

# AMHERST COUNTY HIGH SCHOOL

## PROGRAM OF STUDIES

### 2011-2012

#### INTRODUCTION

Dear Student: Welcome to ACHS!!

The administration, faculty and staff extend early congratulations as you make preparations to become a “Lancer” graduate. We anticipate celebrating this educational milestone with you much sooner than you expect.

As you begin preparations for the coming year, please note a few changes in the Program of Studies that must be called to your attention as you make your important scheduling decisions. First, ACHS has been awarded the Virginia Advanced Studies Strategies (VASS) grant. This grant will provide students with open access to the Pre-Advanced Placement (Pre-AP) and Advanced Placement (AP) curricula. To that end, we are encouraging more students to engage in the AP curricula to bolster their position for college recruitment and enrollment. Colleges and universities across the nation are becoming more selective and extending offers of admission to high school graduates who take the most rigorous coursework offered at their high school.

It is our hope that each of you will embrace this opportunistic challenge and make salient decisions about your post-secondary goals. ACHS will continue to offer an array of desirable courses that focus on career and technical education, fine arts, music, theatre arts, business education and foreign languages. As we broaden the scope of our course offerings, we expect all students to realize their potential and make wise choices.

Such decisions are not easy. We invite you to visit the ACHS School Counseling Office and make an appointment with your counselor. Remember, you only see obstacles when you take your eyes off your goal.

In “Lancer” Spirit ,

Haywood M. Hand, Jr.  
Principal

#### Standard Credit and Verified Credit

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

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

#### Standard Diploma Requirements

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

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

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

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

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

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

**Advanced Studies Diploma Requirements**

***Advanced Studies Diploma***

<i>Discipline Area</i>	<i>Standard Unit of Credit</i>	<i>Verified Units of Credit</i>
English	4	2
Mathematics <sup>1</sup>	4	2
Science <sup>2</sup>	4	2
Social Studies <sup>3</sup>	4	2
Foreign Language <sup>4</sup>	3 or 4	
Health and PE	2	
Fine or Practical Arts	1	
Electives	1 or 2	
Student Selected SOL Test <sup>5</sup>		1
<b>TOTAL</b>	<b>24</b>	<b>9</b>

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

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

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

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

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

**Modified Standard Diploma Requirements**

The Modified Standard Diploma program is intended for certain students at the secondary level who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the Modified Standard Diploma program shall be determined by the student’s Individual Education Program (IEP) team and the student, where appropriate, at any point after the student’s eighth grade year.

The school must secure the informed written consent of the parent/guardian and the student to choose this diploma program after review of the student’s academic history and the full disclosure of the student’s options.

The student who has chosen to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard or Advanced Studies Diploma at any time

throughout that student’s high school career. The student will not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma.

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

***Modified Standard Diploma***

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

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

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

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

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

**Recognition of Merit**

The **Scholar’s List** is a nine-week academic recognition for all students who take a minimum of five units of credit per semester and who have a GPA of 3.50 or better. All courses will count in computing the grade point average (GPA).

The **Honor Roll** is a nine-week academic recognition for all students who take a minimum of five units of credit per semester and who have a GPA of 3.25 to 3.49. All courses will count in computing the GPA.

The **Golden “A” Award** is a merit-based program designed to recognize student achievement annually with a certificate and cumulatively after four years of high school with a trophy. The certificate will be awarded to students in grades 9 through 12 who

1. Maintain a 3.7 GPA and pass all SOL tests  
or

- Maintain a 3.60-3.699 and pass the majority of their SOL tests with Pass/Advanced or have SAT score of 1000+ or PSAT score of 1650+ or a 4 or 5 on an AP exam.

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

The following criteria for a certificate apply to students in 9<sup>th</sup> grade:

- Maintain a 3.70 GPA in all 8<sup>th</sup> grade courses or
- Maintain a 3.60-3.699 GPA and score Pass/Advanced in three 8<sup>th</sup> grade SOL tests.

### **National Honor Society**

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

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

The Governor’s School serves juniors and seniors from 5 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:

- Completed Algebra II/Trigonometry during the 10<sup>th</sup> grade year.
- Completed Chemistry during the 10<sup>th</sup> grade year.
- PSAT scores taken in the fall of the 10<sup>th</sup> grade year.
- Exceptional interest/aptitude in math and science.
- High level of achievement in all courses
- Outstanding reading comprehension skills
- Teacher recommendations
- 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..

### **The Early College Program**

The Early College Program is a unique and exciting partnership with Central Virginia Community College. Early College is a 2 year program designed to allow selected juniors who have successfully completed Algebra II or Algebra II/Trig 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 at CVCC Amherst Center 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 Articulation and Dual Enrollment College Credit**

The Tech Prep/College Prep Program is a partnership between Amherst County High School and CVCC. Students successfully completing the high school portion of Tech Prep/College Prep program may be eligible to receive college credit for selected courses at CVCC. Articulated courses offered at CVCC include Advanced Engineering and Design Technology, Micro-Computer Automation, Office System Technology, and Welding.

College level dual enrollment courses are available to students in the Tech Prep/College Prep Program. As a result, time and money are saved in the pursuit of post-secondary education. High School counselors can provide more information about the requirements for dual enrollment participation. Dual enrollment courses offered by ACHS include Advanced Composition, Calculus, Precision Machining Technology (Machine Tools), Heating/Ventilation/Air Conditioning (HVAC), Microcomputer Software Applications and Emergency Medical Technician (EMT), Welding II, CAD II, Building Trades II and Computer Systems Technology.

### **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)

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

### **Core Courses**

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

### **Elective Courses**

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

### Credit Required for Promotion

9<sup>th</sup> to 10<sup>th</sup> .....5  
10<sup>th</sup> to 11<sup>th</sup> .....10  
11<sup>th</sup> to 12<sup>th</sup> .....15

### 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 fifteenth day of each semester. Courses dropped after the fifteenth day will result in a W/F (withdraw/failing) being recorded on the student's transcript. Approval to withdraw from a class must be granted by the school principal.

