

2 0 1 9 - 2 0 2 0







#### **Note to Parents and Students:**

The Campbell County Schools, Secondary Program of Studies handbook contains academic information intended to help plan a course of study and career plan for our students. As a division, we are committed to our mission by offering a varied selection of courses and programs that will enable every student to choose and pursue any post-K12 endeavor.

Please take the time to review the information presented in our Secondary Program of Studies. The information ranges from specific course selection options, graduation requirements, and the various CCPS programs such as: Early College, Central Virginia Governor's School, STEM Academy, Career and Technical, and Dual Enrollment at CVCC.

A comprehensive, successful academic and career path is best accomplished through the collaboration of students, parents, teachers, administrators and counselors. A collaborative and detailed plan will ensure our students are better prepared for their post-secondary endeavors. Please be in contact with your child's school counselor in order to receive support in creating an individualized plan for your child. It is our goal that we will serve and assist you.

Please be advised that the Board of Education may revise or create policies over the course of the school year. State Laws, State Board of Education Bylaws, Virginia Department of Education, and Campbell County Board of Education Policies and Regulations shall supersede those statements and references contained in this publication.

# TABLE OF CONTENTS

## **POLICIES & PLANNING**

	VA DOE Graduation Requirements	7
	Standard and Verified Credits	8
	Approved Courses	8
	Graduation Requirements	9
	High School Graduation Requirements	12
	Assessment	13
	Special Education	17
	Adapted Curriculum Course Descriptions	18
	English as a Second Language (ESL)	21
	Virtual Learning	22
	Career Planning	23
	Career Clusters	24
	Work-based Learning	25
	Career and Technical	28
	Electives	36
	English Fine Arts	39
	Foreign Language	44
	Health and Physical Education	49
	History and Social Studies	50
	Mathematics	53
	Science	57
		3,
PRO	OGRAMS	
	Central Virginia Governor's School	61
	Early College Program	63
	STEM Academy	65
	Early College Scholars Program	66



## **2017 VA DOE GRADUATION REQUIREMENTS**

As adopted in the 2017 Standards of Accreditation, Virginia's revised graduation requirements maintain high expectations for learning in English, math, science and history/social science while reducing the number of Standards of Learning (SOL) tests students must pass to earn a high school diploma. The new standards also implement the "Profile of a Virginia Graduate," which describes the knowledge, skills, attributes and experiences identified by employers, higher education and the state Board of Education as critical for future success.

## **OUR PURPOSE Profile of a Virginia Graduate** In Virginia, the Life Ready Individual Will During His or Her K-12 Experience: Achieve and apply appropriate Attain and demonstrate academic and technical productive workplace skills, knowledge qualities, and behaviors Align knowledge, skills, **Build connections and** and personal interests with value for interactions with CIVIC RESPONSIBLE career opportunities A student meeting the Profile of a Virginia

Graduate has achieved the commonwealth's high academic standards and graduates with responsibility, and a career plan aligned with his

#### The Five C's

In preparing students to meet the Profile of a Virginia Graduate, schools are required to ensure that students develop the following competencies known as the "Five C's":

- 1. Critical thinking
- 2. Creative thinking
- 3. Communication
- 4. Collaboration
- 5. Citizenship

#### **Career Exploration and Planning**

The career-planning component of the Profile of a Virginia Graduate provides an opportunity for students to learn more about the employment options and career paths they first explored in elementary and middle school. While there is no specific career-related activity that a student must experience (such as an internship or jobshadowing assignment) to earn a diploma, school divisions must provide opportunities for students to learn about workplace expectations and career options in their own communities and elsewhere. By reducing the number of SOL tests students must pass to earn a diploma, the new standards increase flexibility for schools to expand work-based and service-learning programs that promote college, career and civic readiness.

(See also the Career Planning section beginning on page 21 of this document.)



## STANDARD AND VERIFIED CREDITS

The new graduation requirements are effective with students entering the ninth grade in the fall of 2018 (class of 2022). The number of standard credits for a Standard Diploma and Advanced Studies Diploma remain the same but the number of required verified credits – earned by passing a course in the content area and the associated end-of-course assessment – is reduced to five (one each in English reading, English writing, mathematics, science and history/social science) for both diplomas.

#### Verified Credit/Locally Verified Credit

Changes made to Locally Awarded Verified Credits were updated in May 2018. These changes are a result of updates made to the Standards of Accreditation, taking effect in the 2018-2019 school year.

#### High School Students entering prior to 2018-2019

- May be awarded no more than three (3) verified credits in English, mathematics, science, or history/ social science
- Locally Awarded Verified Credits (LAVC) can only be applied to a Standard Diploma
- 3. Students using credit accommodations to earn verified credits are not subject to the limitations on the number of LAVC awarded

## High School Students entering 9th grade in 2018-19 and beyond

- May be awarded no more than one (1) verified credit in English, mathematics, science, or history/social science
- 2. Locally Awarded Verified Credit can be applied to a Standard or Advanced Diploma
- 3. Students using credit accommodation to earn verified credits are not subject to the limitations on the number of LAVC awarded.

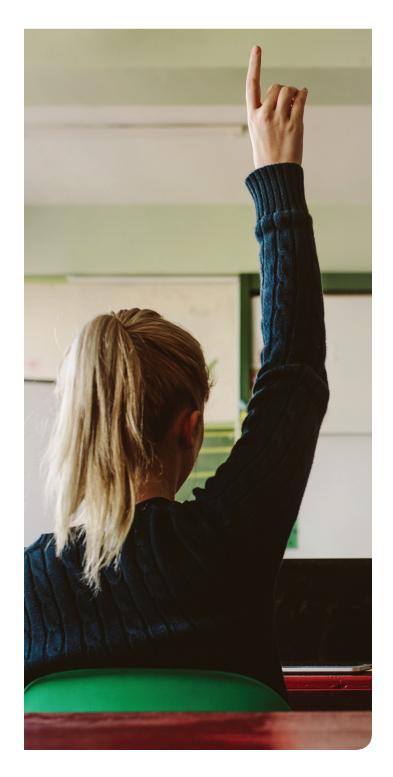
To be eligible to earn locally awarded verified credits in English, mathematics, science, or history/social science under this guidance, a student must:

- 1. Pass the high school course,
- 2. Score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice, and
- 3. Demonstrate achievement in the academic content through an appeal process administered at the local level (CCPS Policy IKFA).

## **APPROVED COURSES**

The Virginia Department of Education maintains a statewide list of approved courses to satisfy high school graduation requirements. The DOE also provides a directory of substitute tests for the awarding of verified credits. Campbell County school counselors can advise on locally available courses to fulfill the requirements for a Standard or Advanced Studies Diploma.

**Document Reference:** Superintendent's Memo 130-18 **STANDARD:** 8VAC 20-131-110. Standard and Verified Units of Credit



## **GRADUATION REQUIREMENTS: STANDARD DIPLOMA**

	STUDENTS ENTERING 9TH GRADE IN THE FALL OF 2018 AND BEYOND		
Standard Diploma	Required Total Credits	Required Verified Credits*	
English <sup>8</sup>	4	2	
Mathematics <sup>1</sup>	3	1	
Laboratory Science 2.4	3	1	
History & Social Science 34.8	3	1	
Health & Physical Education	2	-	
World Language, Fine Arts & CTE 5	2	-	
Economics & Personal Finance	1	-	
Electives <sup>6</sup>	4	-	
Student Selected Test 7	-	-	
Local Electives	-	-	
Total	22	5	

<sup>\*</sup>To earn a Verified Credit, a student must successfully complete the requirements of the course and achieve a passing score on the end-of-course (EOC) SOL test for that course or additional tests as described in the notes below.

# Standard Diploma Course Requirements (8 VAC 20-131-51) for Students Entering Ninth Grade for the First Time in 2018-2019 and Beyond

- 1. Courses completed to satisfy this requirement shall include at least two different course selections from among: algebra I, geometry, algebra functions, and data analysis, algebra II, or other mathematics courses approved by the board to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
- 2. Courses completed to satisfy this requirement shall include course selection from at least two different science disciplines: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.
- 3. Courses completed to satisfy this requirement shall include Virginia and U.S. History, Virginia and U.S. government, and one course in either world history or geography or both. The board shall approve courses to satisfy this requirement.

- 4. 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 either a laboratory 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 as an additional test to verify student achievement.
- 5. Per the Standards of Quality, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education. Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical course credit.
- 6. Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
- 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 8 VAC 20-131-110.

#### **Local Notes:**

8. Students will be required to take English and Social Studies courses in sequence. Students will not be allowed to enroll in required high school English or Social Studies courses before the grade level in which the subjects are normally required of students.

#### Additional Requirements for Graduation:

- Advanced Placement, Honors, or International **Baccalaureate Course or Career and Technical** Education Credential - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- **Virtual Course** Students shall successfully complete one virtual course, which may be a noncredit-bearing course or a required or elective credit-bearing course that is offered online.
- Training in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED) Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.



## **GRADUATION REQUIREMENTS: ADVANCED STUDIES DIPLOMA**

	STUDENTS ENTERING 9TH GRADE I	IN THE FALL OF 2018 AND BEYOND
Advanced Studies Diploma	Required Total Credits	Required Verified Credits*
English <sup>8</sup>	4	2
Mathematics <sup>1</sup>	4	1
Laboratory Science 2.4	4	1
History & Social Science 348	4	1
Health & Physical Education	2	-
World Language 7	3	-
Fine Arts & CTE 5	1	-
Economics & Personal Finance	1	-
Electives <sup>6</sup>	3	-
Student Selected Test	-	-
Local Electives	-	-
Total	26	5

<sup>\*</sup>To earn a Verified Credit, a student must successfully complete the requirements of the course and achieve a passing score on the end-of-course (EOC) SOL test for that course or additional tests as described in the notes below.

# Advanced Studies Diploma Course Requirements (8 VAC 20-131-51) for Students Entering Ninth Grade for the First Time in 2018-2019 and Beyond

To graduate with an Advanced Studies Diploma for students entering the ninth grade for the first time in 2018-2019 and beyond, a student must earn at least 26 standard units of credit and at least five verified units of credit:

Beginning with students entering ninth grade for the first time in 2018-2019, a student must also:

- either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competencybased instruction in the subject area to satisfy the standard diploma requirements; and
- acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the board.

**Please note:** Your school counselor can tell you which courses are offered by your school to fulfill the requirements for an Advanced Studies Diploma.

- . Courses completed to satisfy this requirement shall include at least three different course selections from among: algebra I, geometry, algebra functions, and data analysis, algebra II, or other mathematics courses above the level of algebra II. The board shall approve other courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a mathematics course credit.
- 2. Courses completed to satisfy this requirement shall include course selection from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma and shall include interdisciplinary courses that incorporate Standards of Learning content from multiple academic areas. The board shall approve courses to satisfy this requirement. Per the Standards of Quality, a computer science course credit earned by students may be considered a science course credit.
- 3. Courses completed to satisfy this requirement shall include Virginia and U.S. history, Virginia and U.S. government, and two courses in either world history or geography or both. The board shall approve courses to satisfy this requirement.
- 4. 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 either a laboratory 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 as an additional test to verify student achievement.

- 5. Per the Standards of Quality, a computer science course credit earned by students may be considered a career and technical course credit.
- 6. Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.
- 7. Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.
- 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 8 VAC 20-131-110.

#### Additional Requirements for Graduation:

- Advanced Placement, Honors, or International **Baccalaureate Course or Career and Technical** Education Credential - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, honors, or International Baccalaureate course, or (ii) earn a career and technical education credential approved by the board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment.
- Virtual Course Students shall successfully complete one virtual course, which may be a non-

- credit-bearing course or a required or elective credit-bearing course that is offered online.
- Training in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED) Students shall be trained in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement, as provided in 8VAC20-131-420 B.

## HIGH SCHOOL GRADUATION REQUIREMENTS

Students shall meet the following requirements established by the Virginia Board of Education and the Campbell County School Board. The Virginia Department of Education and Campbell County Public School Board recognizes the following diploma options:

- Standard Diploma
- Advanced Studies Diploma

**Note:** CCPS requires elective credits in addition to those required by the Virginia Board of Education for all Standard and Advanced Studies Diplomas. Seniors must be enrolled in coursework to earn at least five credits, unless special permission is granted by the division administration.

#### **Early Graduation**

Except in extenuating circumstances, as determined by the Superintendent or designee of Campbell County Public Schools, students will not be allowed to graduate early. Students working towards a standard or advanced studies diploma will not be allowed to enroll in required high school English or Social Studies courses before the grade level in which the subjects are normally required of students. Nothing in this section shall prohibit the superintendent or designee in determining graduation decisions and course sequencing.



## **ASSESSMENT**

#### **Final Exam**

A final exam, performance assessment, or culminating activity shall be required of each student in every class in which the student has not taken an end-of-course SOL exam.

Students enrolled in Virtual Virginia courses, CTE Dual Enrollment programs, early college, Central Virginia governor's school, and regional STEM shall adhere to these program requirements for final exams.

#### **Exemption**

Students who average an A for each of the first three grading periods may be exempt from the final exam, performance assessment, or culminating activity.

## **VIRGINIA STANDARDS OF LEARNING TESTING PROGRAM**

#### **Overview**

The Standards of Learning (SOL) for Virginia Public Schools establish minimum expectations for what students should know and be able to do at the end of each grade or course in English, mathematics, science, history/social science and other subjects.

SOL tests in reading, writing, mathematics, science, and history/social science measure the success of students in meeting the Board of Education's expectations for learning and achievement. All items on SOL tests are reviewed by Virginia classroom teachers for accuracy and fairness, and teachers also assist the state Board of Education in setting proficiency standards for the tests. The results of SOL assessments in the content areas inform parents and teachers about what students are learning in relation to the SOL and hold schools accountable for teaching the SOL content.

#### Computer Adaptive Test (CAT)

A computer adaptive test (CAT) is an assessment that is customized for every student based on how the student responds to the test questions. Students who take online grades 3–8 mathematics and grades 3–8 reading tests will be administered a computer adaptive version of the Standards of Learning (SOL) tests.

#### **Technology-Enhanced Items**

Today's online SOL assessments challenge students to apply what they have learned in ways not possible with traditional multiple-choice tests. Reading, writing, mathematics, science, and history assessments include "technology enhanced" items that require students to demonstrate critical-thinking and problem-solving skills, much as they do in response to classroom assignments from teachers.

#### Virginia Alternative Assessment Program (VAAP)

The VAAP is an alternative assessment based on alternate achievement standards and is specifically designed to evaluate the achievement of students with significant cognitive disabilities. The VAAP is available to students in grades 3-8 and high school who are working on academic standards that have been reduced in complexity and depth. These academic standards are called Aligned Standards of Learning (ASOL) and are available in reading, writing, mathematics, science, and history/social science. Students will compile a collection of work samples, or COE to demonstrate achievement on the ASOL. Students who participate in the VAAP participate in all content areas; participation decisions are made on an individual basis.

http://www.doe.virginia.gov/testing/alternative\_assessments/vaap\_va\_alt\_assessment\_prog/index.shtml

## Testing Requirements and the 2017 Standards of Accreditation

Virginia has requirements for testing included in the Student Achievement section of the 2017 Standards of Accreditation (SOA) at **8VAC20-131-30**.

In kindergarten through eighth grade, where the administration of Virginia Assessment Program tests is required by the board, each student shall be expected to take the tests following instruction.

Each student in middle and secondary schools shall take all applicable end-of-course SOL tests following course instruction. Students who achieve a passing score on an end-of-course SOL test shall be awarded a verified unit of credit in that course in accordance with the provisions of **8VAC20-131-110**. Students may earn verified units of credit in any courses for which end-of-course SOL tests are available. Students shall not be required to take an end-of-course SOL test in an academic subject after they have earned the number of verified credits required for that academic content area for graduation, unless such test is necessary in order for the school to meet federal accountability requirements.

Students will test in the related course until they meet their required verified credits. Federal testing requirements mandate that each high school student test once in Reading, Math, and Biology.

#### Standards of Learning Test Schedule

GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7	GRADE 8	END OF COURSE
					Writing	Writing
Reading	Reading	Reading	Reading	Reading	Reading	Reading
Math	Math	Math	Math	Math	Math	Algebra I Geometry Algebra II
	Virginia Studies				Civics and Economics	World History I World History II VA & US History
		Science		Science	Earth Science	Biology Chemistry

## **LOCAL ALTERNATIVE ASSESSMENT**

#### **General Information**

In 2014, the state Board of Education approved guidelines for locally developed assessments that replaced the SOL tests for 3rd Grade History, 3rd Grade Science, 5th Grade Writing, U.S. History I, and US History II SOL tests, which have been eliminated by the General Assembly. School divisions must certify that they have provided instruction and administered an alternative assessment to students that no longer have these corresponding SOL tests.

Guidelines for Local Alternative Assessments require school divisions to provide a balanced assessment system, where students produce work or demonstrate their knowledge, understanding, and skills in ways that are authentic to the subject and/or the real world. Your child's work is evaluated, not graded, to better improve assessment and instruction in the classroom.

#### Score Reporting of Local Alternative Assessments

To view your child's progress on these Local Alternative Assessments, visit the assessment tab within Parent Portal.

More Information concerning Campbell County Public Schools Local Alternative Assessment can be found on the CCPS website: http://www.campbell.k12.va.us

## PRE-AP AND AP COURSEWORK

CCPS offers a variety of Pre-AP and AP coursework. Students must meet appropriate criteria to enroll in Pre-AP and AP coursework. Course offerings are dependent upon graduation requirements for Standard and Advanced Diplomas.

Students receive weighted credit for participating in AP classes; they receive college credit only by achieving a high score on the College Board's Advanced Placement Tests. Colleges have different criteria for awarding credit scores on AP tests, and it will be the responsibility of students to contact colleges to ascertain their policies regarding Advanced Placement scores.

## **ASSESSMENT DESCRIPTIONS**

#### Measure of Academic Progress (MAP) Testing

MAP is an adaptive assessment that measures progress and growth for students. MAP results are reported in RIT scores, an estimation of their instructional level, which correlate to percentiles. RIT scores increase as student learning increases, and anticipated growth rates are based on national norms. From the test results, teachers will use data-driven decision-making to differentiate and enhance instruction for all students. Students in Campbell County Public Schools will participate in the Measure of Academic Progress (MAP) Testing Program three times a year. Students will be assessed in Reading (Kindergarten through 10th grade), Math (Kindergarten through Algebra I), and Language (6th through 10th grade).

#### **SAT/SAT School Day**

The SAT, Scholastic Assessment Test or SAT Reasoning Test, is a test used to assess high school juniors and seniors' college-readiness by measuring reading, writing, and math levels. Scores are used to determine acceptance to colleges and universities across the nation. This is a required test for college-bound students. Campbell County proudly participates in the SAT School Day program to increase accessibility to the SAT by administering the test during the school day to high school seniors annually in October.

#### **PSAT**

The PSAT, Preliminary Scholastic Aptitude Test, is a test administered by the College Board taken by high school sophomores and juniors to help prepare for the SAT. The test is a good indicator of how students perform on the SAT. In Campbell County, the PSAT is given to all 10th grade students. Results can be also used to determine eligibility for the National Merit Scholarship Program.

#### **CVCC Compass Test**

The CVCC Compass Test is the placement test for all students who have completed the application to Central Virginia Community College. Tested areas include math and English. Tests are untimed.

