

# Rockbridge County Public Schools



## MISSION STATEMENT

Rockbridge County High School encourages its students to develop intellectually, socially, and physically, so that each student will become a contributing citizen to our school, community, nation, and global society.

## BELIEFS

The community, parents, staff, and students of Rockbridge County High School believe:

- Learning is a lifelong process.
- A positive school environment energizes student performance.
- Student learning increases through working with people who come from different backgrounds, solving real world problems, and understanding the global context of current occupational preparation.
- Exemplary student and staff performance develops through setting individual learning goals, identifying means of meeting those goals, and assessing progress toward established goals.
- Members of the learning community are models for setting high personal expectations, creating excitement about learning, valuing diversity, encouraging colleagues and students, sharing best practices, utilizing big picture thinking, and demonstrating skills.
- Administrators provide leadership through broad staff and student involvement in the following areas: assessing school climate, identifying strategies to improve student performance, and collaborating with parents and community organizations.
- Schools excel through strong connections to parents and the larger community.

## DECLARATION OF NON-DISCRIMINATION

The Rockbridge County Public School Division does not discriminate on the basis of race, color, religion, national origin, sex, disability, pregnancy, childbirth or related medical conditions, age, marital status, genetic information, sexual orientation, gender identity, disability, or status as a veteran. The following persons have been designated to handle inquiries regarding the non-discrimination process.

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**2893 Collierstown Road, Lexington, VA 24450**  
540-463-7386

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## USING THE PROGRAM OF STUDIES

The purpose of the Program of Studies is to describe programs and courses offered at Rockbridge County High School. You will find descriptions of courses offered in grades 9-12 grouped by discipline. Grade level designations represent the grade at which most students take the course described. Exceptions to the stated grade levels may be made to meet the educational needs of an individual student. The purpose of this guide is to assist parents/guardians and students with both long-range program planning as well as selecting courses for the next year. Prerequisites are important to keep in mind in this planning process. Individual aptitudes, interests and diploma requirements all play an important role in making course selections that lead to fulfillment of personal, educational and career goals. Parents/guardians are asked to review the Program of Studies with their children.

Every RCHS student has an Academic and Career Plan on file with his or her school counselor. Students begin mapping out their high school and future plans with this document during their seventh grade year. High school counselors review the Academic and Career Plans with students and parents/guardians annually during course selection as goals change and new interests develop. Students are encouraged to fill in the sample Academic and Career Plan located at the end of this book.

### **COURSE SELECTION / REGISTRATION PROCESS**

At the beginning of the **second** semester, school counselors will begin meeting with all students to select courses for the following school year. Students who fail to register will have course selections made by school counseling staff. Parents/guardians are encouraged to participate in this important process. Students and parents/guardians should carefully consider diploma requirements, the student's abilities and interests, past academic performance, career goals, and teacher recommendations. Parents/guardians are encouraged to contact their child's school counselor to discuss student career goals, course selections and student academic achievement.

During the meeting with their counselor, students will be asked to provide a selection of alternative elective options that counselors will assign to students in the event that they cannot be enrolled in their first choice electives.

**The registration deadline for all students is the last day of school of the previous year. After that date, course selection changes will be made only under the following circumstances:**

- Failure of a course which is a prerequisite for a selected course
- Failure of a course which is a graduation requirement
- Completion of a selected course in summer school
- Change in diploma type
- Grouping adjustments/balancing of classes by counselors or administration, or due to low enrollment.
- Recommendation of screening and/or eligibility committee
- Clerical error
- Students may be removed from a non-required elective course to be placed in a course for credit recovery

### **DROP/ADD PERIOD**

The Drop/Add period allows students to adjust their schedules to meet their academic **needs**. All requests to drop a class are initiated by contacting the student's counselor and **completing** a written request form available in the counseling office. Every effort will be made to allow students to be in their requested courses; however, these requests will only be approved when there is available space in an alternate class. Therefore it is important for students to carefully consider the courses they register for in the spring. Students and parents/guardians may meet with teachers and counselors to discuss changing the placement level of a course at any time throughout the school year.

