

**AMHERST COUNTY HIGH SCHOOL  
PROGRAM OF STUDIES  
2018-2019**



**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 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 progress 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

**Diploma Requirements**

**The Virginia Board of Education approved revisions to the requirements students must meet to earn a high school diploma. After a final review by the governor and an opportunity for public comment, the new diploma requirements will begin with students entering the ninth grade in 2018-2019 (class of 2022) and beyond.**

**(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.

Beginning with first-time ninth grade students in the 2016-2017 school year, requirements for the standard and advanced diplomas shall include a requirement to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

**Standard Diploma**

Credits required for graduation with a *Standard Diploma*:

*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 World History or Geography or both 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.

\* Beginning with students entering ninth grade for the first time in 2013-2014, a student must also earn a board-approved career and technical education credential to graduate with a Standard Diploma; and successfully complete one virtual course, which may be non-credit bearing.

### 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.

\* Beginning with students entering ninth grade for the first time in 2013-2014, a student must successfully complete one virtual course, which may be non-credit bearing, to graduate with an Advanced Studies Diploma.

### 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 (3.7 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 two year program designed to allow selected juniors who have successfully completed Al-

gebra 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 in 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), Emergency Medical Technician (EMT), Welding, Advanced Forestry Management, and Advanced Engineering Drawing and Design.

### **Grow Your Own Teachers Initiative**

Lynchburg College's Grow Your Own Teachers Program is an opportunity for students to earn a teaching degree through a partnership between Amherst County Schools and Lynchburg College. To be eligible for the program students must reside in Amherst County and have a desire to teach Science, Technology, Engineering and Math. Students enrolled in Early College through Amherst County Public Schools and CVCC are eligible to participate.

Benefits of Grow Your Own are: 1) Students pay two years of tuition at CVCC and benefit from a financial aid package the two years at Lynchburg College. 2) Field work experiences and student teaching are done in the Amherst County Public Schools. 3) Faculty advisors from CVCC and Lynchburg College are available to assist students. 4) After graduation, students work with Amherst County Public Schools to secure job placement if an opening is available for which they are qualified.

Please contact your school counselor for more in-

formation about the Grow Your Own Teachers Program.

### **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. Courses must be from a school of higher learning that has a contracted agreement with Amherst County Public Schools.

#### **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.

### Audit Courses

Students may audit a course if they have approval to retake a course for the purpose of obtaining a higher final grade. Both grades must show on the student's transcript; however, the student will receive credit for the highest grade only. Note: This does not apply to course failures.

### 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.

### Standard Grading Scale

Scale	Symbol	Standard
98-100	A+	4.0
93-97	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
0-59	F	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.**

### AP and Dual-Enrollment Grading Scale

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

Scale	Symbol	PreAP
98-100	A+	4.5
93-97	A	4.5
90-92	A-	4.2
87-89	B+	3.8
83-86	B	3.5
80-82	B-	3.2
77-79	C+	2.8
73-76	C	2.5
70-72	C-	2.2
67-69	D+	1.8
63-66	D	1.5
60-62	D-	1.2
0-59	F	0

### AP Grading Scale

Scale	Symbol	AP*
90-100	A	5.0
80-89	B	4.0
70-79	C	3.0
60-69	D	2.0
0-59	F	0

\* Students taking Dual-enrollment and Advanced Placement Courses receive letter grades without a plus or minus.

### Diploma Options

Amherst County High School currently offers the following diplomas: Standard, Advanced Studies, Applied Studies, and Certificate of Completion. See pages 1 and 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, Bi-Literacy, 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.

**Senior athletes will be required to be enrolled in classes for all seven periods.**

### 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.**

## Course of Study

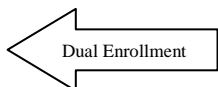
**Note: Due to staffing, budget changes or low enrollment, some courses may not be offered.**

### 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 I

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.