#### **ASVAB**

The Armed Services Vocational Aptitude Battery (ASVAB) is developed and maintained by the Department of Defense. It measures a young adult's strengths, weaknesses, and potential for future success. The ASVAB Career Exploration Program (CEP), takes approximately three hours, covers eight subjects and is composed of 200 questions. The ASVAB CEP is currently a pen and paper test. If it is offered by their school, high school students can take the ASVAB CEP test in grades 10, 11 and 12. They can only take it at the high school they attend, unless special arrangements are made.

The ASVAB CEP also incorporates an interest self-assessment which can help young adults identify potential careers. If the self-assessment is completed online, students also have access to the OCCU-Find, which outlines over 1,000 occupations for students to explore based on their interest codes.

ASVAB CEP test results are sent to students' schools so they can explore career options with counselors. The scores show how well the student did on each subject, and how they compare with others who took the test. There are three composite scores in Verbal, Math, and Science and Technical skills, and the Armed Forces Qualification Test (AFQT) score is also reported.

https://www.todaysmilitary.com/joining/asvab-test

#### Financial Literacy Program/W!SE Test

Students typically take Economics and Personal Finance during their tenth grade year. The culmination of the course is participating in the W!SE (Working in Support of Education) Test. Students may earn the W!se Certified Financially Literate $^{TM}$  (CFL $^{TM}$ ) credential

by passing the test. The credential shows colleges and employers that students have the knowledge and skills to be financially knowledgeable.

#### **Substitute Tests**

As permitted by the Standards for Accrediting Public Schools (8VAC20-131-110), the Virginia Board of Education has approved various "substitute" tests and set the minimum score that must be achieved for the purpose of awarding verified credit to students. The tests listed in this document are approved by the Virginia Board of Education as substitute tests, and verified credit can be awarded when the student achieves at least the minimum score required for a Pass/Proficient rating as shown for each test.

http://www.doe.virginia.gov/testing/substitute\_tests/subtests-verified-credit.pdf

#### WorkKeys

ACT WorkKeys® assessments measure foundational skills required for success in the workplace, and help measure the workplace skills that can affect job performance.

Each assessment offers varying levels of difficulty. The levels build on each other, incorporating the skills assessed at the previous levels. For example, at Level 5, individuals need the skills from Levels 3, 4, and 5. The complexity increases as the quantity and/or density of the information increases.

These tests serve as substitute tests in Campbell County with proficient scores.

#### WorkKeys Assessments Offered:

#### Workplace Documents for EOC Reading

Employees need to be able to understand written text to do a job. The Workplace Documents assessment measures the skills people use when they read and use written text such as memos, letters, directions, signs, notices, bulletins, policies, and regulations on the job. Get more information:

#### **Business Writing for EOC Writing**

The Business Writing assessment measures the skill used when writing an original response to a work-related situation. Get more information:

http://www.act.org/content/act/en/products-and-services/workkeys-for-employers/assessments.html

## **ENGLISH LANGUAGE PROFICIENCY ASSESSMENTS**

#### **WIDA Screener**

The WIDA Screener is an English language proficiency assessment given to incoming students in Grades 1-12 to assist educators with the identification of students as English learners (ELs). The purpose of this assessment is to help educators make decisions about whether a student is a candidate for English learner support services. The online WIDA Screener assesses the four language domains of Listening, Speaking, Reading, and Writing.

#### **ACCESS for ELLs**

The ACCESS for ELLs® 2.0 test is an English language proficiency assessment based on the Model Performance Indicators (MPIs) of the WIDA English language development (ELD) standards for students K-12. The ACCESS for ELLs® 2.0 test assesses social and instructional English used within the school context as well as academic English associated with language arts, mathematics, science and social studies across the four language domains of listening, speaking, reading and writing. The ACCESS for ELLs® 2.0 test is administered annually to EL students K-12 to monitor their progress in acquiring English proficiency.

#### Alternate ACCESS for ELLs

In Spring 2013, the Alternate ACCESS for ELLs® test became the state-approved ELP assessment for EL students who have significant cognitive disabilities. The Alternate ACCESS for ELLs® test is an English language proficiency assessment based on the Alternate MPIs of the WIDA ELD standards for students in grades 1-12. The Alternate ACCESS for ELLs® test assesses social and instructional English used within the school context as well as the academic English associated with language arts, mathematics and science across the four language domains of listening, speaking, reading and writing. The Alternate ACCESS for ELLs® test is administered annually to EL students in grades 1-12 with significant cognitive disabilities to monitor their progress is acquiring English proficiency.

http://www.doe.virginia.gov/testing/english\_ language\_proficiency\_assessments/index.shtml



## **SPECIAL EDUCATION**

#### **Programming**

CCPS provides special education services for students identified eligible for service. We offer a continuum of special education services to best support the needs of our students. Course offerings are for students with disabilities and require an Individualized Education Program (IEP). Some courses may not be available at every school. Many students with disabilities are expected to meet grade-level curriculum standards in general education classes.

#### **Continuum of Services**

The Virginia Department of Special Education and the Campbell County Public School System advocates for a continuum of special education services and placement considerations for all students with disabilities. Services and placements range from indirect services through residential services. All decisions regarding the placement of a child with a disability in a special education service delivery model will be made by an individualized Education Program (IEP) team in consultation with the parents or guardians of the child and consistent with Federal Individuals with Disabilities Education Act (IDEA) Least Restrictive Environment requirements.

Campbell County Public Schools provides a continuum of services and placement considerations to meet the needs of students with disabilities. All services and placement determinations are made by the Individualized Education Plan (IEP) team.

- Specially Designed Instruction (SDI) is defined as instructional adaptations in content, methodology or delivery to address the unique needs of an eligible student as a result of the child's disability.
- SDI is delivered through special education services as determined by the IEP team. SDI and subsequent services address a student's required needs in order to access the general curriculum relevant to the impact of the student's disability.
- The Least Restrictive Environment (LRE) summary defines the SDI a student requires and may include academic, behavioral, social, executive functioning or other needs.

#### Who provides Specially Designed Instruction?

- Special education personnel: Special education personnel include the special education teacher and related service providers and are the primary service modality for SDI.
- Paraprofessional: The paraprofessional supports
  the implementation of accommodations and
  modifications as outlined by the IEP and may
  facilitate educational activities such as preinstruction, data collection and review instruction.
  Under specific circumstances, the paraprofessional
  may provide SDI that is developed and supervised
  by special education personnel.

- General education teacher: The general education teacher supports the implementation of accommodations and modifications as outlined by the IEP. Services may be implemented in collaboration with special education personnel.
- Related service provider: The related service provider supports the implementation of SDI through services (direct and consultative) related to the specific discipline.

#### What may Specially Designed Instruction look like?

#### Consultation:

General and special education teachers may consult on appropriate strategies for instruction, behavior management, data collection, observation, and feedback to utilize within the general education setting thus accomplishing better outcomes in the least restrictive environment.

## Academic support services in the general education classroom:

Special education services may be offered in the general education classroom in the form of a co-teaching model, or by making adaptations or modifications to the general education curriculum and assessments. In addition, the special education teacher may meet individually or in small group instruction to meet various academic and behavioral needs of the student.

## Direct special education services in the special education classroom:

Direct special education service in the special education classroom may be required for students who have the most significant impact on their ability to learn in the general education setting. Students who require this level of support may receive this through direct intensive or multi-sensory instruction which utilizes specialized strategies and techniques. This level of service may be offered in a small group within the special education classroom. In addition to remediating specific academic needs of the student specific skills training may be utilized and support behavioral difficulties that interfere with student learning or the learning of others.

If a student's academic or emotional needs have a significant impact on his or her ability to learn in the general education environment, the IEP team may determine that a student needs a more restrictive environment. Some students with significant cognitive disabilities require a more restrictive setting, such as an Adaptive Classroom Environment, where the students access an Adaptive Curriculum, including instruction following the Aligned Standards of Learning (see course descriptions below). In High School, these students will complete course work that meets requirements for an Applied Studies Diploma (see course descriptions below). Students requiring instruction following the Aligned Standards of Learning participate in the Virginia Alternate Assessment Program (VAAP).

For more information, contact the CCPS Special Education Department at Campbell County School Administration Building (434–332–8235).

## ADAPTED CURRICULUM COURSE DESCRIPTIONS (MIDDLE SCHOOL)

COURSE	DESCRIPTION	ASSESSMENT REQUIREMENTS	
MS Foundations English	This course is designed to support the Virginia Aligned Standards of Learning in English including areas of reading and writing. Students may enroll in this class each year of middle school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).		
MS Foundations Mathematics	This course is designed to support the Virginia Aligned Standards of Learning in Mathematics. Students may enroll in this class each year of middle school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).	Participation in these courses will support students in fulfilling	
MS Foundations Science	This course is designed to support the Virginia Aligned Standards of Learning in Science. Students may enroll in this class each year of middle school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).  requirement for the Virginia Aligned Standards of Alternative Assessment Program (VAA)		
MS Foundations History/Social Science	This course is designed to support the Virginia Aligned Standards of Learning in History/Social Science. Students may enroll in this class each year of middle school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).		
Adapted PE	This adapted physical education course is designed for students who have Individual Education Plans (IEPs) identifying adapted physical education services in the special education setting. Students may enroll in this class each year of middle school participation, as appropriate. Emphasis is on organized lead-up modified fitness and wellness activities. Activities are designed based upon the student's present level of performance and directed to improve deficit areas and maximize participation.	None required	
Life Skills	This adapted curriculum course is designed to begin preparing students with transition skills necessary for managing life after graduation with maximum independent functioning. Students may enroll in this class each year of middle school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP), in the area of life skills, such as the development of personal care, home care, community living and vocational skills.	None Required	
Social Skills	This adapted curriculum course is designed to develop social skills necessary for students to be successful in educational, home and community settings. Students may enroll in this class each year of middle school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP), in the area of social skills, such as the development of functional communication, prosocial behaviors and positive interpersonal relationships skills.	None required	

## ADAPTED CURRICULUM COURSE DESCRIPTIONS\* (HIGH SCHOOL) GRADES 9-12

\*Some students eligible for an Applied Studies Diploma may not be eligible for instruction following the Aligned Curriculum.

COURSE	DESCRIPTION	ASSESSMENT REQUIREMENTS		
HS Foundations English	This course is designed to support the Virginia Aligned Standards of Learning in English including areas of reading and writing. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).			
HS Foundations Mathematics	This course is designed to support the Virginia Aligned Standards of Learning in Mathematics. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).	Participation in these courses will support students in fulfilling requirements		
HS Foundations Science	This course is designed to support the Virginia Aligned Standards of Learning in Science. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).	for the Virginia Alternative of high ndividualized Assessment Program (VAAP)		
HS Foundations History/Social Science	This course is designed to support the Virginia Aligned Standards of Learning in History/Social Science. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).			
Adapted PE	This adapted physical education course is designed for students who have Individual Education Plans (IEPs) identifying adapted physical education services in a special education setting. Students may enroll in this class each year of high school participation, as appropriate. Students gain knowledge and skills in a variety of team sports and activities which promote an active lifestyle. Activities are designed based upon student's present level of performance and directed to improve deficit areas and maximize participation.			
Independent Living Skills	This adapted curriculum course is designed to prepare students with transition skills necessary for managing life after graduation with maximum independent functioning. Independent living skills may include instruction related to self-management, hygiene, goal setting, leisure, community participation, planning, travel and household maintenance. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP). Students may enroll in this class each year of high school participation, as appropriate.	participation in these courses may support students in completing requirements for an Applied Studies		
Vocational/ Employment Skills	This adapted curriculum course is designed to develop vocational skills necessary for successful employment with maximum independent functioning. Employment skills may include instruction related to punctuality, following directions, workplace communication and social skills, and job readiness skills. Students may enroll in this class each year of high school participation, as appropriate. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).	Diploma.		

## ADAPTED CURRICULUM COURSE DESCRIPTIONS\* (HIGH SCHOOL) GRADE 12 +

\*Some Applied Studies students may return to work towards a standard Diploma.

COURSE	DESCRIPTION	ASSESSMENT REQUIREMENTS	
Life-skills Reading	This adapted curriculum course is designed to reinforce basic reading and writing skills with real-world application. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).		
Life-skills Math	This adapted curriculum course is designed to reinforce basic mathematical skills with real-world application. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).		
Independent Living Skills	This adapted curriculum course is designed to develop functional skills necessary for independent living. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP) in areas of independent living such as housekeeping, meal planning and preparation, hygiene and selfmanagement.	These courses are designed for students who	
Vocational Skills	This adapted curriculum course is designed to develop appropriate work-related behaviors in order to prepare students for participation in community-based worksites or employment. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP) in the area vocational skills identification, exploration and development with real-world application.	have sufficed requirements for an Applied Studies Diploma following the Aligned Standards of Learning.	
Community Skills	This adapted curriculum course is designed to develop functional skills necessary for community integration with maximum independent functioning. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP) in areas of community access such as money handling, social skills, self-management and self-advocacy.		
Recreation & Leisure Skills	This adapted curriculum course is designed to prepare students to participate in age-appropriate activities that promote well-being, socialization and community access. Instruction is individualized to meet the needs of the student. Instruction and pacing is individualized based on the needs of the student, including needs identified in the Individual Education Plan (IEP).		

## **ENGLISH AS A SECOND LANGUAGE (ESL)**

Grade Levels: 9-12 CCPS Course Code(s):

Credit: 1

#### **ESL I**

This introductory course is designed for students who are beginning to learn to speak English. The course focuses on acquiring skills in listening, speaking, reading, and writing and emphasizes vocabulary development, and English grammar and word order (syntax). Students also learn skills to help them adjust to their new situation. Students qualify for this course based on their performance on an English language assessment.

#### **ESL II**

In this course, students will continue to further develop the four basic communication skills (listening, speaking, reading, and writing) by broadening the formal study of grammar and continued vocabulary building. Students will continue to develop their listening and reading comprehension and practice oral communication skills. Students will qualify for this course based on their performance on an English language assessment.



## **VIRTUAL LEARNING**

Virtual learning programs must reflect the same characteristics of any effective program. Effective online programs require highly-qualified teachers, rigorous standards-based curricula, meaningful assessments, engaging instruction, continuous support, and effective administration. CCPS utilizes online learning opportunities through the online learning platforms of Edgenuity and Virtual Virginia. Virtual programs offer increased opportunities, flexibility, and convenience to meet the needs of our learners. To succeed in an online class, students need to be self-motivated so they do not fall behind. Students must be able to stay on task, meet deadlines, and ask for assistance when needed.

## **Edgenuity Opportunities**

#### 9-12th Credit Recovery:

Credit recovery courses are designed to assist students who have not yet passed or missed out on specific sections of skills or time-periods during the year. Students taking this course could have been unsuccessful with a quarter or semester, transferred in and missed part(s) of the original course, or need additional support with certain skills/units. This course can be offered during the school year and summer.

#### **Initial Course for Credit:**

Initial courses are designed to equip students with the skills necessary for them to be proficient in a particular subject area in a quarterly format. This is for students who have not yet taken the class and need it for credit or elective purposes. As we progress in our use of Edgenuity, we hope to increase student opportunity for coursework beyond what is offered in our current program of studies.

#### 6-8th Summer School Skills Enrichment:

Middle School Summer coursework is designed to assist students with specific skills and provide additional practice based on individual need. CCPS will be blending MAP learning data with Edgenuity program to make summer school courses better aligned to student needs.

#### **Cornerstone Learning:**

Cornerstone Learning courses are designed for a 35-minute class period. Classes are developed in a quarterly format for the students to have ample opportunity to acquire the skills required to be proficient in that subject area. Coursework is also aligned to the Standards of Learning, VDOE Curriculum

Framework, and division pacing guides. This alignment will provide students with a seamless transition when they return to their home school.

#### **Edgenuity Coursework**

#### **CURRENT OFFERINGS:**

MATH	ENGLISH	SCIENCE	HISTORY
Math 6 (3103)	English 6	6 Life	6 USI
	(1106)	(4115)	(2354)
Math 7	English 7	7 Physical	7 USII
(3104)	(1110)	(4125)	(2355)
Pre-Algebra	English 8	8 Earth	8 Civics
(3115)	(1120)	(4210)	(2357)
Algebra I	English 9	Biology	World History
(3130)	(1130)	(4310)	Part I (2219)
AFDA	English 10	Ecology	World History
(3134)	(1140)	(4340)	Part II (2221)
Geometry	English 11	Physics	Virginia & US
(3143)	(1150)	(4511)	History (2360)
	English 12 (1160)	Chemistry (4410)	Virginia & US Government (2440)

#### Virtual Virginia

Virtual Virginia is a program of the Virginia Department of Education that provides access to online Advanced Placement, world languages and elective courses. Students who meet the prerequisites may enroll through the guidance department in their home school. The most current information can be found at <a href="http://www.virtualvirginia.org">http://www.virtualvirginia.org</a>.

## **World language and certain non-AP elective courses:** No tuition

**AP courses:** The Virginia Department of Education pays tuition and AP exam fees for all Early College Scholars.

**Other courses:** There is a tuition charge for non-Early College Scholars and certain elective courses.

Students are responsible for paying the \$75.00 administrative fee charged by Virtual Virginia when withdrawing from a course more than 21 calendar days after the start of the course.

## **CAREER PLANNING**

CCPS believes that academic and career planning is an important component to our mission. Classroom teachers, guidance counselors, site administrators, families, community representatives and division administrators have the collective responsibility to support and guide our students as they develop their K-12 individual learning vision and develop a plan for post-secondary success in our communities. Career and academic planning is for all by all.

Linking academics to post-high school plans can make school more relevant to your student.

For CCPS students begin to explore careers in elementary school through lessons taught by the counselors and instructional staff and through other classroom activities. Our students will experience lessons, to enhance both academic and career planning, and start developing some context to their content classes.

#### **6TH GRADE**

- CAREER EXPLORATION
- PORTFOLIO DEVELOPMENT (MY PLAN)

#### **7TH GRADE**

- SELF-AWARENESS
- CAREER EXPLORATION
- PORTFOLIO DEVELOPMENT (MY PLAN)
- FINANCIAL LITERACY AND LIFE SKILLS

#### **8TH GRADE**

- SELF-AWARENESS
- CAREER EXPLORATION
- EDUCATION PLANNING
- PORTFOLIO DEVELOPMENT (MY PLAN)
- FINANCIAL LITERACY AND LIFE SKILLS

#### 9TH GRADE

- SELF-AWARENESS
- CAREER EXPLORATION
- EDUCATION PLANNING
- PORTFOLIO DEVELOPMENT (MY PLAN)
- FINANCIAL LITERACY AND LIFE SKILLS

#### **10TH GRADE**

- SELF-AWARENESS
- CAREER EXPLORATION
- EDUCATION PLANNING
- PORTFOLIO DEVELOPMENT (MY PLAN)
- FINANCIAL LITERACY AND LIFE SKILLS

#### 11TH GRADE CONTINUED

- SELF-AWARENESS
- CAREER EXPLORATION
- EDUCATION PLANNING
- PORTFOLIO DEVELOPMENT (MY PLAN)
- FINANCIAL LITERACY AND LIFE SKILLS

#### 12TH GRADE

- SELF-AWARENESS
- CAREER EXPLORATION
- EDUCATION PLANNING
- PORTFOLIO DEVELOPMENT (MY PLAN)
- FINANCIAL LITERACY AND LIFE SKILLS

## **CAREER CLUSTERS**

Exciting and diverse careers are open to qualified applicants. The possibilities are limitless. Your school counselor will help you learn more about these opportunities beginning in middle school. Learn more about your own interests using your career inventories through Career Cruising. Most careers fall into one of the following career clusters:



#### **Agriculture, Food & Natural Resources**

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.