### **COURSE WITHDRAWAL POLICY**

After the conclusion of the add/drop periods, decisions to allow students to drop a course are made on a case-by-case basis by administration. If a student drops a course after the first five days of the school year (or first ten days of the semester for a semester course), a WP (withdrawn passing) or WF (withdrawn failing) may be recorded on the student's transcript based on the student's grade in the course. The WF will be calculated into the student's grade point average. Reasonable effort will be made to assist students experiencing difficulty in a class. Students, parents/guardians, and teachers will make every effort to work together to meet students' academic needs. Dropping a course after the drop/add period ends will be considered on an individual basis and requires completion of a written request and the approval of an administrator.

# **GRADUATION REQUIREMENTS**

## **PROFILE OF A VIRGINIA GRADUATE**

The Profile of a Virginia Graduate comprises the course and credit requirements students must meet to earn a Standard Diploma or Advanced Studies Diploma and the skills, experiences, and attributes essential for success in college and the workforce.

Students meeting the Profile of a Virginia Graduate achieve the commonwealth's high academic standards and graduate from high school with workplace skills, an understanding of their responsibilities as citizens, and career plans aligned with their talents, interests and experiences.

For freshmen entering high school in 2018 and beyond, the following requirements must be met in addition to the diploma requirements:

- **Advanced Placement, Dual Enrollment Course, a Work-Based Learning Experience, or a Career and Technical Education Credential** - In accordance with the Standards of Quality, students shall either (i) complete an Advanced Placement, **Dual Enrollment**, or International Baccalaureate course, or (ii) complete a **school-coordinated workplace experience related to a student's goals or interests, connected to a course, and performed in partnership with local businesses and organizations allowing students to apply classroom instruction in a real-world business or service-oriented work environment, or (iii)** 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](#).
- **Demonstration of the five Cs** - Students shall 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..

## Graduation Requirements for the Class of 2022 and beyond

### Standard Diploma:

<u>Subject Area</u>	<u>Credits</u>	<u>SOLs</u>	<u>Notes</u>
English	4	2	Courses shall include English 9, 10, 11 & 12
Math	3	1	Courses shall include at least 2 different courses from algebra I, geometry, AFDA, algebra II, or other mathematics courses
Lab Science	3	1	Courses shall include at least 2 different courses from two different science disciplines: earth sciences, biology, chemistry, or physics
Social Studies	3	1	Courses shall include Virginia and U.S. history, Virginia and U.S. government, and one course in either world history or geography or both
World Language, Fine Arts or CTE	2		Courses shall include at least two sequential electives
Health & PE	2		Courses shall include Health/PE 9 and Health/PE 10
Economics & Personal Finance	1		
Electives	4		
Total Credits	22		5

### Advanced Diploma:

<u>Subject Area</u>	<u>Credits</u>	<u>SOLs</u>	<u>Notes</u>
English	4	2	Courses shall include English 9, 10, 11 & 12
Math	4	1	Courses shall include algebra I, geometry, algebra II, and other approved mathematics courses
Lab Science	4	1	Courses shall include earth sciences, biology, chemistry, or physics
Social Studies	4	1	Courses shall include Virginia and U.S. history, Virginia and U.S. government, and two courses in either world history or geography or both
World Language	3		Courses shall include three years of one language or two years of two languages
Health & PE	2		Courses shall include Health/PE 9 and Health/PE 10
Fine Arts or CTE	1		Courses shall include at least two sequential electives
Economics & Personal Finance	1		
Electives	3		
Total Credits	26	5	

**Additional Graduation Requirements for Either Diploma Type:** Students shall complete either an AP/DE Course, OR a Work Based Learning Experience, OR a CTE Certification.

## STANDARD DIPLOMA CREDIT ACCOMMODATIONS

Credit accommodations provide alternatives for students with disabilities in earning the standard and verified credits required to graduate with a Standard Diploma. A student's transcript would not reflect the use of credit accommodations.

Credit accommodations are determined by the IEP team or 504 committee at any point after the student's eighth-grade year. The school must secure the informed written consent of the parent/guardian and the student to choose credit accommodations after a review of the student's academic record and full disclosure of the student's options. IEPs and 504 plans must specify which credit accommodations are allowed and under what circumstances.