### ART HISTORY AND APPRECIATION

**(online only)** 

Semester – ½ credit

Art has played a significant role in every major civilization throughout the history of man. The emergence of different art forms often reflects the values that a civilization deems important: religion, labor, love, political change, or even commerce. Since art-work and cultural values are so closely related, studying art is a compelling way to learn about the people who produced it.

### 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

Semester – ½ 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.

## DIGITAL ART (online only)

Semester – ½ credit

This one-semester elective course is intended as a practical, hands-on guide to help students understand digital art. In this course, students will have an overview of digital art history, summarize the important events related to art from the nineteenth century to the present, explore various careers in digital art, learn how digital art is stored on computers and about various digital file formats and their compression techniques, learn to create basic shapes and universal symbols, learn about perspective, a technique applied to two-dimensional images so they appear three-dimensional images, learn how to crop, flip, rotate, blur, distort, or sharpen an image, learn about the layout design principles of emphasis, readability, balance, rhythm, and unity, learn how to critique an artwork using the four stages of art criticism and how to convert traditional art to digital art, digital printing, digital photography, and multimedia.

## 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

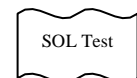
Prerequisite: Pre-AP English 9 or English 9

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 Advanced 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 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.



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**

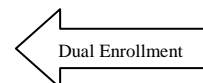
Prerequisite: Advanced English 11 or AP Language and Composition

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

The intent of this course is to help students learn the skills necessary for performing a variety of physical activities and understand the benefits of achieving and maintaining a healthy and active lifestyle. Five strands within the curricula are Skillful Movement, Movement Principles and Concepts, Personal Fitness, Responsible Behaviors, and Physically Active Lifestyle. Health education class will include instruction in disease prevention and control, consumer health, environmental health, personal and family survival, substance abuse, family life, and first aid. Students will be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. To receive credit for ninth grade Health and Physical Education, students must satisfy requirements for both Health Education and Physical Education.

### **DRIVERS EDUCATION / HEALTH & PE 10**

Prerequisite: Health & PE 9

Year – 1 credit

Standards of Learning in this course are sequenced and progress in complexity from the five strands concentrated on in H/PE 9. The standards are intended to provide the knowledge, processes, and skills needed for students to become physically educated, physically fit, and responsible in their health choices and behaviors for a lifetime. Emphasis is placed on physical fitness through national standard fitness test. Activities include team and lifetime sports. Drivers Ed is taught in place of Health for the first semester; once state requirements have been met Health is started. Drivers Ed instruction focuses 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. Health Education will offer instruction in mental health, substance abuse, and family nutrition. To receive credit for tenth grade Drivers Ed / Health and Physical Education, students must satisfy requirements for both Health Education and Physical Education.

### **PHYSICAL FITNESS**

Prerequisite: Grade of B or above in Health & PE, Teacher Recommendation

Semester – ½ credit

This course is designed to improve fitness levels and knowledge about fitness and training. This level is designed for the beginner in weight training technique, running form, core/balance exercises and flexibility training. Using a variety of cardiovascular exercises, resistance exercises and fitness routines students will gain first-hand knowledge on how to create productive routines that are safe and progressive. Students will implement activities designed to increase cardiovascular fitness and muscular strength. These programs will be designed to improve body composition on an individual basis through exercise and diet. Periodic fitness testing will test cardiovascular endurance, muscular endurance, and muscular strength.

### **ADVANCED PHYSICAL FITNESS**

Prerequisite: Physical Fitness, Teacher Recommendation

Semester – ½ credit

Advanced Physical Fitness is a continuation of the Physical Fitness class with an emphasis on increased intensity in weight training and interval agility training. The course is designed to continue mastery of weight training technique, dynamic and static stretching, aerobic and anaerobic exercises, core and balance training. Periodic fitness testing will test cardiovascular endurance, muscular endurance, and muscular strength.

### **ATHLETIC WELLNESS I**

Prerequisite: Grade of B or above in Health & PE, Teacher Recommendation

Semester – ½ credit

This course is designed to improve student knowledge about fitness and training. This level is designed for the beginner in weight training technique, running form, core/balance exercises and flexibility training. The course focuses on improving

body composition, instruction on correct technique and to improve overall safety within a weight training program.