#### **Architecture and Construction**

Careers in designing, planning, managing, building and maintaining the built environment.



#### Arts, A/V Technology, & Communication

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.



#### **Business Management & Administration**

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.



#### **Education & Training**

Planning, managing and providing education and training services, and related learning support services.



#### **Finance**

Planning, services for financial and investment planning, banking, insurance, and business financial management.



#### **Government & Public Administration**

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.



#### **Health Science**

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.



#### **Hospitality & Tourism**

Encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.



#### **Human Services**

Preparing individuals for employment in career pathways that relate to families and human needs.



#### **Information Technology**

Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.



#### Public Safety, Corrections, and Security

Planning, managing, and providing legal, public safety, protective services and homeland security, including professional & technical support services.



#### **Manufacturing**

Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.



#### Marketing, Sales, and Services

Planning, managing, and performing marketing activities to reach organizational objectives.



#### Science Technology, Engineering, & Mathematics

Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.



#### Transportation, Distribution and Logistics

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

## CAMPBELL COUNTY SCHOOLS WORK BASED LEARNING

#### Overview and Purpose

CCPS understands the importance of having students prepared to successfully transition into the workplace, armed services, or post-secondary programs upon earning their high school diploma. Virginia's revised graduation requirements and new standards are centered on the "Profile of a Graduate," a comprehensive blend of Content Knowledge, Workplace Skills, Community and Civic Responsibility, and Career Planning. The goal of every Campbell County Public School student is to meet the Profile of a Graduate standards, ensuring academic and content knowledge, workplace readiness with industry skills, and a sense of community and civic responsibility to Campbell County and beyond. Our mission is to ensure our students are prepared to pursue any post K-12 endeavor.

**Work-Based Learning (WBL)** is a school coordinated workplace experience related to students' career goals and/or interests, is based on instructional preparation, and is performed in partnership with local businesses, industries, and other organizations.

The purpose of providing work-based learning (WBL) is to better equip our students to meet the challenges of the real world. By teaching workplace readiness skills combined with genuine workplace experiences (WPE), we believe our students will be better prepared to succeed in a career of their choice as well as fulfill the workforce needs of Campbell County.

### WORK PLACEMENT EXPERIENCE ELECTIVE COURSE OFFERING

#### **Work Placement Experience Course Description**

This course provides senior students with experience in a field related to an interest and provides them the opportunity to make practical use of workplace readiness skills. Goals are set between the student, mentor, and employer. Coursework of 20–25 hours is an expectation for this elective in conjunction with field experience.

#### **Hours and Credits**

- Course local elective-1-2 credits
- 120 work hours-1 credit
- 260 work hours-2 credits
- Completion 20 25 hours workplace readiness skills course
- (Pass/Fail)
- Students can work during school, late arrival or early dismissal, after school or weekends

#### **WPE Student Expectations**

- Attend all required orientation/classroom sessions related to workplace readiness skills
- Attain paying job related to Academic and Career Plan
- Be responsible for transportation to and from the WPE site
- Complete all related coursework and site documents on time including portfolio submissions
- Report to WPE site on time
- Contact worksite and WPE Coordinator if unable to report to work
- Wear appropriate attire
- Contact Coordinator immediately if an issue arises that may impact ability to complete the workplace experience

## Description of CTE Work-Based Learning Methods of Instruction

- **Job shadowing** is a method of short-term, schoolcoordinated career exploration in which the student interviews a competent worker about their job and industry and "shadows" (follows) the worker to observe the performance of a variety of job tasks. Job shadowing is less intensive than the other methods and is usually the first form of workplace assignment given to a student. Prior to job shadowing, the student receives instruction about careers and the process of career choice, develops appropriate questions to ask, and learns the rules and guidelines for grooming, dress, and behavior in the workplace. Once the student has identified a career interest, path, or goal, job shadowing helps the student make informed career decisions and focus their studies. Job shadowing does not provide a standard unit of credit, but the student may enhance their class grade through the experience.
- 2. Mentorship is a structured, school-coordinated method that enables the student to learn about the industry and the workplace from a selected worker who has a recognized record of achievement in the occupational field. It requires student preparation, including career exploration, prior to the experience. Mentorship is more complex than job shadowing but less demanding and often of shorter duration than internship or service learning. Mentorship does not provide a standard unit of credit, but the student may enhance their class grade through the experience.
- 3. Service learning is a method in which the student engages in community-service work for a specified number of hours to gain developmental experience. Students and teachers cooperate with local leaders

to address community problems and issues, resulting in student service to the community and development of personal, workplace-readiness, academic, and citizenship skills. Students engage in critical, reflective thinking and experience the relationship of theory and practice. Service learning does not provide a standard unit of credit, but the student may enhance his/her class grade through the experience.

- **Internship** is a progressive, school-coordinated method that places the student in a real workplace environment in order to develop and practice career-related knowledge and skills needed for a specific entry-level job. An internship can be either introductory (short-term) or extended (lasting a summer, a semester, or an entire school year and involving a specified number of hours in the training agreement). Currently, interns may be paid or unpaid.1 An internship provides hands-on experience in a particular industry or occupation related to the student's career interests, abilities, and goals, and allows him/her to document jobrelated experiences. Prior to an internship, the student receives the established criteria and guidelines from the workplace supervisor, and throughout the internship, the supervisor evaluates the student. Internship does not provide a standard unit of credit, but the student may enhance their class grade through the experience.
- **Clinical experience** is a form of cooperative education for health and medical sciences students, except that students are not paid for their clinical work. Clinical experience provides the student with an opportunity to integrate knowledge acquired in the classroom with clinical practice, and it affords practice of the fundamental skills, behaviors, and attitudes needed for professional competence in the healthcare field. Clinical experience is based on observation and treatment of patients at different stages of medical practice. These experiences place students in a variety of healthcare settings so they may better understand the scope of the profession and healthcare needs. Like cooperative education, clinical experience is closely supervised, qualifies students for credit toward graduation, and requires a significant number of on-site hours (established by the Virginia Board of Nursing or the Virginia Department of Health).
- 6. Cooperative education is a career preparation WBL method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each

- contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve a minimum of 396 hours. Currently, 236 CTE courses are taught in Virginia that provide students with the option to participate in a cooperative education experience.
- Youth Registered Apprenticeship (YRA) is a career preparation WBL method that integrates schoolbased and work-based learning to help students gain employability and occupational skills. Local programs provide training based on statewide youth apprenticeship curriculum guidelines, endorsed by business and industry. Students are instructed by qualified teachers and skilled journeyworker worksite experts. Students are simultaneously enrolled in academic classes to meet high school graduation requirements and in occupation specific related instruction classes. Once an employer becomes an approved YRA sponsor, the student is hired and registered as an apprentice. The participating sponsor/employer provides supervision of a skilled mentor and the student continues with the Career Technical Education (CTE) training at his/her school. Upon completion of the requirements for a high school diploma, youth registered apprentices may continue as fulltime registered apprentices, subject to all standard on-the-job and related instruction requirements.
- Registered Apprenticeship is a career preparation WBL method that provides the student with hands-on training from an experienced mentor at the job site in the specified occupation. Student apprentices are paid employees of a company. Apprentices receive wages when they begin work and receive pay increases as they meet benchmarks for skill attainment, rewarding and motivating apprentices as they advance through their training. An apprentice must be paid at least the minimum federal hourly wage. Upon completion of a Registered Apprenticeship program, the apprentice receives a nationally recognized credential which consists of a Completion Certificate and journeyworker card. This is a portable credential that signifies to employers that employees with the journeyworker status are fully qualified for the job.



## CAREER AND TECHNICAL

#### Agriculture

## Agriscience I (8073)



Credit: 1

Students who have limited or no agricultural background or experience learn fundamental agricultural competencies needed for rural or urban living. Areas of instruction include meat grading and selection; maintenance of home appliances and equipment; and the study of plumbing, electrical wiring, and carpentry fundamentals. Teachers may incorporate additional competencies in the study of soil fertility and in cultural practices for shrubs, lawns, gardens, and fruit trees. The course emphasizes leadership development activities and participation in FFA activities. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Agriscience II (8008) XCIII



Prerequisite: Agriscience I Credit: 1

Students continue to learn agricultural mechanics, with emphasis placed on fundamentals of electricity, arc welding, gas cutting and welding, small engines, power woodworking, and wood and metal preservatives. They also receive instruction in animal science and further develop competencies in rural and urban living, leadership, and resource conservation. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Agriscience III (8010)

Prerequisite: Agriscience II Credit: 1

This course emphasizes one or more areas of plant science, animal science, soil science, agricultural business management, and agricultural mechanization, based upon the student's employment objective. Supervised occupational experience programs and leadership training are important parts of the course. When only single periods are provided, greater emphasis is placed on individualized instruction and supervised occupational experience programs.

#### Agriscience IV (8012)

Prerequisite: Agriscience III Credit: 1

This course includes instruction in agricultural mechanics, with emphasis placed on the application of mechanical skills to farm power and machinery, soil and water management, supervised farming programs, and leadership training.

#### Ornamental Horticulture I (8034)

Credit: 1

Designed for high school sophomores and juniors, Ornamental Horticulture I involves the production, maintenance, processing, and distribution of plant materials. This course is designed to give students a basic background and entry-level employment skills in the following major learning areas: career opportunities, plant propagation, home gardening, lawn care, greenhouse and nursery management, floral design, and holiday decorations. Instruction is provided in safety practices and leadership skills.

#### Ornamental Horticulture II (8036)



Credit: 1

Prerequisite: Ornamental Horticulture I

A course for high school juniors and seniors, Ornamental Horticulture II is designed to help students develop the necessary knowledge and skills for employment and advancement in areas such as landscape design, landscape construction, and landscape maintenance. Skills such as sketching and drawing, analyzing a landscape site, designing landscapes, identifying and selecting landscape plants, purchasing and installing plants, and maintaining landscapes by watering, fertilizing, mulching, pruning, and controlling pests are introduced. Students also learn the basics of the plant production industry. Instruction includes the science of plant production as well as market and business management. Participation in Future Farmers of America activities provides leadership development opportunities. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Ornamental Horticulture III (8038)

Credit: 1

Prerequisite: Ornamental Horticulture II

A course for high school seniors, Ornamental Horticulture III enables students enrolled in the course to learn the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry. Leadership development is offered through participation in Future Farmers of America.

#### - Business Information and Technology -

#### Accounting (6320)

Credit: 1

Students in grades 10-12 enrolled in this course are offered a starting point for building a career by learning basic skills and developing values and attitudes useful in gaining entry into the field of accounting. Students study basic principles, concepts and practices of the accounting cycle. They also learn about bookkeeping terms such as assets, capital, income, expenses, and liabilities and about merchandising business, check writing, and handling payroll. Students learn fundamental accounting procedures using both a manual and an electronic system.

#### **Advanced Accounting (6321)**

Prerequisite: Accounting I Credit: 1

High school juniors and seniors will continue to study the basic principles, concepts, and practices of the accounting cycle. In addition, students will work in this class to develop competencies in the following five duty areas: using automation to implement accounting procedures; implementing accounting procedures for assets, liabilities, and equity; implementing special systems; and understanding business ethics, thereby enhancing career exploration and employability skills. Students will use accounting and spreadsheet software to analyze and interpret business applications.

#### Principles of Business and Marketing (6115) Credit: 1

Students in this course explore the roles of business and marketing in the free enterprise system and the global economy while studying the important role business plays in the lives of individuals as consumers and workers. The course also provides the skills and knowledge needed to conduct one's own business affairs, such as making consumer decisions, maintaining bank accounts, and purchasing insurance.

#### Business Law (6131)

Credit: 1

This course is designed to help students in grades 10-12 learn about law in a variety of situations encountered in business and day-to-day living. Students examine the foundations of the American legal system and explore concepts as they relate to legal principles and business and personal laws.

#### Business Law/ Business Management (6133) Credit: 1

This course is designed to help students in grades 10-12 learn about law in a variety of situations encountered in business and day-to-day living and to explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations during the study of study basic management concepts and leadership styles. Students will study various elements of the business world that are particularly important today. These include organizational change, diversity in the workplace, ethics, global competition, the link between business and society, and the critical role played by technology (including the Internet and e-commerce). Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, cooperative education, and/or the Future Business Leaders of America.

#### **Business Management (6135)**

Credit: 1

In this course, high school juniors and seniors study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project management, problem solving, and ethical decision making are integral aspects of the course. Students will study various elements of the business world that are particularly important today. These include organizational change, diversity in the workplace, ethics, global competition, the link between business and society, and the critical role played by technology (including the Internet and e-commerce). Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, cooperative education, and/or the Future Business Leaders of America.

#### Computer Applications (6611) Credit: 1

This course is designed for secondary students to develop and enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students will develop the correct keyboarding techniques and gain a basic knowledge of word processing, spreadsheet, database, and graphic applications. Students will demonstrate an understanding of computer concepts through applications of knowledge. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Computer Information Systems (6612)

Prerequisite: Pass the Keyboarding Assessment or Computer Applications Credit: 1

In this course, students in grades 10-12 apply problemsolving skills to real-life situations through word-

processing, spreadsheet, database software, and through integrated activities. They work individually and in groups to explore computer concepts, operating systems, and emerging technologies. Instruction includes the use of Microsoft Word, Microsoft Access, Excel, and PowerPoint presentations. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

### Word Processing (6625)

Prerequisite: Computer Information Systems Credit: 1

In this course, high school juniors and seniors apply problem-solving skills to real-life situations, through the use of word processing, spreadsheet, database, and presentations software. Students work individually the majority of the time to trace the development of computers and their impact on society while learning to use various up-to-date programs. Through this course, students gain a more advanced understanding of some of the different computer applications which are used in the business world and which will probably be used in their day-to-day lives. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Design, Multimedia, and Web Technologies (6630)

Prerequisite: Pass the Keyboarding Assessment or Computer Applications Credit: 1

This course is designed for secondary students to provide them with an array of multimedia and web site design components. Students will design individual pages using an HTML editor and graphical user interfaces. Students will also help in the design and maintenance of the school's web site. In addition, students will work in a team environment to compose page layout and design. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Advanced Design, Multimedia, and Web Technologies (6631)

Prerequisite: Design, Multimedia, and Web Technologies (6630) Credit: 1

Students develop advanced skills in creating interactive media, web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software, applying skills learned to real-world projects. Completion of this course may prepare students for industry certifications.

## Economics and Personal Finance (6120)



Credit: 1

This year-long course is a general introduction into the world of economics. Course content includes microeconomics, macroeconomics, and the rationale for specialization and trade across international borders with emphasis on costs and benefits of that specialization. The course is designed to help students apply economic analysis to their own lives by helping them to make personal decisions about spending, working, saving, and investing and to explore social and economic challenges and policies facing local, state, and national governments. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Technology -

#### Basic Technical Drawing (8435)

Credit: 1

In this course, designed for students with a sound knowledge of math, students experience the basic language of industry and technology. They gain skills and understanding of the broad scope of mechanical drawing and drafting. The course is highly recommended for students who plan to study engineering, architecture, landscaping, or industrial technology in the future. An introduction to Computer Aided Design (CAD) is included in the course.

## Engineering Drawing (8436)



Prerequisite: Basic Technical Drawing Credit: 1

In this course, students are introduced to the graphic language of industry for engineers, manufacturers, and technicians. The course provides greater depth in drafting problems, skills, and techniques and emphasizes interpretation of industrial prints, ability to use reference books and resource materials, and the adherence to the American National Standards Institute (ANSI) standards for drafting. An important aspect of the course is the application of Computer Aided Design (CAD) principles and applications to typical engineering and design problems. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Architectural Drawing (8437)



Prerequisite: Basic Technical Drawing Credit: 1

Architectural Drawing provides students with the opportunity to learn more about the basic background and principles of architecture and its related drafting practices and techniques. Computer Aided Design

(CAD) principles are an integral part of the instruction. Construction methods and techniques are studied and applied in the building of scale model projects. This course can benefit a future building or landscape architect, interior designer, or home builder, as well as a future homeowner. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Advanced Technical Drawing, Part I (D211) and Advanced Technical Drawing, Part II (D212)

Prerequisites: Basic Technical Drawing, Architectural Drawing, and Engineering Drawing Credit: 1

College Credits: 6

This class is an introduction to the use of twodimensional drawing and uses CAD software. Students will be required to learn the commands necessary to produce two-dimensional drawings, plotting methods and procedures, and Orthographic (Multi-view) Projection. The course is also dual enrolled with Central Virginia Community College, and students successfully completing the course can earn up to 6 college credit hours.

### Carpentry I (8601)

Credits: 1

In this course, students learn the basic theories and principles of residential and commercial construction. Classroom and laboratory instruction are designed to provide students with a working knowledge of carpentry skills and procedures. Students are taught safe use of hand and power tools, estimating, blueprint reading, floor framing, wall framing, and roof framing. Carpentry I is the building block for achieving highlevel construction industry skills that can result in an exciting and lucrative career. With an emphasis on safety, the NCCER Core Curriculum is used in this course. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Carpentry II (8602) XCTE

Prerequisite: Carpentry I

Credits: 2

This course provides a continuation of instruction in the working knowledge, skills, and processes required for carpentry work. Students continue to follow safe procedures in using hand and power tools and to learn skills of estimating, blue print reading, and framing of floors, walls, and roofs. Upon satisfactory completion of the course, students are prepared for entrance level employment in the construction trades. With an emphasis on technical skills, the NCCER Carpentry Curriculum is used in this course. Students enrolled in

this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Carpentry III (8603)

Prerequisite: Carpentry II

Credits: 2

Carpentry III is an advanced course that allows students to gain in-depth knowledge and hands-on experience in construction industry skills. Upon satisfactory completion of the course, students are prepared for entrance level employment in the construction trades. Students enrolled in this course will take a career and technical assessment defined by the Virginia Department of Education.

#### Robotics (8421)

Credits: 1

Students engage in the study of computers and microprocessors and their applications to manufacturing, transportation, and communication systems. Topics include computer equipment and operating systems, robotics, programming, control systems, and social/cultural impact of these technologies. Problem-solving activities challenge students to design, program, and interface devices with computer systems. Learning activities include robotics, computer-aided design, computer-aided manufacturing and design, and control of electromechanical devices.

#### Career and Technical -

(courses taught at the Campbell County Technical Center)

Auto Body Repair I (8679)

Credits: 2

This course prepares students for occupations in the auto body collision repair industry. Using equipment and products currently utilized in the auto body repair field, students learn the basic skills and techniques of auto body refinishing, basic metal work, body filling and shaping, custom colors in painting, and estimating costs for auto body repairs. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.