### Course Sequence

All courses are to be taken in sequence. Students may not take sequenced courses simultaneously.

### Grading Scale

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

### Pre-AP and AP Grading Scale

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

Dual-enrollment courses offered through ACPS, Advanced Placement(AP) courses and CVGS courses that may lead to college credit are graded on a 10 point scale and will be weighted with A=5; B=4;C=3;D=2; and F=0.

### Diploma Options

Amherst County High School currently offers the following diplomas: Standard, Advanced Studies, Modified Standard, and Special. In addition, students may earn the following state seals: Career and Technical Education, Advanced Mathematics and Technology, Excellence in Civics Education, Governor's Seal, and/or Board of Education Seal. All diploma and seal requirements are in full compliance with the Standards of Accreditation of the Virginia Department of Education. The Class of 2015 will have the opportunity to earn a Standard or Advanced Technical diploma.



## Diploma Requirements

### Standard Diploma

- Beginning with the ninth-grade class of 2011-2012 and beyond, students shall earn the required standard and verified units of credit as outlined below.
- 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	
Fine Arts or Career and Technical Practical Ed	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 U.S. and Virginia History, Virginia Government, and one course in either courses to satisfy this requirement.

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

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

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

### Standard Technical Diploma

Requirements for a Standard Technical Diploma

- Credits required for graduation with a Standard Technical Diploma

*Standard Technical Diploma*

<i>Discipline Area</i>	<i>Standard Units of Credit Required</i>	<i>Verified Credits Required</i>
English	4	2
Mathematics <sup>1</sup>	3	1
Laboratory Science <sup>2,5</sup>	3	1
History and Social Studies <sup>3,5</sup>	3	1
Health and PE	2	
Economics and Personal Finance	1	
Career and Technical Ed.	4	
Electives	2	
Student Selected <sup>6</sup>		1
<b>TOTAL</b>	<b>22</b>	<b>6</b>

<sup>1</sup> Courses completed to satisfy this requirement shall include at least three course selections from among: Algebra I, Geometry, Algebra Functions and Data Analysis, or 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 course selections from three different Science disciplines from among: Earth Sciences, Biology, Chemistry and Physics. The Board shall approve courses to satisfy this requirement.

<sup>3</sup> Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.

<sup>4</sup> Courses completed to satisfy this requirement must include a career concentration as approved by the board. For concentrations that require less than four courses, students must complete additional courses that are related to the student's career concentration.

<sup>5</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 acquires 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 test to verify student achievement. If a career concentration includes a specific assessment approved by the board, then the student must take this assessment.

<sup>6</sup> A student may utilize additional tests for earning verified credit .

### Advanced Studies Diploma

Requirements for an Advanced Studies Diploma

1. 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 Career and Technical Ed.	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 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.

### Advanced Technical Diploma

Requirements for an Advanced Technical Diploma

1. Credits required for graduation with an Advanced Technical Diploma.

#### Advanced Technical 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	
Economics and Personal Finance	1	
Career and Technical Education <sup>5</sup>	3	
Fine or Practical Art	1	
Student Selected Test <sup>6</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 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> Courses completed to satisfy this requirement must include a career concentration as approved by the board. For concentrations that require less than four courses, students must complete additional courses that are related to the student's career concentration. If a career concentration includes a specific assessment approved by the board, then the student must take this assessment to fulfill this requirement.

<sup>6</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.

# COURSE OF STUDY

**NOTE: Due to staffing, budget changes or low enrollment, some courses may not be offered in the 2011-2012 school term.**

## **ART**

---

Although instructional materials are provided, the student is often required to provide materials for individual projects that he/she retains. An art fee is required.

### **ART I**

Prerequisite – None

Semester – ½ credit

Student will work in a variety of drawing mediums including but not limited to pencil, pen and ink, charcoal and pastels. They will use various drawing techniques to do a range of subjects from portraits to landscapes.

### **ART II**

Prerequisite: None

Year - 1 Credit

This course is offered to students who have an interest in creative expression through drawing and painting.

### **ART III**

Prerequisite: Art II or staff recommendation with portfolio review.

Year - 1 credit

Students will do more in-depth study focusing in the areas of drawing, design, sculpture, painting and printmaking. This course is a continuation of the Art II program.

### **ART IV**

Prerequisite: Art III or a portfolio of current work for review.

Year - 1 credit

This course is for students who have considerable drawing and painting experience. This course stresses individual development. Experimentation is encouraged using a wide variety of drawing and painting media and techniques. Individuals will be expected to perfect their talents and to build on what they learned in Art II & III.

### **ART V**

Prerequisite: Art IV or a portfolio of current work

Year - 1 credit

Students with a strong interest in the visual arts may do an in-depth study in various mediums. This course

is designed to give students a chance for independent study.

### **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

Semester – ½ credit

Students will further their ceramic education, experience and personal artwork. The students will work on completing a 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 for 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 will be a progressive course that can be taken multiple semesters for students to further their ceramic growth.

### **PHOTOGRAPHY I**

Prerequisite: None

Year - 1 credit

Photography I is designed to give students knowledge of basic photography through lectures, demonstrations, working assignments and laboratory practice. Students will explore the principles of photography and fundamental techniques of the camera in relation to the expressive possibilities in visual communication and design. (Students will be

responsible for providing their own film, printing paper and portfolio supplies: \$50-\$75 for the year). They will need access to a 35 mm camera to use at home. It is strongly recommended they have a SLR camera with manual mode capabilities.