### ATHLETIC WELLNESS II

Prerequisite: Athletic Wellness I or Teacher Recommendation

Semester – ½ credit

This course will be offered to students in Grades 10 and 11. The emphasis is placed on maximizing the student's overall athletic development and to reduce the risk of injury. The course focuses on improving body composition, instruction on correct technique and to improve overall safety within a weight training program.

### ATHLETIC WELLNESS III

Prerequisite: Athletic Wellness II or Teacher Recommendation

Semester – ½ credit

This course will be offered to students in Grade 12. The emphasis is placed on maximizing the student's overall athletic development and to reduce the risk of injury. The course focuses on improving body composition, instruction on correct technique and to improve overall safety within a weight training program.

## 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 patterns, generalization of arithmetic concepts, proportional reasoning, representing mathematical relationships using tables, symbols and graphs and will include a transformational approach to graphing. 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 pro-



vides an understanding of the terminology, notation, and symbolism of Algebra. Content includes patterns, generalization of arithmetic concepts, proportional reasoning, representing mathematical relationships using tables, symbols and graphs and will include a transformational approach to graphing. 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

The student will apply programming techniques and skills to solve practical real-world problems in mathematics arising from consumer, business, and other applications in mathematics. The class will use chromebooks as the primary learning device, eliminating the need to be in a computer lab. Students will be introduced to JavaScript and SQL programming languages and write programs in each to learn the structure of computer programming as they explore how computers and math are used in the workplace.

**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 exploration of geometric relationships including properties of geometric figures, trigonometric relationships and mathematical proofs. 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. An emphasis on two- and three-dimensional reasoning skills, coordinate and transformational geometry and the use of geometric models to solve problems. Students will take the Geometry SOL test at the end of the course.



## **PRE-AP GEOMETRY**

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

Year – 1 credit; 4.5 Weighted Grading Scale

Pre-AP Geometry 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. Students will take the Geometry SOL test at the end of the 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 functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, sequences and series, normal curve and a transformational approach to graphing. Students will take the Algebra II SOL test at the end of the course.

## **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 include concepts taught in regular Algebra II and include a wider variety of topics and a more in-depth approach than Algebra II. Graphing utilities will be used to enhance understanding through modeling and aid in the study of functions and their inverses. At times, students will be required to perform mathematical calculations without the use of a calculator. Opportunities to develop conceptual understanding in addition to mastery of basic skills will be provided. Students will take the Algebra II SOL test at the end of the course.



## **COMPUTER SCIENCE – VISUAL BASIC**

Prerequisite – Completion of Algebra II with a minimum grade of C and a passing score on the Algebra II SOL test *or* enrolled in Pre-AP Algebra II

Year – 1 credit

This course is designed for students who have a working knowledge of the basic principles of Algebra. Students will learn the history of computational systems and the social and ethical implications of computers. They will be introduced to micro-computers and the Visual Basic programming language which is an object-oriented programming language used to create Windows, Web and command-line (console) applications. Fundamental programming concepts, including variables, conditional control structures, loops, procedures, arrays, structures, enumerated types, classes, and files are covered. Students will design and code programs using good problem-solving skills and good programming structure and will develop skills in working both mathematical and non-mathematical problems. No previous programming experience is required.

## **COMPUTER SCIENCE – C++**

Prerequisite – Visual Basic.NET with a minimum grade of C+ *or* math department recommendation  
Year – 1 credit

Programming offers students an invaluable opportunity to develop problem-solving skills. This course is an introduction to C++, an object-oriented lan-

guage. Students will use logical thinking in defining a problem, breaking it down in a series of smaller problems and writing programs to solve the problem using structured programming techniques and program development methodology. Students will learn the fundamentals of the language and design, code, test and debug programs. Topics include data structures, functions, classes and objects, arrays and structs, streams and files, classes and objects, decision structures, mathematical functions, recursion, and many more. Structured programming and the testing of programs will be stressed.

