills.

## **SPORTS MEDICINE II**

Prerequisite: Sports Medicine I, and a genuine interest in healthcare; 11<sup>th</sup> or 12<sup>th</sup> grade status

Year – 2 credits (2 periods)

This course is designed as an advanced look at the treatment, evaluations, and rehabilitation of athletic related injuries. Topics include and are not limited to medical considerations. The student will learn advanced first aid and life support techniques. Students will be required to work in the Athletic Training Room and may choose to assist in the coverage of practices and games.

## **AGRICULTURE, FOOD AND NATURAL RESOURCES**

### **APPLIED AGRICULTURAL CONCEPTS**

Prerequisite: None

Year – 1 credit

This course is designed to meet the needs of students who have limited or no agricultural background or experience. Fundamental agricultural competencies needed for rural or urban living form the basis of the course. Areas of instruction include meat grading and selection, and maintenance of home appliances and equipment: additional competencies in the study of soil fertility and in cultural practices for shrubs, lawns, gardens, and fruit trees may be incorporated. Leadership development activities are included in the course content, and participation in FFA activities is encouraged.

### **INTRODUCTION TO NATURAL RESOURCES**

Prerequisite: Grade 10 or above

Year – 1 credit

Introduction to Natural Resources is designed as a one-year, single-period occupational preparation course. The course assists students in developing knowledge and skills required for employment in occupations in forestry and wildlife management, outdoor recreation, and air, soil, and water conservation. Because of the emphasis on different facets of natural resources management in different parts of the state, the course will vary to meet local needs and interests.

### **FORESTRY MANAGEMENT**

Prerequisite: Introduction to Natural Resources

Year – 1 credit

Forestry, Wildlife, and Soil management is designed as a one-year occupation preparation course. The course includes instruction in forest protection and harvesting, fishpond ecology and management, planning and operation of a hunting and fishing preserve, wildlife ecology and management, soil and water

management systems, service and operation of large power equipment, and leadership training.

### **ADVANCED FORESTRY MANAGEMENT**

Prerequisite: Forestry Management

Year – 1 credit

Natural Resources Business Management is an occupational preparation course offered at the twelfth grade level. Much of the instruction may be individualized. Major learning areas include processing forest products and lumber grading, and determining the feasibility of establishing, financing, and managing a business such as forestry, outdoor recreation, wildlife, or urban conservation.

## **TRANSPORTATION, DISTRIBUTION AND LOGISTICS**

### **AUTO TECHNOLOGY I**

Prerequisite: Grade 10 or higher

Year – 1 credit

This class is a pre-requisite for entry into the 2 year, 4 credit program. The class provides a solid understanding of the fundamental theory and related science involved in the automotive industry. The course provides all students with a practical, real world automotive education. It includes 14 categories of basic automotive instruction, as well as instruction on safety, economics and employment.

### **AUTO TECHNOLOGY II**

Prerequisite: Auto Tech I

Year – 2 credits (2 periods)

This class is for students who are considering a career in the automotive industry. Building on knowledge acquired in the introductory class, students will study 14 categories in great depth and will apply the knowledge in a hands-on shop environment. In this advanced class, students will begin a log book of experiences and completed competencies.

### **AUTO TECHNOLOGY III**

Prerequisite: Auto Technology II

Year – 2 credits (2 periods)

In this class students will focus on completing the “Competency Log Book” started in Auto II. Completing this log book will qualify the student for NATEF certification as an automotive General Technician student and can be used for advanced placement and tuition savings at most technical colleges.

## **ARCHITECTURE AND CONSTRUCTION**

### **CONSTRUCTION TECHNOLOGY**

**(Pending Approval)**

Prerequisite: None

Grade 9- 12

Semester – ½ credit

Students design and build scale or full-size structures and work with projects that help them understand the jobs of architects, carpenters, electricians, plumbers, surveyors, contractors, masons, design engineers, and a variety of other construction careers. They also explore aspects of the construction industry.