### **PHOTOGRAPHY II**

Prerequisite-Photography I

Year-1 credit

Students will do more in-depth study in photography and refine their lab skills to a higher degree. Special processing techniques and digital imaging will be explored. As part of the class assignment students will work closely with the yearbook and newspaper staffs to provide pictures for their publications. (Students will be responsible for providing their own film, printing paper and portfolio supplies: \$50-\$75 for the year). They will need access to a 35 mm camera to use at home. It is strongly recommended they have a SLR camera with manual mode capabilities.

### **PHOTOGRAPHY III**

Prerequisite-Photo II

Year - 1 credit

Photography III will allow students to work more independently on their own individual skill levels. They will work more with digital photography as well as medium format black and white. They will continue to develop their portfolio. They would be encouraged to research career opportunities in the field of photography. (Students will be responsible for providing their own film, printing paper and portfolio supplies: \$50-\$75 for the year). They will need access to a 35 mm camera to use at home. It is strongly recommended they have a SLR camera with manual mode capabilities.

## **ENGLISH**

---

Students must take their English courses in sequence with only one English course per year. Exceptions may be considered in the junior and senior year 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, 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 ; English 9

Year – 1credit ; 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 assessments.

SOL Test

### **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.

### **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.

### **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 will be expected to take the College Board Exam in addition to fulfilling all English 11 curriculum requirements.



### **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**

Pre-requisite: 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

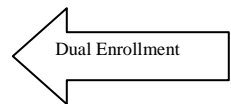
documented research paper and other analyses of classic works.

### **ADVANCED PLACEMENT ENGLISH LITERATURE**

Pre-requisite: Advanced English 11 or AP Language and Composition

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  
Section 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 112, 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.

### **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

Year – 1 credit

This course concentrates on direction, set design, and theater theory. Content also includes scene and advanced acting skills.

### **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 would design and implement their set creation, light plot, or sound plot to be a practical application used in productions at Amherst County High School.

### **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 student 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 –Students should have proficient writing skills and have successfully completed previous English classes. An Application is required.

Year – 1 credit

The content includes preparation, design, editing and publication of the yearbook.

Students may take this course each year in high school for one credit per year.

### **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.

Students may take this course each year in high school for one credit per year.

### **CREATIVE WRITING**

Prerequisite - None - Keyboarding recommended

Semester – ½ credit

This class emphasizes student writing. Students will receive instruction in critiquing and selecting literary work, magazine layout, and the publication of THINK.

### **COLLEGE PREP**

Prerequisite - Students should have completed English 9 and 10 and Geometry.

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 verbal and math sections of the SAT. Algebra I and Geometry will be reviewed. Concepts are reviewed, not introduced.

Both math and verbal reviews will use *Peterson's SAT Success*. 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

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

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; 4.5 Weighted Grading Scale

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 – Pre-AP Spanish

Year – 1 credit; 5.0 Weighted Grading Scale

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**

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

Students review and add to the four language skills begun 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

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; 4.5 Weighted Grading Scale

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 – Pre-AP French

Year – 1 credit; 5.0 Weighted Grading Scale

This course will continue the development of written and conversational skills in French. Grammar will focus on areas which are covered in the French SAT II. Students are required to spend a considerable amount of time working independently.

## **HEALTH & PHYSICAL EDUCATION**

---

### **HEALTH & PE - 9**

Prerequisite – None

Year – 1 credit

Topics include appearance, bone and muscles, food, tissue maintenance, sense organs, nervous system,

heart, vessels, and blood. Activities include physical fitness, weights, basketball, volleyball, soccer, track, softball, and group games.

### **HEALTH & PE 10**

Prerequisite - H& PE 9

Year – 1 credit

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

### **DRIVER EDUCATION**

Prerequisite – None (non-credit)

This course is taught in conjunction with H & PE 10 and includes instruction on developing proper driving techniques and attitudes essential to safe driving.

Emphasis is placed on traffic knowledge, manipulative skills, and a proper attitude toward the use of motor vehicles. Students will be provided the opportunities to practice their driving skills on the range after school. Students are selected for on the range driving according to their birth date.

### **WEIGHT TRAINING AND CONDITIONING**

Prerequisite – Grades 9-11

PE/Wt. Training Instructor Recommendation

Semester – ½ credit per semester

Students may take 2 semesters per year for 4 years  
This course will concentrate on strengthening students physically and mentally. The main concentration will be on the correct technique of lifting, the cycling of different routines and plyometrics.

### **WEIGHT TRAINING-LIFETIME FITNESS**

Prerequisite: Wt. Training;

Grade 12

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

## **MATHEMATICS**

### **ALGEBRA SOL ENRICHMENT**

Prerequisite – Algebra I or Algebra I Part I and Part II.

Administration/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. Students will demonstrate proficiency in each Algebra I SOL. 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.

### **ALGEBRA I PART II**

Prerequisite - Algebra I Part I

Year – 1 credit

Students will review each of the algebraic concepts taught in Algebra I, Part I and continue the study of linear equations, polynomials, rational expressions and their application to real-life problems. This course will include each of the Algebra I SOL's and culminate in students taking the Algebra I SOL test.



### **ALGEBRA I**

Year – 1 credit

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



### **COMPUTER MATHEMATICS**

Prerequisite – Successful completion of Algebra I Part II. This class does not satisfy the Advanced Diploma requirement for mathematics and cannot be taken after Algebra II.

Year – 1 credit

This course will include learning that incorporates computer math standards of learning (SOL's) using the graphing calculator as the primary computing device, giving students the opportunity to think through math problem solving through computer programming while avoiding the need to be in a computer lab.

### **GEOMETRY PART I**

Prerequisite - Algebra I, or Algebra I, Part II; successful completion of the Algebra I SOL test or concurrently enrolled in Algebra Enrichment  
Year – 1 credit

Students in Geometry Part I review the skills and concepts taught in Algebra I, and incorporate those skills in the study of geometry. Each of the geometry Standards of Learning will be introduced. Topics will include lines and angles, proofs, parallel and perpendicular lines and planes, triangles, polygons, circles, constructions, and coordinate geometry.