### **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.

### **APPLIED TECHNICAL MATHEMATICS I-II CVCC MTH 103-104**

Year – 1 credit

5.0 Weighted Grading Scale

Prerequisites: Competency in Math Essentials MTE 1-3 as demonstrated through the placement and diagnostic tests, or by satisfactorily completing the required MTE or MTT units or equivalent. A grade of C or higher in MTH 103 is required to proceed to MTH 104 for CVCC credit. The student must have at least Algebra 1 and Geometry and has passed at least

one math SOL verified credit. **Recommendation from the CTE department** at ACHS is required.

Topics covered in the MTH 103 course include: basic arithmetic, ratios, proportions and percents and finding area and volume of 2 and 3 dimensional figures. Topics covered in the MTH 104 course include: graphing, angle relationships, triangles, polygons, circles, similar figures, trigonometric applications, vectors and statistics. The primary focus of this course will be on practical applications of mathematics.

### **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 corps members.

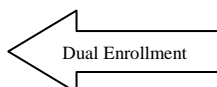
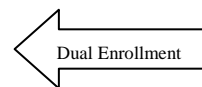
Chorus classes at the High School include both introductory and performance oriented programs. Several activities require participation in performances and rehearsals outside school hours.

### **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.

### **MUSIC APPRECIATION (online only) 📖**

Semester – ½ credit

This one-semester elective course is intended as a practical, hands-on guide to help students understand, discuss, and appreciate music more knowledgeably. Students will explore the history and evolution of music. Students will also learn about the concepts and techniques in music and music listening. They will also learn about musical instruments, famous composers and artists, and key musical genres.

## **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.



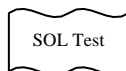
### **PRE-AP EARTH SCIENCE**

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 structure 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 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.

### **INTRODUCTION TO ASTRONOMY**

(online only) 

**Year – 1 credit**

This one-semester course is intended to introduce students to the concepts of astronomy. This course has 17 lessons and 6 Course Activities. Each lesson contains one or more Lesson Activities. In Introduction to Astronomy, students will learn about the history of astronomy, students will learn about the history of astronomy from ancient times to modern times. Students will identify the movements of the Sun, Moon, planets, and stars across the sky. They will describe the formation of the solar system, and the role of the Sun and Moon in the solar system. They will describe the causes of seasons on Earth and the reasons for life on Earth. Students will learn about stars, galaxies, and the



Milky Way. They will explain various theories of cosmology, and advantages and disadvantages of space exploration.

## SOCIAL STUDIES

### WORLD HISTORY PART I – WORLD HISTORY AND GEOGRAPHY TO 1500 AD



Prerequisite: None

Year – 1 credit

Students will explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. (C.E.) in terms of the impact on Western civilization. The course will be divided into four broad eras of human history. The first era will focus on human origins and early civilizations from pre-history to 1000 BC (B.C.E.). The second era will focus on the classical civilizations and the rise of religious traditions, 1000 B.C. (B.C.E.) to 500 A.D. (C.E.). The third era will focus on post-classical civilizations, 300 to 1000 A.D. (C.E.). The fourth era will focus on regional interactions, 1000 to 1500 A.D. (C.E.). This course will be offered to students needing credit recovery or students transferring to Amherst County High School.

### 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

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 exten-

sive 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 understanding. 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 (2018-2019)**

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 RELIGIONS**

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** ■

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.**

**NATIVE AMERICAN STUDIES (online only) ☐**  
Semester – ½ credit

This course explores a variety of topics related to contemporary Native American people. Each lesson focuses on a theme such as: worldviews, spirituality, language, health, socioeconomics, art, images in the media, contemporary professionals and organizations, veterans, and modern-day pow wows. The last lesson expands to include a global perspective by introducing issues of indigenous people worldwide.

**WORLD GEOGRAPHY (online only) ☐**  
Year – 1 credit

Geography is the study of where things are in the world. It is important to know why people settled where they did: sometimes this is for weather-related reasons, and sometimes it's because of bountiful natural resources nearby. In this course, students will learn about these special features which drive economic development and form the locales where people settle.