### Auto Body Repair II (8680) XCTE

Prerequisite: Auto Body Repair I Credits: 2

This course provides a continuation of preparation for occupations in the auto body collision repair industry. Students continue to progress in the knowledge of skills and techniques utilized in auto body refinishing: basic metal work, body filling and shaping, custom colors in painting, and estimation of costs for auto body repairs. Students successfully completing the course are prepared for entry level employment in the auto body collision repair industry. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

## Automotive Servicing Technology I (8506)



Credits: 2

This course provides students who have a genuine interest in automotive repair with the opportunity to become familiar with safety practices, procedures, tools, and equipment involved in the automotive repair profession. Students will learn the importance of observing safety practices, as well as the functions of the various working parts of an automobile, including brakes, electrical system, suspension, steering, and engine performance. Students are also introduced to the procedures for performing a state inspection. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

## Automotive Servicing Technology II (8507)



Prerequisite: Automotive Servicing Technology I Credits: 2

This course provides a continuation of the study of safety practices, procedures, tools, and equipment involved in the automotive repair profession. There is continued emphasis on observing safety practices and additional study of the functions of the various working parts of an automobile: brakes, electrical system, suspension, steering, and engine performance. Upon successful completion of the course, students are qualified to take the exam for Virginia State Inspection Certification. The program also provides a foundation for preparation for the ASE (Automotive Service Excellence) national certification tests. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

### Computer Repair (I221C) 💢 CTE



Credits: 2 College Credits: 4

This year-long course uses hands-on experiences

to teach students the basic information needed to maintain, service, and upgrade a computer through hardware and software applications. Students learn the basic vocabulary and troubleshooting skills used by a computer repair technician and are taught the skills that will prepare them for the A+ Hardware and A+ Software exam after successful completion of the class. The course is also dual enrolled with Central Virginia Community College, and students successfully completing the course can earn up to 6 college credit hours. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### **Computer Networking -**MTA I (I101C) and II (I130C) \*\*CTE



Credits: 2

College Credits: 8

Designed to prepare students to enter the computer field, this course teaches students how to install, troubleshoot, and maintain computer networks. The course uses an online curriculum that provides hands-on applications and reinforcement for the skills associated with the first two semesters of the Microsoft Technology Associate Certifications in Networking Fundamentals, Servers, Database and Gaming. The course is also dual enrolled with Central Virginia Community College, and students successfully completing the course can earn up to 6 college credit hours. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Cosmetology I (8527)



Credits: 2

This course introduces students to the skills needed to enter the beauty industry. Students learn the basic skills related to hair design, chemical services, skin care, and nail care and have the opportunity to practice their skills on both mannequins and live models. Safety and sanitation and communication skills are emphasized. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.



#### Cosmetology II (8528)

Prerequisite: Cosmetology I

Credits: 2

Only seniors are allowed to enroll in this course, which continues instruction in the skills needed to enter the beauty industry. Students continue to use both mannequins and live models to practice skills related to hair design, chemical services, skin care, and nail care. Students who successfully complete Cosmetology I and II are eligible to apply for the Virginia State Board cosmetology licensure examination. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

## Culinary Arts I (8275)

Credits: 2

This course provides a foundation for students who wish to continue their education at a culinary arts school or to enter the food service field. After instruction in safety, sanitation, measurement, recipe reading, and equipment operation, as well as an introduction to skills for cake decorating, candymaking, and catering, students cater meals for various meetings held at the Technical Center. Students also fill orders for cakes, pies, pastries, and take-out meals for the Technical Center staff. Students receive handson practice and reinforcement of skills by operating a restaurant for the Technical Center students. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.



## Culinary Arts II (8276)

Prerequisite: Culinary Arts I

Credits: 2

This course continues students' preparation for continuing their education at a culinary arts school or entering the food service field. Students receive additional instruction in safety, sanitation, measurement, recipe reading, and equipment operation, as well as skills for cake decorating, candy-making, and catering. Students continue to receive hands-on

practice and reinforcement of skills by catering meals for various meetings held at the Technical Center; filling orders for cakes, pies, pastries, and take-out meals for the Technical Center staff; and operating a restaurant for the Technical Center students. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

## Electricity and Cabling I (8533)

Credits: 2

This course provides a foundation in electrical principles and practices, as well as a basic understanding of the National Electrical Code. The course focuses on the "how" and "why" of safe electrical wiring practices, following a logical sequence from residential electrical installations to concepts and principles of commercial and light industrial electrical construction. Students develop safety and workplace skills in tools and materials, electrical theory, and conduit and power systems. With an emphasis on safety, the NCCER Core Curriculum is used in this course. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Electricity and Cabling II (8534)

Prerequisite: Electricity and Cabling I

Credits: 2

This course continues the study of electrical principles and practices, as well as knowledge and application of the National Electrical Code. The course reinforces the "how" and "why" of safe electrical wiring practices, following a logical sequence from residential electrical installations to concepts and principles of commercial and light industrial electrical construction. Students continue to develop safety and workplace skills in tools and materials, electrical theory, and conduit and power systems. With an emphasis on technical skills, the NCCER Electricity Curriculum is used in this course. Successful completion of the course prepares students for entry level jobs in the electrical field. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

#### Manufacturing Technology/ MT1 (M8425) and II (M8427)



Credits:2

This one-year course is designed to meet the growing employment and technical demands of the manufacturing sector. The class is delivered in a modular setting that includes but is not limited to: safety and quality practices, measurement, manufacturing processes, electrical and mechanical fundamentals and maintenance awareness. Students enrolled in MT1 work on developing the following skills: speaking, active learning, critical thinking, production

and process, systems evaluation and math problem solving. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.

## Nurse Aide I (836A) and II (836B) (CTE

Credits: 2

This one-year course is designed to introduce students to career opportunities in the health care field. Instruction focuses on skills for nurses' aides. Students learn medical terminology, human anatomy, body functions and disorders, safety, and infection control as they develop health assistant skills. Supervised laboratory experience is an integral part of the course, and clinical practice hours are coordinated through local nursing homes. Students who successfully complete the class are qualified to take the state test for Certified Nurse Aide. Students enrolled in this course will take a career and technical assessment approved by the Virginia Department of Education.



#### Apprenticeship/Internship Program (9090, 9092 or 9093)

Credits: 3

Campbell County High Schools offers an Apprenticeship Program for Career and Technical students during their senior year of school. This program allows students to receive on-the-job training at approved job sites while attending high school. The Apprenticeship Coordinator, along with the Virginia Department of Labor Representatives, establishes work processes as guidelines for on-the-job training purposes. Interested students should contact their Guidance Department to learn more about the qualifications for acceptance into this program.

## DUAL ENROLLMENT CTE PROGRAMS



#### at Central Virginia Community College

The following CET dual enrollment programs are offered to seniors on the campus of Central Virginia Community College. Students earn both high school credits and college credits for these programs. Students will attend CVCC in the morning and return to their home school for any required courses for graduation. All programs require students to take the CVCC placement test. The required score varies depending on the program. Course descriptions can be found at www.cvcc.vccs.edu

#### Heating, Ventilation, and Air Conditioning

Fall Semester- (1.5 High School Credits and 10 College Credits)

**AIR 121** Air Condition and Refrigeration I (AIR121C)

**AIR 154** Heating Systems I (AIR154C)

Applied Technical Math (MTH103C) MTH 103

**Optional Course** 

**SDV 100** College Success Skills (SDV100C)

Spring Semester- (1.5 High School Credits and 9 College Credits)

**AIR 165** Air Conditioning I (AIR165C)

**AIR 155** Heating Systems II (AIR155C)

Applied Technical Math II (MTH104C) **MTH 104** 

**Optional Course** 

#### **Machine Tool**

Fall Semester- (1.5 High School Credits and 10 College Credits)

**MAC 161** Machine Shop Practices I (MAC161C)

**MAC 162** Machine Shop Practices II (MAC162C)

**SDV 100** College Success Skills (SDV100C)

MTH 103 Applied Technical Math I (MTH103C)

Spring Semester- (1.5 High School Credits and 9 College Credits)

Machine Shop Practices III (MAC163C) **MAC 163** 

**MAC 164** Machine Shop Practices IV (MAC164C)

MTH 104 Applied Technical Math II (MTH104C)

17/	$\sim$ l $\sim$ l	III	a
W	ELU	แท	u

Fall Semester- (1.5 High School Credits and 10 College Credits)

**WEL 120** Introduction to Welding (WEL120C)

**WEL 123** Metal Arc Welding – Basic (WEL123C)

**SDV 100** College Success Skills (SDV100C)

MTH 103 Applied Technical Math I (MTH103C)

Optional Course

Spring Semester- (1.5 High School Credits and 9 College Credits)

WEL 124 Metal Arc Welding – Advanced (WEL124C)

WEL 160 Gas Metal Arc Welding - MIG (WEL160C)

MTH 104 Applied Technical Math II (MTH104C)

**Optional Course** 

#### **Emergency Medical Technician (EMT) - Basic**

Fall Semester- (1.5 High School Credits and 9 College Credits)

**EMS 100** CPR for Healthcare Provider (EMS100C)

**EMS 111** Emergency Med Tech-Basic (EMS111C)

EMS 120 EMT Basic/Clinical (EMS120C)

Spring Semester- (1.5 High School Credits and 6 College Credits)

**HLT 143** Medical Terminology I (HLT143C)

**HLT 230** Principles of Nutrition (HLT230C)

#### **Fire and EMS**

Fall Semester- (1.5 High School Credits and 9 College Credits)

**EMS 100** CPR for Healthcare Provider (EMS100C)

**EMS 111** Emergency Med Tech-Basic (EMS111C)

**EMS 120** EMT Clinical/Basic (EMS120C)

Spring Semester- (1.0 High School Credits and 5 College Credits)

**FST 100** Principles of Emergency Services (FST100C)

**FST 196** On-Site Training (FST196C)

#### **Criminal Justice**

Fall Semester- (1 High School Credit and 6 College Credits)

**ADJ 100** Survey of Criminal Justice (ADJ100C)

ADJ 105 Juvenile Justice System (ADJ105C)

Spring Semester- (1.0 High School Credits and 6 College Credits)

**ADJ 128** Patrol Administration and Operations (ADJ128C)

**ADJ 140** Introduction to Corrections (ADJ140C)

#### **Health Sciences**

Note: Students will remain on the CVCC campus for this program and will not be required to attend their home school to meet graduation requirements.

Fall Semester- (2.5 High School Credits and 16 College Credits)

**BIO 141** Human Anatomy & Physiology I (BIO141C)

**ENG 111** College Composition I (E111C)

**HLT 230** Principals of Nutrition (HLT230C)

PLS 211 Government I (PLS211C)

SDV 100 College Success Skills (SDV100C)

**HLT 141** Intro to Medical Terminology (HLT141C)

(MTH 163 or 271 will replace HLT 230 in first semester if student needs additional math for advanced diploma. HLT 230 will be offered in second semester. A grade of "C" or better is required in BIO 141 and MTH 163 to enroll in BIO 142 and MTH 164.)

Spring Semester- (2 High School Credits and 13 College Credits)

BIO 142 Human Anatomy & Physiology II (BIO142C)

**ENG 112** College Composition II (E112C)

**PSY 230** Developmental Psychology (PSY230C)

PLS 212 Government II (PLS212C)

(Students who enroll in Math in the fall semester will enroll in Math and HLT 230 for the spring semester for a total of 19 credits.)

#### **Cyber Security**

Fall Semester- (1.5 High School Credits and 9 College Credits)

ITE 115 Introduction to Computer Applications

and Concepts (ITE115C)

ITN 101 Introduction to Network Concepts (ITN101C)

**ITP 100** Software Design (ITP100C)

Spring Semester- (1.5 High School Credits and 9 College Credits)

ITN 260 Network Security Basics (ITN260C)

ITN 261 Network Attacks, Computer Crime

and Hacking (ITN261C)

**ITN 267** Legal Topics in Network Security (ITN267C)

## **ELECTIVES**

#### **Creative Writing (1171)**

Prerequisites: English 9; English 10 Credit: 1

This course is designed for high school juniors and seniors who have a genuine passion and aptitude for writing and will challenge students who are already proficient and prolific writers. In this advanced writing class, students will read, write, and share, in order to improve their writing ability. The first semester focuses on instruction in poetry and short story writing. The second semester provides a vehicle for student publication in the form of a school literary magazine. The magazine is compiled and edited by the students in the Creative Writing class, not only providing a showcase for the creative writing students to demonstrate what they have learned, but also serving as a creative outlet for the entire student body.

#### Journalism I (1200)

Credit: 1

This course will provide first-year students with the opportunity to develop skills for both creative and journalistic writing. Students will learn about the history of journalism and will be introduced to basic journalistic techniques. They will have the opportunity to write for the school newspaper, but will not be involved in the editing or layout process. The students will also spend time writing and analyzing poetry, short fiction, and creative nonfiction selections.

#### Journalism II (1210)

Prerequisite: Journalism I Credit: 1

In this course, students continue to learn and practice journalistic skills as they work to write, edit, lay out, and improve the school newspaper. For layouts, students will learn how to use InDesign software. Students, who serve as editors for the paper, will have the opportunity to develop leadership skills and will learn a sense of responsibility and ownership of the paper. When not working on hands-on assignments, students will learn additional information about important journalists and newspapers, pertinent lawsuits, and first amendment issues. The course will help to prepare interested students for college-level journalism classes.

#### Advanced Journalism (1220)

Prerequisite: Journalism I Credit: 1

This class allows students interested in creative writing to continue to develop their writing skills as they write creatively and analyze the work of others. Students in the class will serve as the editorial board of the school's literary magazine. Students will not only write for the magazine but will also select the pieces to be published and will lay out the magazine. To produce the magazine, students will learn to use Photoshop 7 and InDesign software.

#### Yearbook (1202)

Credit: 1

This class is designed for students interested in all aspects of yearbook production. In their work on the yearbook, students will gain insight into the creative, mechanical, managerial, and business functions related to the production of the school yearbook. Through producing the yearbook, students will learn to cooperate as members of a highly organized team. They will gain experience in journalistic writing and will observe, understand, and apply technical skills inherent in photojournalism. Students will be involved in reading, proofreading, interviewing, examining records, scouting sports and social events, promoting sales, selling advertising, completing photography assignments, meeting deadlines, and attending workshops.

#### Student Assistant/Office/Teacher Aide (1012)

Prerequisites: Staff Recommendation/ Administrative Approval Credit: 1

Students will be assigned to the main office, guidance office or to a teacher to be an assistant. Students will receive a pass or fail mark for the class. The pass-fail mark is not computed in the student's grade point average; however, the student does receive a credit for the program.

#### Elementary Teacher Assistant (1014)

Credit: 1

The Elementary Teacher Assistant Program offers high school juniors and seniors an opportunity to explore career possibilities in elementary education or a childrelated field. Students enrolled in the program will learn about elementary education through observation and involvement as they report daily to an elementary class to work with students and their teacher. Students who are selected as elementary assistants should enjoy working with young children and should regard their experience as a possible stepping stone to a future career. Elementary assistants are expected to have average to above average academic records and to possess strong communication skills. They must maintain exemplary attendance and are expected to be mature and dependable in their helping role with teacher and students. It is necessary for student assistants to be in walking distance of an elementary school or to have daily transportation.

#### Virginia Teachers for Tomorrow (T101)

Prerequisites: Two teacher recommendations, essay and 3.0 GPA, Seniors and/or Juniors

Credit: 1 (weighted)
College Credits: 4

Teachers for Tomorrow is a dual enrollment course offered in collaboration with Lynchburg College. This course is designed for students to explore teaching as a profession and the variety of career opportunities in the educational field. The curriculum focuses on three themes: experiencing the profession, learning, and the classroom. Instruction takes place in the high school classroom, and the student participates in a supervised field experience. The program seeks to provide students insight into the nature of teaching and the critical issues affecting American schools. Students must complete a professional portfolio and attend required seminars at Lynchburg College.

#### Leadership (2822)

Credit: 1

This course is designed to promote leadership skills and to provide a time for students to engage in school service projects. The major objectives are for students to develop communication skills, improve their organizational skills, develop team-building strategies, and promote responsibility and sportsmanship in all school activities. The course is primarily handson but also includes supplementary readings, guest speakers, projects, and role-playing. To better meet students' needs, students are provided the opportunity to select many of the class goals and projects as the year progresses. Most of the content used in the class is obtained from materials developed for the Virginia High School League Leadership conferences and from the book The Seven Habits of Highly Effective Teens by Sean Covey. Students are graded on a pass/fail basis. Participation in class discussion is extremely important, and points are assigned for various projects done weekly as well as monthly. Participation in the class provides students with an opportunity to be creative, serve their school and community, and grow as leaders.

#### Photography (9912) Credit: 1

This course introduces students to the principles of photography and fundamental camera and darkroom techniques. Students in the class will need a 35mm camera.



#### Sociology/Psychology (2700)

Credit: 1

This course consists of a study of the basic concepts, theories, and methods used in the study of sociology and psychology. The main objective of the course is to enhance students' awareness and understanding of sociological and psychological principles and to teach students to apply these principles in everyday life.

### SOL Enrichment (9921)

Credit: 1

This course is designed to support students in attaining verified credits in order to meet graduation requirements. Students in this class will receive additional instruction as identified through previous SOL tests and pre-assessments.

## Pre-AP Computer Science/Programming (6641)

Credit: 1 (weighted)

Students explore computer concepts, apply logic procedures, and implement programming procedures with one or more languages, such as Visual Basic.Net, Java, C#, and C++. Graphical User Interfaces, such as Alice, Game Maker, and Flash, may be used as student's design and develop interactive multimedia applications. In addition, HTML or JavaScript may be employed to create Web pages.

#### AP Computer Science A (3185)

Credit: 1 (weighted)

The AP Computer Science A course is an introductory computer science course built around the development of computer programs that correctly solve a given problem. The design and implementation of the computer programs is used to introduce:

the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. The JAVA programming language will be used in the course.

Students receive weighted credit for participating in AP Classes. They receive college credit only by achieving a high score on the College Board's Advanced Placement Tests. Colleges have different criteria for awarding credit for scores on AP tests, and it will be the responsibility of students to contact colleges to ascertain their policies regarding Advanced Placement scores.



Fundamentals of Speech (1300)

Credit: 1

This course is designed to offer high school sophomores, juniors, and seniors a variety of interesting and stimulating activities and performance projects geared toward learning techniques associated with the highly specialized fields of speech and drama. Class activities are constructed to help students fully realize the intent of theater standards and to serve as springboards for deeper exploration, examination, and experimentation with theater on the individual and collaborative levels. The course is based on the premises that theater is basic to a balanced academic experience for all students and that the diversity of theater provides opportunities for the involvement of all students, regardless of experience or abilities. This course provides a creative and critical thought process that helps students foster a healthy self-concept, develop intrapersonal skills, clarify their perceptions of the world, and nurture an awareness of themselves as physical, social, and creative beings.

#### Fundamentals of Speech II (1301)

Prerequisite: Fundamentals of Speech I Credit: 1

This course is designed to further acting/presentation skills with greater emphasis placed on design and the technical processes. Students will develop a more refined understanding of previously learned terminology

and basic speech/script writing formats. Focus is placed on learning decorum for delegating duties within the hierarchy of theater management including directing, script writing, costume/prop design, and light/sound design, as well as learning the techniques for the successful delivery of a theatrical production. Additional training is provided for analyzing dramatic selections and for developing strong characters that literally come to life on the stage. The course is based on the premises that theater is basic to a balanced academic experience for all students and that the diversity of theater provides opportunities for the involvement of all students, regardless of experience or abilities. This course provides a creative and critical thought process that helps students foster a healthy self-concept, develop intrapersonal skills, clarify their perceptions of the world, and nurture an awareness of themselves as physical, social, and creative beings. Its most important goal is to promote active lifelong learning so that students will be able to express themselves through public and interpretational speaking by linking hands-on knowledge to real-world situations.