## GEOMETRY PART II

Prerequisite - Geometry Part I  
Year – 1 credit

This course will reinforce the skills taught in Geometry Part I. Emphasis will be placed on mastery of the Standards of Learning. Topics will include lines and angles, proofs, parallel and perpendicular lines and planes, triangles, logic, polygons, circles, constructions, and coordinate geometry, vectors and three-dimensional solids.

## GEOMETRY

Prerequisite : Algebra I  
Year – 1 credit

Geometry extends the skills and concepts developed in Algebra I through the study of concepts involved with plane and solid figures. Topics include a review of real numbers, segment and angle measurement, angle relationship, parallel and perpendicular lines, convex polygons, and congruent triangles. Also emphasized are circles, construction, coordinate geometry, area and volumes of solid figures.



## Pre-AP GEOMETRY

Prerequisite Successful completion of Algebra I.

Year – 1 credit; 4.5 Weighted Grading Scale

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



## ALGEBRA II

Prerequisite- Algebra I and Geometry  
Year – 1 credit

Algebra II is for students who wish to advance their mathematics knowledge in algebraic concepts at a moderate pace without the study of trigonometry. Topics include linear equations and inequalities, problem solving, polynomials and factoring, rational expressions, conic sections, arithmetic and geometric progressions. The math department recommends a grade of "C" or above in Algebra I and successful completion of Geometry.



## PRE-AP ALGEBRA II

Prerequisite- Advanced Geometry  
Year – 1 credit; 4.5 Weighted Grading Scale



Pre-AP Algebra II will present a wider variety of topics and a more in-depth approach than Algebra II. This course will include Trigonometry. It will include a transformational approach to graphing functions. Graphing utilities will be used to enhance understanding through modeling and aid in the study of functions and their inverses. Students will be required to have a graphing calculator. Opportunities to develop conceptual understanding in addition to mastery of basic skills will be provided.

## ALGEBRA III

Prerequisite Algebra II or Algebra II/ Trigonometry  
Year – 1 credit

Content includes the review of topics from Algebra II and Geometry and introduces new topics such as trigonometry, conics, matrices, series and limits. 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 Math Analysis.

## AP STATISTICS

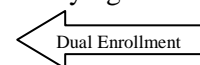
Prerequisite-Algebra II or above  
Year – 1 credit; 5.0 Weighted Grading Scale

Students are introduced to the major concepts and tools for collecting, analyzing and drawing conclusions from data. The course has broad applications in many areas of college study such as the natural and social sciences, education and business. Topics covered include: 1) description of patterns and departures from patterns; 2) sampling and experimentation; use of probability stimulation and statistical reference. Students are expected to take the AP Exam.

## CVCC Pre-Calculus

Prerequisites –Pre-AP Algebra II  
Year – 1 credit ; 5.0 Weighted Grading Scale

This course emphasizes the characteristics of functions, complex numbers, conic sections and logarithms. Graphing utilities will be used by students and teachers to enhance the understanding of realistic applications, solving equations and verifying equations.



## AP CALCULUS/CVCC

Prerequisites - Math Analysis, CVCC approval and CVCC Placement Test scores by June 1<sup>st</sup> and successful completion of all math SOL assessments.  
Year – 1 credit; 5.0 Weighted Grading Scale

This course includes a review of trigonometry, trig identities, and solving trig equations. Calculus studies limits, the derivative, application of the derivative and integration, application of integration, volumes of revolution, infinite series, parametric equations and polar coordinates.

## **MUSIC**

---

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

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

### **JAZZ ENSEMBLE**

Prerequisite – Must be a part of Advanced Band class

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.

### **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.

### **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 percussions ensemble music.

### **FLAGS**

Prerequisite – Audition

Semester – ½ credit

Non band student who audition for the flag corps of the marching band will need to sign up for this course. After the regular marching season is over, we will focus our efforts on an “indoor guard” performance.

### **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.

### **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 class can 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.

## **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.

## **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.

## **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.



### **SCIENCE ENRICHMENT**

Prerequisite – None

Semester – No credit

This course is designed for students who have successfully completed the science SOL courses but have not successfully completed the Standards of Learning (SOL) Assessment. Standards of Learning objectives will be enriched. 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 EOC science SOL tests.

### **Pre-AP EARTH SCIENCE**

Prerequisite

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.

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: Biology

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.

## **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.

## **AP BIOLOGY/RESEARCH**

Prerequisites-Pre-AP Biology

Year – 2 credits(2 class periods)

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 AP Exam.



SOL Test

## **CHEMISTRY**

Prerequisite –Biology, 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**

Prerequisite – Pre AP Biology and Algebra II

Year – 1 credit; 4.5 Weighted Grading Scale

This course is recommended for college-bound students with plans for a science or health major and an aptitude for mathematics. Emphasis is placed on independent problem-solving skills and analysis of laboratory data. Topics are covered in greater depth than in Chemistry. Aspects of chemistry to be studied include properties of solutions, reaction rates,

thermodynamics, equilibrium, theories of acids and bases, redox reductions, and electrochemistry. An independent research project is required.

## **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

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.

## **SOCIAL STUDIES**

---

Students will not be permitted to take more than one (1) social studies course such as U.S. History and U.S. Government in the same year. Exceptions may be considered in the senior year.

## **WORLD GEOGRAPHY**

Prerequisite –None

Year – 1 credit

World Geography emphasizes man's relationship with his physical and cultural environment and the development of basic geographical skills and concepts. The cultural areas studied include Southwest Asia, Europe, Africa, Latin America, Russia, The Commonwealth of Independent States, Japan and China.

The focus of this course will be on the five themes of geography, location, place, relationships within places, movement, regions, and will allow students to find answers to questions about the world. Through the study of geography, students will explore and discover the processes that shape the earth, the



SOL Test

relationships between people and environments, and the connections between people and places. Geography will help students to build a global perspective and to understand the connections between global and local events.