**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**

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**

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

Students will develop skills in areas including key-boarding, computer applications, communication skills, and office procedures.

## 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 understand 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 AND MEDICAL SCIENCES

Prerequisite: Grade 10 or higher

Year – 1 credit

Introduction to Health and Medical Sciences 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 themselves 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

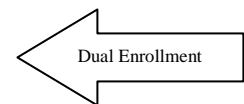
It is recommended that students take "Introduction to Health Careers and Medical Sciences" prior to enrolling in this course. Chemistry and Biology are also recommended. Students will submit an application and be interviewed by nursing faculty prior to being enrolled in this course. Graduates will be 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. Stu-



dents 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  
Semester – ½ 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.

### **COMMUNITY FORESTRY AND TREE MANAGEMENT**

Grades 10 -12

Year – 1 credit

*Pending VDOE and Board Approval*

Students in this course will be instructed in the value and benefit of trees and forests in urban areas. Course content will include identifying, selecting, and caring

for trees in urban areas.

## **INTRODUCTION TO NATURAL RESOURCES**

Grades 9-10

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.

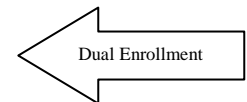
### **ADVANCED FORESTRY MANAGEMENT**

Prerequisite: Forestry Management

Dual Enrollment with CVCC

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)

This course is available for students who have completed the first two courses of Automotive Technology and attained program-completer status. The tasks for this capstone course represent the middle-tier standards of the National Automotive Technician's Education Foundation's (NATEF's) Automobile Service Technology accredited program. Students are provided instruction in all systems as they prepare for the ASE (Automotive Service Excellence) Student Certification.

## **ARCHITECTURE AND CONSTRUCTION**

### **CONSTRUCTION TECHNOLOGY**

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.

## **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.

## **ENGINEERING DRAWING AND DESIGN**

Grades 10-12

Prerequisite: Technical Drawing and Design

Year – 1 credit

*Pending VDOE and Board Approval*

Students use a graphic language for product design, technical illustration, evaluation of designs, and engineering drawings. They increase their understanding of drawing techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. They work in teams to design solutions for an identified need.

## **ADVANCED ENGINEERING DRAWING AND DESIGN**

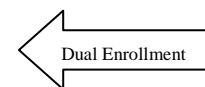
Grades 11-12

Prerequisite: Engineering Drawing and Design

Year – 2 credits (2 periods)

*Pending VDOE and Board Approval*

Students use a graphic language for product design and technical illustration. They increase their understanding of drawing techniques learned in the prerequisite courses. They research design-related fields while identifying the role of advanced drawing and design in manufacturing and construction industry processes. They apply the design process, analyze design solutions, reverse engineer products, create 3-D solid models using CADD, construct physical models, and create multimedia presentations of finished designs. They



complete a work portfolio based on a chosen graphic project.

## 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.



Dual Enrollment

## 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.



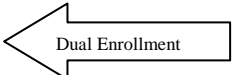
Dual Enrollment

## 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.



Dual Enrollment

## 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 devel-

opment 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**

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.

### **TELEVISION AND MEDIA PRODUCTION II**

Prerequisite: Television and Media Production I

Year – 1 credit

Students will become media producers as they take real-world projects from conception to production. They will continue to develop and master skills that are essential to the industry as they function in various professional roles. In addition, the students will gain both breadth and depth in their abilities with the sophisticated tools and equipment involved in professional media production. They will develop an increased understanding of postsecondary and career pathways and will develop plans and portfolios to help them achieve their goals.

## **INFORMATION TECHNOLOGY**

### **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: 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 recom-

mended.