#### Advanced Speech (1302)

Prerequisites: Fundamentals of Speech I, Fundamentals of Speech II Credit: 1

This course requires students to actively utilize and apply the terminology and performance/presentation skills learned in previous levels of Speech. Advanced Speech will culminate in the completion of a final project. Final projects may entail a variety of expectations, including, but not limited to, the production of an original play (put through the entire production process) or the production of a documentary. Final projects will also require extensive research into the background of specified topics for original scripts, as well as for other productions presented during the year. Students will be given greater responsibility pertaining to their acting/presentation skills, initiative for speech/theater development activities, and creativity in design and writing. This course provides a creative and critical thought process that helps students foster a healthy self-concept, develop intrapersonal skills, clarify their perceptions of the world, and nurture an awareness of themselves as physical, social, and creative beings. Its most important goal is to promote active lifelong learning so that students will be able to express themselves through public and interpretational speaking by linking hands-on knowledge to real-world situations.

#### **ENGLISH**

#### **Campbell County Schools**

English Sequence

Grade	Course	Pre-AP and AP Option
6	English 6	Advanced English 6
7	English 7	Advanced English 7
8	English 8	Advanced English 8
9	English 9	Advanced English 9
10	English 10	Advanced English 10
11	English 11	AP Language or Dual Enrollment English*
12	English 12	AP Literature or Dual Enrollment English*

<sup>\*</sup>Dual Enrollment English courses will be provided at Campbell County high schools if staff is available and there is adequate enrollment. When the courses are not provided at the home school, students may enroll in the courses at Central Virginia Community College. Students will be responsible for a portion of the tuition as determined annually by the Campbell County School Board.

The goals of the English Standards of Learning are to teach students to read, write, research, and communicate. Students should be prepared to participate in society as literate citizens, equipped with the ability to think analytically, solve problems, communicate effectively, and collaborate with diverse groups in their communities, workplace, and postsecondary education. As students progress through the school years, they become active and involved learners and develop a full command of the English language, evidenced by their use of Standard English and their rich speaking and writing vocabularies.

#### English Six (1109)

In sixth grade, students continue to build upon skills previously taught in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will identify elements of narrative structure including identifying theme and analyzing figurative language. In sixth grade, there is an increased emphasis on nonfiction reading by creating objective summaries and drawing inferences using textual evidence. The student will begin the study of word origins and continue vocabulary development. The student will also plan, draft, revise, and edit writing in a variety of forms with an emphasis on narrative and reflective writing. Students will continue to deliver multimodal presentations individually and in collaborative groups. Students will also interpret information presented in diverse media formats. The student will find, evaluate, and select appropriate resources for a research product and cite both primary and secondary sources. As in earlier grades, the meaning and consequences of plagiarism will be stressed. There is a reading SOL for this course.

#### Advanced English Six (1108)

The sixth-grade student who has already exhibited an aptitude for English will continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will identify elements of narrative structure including identifying theme and analyzing figurative language. In sixth grade, there is an increased emphasis on nonfiction reading by creating objective summaries and drawing inferences using textual evidence. The student will begin the study of word origins and continue vocabulary development. The student will also plan, draft, revise, and edit writing in a variety of forms with an emphasis on narrative and reflective writing. Students will continue to deliver multimodal presentations individually and in collaborative groups. Students will also interpret information presented in diverse media formats. The student will find, evaluate, and select appropriate resources for a research product and cite both primary and secondary sources. As in earlier grades, the meaning and consequences of plagiarism will be stressed. There is a reading SOL for this course.

#### English Seven (1110)

In seventh grade, students continue to build upon skills previously taught in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will identify elements of a variety of genres while focusing on an author's style. In seventh grade, there is an increased emphasis on nonfiction reading, and students will identify the source, point-of-view, and purpose of texts. The student will continue the study of word origins and roots and begin identifying connotations. The student will also plan, draft, revise, and edit writing in a variety of forms with an emphasis

on expository and persuasive writing. Students will write to develop and modify a central idea, tone, and voice to fit the audience and purpose. Students will continue to deliver multimodal presentations individually and in collaborative groups. Students will also interpret information presented in diverse media formats. Students share responsibility for collaborative work, as both a contributor and a facilitator, while working for consensus to accomplish goals. The student will apply research techniques to quote, summarize, and paraphrase research findings while properly citing sources. As in earlier grades, the meaning and consequences of plagiarism will be stressed. There is a reading SOL for this course.

#### Advanced English Seven (1112)

The seventh-grade student who has already exhibited an aptitude for English will build upon skills previously taught in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will identify elements of a variety of genres while focusing on an author's style. In seventh grade, there is an increased emphasis on nonfiction reading, and students will identify the source, point-of-view, and purpose of texts. The student will continue the study of word origins and roots and begin identifying connotations. The student will also plan, draft, revise, and edit writing in a variety of forms with an emphasis on expository and persuasive writing. Students will write to develop and modify a central idea, tone, and voice to fit the audience and purpose. Students will continue to deliver multimodal presentations individually and in collaborative groups. Students will also interpret information presented in diverse media formats. Students share responsibility for collaborative work, as both a contributor and a facilitator, while working for consensus to accomplish goals. The student will apply research techniques to quote, summarize, and paraphrase research findings while properly citing sources. As in earlier grades, the meaning and consequences of plagiarism will be stressed. There is a reading SOL for this course.

## English Eight (1120)

In eighth grade, students continue to build upon skills previously learned in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will explain the development of theme(s), and compare/contrast authors' styles. In eighth grade, there will be an increased emphasis on nonfiction reading, and students will analyze authors' qualifications, point-of-view, and style. The student will continue the study of word origins, roots, connotations, and denotations. The student will also plan, draft, revise, and edit while writing in a variety of

forms with an emphasis on expository and persuasive writing. Students will compose a thesis statement and defend a position with reasons and evidence. Students will evaluate, analyze, develop, and produce media messages. Students will create multimodal presentations that include different points-of-view, and collaborate with others to exchange ideas, make decisions, and solve problems. The student will apply research techniques to analyze information gathered from diverse sources by identifying misconceptions and possible bias. Students will also cite primary and secondary sources using either MLA or APA style sheet. As in earlier grades, the meaning and consequences of plagiarism will be stressed. There is a reading and writing SOL test for this course.

#### Advanced English Eight (1123)

The eighth-grade student who has already exhibited an aptitude for English will build upon skills previously taught in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will explain the development of theme(s), and compare/ contrast authors' styles. In eighth grade, there will be an increased emphasis on nonfiction reading, and students will analyze authors' qualifications, point-ofview, and style. The student will continue the study of word origins, roots, connotations, and denotations. The student will also plan, draft, revise, and edit while writing in a variety of forms with an emphasis on expository and persuasive writing. Students will compose a thesis statement and defend a position with reasons and evidence. Students will evaluate, analyze, develop, and produce media messages. Students will create multimodal presentations that include different points-of-view, and collaborate with others to exchange ideas, make decisions, and solve problems. The student will apply research techniques to analyze information gathered from diverse sources by identifying misconceptions and possible bias. Students will also cite primary and secondary sources using either MLA or APA style sheet. As in earlier grades, the meaning and consequences of plagiarism will be stressed. There is a reading and writing SOL test for this course.

#### English Nine (1130)

Credit: 1

In ninth grade, students continue to build upon skills previously learned in earlier grades. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will apply knowledge of literary terms and analyze a variety of genres. In ninth grade there will be an increased emphasis on nonfiction reading, and students will make inferences and draw conclusions using explicit and implied textual evidence. The student

will continue to expand vocabulary using the structural analysis of roots and affixes to understand complex words. The student will also plan, draft, revise, and edit while writing in a variety of forms with an emphasis on analysis and persuasion while defending a position using counterclaims, reasons and evidence from credible sources. Students will analyze and interpret the social, commercial, and/or political motives behind media messages. Students will use multimodal tools to create presentations both independently and in small groups. The student will apply research techniques to analyze information gathered from diverse sources by identifying misconceptions, and possible bias citing both quoted and paraphrased information using either MLA or APA style. Students will continue to work in collaborative groups assisting with setting rules and working toward consensus. In 2019-20 students will begin a portfolio writing sample for locally verified credit toward graduation requirements.

#### Pre-AP English Nine (1133)

Credit: 1 (weighted)

The ninth-grade student who has already exhibited an aptitude for English will continued emphasis on reading comprehension by comparing fiction and nonfiction texts. In fiction texts, students will apply knowledge of literary terms and analyze a variety of genres. In ninth grade there will be an increased emphasis on nonfiction reading, and students will make inferences and draw conclusions using explicit and implied textual evidence. The student will continue to expand vocabulary using the structural analysis of roots and affixes to understand complex words. The student will also plan, draft, revise, and edit while writing in a variety of forms with an emphasis on analysis and persuasion while defending a position using counterclaims, reasons and evidence from credible sources. Students will analyze and interpret the social, commercial, and/ or political motives behind media messages. Students will use multimodal tools to create presentations both independently and in small groups. The student will apply research techniques to analyze information gathered from diverse sources by identifying misconceptions, and possible bias citing both quoted and paraphrased information using either MLA or APA style. Students will continue to work in collaborative groups assisting with setting rules and working toward consensus. In 2019-20 students will begin a portfolio writing sample for locally verified credit toward graduation requirements.

#### English Ten (1140)

Credit: 1

In tenth grade, students continue to build upon skills learned in earlier grades. There is a sustained emphasis on reading comprehension by comparing fiction and nonfiction texts. Students will analyze the cultural and social function and universal themes of fictional texts from different cultures. Tenth grade students will analyze and synthesize information from nonfiction texts to solve problems, answer questions, and generate new knowledge. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The student will continue to use the writing process to write/compose with an emphasis on persuasion and analysis while showing relationships among claims, reasons, and evidence from reliable sources. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will continue to use multimodal tools to create presentations both independently and in small groups. The student will continue to build research skills presenting information gathered from diverse sources, identifying misconceptions and possible bias while crediting sources using MLA or APA style. The tenth-grade student will continue to become a skilled communicator, working both independently and in collaborative groups while presenting alternate views and working toward common goals. In 2020-21 students will continue to add to the writing portfolio for locally verified credit.

\*The bodies of literature for grades 10, 11, and 12 are interchangeable and may be taught in any of these grades.

## Pre-AP English Ten (1143)

Credit: 1 (weighted)

The tenth-grade student who has already exhibited an aptitude for English will read, comprehend, and critique literary works from a variety of eras and cultures. In tenth grade, students continue to build upon skills learned in earlier grades. There is a sustained emphasis on reading comprehension by comparing fiction and nonfiction texts. Students will analyze the cultural and social function and universal themes of fictional texts from different cultures. Tenth grade students will analyze and synthesize information from nonfiction texts to solve problems, answer questions, and generate new knowledge. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The student will continue to use the writing process to write/compose with an emphasis on persuasion and analysis while showing relationships among claims, reasons, and evidence from reliable sources. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will continue to use multimodal tools to create presentations both independently and in small groups. The student will continue to build research

skills presenting information gathered from diverse sources, identifying misconceptions and possible bias while crediting sources using MLA or APA style. The tenth-grade student will continue to become a skilled communicator, working both independently and in collaborative groups while presenting alternate views and working toward common goals. In 2020-21 students will continue to add to the writing portfolio for locally verified credit.

\*The bodies of literature for grades 10, 11, and 12 are interchangeable and may be taught in any of these grades.

## English Eleven (1150)



Credit: 1

In eleventh grade, there is a sustained emphasis on reading comprehension of fiction and nonfiction texts. Students will conduct comparative analyses of multiple texts that address the same topic to determine how authors reach similar or different conclusions. The students will examine and analyze fiction texts by American authors describing the contributions of other cultures and identifying prevalent themes and characterizations, which are reflective of American history and culture. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The grade-eleven student will continue to use the writing process to write/compose with an emphasis on persuasion/argumentation for multiple purposes and audiences to create focused, organized, and coherent writing. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will create persuasive multimodal presentations that address alternative perspectives. The student will produce a research product synthesizing information from primary and secondary sources while maintaining ethical and legal guidelines for gathering and using information. The eleventh-grade student continues to build communication skills working both independently and in collaborative groups. Students will continue to demonstrate the ability to work within collaborative groups while presenting alternate views and working toward common goals. In 2019-2021 the students will take reading and writing SOL tests. In 2021-22 the student will complete the portfolio process.

\*The bodies of literature for grades 10, 11, and 12 are interchangeable and may be taught in any of these grades.

## AP English Language and Composition (1196)





Credit: 1 (weighted)

Advanced Placement English Language and Composition is a course designed to provide advanced English students an opportunity to earn college credit

while simultaneously mastering the Standards of Learning for English 11. In addition to meeting English 11 requirements, students will become skilled readers of prose written in a variety of rhetorical contexts, and become skilled writers who compose for a variety of purposes. The readings and compositions in this course will make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. Students taking this course will take two required end-of-course SOL tests: The Writing SOL Test and the Reading SOL Test. The student will continue a portfolio writing sample for locally verified credit toward graduation requirements. In 2019-2021 the students will take reading and writing SOL tests. In 2021-22 the student will complete the portfolio process.

## Dual Enrollment English (ENG111 - ENG112)



Prerequisites: Central Virginia Community College Placement Test; (ENG 112 – successful completion of English 111)

Credit: 1 (weighted) College Credits: 6

Dual Enrollment English (College Composition I -II) is a college-level composition course that also incorporates literary analysis. The class is offered in collaboration with Central Virginia Community College. ENG 111 introduces students to critical thinking and the fundamentals of academic writing.

Through the writing process, students refine topics: develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches or a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay. ENG 112 continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of texts about the human experience. Students will locate, evaluate, integrate, and document sources and effectively edit for style and usage. Juniors taking this course will take two required end-of-course SOL tests: The Writing SOL Test and the Reading SOL Test. Students must pass both the course and the two SOL tests to earn two verified credits which are required for graduation. For seniors enrolled in this course, there is no SOL test.

Dual Enrollment English courses will be provided at Campbell County high schools if staff is available and there is adequate enrollment. When the courses are not provided at the home school, students may enroll in the courses at Central Virginia Community College. Students will be responsible for a portion of the tuition as determined annually by the Campbell County School Board.

#### **English Twelve (1160)**

Credit: 1

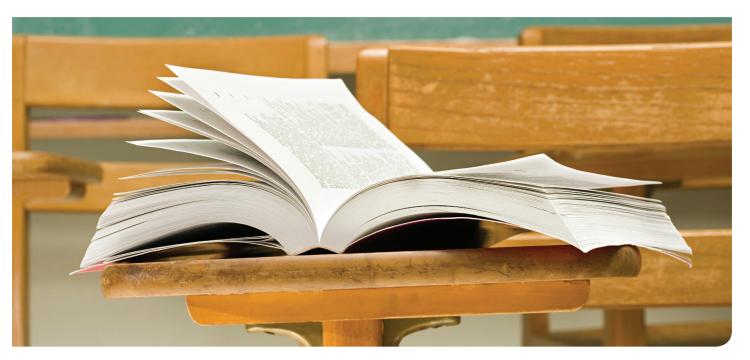
The twelfth-grade student will use organizational skills, audience awareness, appropriate vocabulary and grammar, and In twelfth grade, there is a sustained emphasis on reading comprehension of fiction and nonfiction texts. Students will review multiple texts to identify and evaluate resources to make decisions and solve problems. The students will examine and analyze fiction texts by British authors evaluating how authors use key elements to contribute to meaning and interpreting how themes are connected across texts. The student will continue development of vocabulary, with attention to connotations, idioms, classical allusions, and figurative language. The gradetwelve student will continue to use the writing process to write/compose with an emphasis on persuasion/ argumentation for multiple purposes and audiences to create focused, organized, and coherent writing. Students will write to a standard acceptable to both the workplace and to postsecondary education. The student will create media messages and analyze the cause and effect relationships between mass media coverage and public opinion trends. Students will create persuasive/argumentative multimodal presentations both independently and in collaborative groups. The student will produce a research product synthesizing information from primary and secondary sources while maintaining ethical and legal guidelines for gathering and using information. Students will continue to demonstrate the ability to work within diverse teams and collaborative groups working toward common goals. No SOL test is given for this course.

\*The bodies of literature for grades 10, 11, and 12 are interchangeable and may be taught in any of these grades.

#### AP English Literature and Composition (1195) Credit: 1 (weighted)



Advanced Placement English Literature and Composition is a course designed to provide advanced English students an opportunity to earn college credit while simultaneously mastering the Standards of Learning for English 12. In addition to meeting English 12 requirements, students will be involved in an intensive study of literature and writing. As they read, students will consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The emphasis is on improving writing and analytical skills through in-depth analysis of meaningful readings. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. There is no SOL test given for this course.



## **FINE ARTS**

#### Art I (9120)

Credit: 1

Art I is an introductory art course designed to foster understanding, enjoyment, and use of art in everyday living. Emphasis is placed on the elements of art and the principles of design using various art techniques and materials to create two-dimensional and three-dimensional art works. Students will engage in drawing, painting, crafts, sculpture, and/or graphic arts to express ideas and create images. They will prepare and display their artwork as part of the artistic process.

#### Art II (9130)

Credit: 1

Prerequisite: Art I

Art II is an intermediate art course for students who desire to continue to develop their artistic abilities. Instruction is designed to improve their skills, creativity, vocabulary, imagination, and artistic growth. Focus is on art history and the use of that knowledge of artists, styles, movements, and cultures as inspiration to create art works. Students will begin to use technology and electronic media as artistic tools. They will prepare and display their artwork as part of the artistic process.

#### Art III (9140)

Credit: 1

Prerequisite: Art II

Art III continues to emphasize the development of abilities and skills in creating works of art using an expanded range of art media and processes. Advanced study and instruction in drawing and painting styles, theories, and techniques are emphasized. Career opportunities in the field of art through specific job related projects in the areas of advertising, fashion design, and illustration are explored. Students use technology to create and manipulate images. Selected works of art are added to a portfolio of their best products that can be used for exhibition and career opportunities.

#### Art IV (9145)

Credit: 1

Prerequisite: Art III

Art IV affords students the opportunity to develop a personal direction in the production of their art work with a possible concentration in an area of interest. The course is designed to enable students to develop skill, confidence, and commitment and to demonstrate an advanced level of performance. The culmination is a display of work students have produced throughout their high school art program.

#### Ceramics (9163)

Credit: 1

Prerequisite: Art I

Ceramics is the art or technology of making objects of clay and similar materials treated by firing. This is a hands on class designed for students who have an interest in working with clay. Students will learn basic and advanced hand building techniques and how to use the potter's wheel. They will be introduced to a variety of decorating, glazing and firing techniques and will produce a number of fine pieces of pottery. Well thought out forms, designs and functional uses along with good craftsmanship are emphasized. There is a \$20 fee for this course.

#### Band (9234) - Concert

Credit: 1

Students in grades 9-12 develop and strengthen skills on a band instrument of their choice, learning proper care of the instrument and becoming familiar with its technology. Music theory; ensemble skills; appropriate positions, tone production, and fingerings; and counting, reading, and performing increasingly difficult levels of music are emphasized. The course is performance-oriented and may require students to practice and/or perform at times outside of the regular school day.