## **ADVANCED WORLD GEOGRAPHY**



Prerequisite – World History I and English 8  
Year – 1 credit

The focus of this course will be five central themes of geography: location: place: relationships within places, movement and regions. How they form and change. Special emphasis will be placed on the understanding of the complete interrelations among the cultural regions of the earth. Students will be expected to interpret maps, charts, graphs, and analyze pertinent data. World problems, major events and consequences will be studied through the use of available mass media materials. A year-long project and research paper will be required.

This class is designed for students who have exceptional aptitude and a keen interest in the areas of reading and writing. Students who select to take this class should be highly motivated, have maintained an A or B average in an advanced language arts and social studies class, and have the recommendation of their eighth grade social studies and language arts teachers.

## **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. Students will study historic events, ideas, issues, and people from 1500 AD to present.



## **ADVANCED WORLD HISTORY PART II**

Prerequisite – Successful completion of Advanced World Geography.  
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.

## **UNITED STATES & VIRGINIA HISTORY**



Prerequisite – 11<sup>th</sup> grade course  
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 U.S. AND VIRGINIA HISTORY**

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

Year – 1 credit

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



## **AP U.S. HISTORY**

Prerequisite – Successful completion of two of the following and each corresponding SOL assessment: Pre-AP World Geography, World History I, Pre-AP World History II.

Year – 1 credit

Amherst County High School's Advanced Placement History 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

## **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 on American civic life.

## **ADVANCED U.S. 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, Western Civilization, and Advanced U.S. 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: Pre-AP World Geography, World History I; Pre-AP World History II, and Adv. US/VA History.

Year – 1 credit

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 are required. If not completed by the due date, school counseling will reschedule the student into Advanced Government.

## **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.

## **SOCIAL STUDIES SOL ENRICHMENT**

Prerequisite - Administration/Counselor

Recommendation

Semester – non-credit

This course is designed for students who have successfully completed a social studies End of Course subject but have not successfully completed the accompanying End of Course Standards of Learning Assessment. Standards of Learning objectives will be enriched, and emphasis 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 exam.



## **SOCIOLOGY**

Prerequisite – grade 10 - 12

Semester – ½ credits

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(2012-2013)**

Prerequisite - None

Semester- ½ credit

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

## **COMPARATIVE RELIGION**

Prerequisite - None

Semester – ½ credit

The course provides and 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(2011-2012)**

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.**

## **FRESHMAN SEMINAR**

**9<sup>th</sup> Grade Level, Teacher Recommendation**

Year-1 credit

Students will have training and practice in academic, social and emotional skills. Topics may include time management, study skills, organization, communication, problem solving, decision making, career development, character education and skills in relationships, leadership, technology, coping as well as academic planning and community service.

## **CAREER PATH OF BUSINESS**

---

### **INTRODUCTION TO BUSINESS**

Prerequisite - None

Semester – ½ credit

Introduction to Business is an elective for ninth and tenth grade 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 – Keyboarding; 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.

### **ADVANCED ACCOUNTING**

Prerequisite - Accounting I

Year – 1 credit

Advanced Accounting is a course designed to utilize microcomputers to automate, analyze and interpret business applications including payroll, inventory, accounts payable, and accounts receivable. Management of financial records through various business activities, partnership and corporate accounting are also included. This course is recommended for students who have excelled in Accounting I.

### **COMPUTER INFORMATION SYSTEMS**

Prerequisite – Keyboarding Application or Word Processing

Year – 1 credit

Students learn and apply business applications using spreadsheets, graphics, databases and word processing. Each student is to get a recommendation of his/her keyboarding/word-processing teacher before registering. Keyboarding speed of 25 words per minute is recommended and the successful completion of Algebra I.

### **ADVANCED COMPUTER INFORMATION SYSTEMS**

Prerequisite - Successful completion of Computer Information Systems

Semester – ½ credit

Advanced CIS is the capstone course for the computer offerings in the Business Department. Students will continue to work with Windows 98, Access, Excel and Microsoft Word.

### **DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES**

Prerequisite – Grades 10-12

1. High School Keyboarding Applications or Word Processing.
2. Successful completion of IT Fundamentals or Computer Information Systems

Semester – ½ credit

Design, Multimedia, and Web Technologies will enable students to develop proficiency in creating desktop publications, multimedia presentations/projects, and websites using industry standard application software. Students incorporate principles of layout and design in completing

publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, Web pages, multimedia presentations/projects, calendars, and graphics. Under the direction of the instructor, students will learn to maintain the school's websites. Completion of this course may prepare students for industry certifications.

### **ADVANCED DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES**

Prerequisite: Design, Multimedia, and Web Technologies

Grades 10-12

Semester – ½ credit

Advanced Design, Multimedia, and Web Technologies will enable students to develop advanced skills in creating interactive media, websites, and publications for print and electronic distribution. Students work with sophisticated hardware and software applying skills learned to real-world projects. Under the direction of the instructor, students will maintain the school's websites. Completion of this course may prepare students for industry certifications.

### **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.

### **FINANCE**

Prerequisite – Grades 10 and 12

Semester – ½ credit

Juniors and seniors who will be seeking employment upon graduation as well as college-bound students are encouraged to enroll. Students explore the many facets of financial decision-making involved in daily life. Skills in money management, banking, insurance, credit, and taxes will be developed. Students will also study other financial topics such as the stock market, investing and careers in business.

### **KEYBOARDING APPLICATIONS**

Prerequisite - None

Semester – ½ credit

Keyboarding Applications is a course offered to all students. They develop touch-keyboarding skills with an emphasis on the application to produce personal

and business letters, outlines, manuscripts, and tabulated reports. Keyboarding Applications is a required foundation course.