### **BUILDING TRADES I**

Prerequisite: None

Grade 10 or 11

Year – 1 credit

Introduction to Building Trades I is designed to familiarize students with the construction trades and to equip them to continue in the building trades vocational cluster. A special emphasis will be placed on safety. Students will focus on careers in the building trades, operation of hand and power tools, types of building materials, measuring, construction methods, basic carpentry skills, basic electrical and plumbing theory, and wood frame construction. Fifty percent of the class time will be spent working in the shop area.

### **BUILDING TRADES II**

Prerequisite: Building Trades I

Year – 2 credits (2 periods)

Building Trades II is designed to develop student skills in the Building Trades vocational cluster. Students will investigate, learn and implement construction methods on shop projects including knowledge of building materials, measuring, carpentry skills, electrical and plumbing skills and residential construction methodology. Students will earn their OSHA 10 card and prepare for the NCCER carpentry certification. A large part of the class time will be spent on projects.

### **CARPENTRY I**

Prerequisite: Building Trades II

Year – 2 credits (2 periods)

Carpentry I is the building block for achieving high-level construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, students are taught to use hand and power tools, cut stock, apply construction mathematics, and interpret blueprints. Students will become proficient in identifying types of residential construction components to form foundations and frame walls, floors,

ceilings, roofs, doors, and windows. All students will obtain the required OSHA 10 safety credential.

### **TECHNICAL DRAWING AND DESIGN**

Prerequisite: None

Grade 9-11

Semester – ½ credit

In this foundation course, students learn the basic language of technical design, while they design, sketch, and make technical drawings, illustrations, models, or prototypes of real design problems. Students develop spatial ability as they apply mathematical concepts to visual representations. The course is especially recommended for future engineering and architecture students.

### **DRAFTING I**

Prerequisite: Grade 10 or 11

Year – 1 credit

This is an introduction to the three year drafting program. Students will be exposed to the basic computer aided drafting commands as they relate to engineering and architectural drafting along with blueprint reading.

### **DRAFTING II**

Prerequisite: Drafting I

Year – 2 credits (2 periods)

Drafting II is a yearlong occupational preparation course for students interested in a drafting career as well as students interested in continuing their education after high school in the areas of architecture or engineering. Students will be exposed to the basics of drafting procedures using AutoCAD software. The emphasis in CAD I will be on engineering drafting. Students will prepare drawings of machine parts such as those found in local industries. These drawings will include two-dimensional and three-dimensional views with dimensions and instructions from which the parts can be manufactured.

### **DRAFTING III/CVCC**

Prerequisite: Successful completion of Drafting II

Year – 2 credits (2 periods)

Drafting III is a yearlong occupational preparation course. The emphasis in Drafting III will be on architectural drafting as it relates to light residential construction. Students will be trained to draw a complete set of house plans, which would include floor plans, elevations, wall sections, and details from which a contractor can build. Successful completion of the two-year program will allow the student to articulate into the Engineering Technology Program at Central Virginia Community College. This course may be taken for dual enrollment credit. Students completing the two year program will be required to

take an industry approved assessment at the end of the year.

## MANUFACTURING

### WELDING I

Prerequisite: Grade 10 or higher

Year – 1 credit

This is an introduction to the two-year welding program. Students will be exposed to oxygen and acetylene welding, brazing, hard facing, and oxyacetylene cutting with exposure to the other welding and cutting processes taught in the Welding I and II programs.

### WELDING II

Prerequisite: Welding I

Year – 2 credits (2 periods)

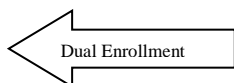
Welding II is a one-year occupational preparation course in which instruction is provided in electrode manipulation skills for shielded metal arc welding process. Students will be taught to read blueprints, weld symbols and weld procedure sheets, as well as Oxyfuel and plasma burn, both manual and semi-automatic process. Students will earn their OSHA 10 hour safety card and prepare for the NCCER welding certification. The AWS (American Welding Society) performance certification test for Shielded Metal Arc Welding will be offered at the end of the year to those prepared to take it.