#### Chorus I (9282)

Credit: 1

Chorus I is designed to develop the student's vocal abilities. Areas covered in music include developing the voice, understanding musical terms, training the ear for listening, singing in harmony with the group, and learning basic choreography for specific selections. Chorus is a performance oriented group of mixed voices organized to give singers training in a variety of vocal forms and styles. Singers will perform an assigned vocal part in unison and in simple harmony. The overall goal is to enable students to read their part in choral music and to perform music in an appropriate style.

#### Chorus II (9283)

Credit: 1

Prerequisite: Chorus I

This course forms an intermediate level chorus ensemble for men and women with good singing skills. Students will continue to develop and improve their singing techniques (breath control, posture, diction, tone production), as well as their sight-reading skills. Preparation of music for performance (of moderate difficulty, and mostly in three and four part settings) is a major course objective. Participation in concerts and various programs and extra rehearsals (as needed) are required. There are special dress requirements for concert appearances.

#### Vocal Ensemble (9280)

Credit: 1

Prerequisite: Audition

In Vocal Ensemble, students will acquire refined musicianship skills in individual and ensemble performance. They will also continue to develop their ability to evaluate musical performances and to articulate preferences and choices through the use of cognitive skills and analytical thinking. Competency in solo/ensemble singing and the use of foreign languages will assist students in preparing for future musical/vocal development and career opportunities. Increasing awareness of the interrelatedness of music, the arts, and other disciplines will be emphasized.

#### Symphonic Band (9296)

Credit: 1

Symphonic Band is primarily a classroom ensemble. The instruments will be divided in a manner intended to facilitate appropriate development and challenge to each section. Students who participate in Symphonic Band will have had prior musical training and must be capable of performing as an ensemble. After-school practice may occasionally be required for concert preparation.

## Small Instrument Ensemble (9250) - Jazz Band

Credit: 1

Prerequisite: Ability to play a musical instrument

This course will cover the history and basic theory behind jazz music. It will be a hands-on class that will use all facets of multimedia to explore the genres of jazz from its roots to the current styles. Students will be able to learn how to improvise and understand the melodic structure and style found in multiple styles of jazz music. The use of computers will be essential in this class. Students will have the opportunity to integrate technology with their learning throughout the year.

#### Small Instrumental Ensemble (9250) - Percussion Band Credit: 1

The purpose of the Percussion Band is to offer students a well-rounded approach to learning percussion instruments in order to develop general musicianship. Students in this course study and perform music written specifically for the percussion family as well as transcriptions adaptable to percussion. Emphasis is on mastering the techniques required for playing the full spectrum of percussion equipment including drums, mallet instruments, timpani and the various hand-held "trap" instruments.

## Music Appreciation/History/Theory (9222)

Credit: 1

This course covers the basics of music theory and technology and the appreciation of music as it relates to our society. Students will learn theory at an individualized pace through use of special software and through classroom lectures. They will learn how to use various types of technology to further their understanding of music and its applications to real world situations. Students will also be responsible for creating and maintaining the music website. No experience in music is required to take this course; however, students will be required to reach certain individualized benchmarks throughout the year. Students should be familiar with the use of the computer, as the software used in the class will allow each student to progress at his or her own pace.

#### Theatre I (1396)

Credit: 1

This course is designed to provide students with a survey of theatre arts, allowing students opportunities to experience and appreciate dramatic literature and participate in the creative processes of performance and production. The course emphasizes skill development and provides theatrical opportunities that enable students to determine personal areas of interest.

#### Theatre II (1397)

Prerequisite: Theatre I

Credit: 1

This course integrates and builds upon concepts and skills from Theatre I. Through various modes of expression and performance, students investigate dramatic literature, theatrical styles, and historical periods. Students will study and respond to a variety of theatre experiences that will refine their communicative, collaborative, analytical, interpretative, and problem-solving skills. Students will expand their artistic abilities and appreciation of the theatrical arts.

#### **Advanced Acting (1398)**

Prerequisite: Theatre II

Credit: 1

Advanced Acting builds upon concepts and skills from Theatre II. Through various modes of expression and performance, students investigate acting styles, character development, dramatic structure, conflict, and resolution. Students will study and respond to a variety of theatre experiences that will refine their skills Students will deepen their artistic abilities and appreciation of the theatrical arts.

#### Directing/Advanced Theatre Studies (1400) Credit: 1

Students who are recommended for this class are placed in either a first or second-year Theatre class. They organize theatre games for the students and suggest improvisations for the class. The directing students also select, cast, block, costume, gather props, and design lighting for at least one one-act play which is presented at school and/or to the community.

#### Technical Theatre I (1435)

Credit: 1

This course introduces students to the principles and implementation of stage design as it applies to the basics of scenic, costume, sound, stage organization and lighting design. Students will also study the methods and materials of set construction.

#### Technical Theatre II (1436)

Prerequisite: Technical Theater I Credit: 1

This course includes continued study of scenic, costume, sound, stage organization and lighting design. Students will explore different design techniques, methods of presenting design effectively, and an emphasis on using design as a tool to further express the drama.

## AP Music Theory (9226)



Prerequisite: Recommendation based on the ability to read and write musical notation. Also, recommended concurrent enrollment in a music course, or private instruction on a musical instrument.

Credit: 1 (weighted)

This course introduces the student to musicianship, theory, musical materials and procedures. It integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and to some extent, history and style. Musicianship skills such as dictation, sight-singing, and keyboard harmony are also taught as part of the preparation for the Advanced Placement test in Music Theory.



## **FOREIGN LANGUAGE**

#### French I (5110)

Credit: 1

French I introduces the French language and the cultures in which French is spoken. Students develop a basic ability to communicate in the language by listening, speaking, reading, and writing. Additionally, students acquire a familiarity with French-speaking cultures and their relationship to our own. Students also learn to use accurate and culturally appropriate vocabulary and structures through their exposure to a variety of resources, including culturally authentic materials.

#### French II (5120)

Prerequisite: French | Credit: 1

French II reviews the basic elements of spoken and written French and expands students' control and creative use of the language. Students continue to develop their communication skills in all four language areas—listening, speaking, reading, and writing. The art, music, history, geography, traditions, significant persons, and perspectives of French-speaking cultures are explored in more depth, primarily in French and in culturally accurate settings.

#### French III (5130)

Prerequisite: French II Credit: 1

French III expands students' control and creativity in French in culturally accurate settings. Students use French to enhance their knowledge of history, geography, traditions, perspectives, and significant persons of French-speaking cultures. They also continue to explore French literature, art, and music, as well as to create their own spoken and written works.

#### French IV Honors (5140)

Prerequisites: French III Credit: 1 (weighted)

French IV continues to expand students' control of and creativity in French. Students use French to study in depth the history, geography, traditions, perspectives, and significant persons of French-speaking cultures. Students read literature, study art and music, write compositions, and prepare oral presentations.

#### French V Honors (5150)

Prerequisites: French IV Credit: 1 (weighted)

As an immersion course, French V provides students with an opportunity to use French in the same context as, and with the same perspectives of, French native

speakers. Students read more complex literature, perform plays, watch and listen to media targeted to native speakers, write creatively, and discuss social issues and current events. Students who successfully complete this course will be prepared for advanced French study in college.

#### Latin I (5310)

Credit: 1

Latin I is an introduction to the language and civilization of the ancient Romans. Students study Latin grammar and vocabulary, explore Roman history and social customs, and are introduced to Greek and Roman mythology. The study of the influence of Latin language and culture on our lives today receives special emphasis.

#### Latin II (5320)

Prerequisite: Latin I Credit: 1

Latin II includes a review of the first year course and continued study of basic Latin grammar. Students continue to develop the skills necessary to become effective translators. Major areas of study include Roman history, Greek and Latin word origins, and mythology. Students deepen their understanding of Roman culture and the influence of the Latin language and classical civilization.

#### Latin III (5330)

Prerequisite: Latin II

Credit: 1

In Latin III, students study more advanced Latin grammar, syntax, and vocabulary in order to translate passages of greater difficulty. Greek and Roman mythology and their influence on our literature, art, and vocabulary receive special emphasis. Roman civilization, history, and social customs are also explored in depth.

#### Latin IV Honors (5340)

Prerequisites: Latin III Credit: 1 (weighted)

In Latin IV, students will review grammar, syntax, and vocabulary while reading primarily the works of the Roman poets Ovid, Catullus, Martial, and Horace and the Roman prose writers Livy, Caesar, Cicero, Pliny, Juvenal, Aesop, and Augustus. Emphasis will be placed on reading Latin literature for enrichment and appreciation and for a broader perspective of classical mythology and Roman history, culture, and daily life. The student will continue to explore the influence of Latin language and Roman civilization on the modern world.

#### Latin V Honors (5350)

Prerequisites: Latin IV Credit: 1 (weighted)

In Latin V, students will continue review of grammar, syntax, and vocabulary while reading the works of major Roman authors. Students will also continue to explore the influence of Latin language and Roman civilization on the modern world.

#### Spanish I (5510)

Credit: 1

Spanish I is an introduction to the basic elements of spoken and written Spanish and to the cultures in which Spanish is spoken. Basic structures and vocabulary are developed through practice with the interactive processes of listening, speaking, reading, and writing in the target language. Students are encouraged to use Spanish as much as possible by communicating in real-life contexts about topics that are meaningful to them. Students develop a familiarity with the cultures of Spanish-speaking countries and their relationship to our own.



#### Spanish II (5520)

Prerequisite: Spanish I Credit: 1

Spanish II reviews the basic elements of spoken and written Spanish and expands students' control and creative use of the language, as well as their proficiency in the communication processes. The history, geography, traditions, significant persons, and perspectives of Spanish-speaking cultures are explored in more depth, primarily in Spanish and in culturally accurate settings.

#### Spanish III (5530)

Prerequisite: Spanish II Credit: 1

In Spanish III, students continue to develop their proficiency in the communication processes by interacting with other speakers of Spanish, comprehending oral and written messages in Spanish, and using Spanish in oral and written presentations. Students enhance their knowledge of the history, geography, traditions, perspectives, and significant persons of Spanish-speaking cultures, use Spanish to experience literature and the arts, and explore ways in which their knowledge of Spanish and Spanish-speaking cultures can enrich their lives.

#### Spanish IV Honors (5540)

Prerequisite: Spanish III Credit: 1 (weighted)

Spanish IV enhances students' creativity and expands their written and oral skills. In this course, students use Spanish to engage in discussions and create compositions and oral presentations in order to compare and contrast cultural elements in the Spanish-speaking cultures.

#### Spanish V Honors (5550)

Prerequisite: Spanish IV Credit: 1 (weighted)

As an immersion course, Spanish V provides students with an opportunity to use Spanish in a variety of contexts. Students read literature, deliver presentations, write creatively, discuss social issues, and explore how their knowledge of Spanish and Spanish-speaking cultures can enrich their lives and careers.

## **HEALTH AND PHYSICAL EDUCATION**

## Health/Physical Education 9 (7300)

Credit: 1

Physical Education instruction emphasizes participation in lifetime fitness activities as a basis for personal wellness. The course focuses on helping students to improve physical fitness and skills and to acquire an appreciation for physical recreation and sports. The health portion of the course includes information concerning prevention and control of disease, consumer health, physiology of exercise, family life education, and effects of alcohol, and other drugs. Students receive a semester of instruction in first aid and are trained in Cardio-Pulmonary Resuscitation (CPR).

#### Health/Physical Education/ Driver's Education 10 (7405)

Prerequisite: Health/Physical Education 9 Credit: 1

Physical Education instruction focuses on progressive development in physical fitness, individual and team skills, and recreational activities that promote personal wellness. Health instruction focuses on mental health and family life education, including parenting and aging. Driver Education utilizes the state's Curriculum Guide for Driver Education in Virginia and includes two phases: classroom and on-the-road instruction. Knowledge, attitude, and skills that are vital to safe driving behaviors are emphasized.

#### Advanced Physical Education 11/12 (7640) Credit: 1

This course is designed for high school juniors and seniors who wish to weight-train and condition for various sports in which they participate. Most students who take Advanced Physical Education are student-athletes who already have a weight training program provided to them by a coach. The instructor provides students who are not participating in a sport with a universal weightlifting routine. In addition to weight training, students are given the opportunity to participate in other physical education activities such as badminton, Frisbee-football, Frisbee-golf, and tennis. A typical class schedule for the week is three days in the weight room and two days in the gym or outdoors.

#### **Athletic Training I (7660)**

Prerequisite: Juniors and Seniors only Credit: 1

Athletic Training 1 is designed to introduce students to the profession of athletic training. It will also introduce other health care professions so students understand the similarities, differences, and relationship of Athletic Training to other health care professions. An overview of the profession of Athletic Training, this course provides an introduction to injury prevention, recognition, management, and rehabilitation. In addition, the role, duties, and responsibilities of an athletic trainer are reviewed. Some of the skills included in this course are First Aid and CPR, taping, wrapping, and modality application.

#### Athletic Training II (7662)

Prerequisite: Athletic Training I Credit: 1

Athletic Training II is designed to be a continuation of the knowledge students learned in Athletic Training I. It will delve further into the Anatomy and Physiology of the human body, elaborate on the athletic injuries discussed in the prerequisite course, introduce new injuries, learn rehabilitation and modality techniques, and give students the opportunity to do observation hours under a certified athletic trainer. This class moves at a fast pace, covers medical terminology, anatomy and physiology.

## Weight Training (9910)

Credit: 1

Prerequisite: A/B Average in the previous health/physical education class OR administrative recommendationThis course is designed to give students a basic knowledge and understanding of the techniques and principles of weight training and conditioning. Each student is given an individualized program that will increase muscular endurance, strength, and efficiency. Class time is spent largely on student participation as the instructor works one-on-one with students to help them reach their personal goals.



## HISTORY AND SOCIAL STUDIES

Grade	Course	Pre-AP and AP Option
6	USI	-
7	US II	-
8	Civics & Economics	-
9	World History I	Pre-AP World History
10	World History II	AP World History
11	VA/US History	AP US History
12	VA/US Government	AP Comparative Politics

The study of history must emphasize the historical thinking skills required for geographic analysis, economic decision making, and responsible citizenship. Students will apply these skills as they extend their understanding of the essential knowledge defined by all of the standards for history and social science.

#### 6. USI (US History to 1865)

Students will use skills for historical and geographical analysis to explore the early history of the United States and understand ideas and events that strengthened the union. The standards for this course relate to the history of the United States from pre-Columbian times until 1865. Students will continue to learn fundamental concepts in civics, economics, and geography as they study United States history in chronological sequence and learn about change and continuity in our history. They also will study documents and speeches that laid the foundation for American ideals and institutions and will examine the everyday life of people at different times in the country's history through the use of primary and secondary sources.

#### 7. USII (US History 1865 to Present)

Students will continue to use skills for historical and geographical analysis as they examine American history since 1865. The standards for this course relate to the history of the United States from the Reconstruction era to the present. Students should continue to develop and build upon the fundamental concepts and skills in civics, economics, and geography within the context of United States history. Students will use investigation as a foundation to delve into the political, economic, and social challenges facing the nation once reunited after the Civil War. This foundation provides a pathway to develop an understanding of how the American experience shaped the world's political and economic landscapes.

#### 8. Civics & Economics

Standards for Civics and Economics examine the roles citizens play in the political, governmental, and economic systems in the United States. Students will examine the foundational documents and principles with which the constitutions of Virginia and the United States were established, identify the rights, duties, and responsibilities of citizens, and describe the structure and operation of government at the local, state, and national levels. Through the economics standards, students will compare the United States economy to other types of economies and consider the government's role in the United States economy. Students will investigate the process by which decisions are made in the American market economy and explain the government's role in the United States economy. The standards identify personal character traits, such as patriotism, respect for the law, willingness to perform public service, and a sense of civic duty, that facilitate thoughtful and effective active participation in the civic life of an increasingly diverse democratic society.

## World History and Geography to 1500 A. D. (C.E.) (2219)

Credit: 1 Verified Credit: 1

This course explores the historical development of people, places, and patterns of life from ancient times until 1500 A. D.(C.E.), in terms of the impact on Western civilization. All high school students are required to take this course, which focuses on historical understanding, engaging students in historical comprehension, analysis, and interpretation. Continual review of content will prepare students for the end-of-course SOL test. Students must pass both the course and SOL test to earn a verified credit.

#### World History and Geography: 1500 A. D. (C.E.) to the Present (2221)

Credit: 1 Verified Credit: 1

This course explores history and geography from 1500 A. D.(C.E.) to the present, with emphasis on Western Europe. Geographic influences on history continue to be explored, but increasing attention is given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that in turn produced social and political changes. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues. This course is not required for graduation but will help to satisfy a history requirement for an advanced diploma. Continual review of content will prepare students for the end-of-course SOL test. Students must pass both the course and SOL test to earn a verified credit.

#### Pre-AP World History (2370)



Credit 1 (weighted) Verified Credit: 1

Pre-AP World History and Geography to 1500 A.D. (C.E.) is an advanced course in world history from prehistory to 1500 A.D. (C.E.) Students will explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. (C.E.) in terms of the impact on Western Civilization. Students will review and strengthen map and globe skills, strengthen skills in interpreting and using information, and strengthen historical thinking skills. This class will delve deeper into content, introduce AP World History themes, introduce comparative essay writing, and develop document-based essays reflecting multiple points of view. Techniques for technical essay writing and use of document-based questions are a focus in this challenging course. The intent is to introduce prerequisite skills necessary to be successful in an AP World History course. Continual review of content will prepare students for the end-of-course SOL test. Students must pass both the course and SOL test to earn a verified credit.

## AP World History (2380) SOL AP





Credit: 1 (weighted) Verified Credit: 1

The purpose of the AP World History course is to develop a greater understanding of the evolution of global processes and contacts in different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study. An integral part of this course is the preparation for the Advanced Placement test given at the end of the second semester. The students can opt to take the SOL test in World History Part II or can use the score on the AP exam to earn a verified credit.

## Virginia and United States History (2360)



Credit: 1

Verified Credit: 1

This high school credit course traces the historical development of American ideas and institutions from the Age of Exploration to the present. While focusing on the political and economic history, the course provides students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history. Students will use historical and geographical analysis skills to explore in depth the events, people, and ideas that fostered our national identity and led to our country's prominence in world affairs. All high school students are required to earn credit for Virginia and United States History, or an equivalent course such as Advanced Placement United States History, to graduate. Continual review of content will prepare students for the end-of-course SOL test. Students must pass both the course and SOL test to earn a verified credit.

## AP United States History (2319) SOL AP





Credit: 1 (weighted) Verified Credit: 1

The AP U.S. History course focuses on developing students' understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides seven themes (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society) that students

explore throughout the course in order to make connections among historical developments in different times and places. An integral part of this course is the preparation for the Advanced Placement test given at the end of second semester. The students can opt to take the SOL test in U.S. History or can use their score on the AP exam to earn a verified credit.

#### Virginia and United States Government (2440) Credit: 1

This course defines the knowledge that enables citizens to participate effectively in civic life. Students examine fundamental constitutional principles, the rights and responsibilities of citizenship, the political culture, the policy-making process at each level of government, and the operation of the United States market economy, and personal finance. Personal character traits are identified that facilitate thoughtful and effective participation in the civic life of an increasingly diverse democratic society. All high school students are required to pass this course, or an equivalent course, such as Advanced Placement Government, to graduate. There is no SOL test for this course.