### **WORD PROCESSING**

Prerequisite –8<sup>th</sup> grade Keyboarding (Touch Keyboarding recommended)

Semester – ½ credit

Students develop intermediate to advanced level word processing skills using a variety of software functions. Students gain competence integrating other application software (database and/or spreadsheets) into word processing activities. Classroom experiences also provide for skill development in communications.

### **OFFICE SPECIALIST**

Prerequisite – None

Year – 1 credit

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

### **ECONOMICS AND PERSONAL FINANCE**

Prerequisite-None

Year- 1 credit

Recommended for Grades 10, 11, 12

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 such as analysis of real world situations, economic reasoning, decision-making and problem solving. Economics and Personal Finance is required for graduation beginning with the entering Ninth Grade class of 2011-2012.

### **CAREER PATH OF HEALTH, HUMAN AND PUBLIC SERVICES**

---

#### **INTRODUCTION TO CULINARY ARTS**

Prerequisite – 9<sup>th</sup> and 10<sup>th</sup> grade 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

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

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.

### **INTRODUCTION TO HEALTH CAREERS**

Prerequisite – Grade 10 or higher

Semester – ½ credit

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

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

### **NURSE AIDE EDUCATION**

Prerequisite - None

Year – 2 periods – 2 credits

It is recommended that students take “Introduction to Health Occupations” prior to enrolling in the Nurse Aide course. Chemistry and Biology are also recommended. Students will submit an application and be interviewed by nursing faculty prior to being enrolled in the Nurse Aide course. Graduates will be required to take the certification exam at the cost of \$90 or more. It is strongly recommended that only students interested in a health career apply to take the Nurse Aide course.

Because of the interaction with nursing home residents during the clinical portion of the Nurse Aide course, a student's behavior, prior discipline record and attendance will be examined before being considered for enrollment.

### **PRACTICAL NURSING PROGRAM**

Prerequisites – Completion of all admission requirements, plus a satisfactory personal interview. Required courses are Biology, Algebra I, Chemistry and Nurse Aide Education course prior to applying to the Practical Nursing Program.

Year I– (4 periods) 3 credits

The Practical Nursing Program is an intensified curriculum, preparing students in the classroom and clinical areas for the role of a licensed practical nurse in the State of Virginia. The program is open to the High School senior who has a scholastic record reflecting indicators of potential success in a program of this nature. **The program includes a year of classroom instruction, with some clinical experience in both semesters.** The student who successfully completes the first year of the PN program must acquire a high school diploma or GED before being eligible to advance to the second year of the program. Admission to the program requires a multi-step process, with final selection being determined by the faculty of the program. Application procedures begin in January preceding fall enrollment, with the selection process being completed by June 1<sup>st</sup>. Admission and Enrollment requirements:

1. Students must secure and complete an application and return to the program director by March 1<sup>st</sup>. (Applications available Jan. 1<sup>st</sup>).
2. An official high school transcript or GED score (composite of 45 or greater) must be sent directly to program director.
3. Students are scheduled for a personal interview with a faculty member.
4. A letter notifying the student of the admission decision is sent by June 1<sup>st</sup>.
5. Upon notification of acceptance, applicable registration fees to be paid by June 30<sup>th</sup>.
6. Additional information can be obtained by contacting program director at the high school.

### **SPORTS MEDICINE**

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

Semester – ½ credit

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.

Semester – ½ credit

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.

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

Prerequisite: Enrolled in 11 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 - 1 credit

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

## **FAMILY AND CONSUMER SCIENCE**

### **RESOURCE MANAGEMENT**

Prerequisite- none

Semester – ½ credit

Grades 11 and 12

Students focus on managing resources to achieve individual goals; making informed consumer choices; creating and maintaining a living environment that supports the well-being of individuals; making decisions, managing a household, and researching careers. Teachers highlight the basic skill of math, and communication when appropriate in the content.

### **INDIVIDUAL DEVELOPMENT**

Prerequisite –Grades 11 - 12

Semester – ½ credit

Students focus on encouraging personal potential of self and others; managing stressful situations, forming

healthy caring relationships with family members and peers, and choosing responsible ways to express oneself. Teachers highlight basic skills of science and communication when appropriate in the content. Community service hours will be required.

## **PARENTING I**

Prerequisite – None

Semester – ½ credit

Students enrolled in Parenting I will discuss all aspects of parenting including parent readiness and growth and development of children(pre-natal to infancy). Practical experiences in child observation and interviewing parents are essential parts of the course. Teen pregnancy prevention, parental responsibility and community resources are emphasized.

## **PARENTING II**

Prerequisite –None

Semester – ½ credit

This course will examine developmental stages of children from birth to age five. Parenting styles and techniques, safety of children, importance of play, proper nutrition, and child care for each age group will be discussed. Projects and observations will be an integral part of the course. Students interested in any type of career dealing with children will find this course helpful.

## **INTRODUCTION TO FASHION DESIGN AND MERCHANDISING**

Prerequisite -None

Semester – ½ credit

The fashion design and merchandising units of study include color, design, wardrobe planning and maintaining, shopping and advertising expertise. Teachers highlight the basic skills of math, science, and communication when appropriate in the content.

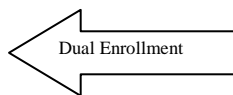
## **CAREER PATH OF AGRISCIENCE, ENVIRONMENT, AND NATURAL RESOURCES\_\_\_\_\_**

### **APPLIED AGRICULTURAL CONCEPTS**

Prerequisite - None

Semester – ½ credit

This course has been designed to meet the needs of students who have limited or no agricultural background or experience. Fundamental agricultural competencies needed for rural or urban living form



the basis of the course. Areas of instruction include meat grading and selection, and maintenance of home appliances and equipment: additional competencies in the study of soil fertility and in cultural practices for shrubs, lawns, gardens, and fruit trees may be incorporated. Leadership development activities are included in the course content, and participation in FFA activities is encouraged.