## **CYBESECURITY FUNDAMENTALS**


Grades 9-12

Year – 1 credit

*Pending VDOE and Board Approval*

Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

## **INTRODUCTION TO CRIMINOLOGY**

**(online only)** 

Semester – ½ credit

This one-semester course is intended as a guide to the field and theories of criminology. It's structured into lessons and Course Activities as follows: The first lesson discusses criminology as a field of study. The next two lessons discuss theories, which suggest that people engage in crime to satisfy self-interests and individual traits influence criminal behavior. The next lesson discusses the theory that motivated offenders are most likely to commit crimes when they are influenced by routine activities of potential victims. The next three lessons describe theories that suggest that people engage in crimes when social institutions fail to have a positive influence on them, they are labeled as criminals, and they associate with peers with criminal backgrounds. The next lesson familiarizes students with the theory that people engage in or refrain from criminal activities based on how they respond to certain events (turning points) in their lives. The next three lessons describe theories that influence of political and social powers, inability to achieve societal goals, and breakdown of social order contribute to criminal behavior. The next two lessons discuss theories that crimes and criminal behavior can be reduced by advocating peace and justice, reducing physical opportunities, and increasing the risks of being caught. The last lesson familiarizes students with the theory that focuses on preventing the escalation of serious crimes in a community.

## **GAME DEVELOPMENT (online only)**

Semester – ½ credit

This one-semester elective course is intended as a practical, hands-on guide to help students understand the process of game development. Students will learn about the history of video games, types of early consoles, arcades, personal computers, platform convergence, game and player goals, game genres, player



motivations, and player demographics. This course will provide students an understanding of story and character development, gameplay, game styles, and level design, game user interface, game audio, mobile and social gaming, and the different job roles in the video game industry. Students will also focus on game development phases, the role of management in game production, and various methods used for marketing games and discuss existing trends and possible directions in video gaming.

### **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.

### **ACADEMIC SUCCESS (online only) 📖**

Semester – ½ credit

This one-semester elective course is intended as a practical, hands-on guide to help students improve their study habits and enhance their prospects for academic success, now and in the future. This course is designed to help improve study skills regardless of skill level at the time the course is taken.

### **ESSENTIAL CAREER SKILLS (online only) 📖**

Semester – ½ credit

This one-semester course is intended as a practical, hands-on guide to help students understand the skills required to achieve success in modern-day careers. This course will cover essential career skills such as positive work ethics, teamwork, conflict resolution, effective speaking and listening, health and safety, and information technology.

### **CTE REMEDIATION-EDMENTUM**

**(online only) 📖**

This non-credit course is offered online to prepare students for various Career and Technical Education credentialing tests required for graduation.

### **SUCCESS AT WORK (AEC only)**

Year – 1 credit

Students study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project man-

agement, problem solving, and ethical decision making are an integral part of the course.

## **LANCER ACADEMY COURSES**

Art History and Appreciation

Digital Art

English 9

English 10

English 11

English 12

Writing Remediation

Writing SOL Review

Spanish I

Spanish II

Ninth Grade Health and Physical Education

Tenth Grade Health and Physical Education

Algebra 1

Algebra 2

Geometry

Algebra Functions and Data Analysis (AFDA)

Music Appreciation

Earth and Space Science

Biology

Chemistry

Environmental Science (for Biology II/ Ecology)

Introduction to Astronomy

World Geography

World History Survey (World History I)

World History (World History II)

US History

Virginia US Government

Economics and Personal Finance

African American Studies

Native American Studies: Historical Perspectives

Native American Studies: Contemporary Perspectives

Sociology

Introduction to World Religions

Keyboarding & Computer

Information Systems (CTE)

Computer Applications (for Computer Apps)

Principles of Business and Marketing

Game Development

Introduction to Criminology

Academic Success

Essential Career Skills

SAT Mathematics

SAT Reading

SAT Writing and Language

ACT WorkKeys- Reading for Information- Leveled

ACT WorkKeys- Locating Information

ACT WorkKeys- Applied Math

# 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 2016-2017 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 County High School Career Coach

TBA

## Amherst Education Center

Ms. Stanbery [astanbery@amherst.k12.va.us](mailto:astanbery@amherst.k12.va.us)

## Amherst Middle School

Mr. Hamlett [lhamlett@amherst.k12.va.us](mailto:lhamlett@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.