#### **AP Comparative Government** and Politics (2450) 🔼 AP

Credit: 1 (weighted)

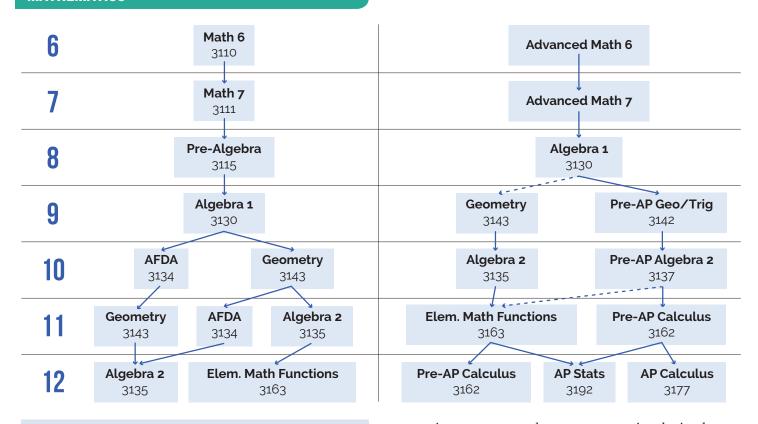
AP Government / AP Comparative Government is a two-semester course designed to provide advanced social studies students an opportunity to earn college credit. The first semester provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. The second semester provides students with the conceptual tools necessary to develop an understanding of some of the world's diverse political structures and practices. The course encompasses the study of both specific countries and their governments and general concepts used to interpret the political relationships and institutions found in virtually all national politics. An integral part of this course is the preparation for the Advanced Placement test given at the end of the semester.

## AP Human Geography AP



The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).





While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies to facilitate problem solving. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative and algebraic concepts or for proficiency in basic computations. The acquisition of specialized mathematical vocabulary and language is crucial to a student's understanding and appreciation of the subject and fosters confidence in mathematics communication and problem solving. Problem solving is integrated throughout the content strands. The development of problem-solving skills is a major goal of the mathematics program at every grade level. The development of skills and problem-solving strategies must be integrated early and continuously into each student's mathematics education. The use of appropriate technology and the interpretation of the results from applying technology tools will be an integral part of teaching, learning, and assessment.

## Grade Six SOL

The sixth-grade standards provide a transition from the emphasis placed on whole number arithmetic in the elementary grades to foundations of algebra. The standards include a focus on rational numbers and operations involving rational numbers. Students will use ratios to compare data sets; recognize decimals, fractions, and percents as ratios; solve single-step and multistep problems, using positive rational numbers; and gain a foundation in the understanding of and operations with integers. Students will solve problems involving area and perimeter and begin to graph in a coordinate plane. In addition, students will build on the concept of graphical representation of data developed in the elementary grades and develop concepts regarding measures of center. Students will solve linear equations and inequalities in one variable and use algebraic terminology. Students will represent proportional relationships using two variables as a precursor to the development of the concept of linear functions.

- Math 6 Designed for students who have demonstrated proficiency in prior math classes or may need additional intervention to help close gaps in mathematical understanding.
- Advanced Math 6 Designed for students who have demonstrated excellence in prior math classes as referenced by growth measures, previous SOL assessments, and problem-solving abilities as well as work ethic. Students in this course will receive instruction on all Math 6 Standards of Learning as well as the correlated Standards from Math 7.
- Students in either course will take the Math 6 SOL assessment in the Spring.



The seventh-grade standards continue to emphasize the foundations of algebra. The standards address the concept of and operations with rational numbers by continuing their study from grade six. Students will build on the concept of ratios to solve problems involving proportional reasoning. Students will solve problems involving volume and surface area and focus on the relationships among the properties of quadrilaterals. Probability is investigated through comparing experimental results to theoretical expectations. Students continue to develop their understanding of solving linear equations and inequalities in one variable by applying the properties of real numbers. Students discern between proportional and non-proportional relationships and begin to develop a concept of slope as rate of change.

- Math 7 Designed for students who have demonstrated proficiency in prior math classes or may need additional intervention to help close gaps in mathematical understanding.
- Advanced Math 7 Designed for students who have demonstrated excellence in prior math classes as referenced by growth measures, previous SOL assessments, and problem-solving abilities as well as work ethic. Students in this course will receive instruction on a correlated set of Math 7 and Math 8 Standards of Learning.
- Students in either course will take the Math 7 SOL assessment in the Spring.

#### Grade 8 BSOL

The eighth-grade standards continue to build on the concepts needed for success in high school level algebra, geometry, and statistics. Students will explore real numbers and the subsets of the real number system. Proportional reasoning is expounded upon as students solve a variety of problems. Students find the volume and surface area of more complex three-dimensional figures and apply transformations to geometric shapes in the coordinate plane. Students will verify and apply the Pythagorean Theorem creating a foundation for further study of triangular relationships in geometry. Students will represent data, both univariate and bivariate data, and make predictions by observing data patterns. Students build upon the algebraic concepts developed in the standards for grades six and seven mathematics, which include simplifying algebraic expressions, solving multistep equations and inequalities, and graphing linear functions. The grade eight standards are vital to providing a solid foundation in Algebra I for students in middle school mathematics. Students in this course will take the Math 8/Pre-Algebra SOL assessment in the Spring.

## Algebra I (3130)



Prerequisite: Pre-Algebra

Credit: 1

This course provides a study of the basic principles of algebra, including using the rational number system; performing operations with polynomials; solving linear equations and inequalities; solving quadratic equations; organizing and manipulating data; and graphing linear and quadratic equations. The course requires students to use algebra as a tool for representing and solving a variety of practical problems. Included in the progression of algebraic content is patterning, generalization of arithmetic concepts, proportional reasoning, and representing mathematical relationships using tables, symbols, and graphs. All students are expected to achieve the Algebra I standards via problem-solving, making connections, reasoning, and communicating mathematical ideas and strategies. The study of Algebra I assists students in generalizing patterns or modeling relevant, practical situations with algebraic models. Students will use graphing calculators, computers, and other appropriate technology. Students taking this course will take an end-of-course SOL test in Algebra I.

#### Algebra, Functions and Data Analysis (3134)

Prerequisites: Algebra I Credit: 1

This course is designed for students who have successfully completed the standards for Algebra I and may benefit from additional support in their transition to Algebra II. Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of equations and inequalities, probability, and analysis of data. Data will be generated through practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, or exponential equations. Through the investigation of mathematical models and interpretation/analysis of data from relevant, applied contexts and situations, students will strengthen conceptual understandings in mathematics and further develop connections between algebra and statistics. Students should use the language and symbols of mathematics in representations and communication, both orally and in writing, throughout the course. These standards include a transformational approach to graphing functions and writing equations when given the graph of the equation. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Note:

- If Algebra Functions and Data Analysis (AFDA) is scheduled any time after Algebra 2, it will count as an elective credit only.
- This course does not apply toward an Advanced Studies Diploma for CCPS.

Geometry (3143)

Prerequisites: Algebra I

Credit: 1

This course provides a study of lines, angles, triangles, logic, polygons, circles, three-dimensional figures, coordinate relations, and transformations. All students are expected to achieve the Geometry standards. The course includes an emphasis on developing reasoning skills through the exploration of geometric relationships including properties of geometric figures, trigonometric relationships, and mathematical proofs. In this course, deductive reasoning and logic are used in direct proofs. Direct proofs are presented in different formats (typically two-column or paragraph) and employ definitions, postulates, theorems, and algebraic justifications including coordinate methods. Emphasis is placed on two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. A variety of applications and some general problem-solving techniques, including algebraic skills, will be used to implement the standards. Graphing utilities (calculators, computers, and other technology tools) and dynamic geometry applications will be used to assist in teaching and learning. Students taking this course will take an end-of-course SOL test in Geometry.

### Pre-AP Geometry/Trigonometry (3142)



Prerequisite: Algebra I Credit: 1 (weighted)

In addition to the content and process goals outlined in Geometry (3143), this course adds trigonometry content including the study of trigonometric definitions and applications. Emphasis placed on using connections between right triangle ratios, trigonometric functions, and circular functions. In addition, applications and modeling will be included throughout the course of study. Oral and written communication concerning the language of mathematics, logic of procedure, and interpretation of results will also permeate the course.

#### Algebra II (3135)



Prerequisite: Algebra I

Credit: 1

This course includes a thorough treatment of advanced algebraic concepts will be provided through the study of functions, equations, inequalities, systems of equations, polynomials, rational and radical equations, complex numbers, and sequences and series. Emphasis will be placed on practical applications and modeling throughout the course of study. Oral and written communication concerning the language of algebra, logic of procedures, and interpretation of results will also permeate the course. A transformational approach to graphing functions will be employed using translation, reflection, dilation,

and rotation to generate a "family of functions" from a given "parent" function. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions.

#### Pre-AP Algebra II (3137)



Prerequisites: Algebra I and Geometry Credit: 1 (weighted)

This course is designed for a more accelerated pace of study. The course covers the concepts listed in the Algebra II (3135) description and includes additional trigonometry content that includes the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Oral and written communication concerning the language of mathematics, logic of procedure, and interpretation of results will also permeate the course. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions. Students taking this course will take an endof-course SOL test in Algebra II.

#### Pre-AP Calculus (3162)

Prerequisite: Pre-AP Algebra II/ Trigonometry **OR Elementary Math Functions** Credit: 1 (weighted)

This is a rigorous course that includes the advanced study of algebra, theory of equations, analytic geometry, and trigonometry, and an introduction to calculus concepts. It is recommended that students demonstrate a sound understanding of the principles of Algebra I, Algebra II, and Geometry before enrolling in this course. Students will use graphing calculators, computers, and other appropriate technology. There is no SOL test given for this course.

#### **Elementary Math Functions (3163)**

Prerequisites: Algebra II and Geometry OR Pre-AP Algebra II Credit: 1

This course is an extension of the concepts learned in Algebra II and an introduction to pre-calculus concepts. The course is comprised of the following three units of study: algebra, trigonometry, and statistics. The algebra unit will include a study of linear relations and functions, systems of equations and inequalities, polynomial and rational functions, exponential and logarithmic functions, and the nature of graphs. The trigonometric unit will include a study of trigonometric

functions, graphs and inverses of trigonometric functions, and trigonometric identities and equations. Real-world applications will be incorporated when appropriate. Graphing utilities (calculators, computers, and other technology tools) will be used to assist in teaching and learning. Graphing utilities facilitate visualizing, analyzing, and understanding algebraic and statistical behaviors and provide a powerful tool for solving and verifying solutions. There is no SOL test given for this course.

#### AP Calculus AB (3177)



Pre-requisite: Pre-AP Calculus or **Elementary Math Functions** Credit: 1 (weighted)

Advanced Placement Calculus AB is a course designed to provide advanced mathematics students an opportunity to earn college credit while simultaneously earning credit toward high school graduation. The course is intended for students who have a thorough knowledge of analytic geometry and elementary functions in addition to college preparatory algebra, geometry, and trigonometry. The purpose of the course is to prepare students for advanced placement in college calculus. The course standards incorporate The College Board Advanced Placement Course Description Syllabus. As mandated by The College Board, graphing calculators are required for this course. Instructional activities that engage students in solving application problems of varying complexities will be used. There is no SOL test given for this course.

#### AP Calculus BC (3179)



Pre-requisite: AP Calculus AB

Credit: 1 (weighted)

Advanced Placement Calculus BC is a course designed to provide advanced mathematics students an opportunity to earn college credit while simultaneously earning credit toward high school graduation. Calculus BC is a full-year course in the calculus of functions of a single variable. It includes all topics taught in Calculus AB plus additional topics: Analysis of parametric, polar, and vector functions, applications of derivatives, integrals, and antidifferentiation. The course standards incorporate The College Board Advanced Placement Course Description Syllabus. As mandated by The College Board, graphing calculators are required for this course. Instructional activities that engage students in solving application problems of varying complexities will be used. There is no SOL test given for this course.

#### AP Statistics (3192) AP



Pre-requisite: Algebra II Credit: 1 (weighted)

Advanced Placement Statistics is a course designed to introduce students to the tools for collecting, analyzing, and drawing conclusions from data. The course incorporates The College Board Advanced Placement Course that exposes students to the following four themes:

- Looking for patterns in data
- 2. Planning and conducting studies
- 3. Exploring data using probability and simulation
- 4. Estimating population parameters and testing hypotheses

Graphing calculators will be used in the course. There is no SOL test given for this course.

## **SCIENCE**

Science provides the key to understanding the natural world. The application of science to relevant topics provides a context for students to build their knowledge and make connections across content and subject areas. This includes applications that integrate Science, Technology, Engineering, and Mathematics (STEM). Various strategies, included inquiry-based learning and hands-on approaches can be used to facilitate STEM applications and to promote critical thinking and a better understanding of our world.

#### 6th Grade - Life Science

- Grade Six Science Standards are integrated into the Life Science Curriculum
- Life Science introduces students to the living world, stressing the nature of living things and how they grow, adapt, and survive in an environment. The ecological relationship between man and his environment is stressed. The scientific method is utilized to teach important concepts including collecting and organizing information, observing and describing, measuring, experimenting, and drawing conclusions.

#### 7th Grade - Physical Science

- Students take VDOE Science 8 Middle School Science SOL Test, which assesses Grade Six SOL, Life Science SOL, and Physical Science SOL
- Grade Six Science Standards are integrated into the Life Science Curriculum
- Physical Science explores the knowledge and skills developed through the exploration of fundamental physics and chemistry. The structure of matter and its relationship to energy, and the forms and uses of energy are investigated. Emphasis is placed on "hands-on" laboratory experiences and the presentation of concepts and theories. The scientific method is also employed in a wide variety of laboratory investigations. Laboratory safety and the proper use of laboratory equipment are stressed.

## 8th Grade - Earth Science (4210)



- Students that pass the course and the EOC SOL test will earn a verifed credit for high school graduation
- Earth Science connects the study of the Earth's composition, structure, processes and history; its atmosphere, freshwater and oceans; and its environment in space. Historical contributions

in the development of scientific thought about the Earth and space are emphasized. The course focuses on the interpretation of maps, charts, tables and profiles; the use of technology to collect, analyze and report data; and the utilization of science skills in systematic investigation. Problem solving and decision making are an integral part of the course, especially as they relate to the costs and benefits of utilizing the Earth's resources. Major topics of study include plate tectonics, the rock cycle, Earth history, the oceans, the atmosphere, weather and climate, and the solar system and universe. Students taking this course will take an end-of-course SOL test in Earth Science. Students must pass both the course and SOL test to earn a verified credit.

#### **Graduation Requirements**

- Students seeking a standard diploma should complete three courses from two different scientific disciplines: earth sciences, biological sciences, and physical sciences (chemistry or physics).
- Students seeking an advanced diploma should complete four science courses from three different disciplines: earth sciences, biological sciences, or physical sciences.
- Students need to earn one verified credit for either a standard or advanced diploma.
- SOL tests are available for Earth Science, Biology, or Chemistry. Students should work with their counselor to determine which tests are needed to verify credits for graduation.
- The federal Every Student Succeeds Act requires all high school students take the Biology SOL test.

## **High School Course Descriptions**

High School Science		
9	Biology or Pre-AP Biology	
10	Chemistry, Pre-AP Chemistry, Ecology	
11	Physics, Ecology, AP Biology, AP Environmental, AP Chemistry, AP Physics	
12	Physics, Ecology, AP Biology, AP Environmental, AP Chemistry, AP Physics	

## Biology I (4310) (1150L)

Prerequisite: Middle School Science Credit: 1 (Biological Science Discipline)

This course is designed to provide students with a detailed understanding of living systems. Emphasis continues to be placed on the skills necessary to examine alternative scientific explanations; actively conduct controlled experiments; analyze

and communicate information; and gather and use information in scientific literature. The history of biological thought and the evidence that supports it are explored, providing the foundation for investigating biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. The importance of scientific research that validates or challenges ideas is emphasized at this level. Students taking this course will take an end-of-course SOL test in Biology to earn a verified credit or for Federal Accreditation purposes. Students must pass both the course and SOL test to earn a verified credit.

## Pre-AP Biology (4311)

Prerequisite: Earth Science Credit: 1 (Biological Science Discipline)

This course is designed to provide students with an opportunity to develop a greater depth of biological knowledge through laboratory investigations and research. Among the topics of study are fundamental principles of biology such as the study of the diversity of life, environmental and biological diversity, population and community ecology, cellular reproduction, and principles of genetics. Students taking this course will take an end-of-course SOL test in Biology. Students must pass both the course and SOL test to earn a verified credit.

## AP Environmental Science (4270) 🔼 AP

Prerequisite: Two years of high school laboratory science and Algebra II. Recommended, but not, is a course in Earth Science.

Credit: 1 (Weighted) (Earth Science Discipline)

AP Environmental Science is designed to be equivalent of a one-semester, introductory college course in Environmental Science. The goals of the course are to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

#### Ecology (4340)

Prerequisite: Successful completion of Biology I or Pre-AP Biology

Credit: 1 (Biological Science Discipline)

This Biology II course focuses on an investigation of the relationship between living communities and their chemical and physical environments. Major topics of study include energy flow, biogeochemical cycles, biotic and abiotic influences on communities of living things, population dynamics, and a study of aquatic and terrestrial ecosystem pollution. There is no SOL test for this course.

## Chemistry I (4410)



Prerequisite: Enrollment in Algebra II, Earth Science, Biology

Credit: 1 (Physical Science Discipline)

This course is designed to introduce the basic chemical concepts such as composition of matter, atomic structure, periodic table, chemical bonding, formulas and equations, gas laws, reacting quantities and acid base theory. Students will practice the investigative skills used by practicing scientists when studying these concepts. Students will also learn to use safety precautions with chemicals and equipment. Students taking this course will take an end-of-course SOL test in Chemistry. Students must pass both the course and SOL test to earn a verified credit.

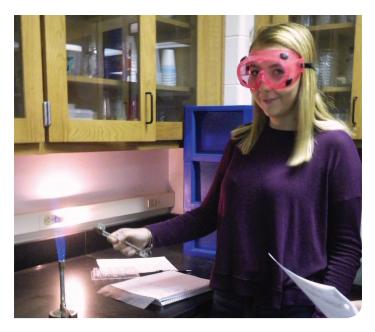
#### Pre-AP Chemistry (4411)



Prerequisite: Enrollment in Algebra II, Earth Science, Biology/Pre-AP Biology

Credit: 1 (Physical Science Discipline)

This course is designed to provide students with an opportunity to develop a greater depth of chemical knowledge and understanding of the interaction of matter and energy by focusing on a qualitative and quantitative study of substances and the changes that occur in them. This interaction is investigated through the use of laboratory techniques, manipulation of chemical quantities, and problem-solving applications. Scientific methodology is employed in experimental and analytical investigations, and concepts are illustrated with practical applications that include examples from environmental, nuclear, organic and biochemistry content areas. Technology, including graphing calculators, computers and probeware, is employed where feasible. Students will also learn to use safety precautions with chemicals and equipment. Students taking this course will take an end-of-course SOL test in Chemistry. Students must pass both the course and SOL test to earn a verified credit.



## AP Chemistry (4470)

Prerequisites: Any Pre-AP Science Course or Successful Passage of another AP Science Course Credit: 1 (Weighted) (Physical Science Discipline)

Advanced Placement Chemistry is designed to be equivalent to a first year college chemistry course. Students will develop an understanding, appreciation and assimilation in the five major areas of chemistry: Structure of Matter, the States of Matter, Reactions, Descriptive Chemistry, and Laboratory. Topics of study include (but are not limited to): energy, molecular orbital theory, and solution chemistry. Students will gain laboratory skills and an appreciation of science as a dynamic process through designing, implementing, and interpreting complex labs. Students will communicate with peers and adults through speech, writing, graphics, and presentations.