### **INTRODUCTION TO NATURAL RESOURCES**

Prerequisite – Grade 10 or above

Year – 1 credit

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

### **FORESTRY, WILDLIFE, AND SOIL 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.

### **NATURAL RESOURCES BUSINESS MANAGEMENT**

Prerequisite – Forestry and Wildlife or instructor permission

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.

## **CAREER PATH OF INDUSTRIAL TECHNOLOGY**

---

### **INTRODUCTION TO AUTO TECHNOLOGY**

Prerequisite – Grade 10 or higher

Semester – ½ 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 I**

Prerequisite – Introduction to Auto Technology

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 II**

Prerequisite - Auto Technology I; Completion of Auto Tech I

2 credits – 2 periods

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

### **INTRODUCTION TO MASONRY**

Prerequisite – Grades 10 or higher

Semester – ½ credit

Students will be exposed to opportunities in the masonry field, basic safety, basic math, hand tools, power tools, blueprints, wood frame construction and develop skills and technical knowledge for mixing mortar and laying brick and block. Students will have hands-on experience in the lab. This class is an introduction to the two-year masonry program.

### **MASONRY I**

Prerequisite – Introduction to Masonry

2 credits – 2 periods

Masonry I is a one-year occupational preparatory course in which instruction is provided in manipulative skills, critical thinking and problem solving through hands-on masonry work. Students will work with safety, masonry math, hand and power

tools, blueprints, mortar mixing, laying brick and block, build columns, arches, chimneys, performing straight wall work and various brick bonds.

## **MASONRY II**

Prerequisite – Masonry I

2 credits – 2 periods

Masonry II is a one-year occupation preparatory course. Students will learn advanced masonry skills. Students will learn to build specialized patterns, designing and building fireplaces and forming foundations.

## **INTRODUCTION TO BUILDING TRADES**

Prerequisite – Grade 10 or higher

Semester- ½ credit

Introduction to Building Trades 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 I**

Prerequisite – Introduction to Building Trades

2 credits – 2 periods

Building Trades I 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.

## **BUILDING TRADES II**

Prerequisite – Building Trades I

2 credits – 2 periods

Building Trades II builds on Building Trades I and prepares students to enter the workforce. Skills USA club membership is required. Students utilize their skills to work on shop and work-site projects. Students can acquire OSHA 30 certification as well as NCCER certificates in Core Safety and Carpentry. A majority of class time is spent on projects.

## **COMPUTER AIDED DRAFTING I**

Prerequisite – successfully completed Algebra I

2 credits – 2 periods

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

## **COMPUTER AIDED DRAFTING II/CVCC**

Prerequisite - Seniors having completed Computer Aided Drafting I

2 credits – 2 periods

Computer Aided Drafting II is a yearlong occupational preparation course, which will allow students to advance their CAD training. The emphasis in CAD II will be on Architectural Drafting as it relates to light residential construction. Students will be trained to draw a complete set of house plans, which would include floor plans, elevations, wall sections, and details from which a contractor can build. Successful completion of the TWO-year program will allow the student to articulate into the Engineering Technology Program at Central Virginia Community College. This course may be taken for dual enrollment credit. Students completing the two year program will be required to take an “industry approved” end of the year test.

## **LEADERSHIP DEVELOPMENT**

Prerequisite – Grades 11 or 12

Semester – ½ credit

Leadership Development is designed to provide students with personal and group leadership skills. Course content will include units in principles of leadership, officer training, parliamentary law, public speaking, effective communication and human relations skills. Students are encouraged to be active members of a community or school organization.

## **INTRODUCTION TO WELDING**

Prerequisite – Grade 10 or higher

Semester- ½ 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 I**

Prerequisite - Introduction to Welding

2 credits – 2 periods

Welding I 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 blue prints, weld symbols and weld procedure sheets, as well as Oxyfule 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 II/CVCC**

Prerequisite - Welding I

2 credits – 2 periods

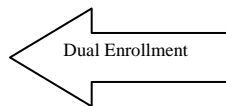
Welding II is a one-year occupation course which provides opportunity to learn advanced Shielded Metal Arc Welding, basic Gas Metal Arc Welding (MIG), and basic Gas Tungsten Arc Welding (TIG). These processes will be used in welding mild steel, stainless steels, and aluminum materials and Flux Core Arc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

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

Prerequisite – CVCC Application Process

Year – 3 credits

Precision machining Technology is a dual-enrolled high school/college course of study, which prepares the area's workforce for employment with modern manufacturing industries. Students are taught how to use computer numeric-controlled machining centers,



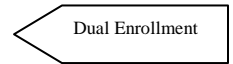
precision measurement devices, CAD technology and other high-tech equipment used in manufacturing operations.

Students will report to CVCC daily for the occupational training courses and then report to the high school for academic courses.

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

Prerequisite – CVCC Application Process- 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 acquired 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.



### **CISCO/CVCC**

Prerequisite – CVCC Application Process

Year – 2 credits

The Cisco Networking Academy Program at CVCC provides the opportunity for a student to challenge the Cisco Certification Network Associate (CCNA) exam after completing four semesters of work. CCNA is targeted for students in high school, technical schools, and community colleges. CCNA instruction focuses on how to install, configure, and operate simple-routed LAN, routed WAN, and switched LAN and LANE networks.

### **CAREER INTERNSHIP**

Prerequisite – Seniors Only.

Year – **No credit**

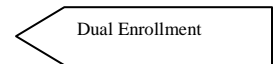
This is a course open to seniors designed to provide a direct experience in the community in an area of serious career interest. A written plan of objectives, activities and evaluation must be developed at the beginning of the internship and agreed to by students, parents, community mentors, a school counselor and principal.

### **TEACHER CADET (TEACHERS FOR TOMORROW)**

Prerequisite - Seniors with a 3.0 or better GPA.