### WELDING III/CVCC

Prerequisite: Welding II

Year – 2 credits

Welding III is a one-year occupation course which provides opportunity to learn advanced Shielded Metal Arc Welding, basic Gas Metal Arc Welding (MIG), and basic Gas Tungsten Arc Welding (TIG). These processes will be used in welding mild steel, stainless steels, and aluminum materials and Flux Core Arc Welding. Welding theories, metallurgy and industry practices will be taught. Students will apply knowledge and skills to group and class projects. Students will continue to prepare for the NCCER welding certification and sit for the exam at the end of the school year. Students that are successful can earn SOL credit applied to their graduation requirements. Additional AWS (American Welding Society) performance certification tests will be offered in SMAW, FCAW, GMAW and GTAW to those prepared to take them. This course can be taken for dual enrollment at CVCC.

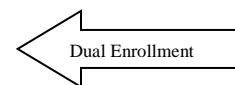


### PRECISION MACHINING TECHNOLOGY (MACHINE TOOLS)/CVCC

Prerequisite: CVCC Application Process

Year – 3 credits

Precision Machining Technology is a dual-enrolled high school/college course of study, which prepares the area's workforce for employment with modern manufacturing industries. Students are taught how to use computer numeric-controlled machining centers, precision measurement devices, CAD technology and other high-tech equipment used in manufacturing operations. Students will report to CVCC daily for the occupational training courses and then report to the high school for academic courses.

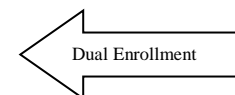


### HVAC (HEATING, VENTILATION AND AIR CONDITIONING) / CVCC

Prerequisite: CVCC Application Process

Year – 3 credits

HVAC is a dual-enrolled high school/college course of study, which prepares students for future employment in careers utilizing skills and knowledge in the areas of heating, ventilation and air conditioning. Students are taught how to use circuits and controls, mechanical codes, air distribution and designs, hydronics and heat pumps. Students will report to CVCC daily for the occupational training courses and then report to the high school for academic courses.



## ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS

### COMMUNICATIONS SYSTEMS

Prerequisite: None

Grades 9-12

Year – 1 credit

Communication Systems provide experiences in the fields of imaging, technology, graphic productions, video and media, technical design, and various modes of communicating information through the use of data. Students develop critical thinking and problem solving skills using the universal systems model. Students also learn about the impact of communication on society and potential career fields relating to communications. Students learn to use image-editing software to manipulate digital images.

### IMAGING TECHNOLOGY

Prerequisite: Communication Systems is recommended

Grades 9-12

Year – 1 credit

Imaging Technology introduces students to the basic principles of photography, while providing a strong

emphasis on digital imaging. Students study the development of photography as a communication medium and its evolution into the digital realm. Students learn to use image editing digital software to manipulate digital images.

### **TELEVISION AND MEDIA PRODUCTION I (Pending Approval)**

Prerequisite: None

Year – 1 credit

Students will learn how to think and work like media producers by engaging in hands-on production projects. Students will also gain proficiency with the media production process while using industry-standard tools. They will explore jobs and careers in the dynamic and growing industry of television and media production and understand the impact of media and its function as entertainment, persuasion, information, and instruction.

## **INFORMATION TECHNOLOGY**

### **IT FUNDAMENTALS**

Prerequisite: None

Grades 9-10

Year – 1 credit

Information Technology (IT) Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. Students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. Students will evaluate the impact of IT on other career clusters. The focus of the IT Fundamentals course is the introduction of 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 computers and Internet technology and develop teamwork and communication skills that will enhance their employability.

### **COMPUTER APPLICATIONS**

Prerequisite: None

Grades 9-10

Semester – ½ credit

Students develop or review correct keyboarding techniques and gain a basic knowledge of word processing, spreadsheet, database, graphics, and telecommunications applications. Students demonstrate an understanding of computer concepts through application of knowledge. Students learn to use software packages and local and worldwide network

communications systems. Learning are incorporated and reinforced in this course.