#### **Physics I (4511)**

Prerequisites: Successful passage of Algebra II Credit: 1 (Physical Science Discipline)

Physics is the study of nature and characteristics of energy and emphasizes a more complex understanding of experimentation, the analysis of data, and the use of reasoning and logic to evaluate evidence. Conceptual understanding of physical systems is the primary focus of this course. In order to arrive at this understanding, students will need to draw upon their knowledge of algebra inferential statistics and trigonometry. Emphasis will be given to the study of forces and motion, energy transformations, wave phenomena, the electromagnetic spectrum, light, electricity fields and NON-Newtonian physics. Practical application and problem-solving are stressed throughout the course. Graphing calculators and computers are employed as tools of study. There is no SOL test for this course.

#### AP Physics (4570) AP



Prerequisites: Successful passage of Algebra II or concurrent enrollment in higher math course Credit: 1 (Weighted) (Physical Science Discipline)

Advanced Placement Physics I is Algebra based designed to be equivalent to a first-year college physics course. Students will develop an understanding, appreciation and assimilation in the major areas of physics: Physics knowledge, Problem solving, Student attributes and Connections. Major topics of study include: mechanics, fluid dynamics, waves, optics, magnetism, electricity and modern physics. Students will gain laboratory skills and an appreciation of science as a dynamic process through designing, implementing, and interpreting complex labs.



## CENTRAL VIRGINIA GOVERNOR'S SCHOOL

The Central Virginia Governor's School (CVGS) for Science and Technology provides special opportunities in mathematics, science and technology in a challenging, independent learning environment for gifted students. Housed at Heritage High School, the Governor's School offers a two-year program in which students earn three credits a year in science, math, and research or technology. The curriculum emphasizes research, internships, extensive laboratory experiences, and the development of problem solving, critical thinking, and technical skills. Students attend CVGS in the morning and return to their home schools in the afternoon.

#### **CVGS Admissions**

Students apply for admission to the Governor's School in the spring of their sophomore year. High Achieving students enrolled in Pre-AP Algebra II/ Trig (or higher level math course) and eligible to enroll in Physics during their junior year are encouraged to apply. Selection committees in each school division review applications and select students. The selection committees consider standardized test scores, academic achievement, attendance record, recommendations by teachers, and demonstrated interest in science and mathematics when evaluating and ranking student applications. The tuition for students accepted into the program is paid to the Governor's School by the student's school division; there is no cost to parents for students to attend the Governor's School. CVGS does not discriminate on the basis of race, color, national origin, sex, age or disability in its programs, activities or employment. CVGS juniors are required to meet specific academic standards in order to be admitted to the senior year program. The Central Virginia Governor's School website, which has a great deal of additional information regarding the program, can be found at the following web address: http://www.cvgs.k12.va.us/admissions.htm.

#### Steps to Apply

- 1. Discuss the opportunity with your parents/guardians and guidance counselor.
- Attend a CVGS open house; this isn't required, but it
  is recommended if you want to learn more about the
  program. Two Open Houses for Prospective Students
  occur during January or February each year. Please
  consult the school calendar on the CVGS Website for
  the dates and times of the Open Houses.

- 3. Fill out the application form available as a form-fill pdf document. Your computer must have Adobe Acrobat Reader installed to fill out the application. When you are finished, save it and print out a hard copy to turn in to your guidance counselor by the due date at your school.
- 4. Ask your guidance counselor to complete the student record form.
- 5. Ask three of your teachers (1 math teacher, 1 science teacher, and 1 other teacher) to write recommendations for you using the recommendation form provided on the website. You can save the form and email it to your teachers, or provide them with a link to the website. Of course, their computers must also have Adobe Acrobat Reader installed to fill out the recommendation. Once completed, teachers should print out the recommendation and return it to your guidance counselor.

#### **Governor's School Courses**

#### **Physics (4515)**

Credit: 1 (weighted)

CVGS physics is a college level introduction using basic calculus and vector analysis to study the particle and wave nature of everyday phenomena. Topics include Newtonian and fluid mechanics, conservation laws, thermodynamics, vibrations and waves, electricity and magnetism, optics, and modern physics. Concepts are explored and applied through hands-on activities and in a computer-based laboratory through investigations requiring data collection and analysis or use of models and computer simulations that show interdisciplinary relationships between physics, life sciences, mathematics, and technology. Development of problem solving, analytical thinking, laboratory, and communication skills is also stressed.

#### Math Analysis (3164)

Credit: 1 (weighted)

College Credits: 7 (4 for MTH 166 and 3 for MTH 168)

Math Analysis is a pre-calculus course that includes an in-depth conceptual analysis of algebraic, polynomial, rational, logarithmic, exponential, and trigonometric functions. Topics include graphical behavior, domains and ranges, roots (real & complex), the first derivative, graphing, application problem solving and data analysis, and an introduction to integration. Parametric equations are presented with a focus on applications and conceptual analysis. Analysis includes required algebraic proofs and/or conceptual explanations in written and oral presentations. Graphing calculators,

spreadsheets, and a computer algebra system are used extensively. The study of matrices is included, and optional topics include an introduction to sequences and series. Upon successful completion of first semester course, students earn 4 credits from CVCC, and students earn 3 additional credits upon successful completion of the second semester course.

#### Junior Research (9811)

Credit: 1 (weighted)

This unique course is an introduction to the research process including literature research, project design, elementary statistical analysis, scientific writing and multimedia presentations. Each student completes an individual research project. Students design a study, collect and analyze data, and report the results in paper, PowerPoint, poster and webpage formats. The statistical analysis of data is conducted using MicroSoft Excel. During the second semester students complete a 36-hour internship.

#### Calculus of a Single Variable (3178)

Credit: 1 (weighted)

College Credits: 8 (MTH 173, MTH 174)

These courses comprise a college level study of differential and integral calculus. Topics include the study of limits, continuity, derivatives (definition, concepts), differentiation techniques (including inverse trigonometric functions and polar and parametric curves), curve sketching, optimization applications, antiderivatives, definite and indefinite integrals, Fundamental Theorems of Calculus, integration techniques, improper integrals, Trapezoidal and Simpson's Rules, applications of the definite integral including geometry, density, center of mass and work, Infinite Series including Taylor Polynomials, separable differential equations with applications, slope fields, and Euler's Method. Upon successful completion of each semester course, students earn 4 semester credits from CVCC.

#### **Computer Science (3180)**

Credit: 1 (weighted)
College Credits: 8 (CS 201, CS 202)

This college level sequence introduces algorithm and problem solving methods and emphasizes structured programming concepts. Students examine constructs for logic control, sequencing statements, input/output, searching and sorting and explore data structures including lists, trees, queues and stacks. This sequence also teaches object oriented programming techniques by making use of methods, classes and objects to demonstrate the object-oriented concepts of encapsulation, inheritance, and polymorphism. Upon successful completion of each semester course, students earn 4 semester credits from CVCC.

#### **Human Anatomy and Physiology (4330)**

Credit: 1 (weighted)

College Credits: 8 (BIO 141, BIO 142)

This college level sequence provides an overview of cellular physiology and reviews many human organ systems including the nervous, respiratory, circulatory, digestive, skeletal, endocrine, muscular, urinary, reproductive, and lymphatic systems. Students explore organ systems through the use of interactive modeling and discuss current medical cases with local health care professionals. Upon successful completion of each semester course, students earn 4 semester credits from CVCC.

#### Connections in Mathematics (3190)

Credit: 1 (weighted)

This course provides students with introductory experiences in symbolic logic, graph theory, probability, voting schemes and apportionment methods, personal finance, mathematical proofs, differential and integral calculus, and separable differential equations. Emphasis is placed on conceptual understanding, solving real world applications, using technology, and fostering mathematical reasoning and communication.

#### Linear Algebra/Vector Calculus (3174/3175)

Credit: 1 (weighted)

College Credits: 7 (4 for MTH 285, 3 for MTH 277)

This sequence is a college level study of linear algebra and vector calculus. Linear algebra includes systems of equations, matrices, vector spaces, linear transformations, bases, dimension, eigenvalues, eigenvectors, and orthogonality. Vector calculus includes vector-valued functions, functions of several variables, vector fields, partial derivatives and multiple integrals. Both semesters emphasize computational techniques, geometry and theoretical structure, creative problem solving, and proofs. Upon successful completion of Linear Algebra, students earn 3 semester credits, and successful completion of Vector Calculus awards 4 semester credits from CVCC.

#### Senior Seminar (9812)

Credit: 1 (weighted)

During the first six-weeks period students participate in an engineering design-build-test project with local engineers serving as mentors. For the next four six-weeks periods, students explore and use sophisticated technologies choosing from among biotechnology, computer-aided design and 3D printing, desktop publishing, electron microscopy, writing iPad applications, scientific photography, microbiology, nuclear science, and robotics. Students end the course with a six-week period of using technology in the completion of the Senior Science Scenario capstone project.

## **EARLY COLLEGE PROGRAM**

The Early College Program is a unique and exciting partnership with Central Virginia Community College. Early College is a two-year program designed to allow selected juniors to earn an Advanced Studies high school diploma from their home schools and an Associate of Arts and Science Degree in General Studies from Central Virginia Community College at the same time. Students will attend the college courses at the Campbell County Technical Center in the morning and have the option of returning to their home school in the afternoon to take elective courses and participate in extra-curricular activities.

Sophomores enrolled in Campbell County Schools with a minimum GPA of 3.5 and enrolled in Pre-AP Algebra II/Trig (or higher level math course) and have successfully completed Algebra I and Geometry are eligible to apply. Students must pass the Compass Assessment in mathematics and English to accept the invitation to the Early College Program. All students accepted into the program must participate in the orientation program.

Tuition will be shared by Campbell County and the parents/students. The amount paid by the parent will be determined annually.

Please contact a guidance counselor for additional information.

# Junior Course Descriptions First Semester

#### College Composition I (E111C)

College Credits: 3 Credit: ½ (weighted)

Develops writing ability for study, work, and other areas of life based on experience, observation, research, and reading of selected literature. Guides students in learning writing as a process: understanding audience and purpose, exploring ideas and information, composing, revising, and editing. Supports writing by integrating, composing, revising, and editing. Supports writing by integrating experience in thinking, reading, listening, and speaking.

#### Pre-calculus I (MTH161C)

College Credits: 3 Credit: ½ (weighted)

Presents college algebra, matrices, and algebraic, exponential, and logarithmic functions. (or Applied Calculus if Precalculus was completed during 10th grade year)

#### Applied Calculus I (MTH261C)

College Credits: 3 Credit: ½ (weighted)

Presents limits, continuity, differentiation of algebraic and transcendental functions with applications, and an introduction to integration.

#### General Biology I (BIO101C)

College Credits: 3 Credit: ½ (weighted)

Explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Introduces the diversity of living organisms, their structure, function and evolution.

#### United States History I (HIS121C)

College Credits: 3 Credit: ½ (weighted)

Surveys United States history from its beginning to the present.

#### Music Appreciation I (MUS121C)

College Credits: 3 Credit: ½ (weighted)

Increases the variety and depth of the student's interest, knowledge, and involvement in music and related cultural activities. Acquaints the student with traditional and twentieth century music literature, emphasizing the relationship music has as an art form with man and society. Increases the student's awareness of the composers and performers of all eras through listening and concert experiences.

#### Orientation

College Credit: 1 Credit: No Credit

Assists students in transition to colleges. Provides overviews of college policies, procedures, and curricular offerings. Encourages contacts with other students and staff. Assists students toward college success through information regarding effective study habits, career and academic planning, and other college resources available to students. Includes instruction in networked information resources and in the use of telecommunication software. May include English and math placement testing. Strongly recommended for beginning students. Required for graduation in degree programs.

#### Second Semester

#### College Composition II (E112C)

College Credits: 3 Credit: ½ (weighted)

Develops writing ability for study, work, and other areas of life based on experience, observation, research, and reading of selected literature. Guides students in learning writing as a process: understanding audience and purpose, exploring ideas and information, composing, revising, and editing. Supports writing by integrating, composing, revising, and editing. Supports writing by integrating experience in thinking, reading, listening, and speaking.

Students taking this course will take two required end-of-course SOL tests: The Writing SOL Test and the Reading SOL Test. Students must pass both the course and the two SOL tests to earn two verified credits which are required for graduation.

#### Pre-calculus II (MTH162C)

College Credits: 3 Credit: ½ (weighted)

Presents trigonometry, analytic geometry, and sequences and series.

(or Applied Calculus if Precalculus was completed during 10th grade year)

## Applied Calculus II (M272C)

College Credits: 3 Credit: ½ (weighted)

Covers techniques of integration, multivariable calculus, and an introduction to differential equations.

#### General Biology II (BIO102C)

College Credits: 3 Credit: ½ (weighted)

Explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Introduces the diversity of living organisms, their structure, function and evolution.

#### United States History II (HIS122C)

College Credits: 3 Credit: ½ (weighted)

Surveys United States history from its beginning to the present.

Students taking this course will take the required endof-course SOL test in Virginia/United States History. To earn a verified credit, students must pass both the course and the SOL test.

#### Concepts of Personal and Community Health (HLT110C)

College Credits: 3 Credit: ½ (weighted)

Studies the concepts related to the maintenance of health, safety, and the prevention of illness at the personal and community level.

## Senior Course Descriptions: First Semester

#### Survey of World Literature I (ENG251C)

College Credits: 3 Credit: ½ (weighted)

Examines major works of world literature. Involves critical reading and writing.

#### Applied Calculus I (MTH261C)

College Credits: 3 Credit: ½ (weighted)

Presents limits, continuity, differentiation of algebraic and transcendental functions with applications, and an introduction to integration.

(or Statistics if Calculus was completed during 11th grade year)

#### Statistics (M240C)

College Credits: 3 Credit: ½ (weighted)

Presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, and correlation and regression.

#### General College Physics I (PHY201C)

College Credits: 4 Credit: ½ (weighted)

Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics.

#### Government I (PLS211C)

College Credits: 3 Credit: ½ (weighted)

Teaches structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy.

## Introduction to Computer Applications and Concepts (ITE115C)

College Credits: 3 Credit: ½ (weighted)

Covers computer concepts and internet skills, and uses a software suite which includes word processing, spreadsheet, database, and presentation software to demonstrate skills.

#### Second Semester

#### Survey of World Literature II (ENG252C)

College Credits: 3 Credit: ½ (weighted)

Examines major works of world literature. Involves critical reading and writing.

#### General College Physics II (PHY202C)

College Credits: 4 Credit: ½ (weighted)

Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics.

#### Government II (PLS212C)

College Credits: 3 Credit: ½ (weighted)

Teaches structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy.

#### Principles of Public Speaking (CST100C)

College Credits: 3 Credit: ½ (weighted)

Applies theory and principles of public address with emphasis on preparation and delivery.

#### Religions of the World (REL230C)

College Credits: 3 Credit: ½ (weighted)

Introduces the religions of the world with attention to origin, history, and doctrine.

## **STEM ACADEMY**

#### At Central Virginia Community College

XLR8: Lynchburg Regional Governor's STEM Academy – is the 16th regional Governor's STEM Academy offering programs in science, technology, engineering and mathematics (subjects known collectively as "STEM") for High School Juniors and Seniors in Virginia's Region 2000/Lynchburg regional area. Located on the campus of Central Virginia Community College – XLR8 offers academic and technical training related to careers in engineering, technology and health science diagnostic services.

STEM Academy students take courses in math, science and engineering using the Project Lead the Way (PLTW) curriculum. Project Lead the Way (PLTW), is the leading provider of rigorous and innovative STEM (science, technology, engineering and math) education curricular used in schools.

The PLTW curriculum has been designed to promote critical thinking, creativity, innovation and real-world problem solving skills for students. The hands-on, project-based program engages students on multiple levels, and provides them with a foundation and proven path to college and career readiness. Course descriptions can be found at www.xlr8academy.com.

### Junior Year-Mechatronics/Biotechnology

EGR 115 and	Engineering Graphics (EGR115C)
EGR 123	Introduction to Engineering Design (EGR123C)
IND 160 and	Introduction to Robotics (IND160C)
EGR 120	Introduction to Engineering (EGR120C)
MTH 155	Statistical Reasoning (MTH155C)
MTH 161 or 261	Pre-calculus I (MTH161C) or Applied Calculus I (MTH261C)
CHM 101 and	General Chemistry I (CHM101C)
CHM 126	Chemistry for Engineers (CHN126C)
SDV 100	College Success Skills (SDV100C)

#### **Senior Year-Mechatronics**

DRF 161	Blueprint Reading I (DRF161C)
SAF 130	Industrial Safety-OSHA 10 (SAF130C)
MEC 140	Introduction to Mechatronics (MEC140C)
MTH 261-162 or Applied Calculus I (MTH261C) and Pre-Calculus II (MTH162C) or	
MTH 173-174	Calculus with Analytic Geometry I (MTH173C) and II (MTH174C)

PRUGRAM

PHY 121-122 Principles of Physics I (PHY121C)

and II (PHY122C)

MEC 190 Internship Mechatronics (MEC190C)

Senior Year-Biotechnology

**HLT 143** Medical Terminology (HLT143C)

MEC 140 Introduction to Mechatronics (MEC140C)

MTH 261-162 or Applied Calculus I (MTH261C) and

Pre-calculus II (MTH162C) or

MTH 173-174 Calculus with Analytic Geometry I

(MTH173C) II (MTH174C)

BIO 141-142 Human Anatomy & Physiology I

(BIO141C) and II (BIO142C)

**HLT 190** Internship Biotech (HLT190C)

**Junior Year-Cybersecurity** 

ITE 115 Introduction to Computer Applications

and Concepts (ITE115C)

ITN 101 Introduction to Network Concepts

(ITN101C)

ITP 100 Software Design (ITP100C)

ITN 260 Network Security Basics (ITN260C)

MTH 155 Statistical Reasoning (MTH155C)

**MTH 161 or 261** Pre-calculus I (MTH161C) or

Applied Calculus I (MTH261C)

SDV 100 College Success Skills (SDV100C)

**Senior Year-Cybersecurity** 

ITN 261 Network Attacks, Computer Crime and

Hacking (ITN261C)

ITN 267 Legal Topics in Network Security

(ITN267C)

MTH 261-162 or Applied Calculus I (MTH261C) and

Pre-Calculus II (MTH162C) or

MTH 173-174 Calculus with Analytic Geometry I

(MTH173C) II (MTH174C)

**PHY 121-122** Principles of Physics I (PHY121C) and II

(PHY122C)

ERG 190 Coordinated Internship (ERG190C)

## **EARLY COLLEGE SCHOLARS PROGRAM**

The Early College Scholars program is a state sponsored program that allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma.

# To qualify for the Early College Scholars' program a student must:

- Have a "B" average or better;
- Be pursuing an Advanced Studies Diploma; and
- Take and complete college-level course work (i.e., AP or dual enrollment) that will earn at least 15 transferable college credits upon graduation.

Participating students sign an Early College Scholars Agreement which is also signed by the students' parents or guardians, principal, and school counselor. Students who meet the terms of the agreement are recognized as Early College Scholars and receive a certificate of recognition from the governor.

This program is supported by Virtual Virginia which provides access to college-level courses.