Completed application form and two teacher recommendations

Essay addressing “Why I Want to Become a Teacher in Training” or “How a Teacher Has Had a Positive



Influence on Me” This class is dual enrollment with Lynchburg College.

Year – 1 credit

This program is supported by the VDOE. It is a program that encourages young people to consider education as a career choice. This course will enhance the reading, writing, public speaking, reflecting skills, and critical skills in our students. This course also will help produce positive leadership skills in our students.

### **STARS PROGRAM**

There are two programs in the curriculum that are computer based.

STARS Repeat core course:

This program is designed to allow a student who has failed a core course to retake that course in a one semester computer-based course rather than repeating the entire year long course. Students will be scheduled into a computer lab for the course with a lab facilitator (teacher). The curriculum for the repeat course will be computer-based. A student may take only two STARS repeat courses in one year. The student will receive credit for this course.

STARS SOL Enrichment core courses:

This program is designed to allow a student who passed the core course but failed the end-of-course SOL test the opportunity to remediate in the concepts necessary for the student to be successful on the SOL test. This course will be scheduled into a computer lab with a lab facilitator (teacher). The enrichment will be computer-based. The student will receive a half credit for the one semester course.

## **COMPUTER/TECHNOLOGY \_\_\_\_\_**

### **VISUAL BASIC.NET**

Prerequisite – Completion of Algebra II with a minimum grade “C” and a passing score on the Algebra II SOL test or enrolled in Algebra II/Trig  
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. The students will be introduced to microcomputers and the Visual Basic.NET programming language which is an object-oriented programming language used to create Windows, Web, and command-line (console) applications. Students will design and code programs using good problem-solving skills and good programming structure. They will develop skills in working with both mathematical

and non-mathematical problems. No previous programming experience is required.

### **INFORMATION TECHNOLOGY (IT) FUNDAMENTALS**

**Prerequisites:** Keyboarding Applications, Word Processing, or **teacher-approved** demonstrated and documented touch keyboarding skills.

Year - 1 credit

IT Fundamentals is recommended for freshmen and sophomores; however is excellent reinforcement for upper classmen.

Information Technology (IT) Fundamentals introduces essential skills needed for students to pursue specialized programs leading to technical and professional careers and certifications in the IT industry. This course introduces skills related to information technology basics, computer hardware, computer maintenance/upgrading/troubleshooting, computer applications, graphics, web page design, Internet fundamentals, network systems, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability. Students participate in several IT-related projects throughout the year.

### **COMPUTER APPLICATIONS AND THE INTERNET**

Prerequisites: Keyboarding Applications, Word Processing, or teacher-approved demonstrated and documented touch keyboarding skills.

**NOTE: It is recommended that freshmen and sophomores take IT Fundamentals before taking this class.**

Semester- ½ credit

Computer Applications and the Internet explores many areas and uses of the Internet including history, ethics, security, browsers, research, communication, e-commerce, terminology, newsgroups networking, and making the Internet work for the student. Students will learn Internet fundamentals and the basics of web page design using HTML. Essential skills for word-processing, spreadsheet database, graphics, and telecommunications applications are taught and reinforced.

# 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 2011-2012 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 feel free to contact any member of the school counseling department at 946-2815.

Amherst County High School Counseling Department

Director	Ms. Mays	<a href="mailto:mmays@amherst.k12.va.us">mmays@amherst.k12.va.us</a>
Secretary	Mrs. Sandidge	<a href="mailto:psandidge@amherst.k12.va.us">psandidge@amherst.k12.va.us</a>
A – D	Mrs. McCrea	<a href="mailto:mmccrea@amherst.k12.va.us">mmccrea@amherst.k12.va.us</a>
E – K	Mrs. Meade	<a href="mailto:pmeade@amherst.k12.va.us">pmeade@amherst.k12.va.us</a>
L – R	Mrs. Curd	<a href="mailto:hcurd@amherst.k12.va.us">hcurd@amherst.k12.va.us</a>
S – Z	Mrs. Thomas	<a href="mailto:kthomas@amherst.k12.va.us">kthomas@amherst.k12.va.us</a>

Amherst Education Center

Ms. Jennings	<a href="mailto:hjennings@amherst.k12.va.us">hjennings@amherst.k12.va.us</a>
--------------	--

Amherst Middle School

Mrs. Cecil	<a href="mailto:kcecil@amherst.k12.va.us">kcecil@amherst.k12.va.us</a>
------------	--

Monelison Middle School

Mr. Silvey	<a href="mailto:jsilvey@amherst.k12.va.us">jsilvey@amherst.k12.va.us</a>
Mrs. Goins	<a href="mailto:kgoins@amherst.k12.va.us">kgoins@amherst.k12.va.us</a>

## 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.

## STUDENT WORKSHEET: SIX-YEAR PLAN

**Selected Career Pathway** \_\_\_\_\_ **Chosen Career** \_\_\_\_\_

School year: \_\_\_\_\_

School year: \_\_\_\_\_

Required Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Required Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Elective Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Elective Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

School year: \_\_\_\_\_

School year: \_\_\_\_\_

Required Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Required Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Elective Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Elective Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

School year: \_\_\_\_\_

School year: \_\_\_\_\_

Required Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Required Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Elective Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Elective Courses	Grade	Credit
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

### Planning Future Assessments/Examinations

Counselor/student review of Assessment/Examination

(Circle if needed and indicate anticipate dates of examinations)

\_\_\_\_\_ Interest Inventory

\_\_\_\_\_ ACT

\_\_\_\_\_ PSAT

OTHER: \_\_\_\_\_

\_\_\_\_\_ ASVAB

\_\_\_\_\_ SAT

NOTES: \_\_\_\_\_

\_\_\_\_\_ Achievement

\_\_\_\_\_ Vocational Assessment

\_\_\_\_\_

\_\_\_\_\_ Aptitude

\_\_\_\_\_ Virginia VIEW

\_\_\_\_\_