### **COMPUTER INFORMATION SYSTEMS**

Prerequisite: IT Fundamentals and/or Computer Applications

Grades 10-12

Year – 1 credit

Students learn and apply business applications using spreadsheets, graphics, databases and word processing. Keyboarding speed of 25 words per minute and the successful completion of Algebra I is recommended.

### **CAREER INTERNSHIP**

Prerequisite – Grade 12 only

Year – 1 credit

This course is designed to provide a direct experience in the Amherst County community or at ACHS in an area of serious career interest. A written plan of objectives, activities and evaluation must be developed at the beginning of the internship and agreed to by students, parents, community mentors, the internship director, a school counselor and principal. Course will not count towards a CTE credit or Credential, offered as a local elective only.

### **INTRODUCTION TO LEADERSHIP**

**(Pending Approval)**

Prerequisite: None

Grades 9-10

Semester – ½ credit

This course equips students with individual and group leadership skills. Course content includes leadership principles, officer training, parliamentary law, public speaking, effective communication, positive public relations skills, and techniques of organizing and conducting group meetings and activities. Students are encouraged to be active members of a community or school organization.

# THE SCHOOL COUNSELING PROGRAM

The developmental school counseling program is multidisciplinary, requiring collaboration and teamwork. Although counselors plan, direct, and carry out most of the school and counseling activities, the responsibility for the success of the program is shared with teachers, administrators, supervisors, parents, and members of the community.

The counselors invite questions, comments and input from parents and/or guardians involved in the educational and personal development of students. For the 2015-2016 school year, school counselors at the high school will be assigned utilizing an alpha distribution of the student population according to last name.

Schedule changes are allowed **only** in the following situations:

1. An error in the schedule
2. A decision to take a more advanced course after consulting with a school counselor
3. An unusual circumstance such as an injury

Please contact any member of the school counseling department at 946-2815.

## Amherst County High School Counseling Department

A – Dh	Ms. McCrea, Lead Counselor	<a href="mailto:mmccrea@amherst.k12.va.us">mmccrea@amherst.k12.va.us</a>
Di – J	Ms. Meade	<a href="mailto:pmeade@amherst.k12.va.us">pmeade@amherst.k12.va.us</a>
K – Q	Ms. Clark	<a href="mailto:lclark@amherst.k12.va.us">lclark@amherst.k12.va.us</a>
R – Z	Ms. Thomas	<a href="mailto:kthomas@amherst.k12.va.us">kthomas@amherst.k12.va.us</a>
Secretary	Ms. Sandidge	<a href="mailto:psandidge@amherst.k12.va.us">psandidge@amherst.k12.va.us</a>

## Amherst Education Center

Ms. James [rjames@amherst.k12.va.us](mailto:rjames@amherst.k12.va.us)

## Amherst Middle School

Ms. Aslin [saslin@amherst.k12.va.us](mailto:saslin@amherst.k12.va.us)

## Monelison Middle School

Ms. Goins [kgoins@amherst.k12.va.us](mailto:kgoins@amherst.k12.va.us)  
Mr. Apperson [japperson@amherst.k12.va.us](mailto:japperson@amherst.k12.va.us)

## **Family Educational Rights and Privacy Act (FERPA)**

FERPA is a federal law that gives parents the right to review their child's education record and to request changes under limited circumstances. To protect the child's privacy, the law generally requires schools to ask for written consent before disclosing the child's personally identifiable information to individuals other than the parent.

FERPA defines "directory information" as information contained in a student's education record that generally would not be considered harmful or an invasion of privacy if disclosed. Directory information could include: name, address, date and place of birth, dates of attendance and grade level; participation in officially recognized athletics and sports; weight and height of members of athletic teams; degrees, honors and awards received or the most recent school attended.

A school may disclose directory information to anyone, without consent, if it has given parents general notice of the information it has designated as "directory information" the right to opt out these disclosures; and the period of time they have to notify the school or their desire to opt out.