A student must meet the following criteria to be eligible for Standard Diploma credit accommodations:

- The student must have a current IEP or 504 plan with standards-based content goals.
- The student must have a disability that precludes him or her from meeting grade-level expectations but is learning on-grade-level content.
- The student must need significant instructional supports to access grade-level SOL content and to show progress.
- The student, based on multiple objective measures of past performance, might not be expected to achieve the required units of credit within the standard time frame.

Credit accommodations for students with disabilities may include:

- Alternative courses to meet the standard credit requirements
- Modifications to the requirements for locally awarded verified credits
- Additional tests approved by the Board of Education for earning verified credits
- Adjusted cut scores on tests for earning verified credits
- Allowance of work-based learning experiences through career and technical education (CTE) courses

While credit accommodations provide alternate pathways and flexibility, students receiving accommodations must earn the 22 standard credits and five verified credits for the classes of 2022 and beyond are required to graduate with a Standard Diploma.

Credit accommodations are not available for the Advanced Studies Diploma.

## REQUIREMENTS FOR OTHER DIPLOMAS AND CERTIFICATES

### REQUIREMENTS FOR AN APPLIED STUDIES DIPLOMA

The Applied Studies Diploma will be available to students with disabilities who complete the requirements of their IEP and who do not meet the requirements for other diplomas. These students are not ranked and they participate in the Virginia Alternate Assessment Program (VAAP).

## GENERAL EDUCATIONAL DEVELOPMENT CERTIFICATES (GED)

An applicant must be at least 18 years of age and not currently enrolled in public education or otherwise meeting the school attendance requirements set forth in the Code of Virginia. Under special circumstances the age limit may be lowered to sixteen years for applicants (1) who have been instructed by their parents in their home *and* who have successfully completed such home instruction; (2) who have been excused from school attendance; (3) for whom an Individual Student Alternative Education Plan (ISAEP) has been granted; (4) who have been expelled from school; or (6) who are required by court order to participate in the GED testing program. Under no circumstances is an individual under the age of sixteen eligible for testing.

Students and parents/guardians may find out more about the GED and ISAEP by speaking with the student's counselor, the Coordinator for Student Services, or school administrator.

## CERTIFICATE OF PROGRAM COMPLETION

Students who successfully complete all academic coursework required for either the Standard or Advanced Studies Diplomas, but who have not yet obtained the necessary verified credits required by the state for the awarding of a diploma. Students who are awarded a Certificate of Program Completion may continue to take the SOL tests needed to upgrade their certificate to a diploma. *Students who have not yet completed all graduation requirements will not be permitted to participate in the graduation ceremony.*

## REQUIREMENTS FOR DIPLOMA SEALS

Please see the information below for information about receiving each of the VDOE Diploma Seals. It is the student's responsibility to inform their school counselor and/or the school registrar that they meet the following qualifications necessary to receive each seal. An application or signed agreement may also be required.

### BOARD OF EDUCATION SEAL

Students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with a final grade point average of "A" (4.0) or better at the end of their senior year will receive a Board of Education Seal on the diploma.

### GOVERNOR'S SEAL

Students who complete the requirements for the Advanced Studies Diploma with an average of "B" (3.0) or better and successfully complete college-level coursework that will earn the student at least nine transferable college credits through Advanced Placement or Dual Enrollment courses shall receive the Governor's Seal on the diploma.

### BOARD OF EDUCATION CAREER & TECHNICAL EDUCATION SEAL

The Board of Education's Career and Technical Education Seal will be awarded to students who:

- Earn a Standard Diploma or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses
- OR pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade, or professional association
- OR acquire a professional license in that career and technical education field from the Commonwealth of Virginia.

The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

### BOARD OF EDUCATION SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

The Board of Education's STEM Seal shall be awarded to students who earn either a Standard Diploma or an Advanced Studies Diploma and satisfy all Math and Science requirements for the Advanced Studies diploma with a "B" average or better in all coursework, and

Successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and

Satisfy all requirements for a Career and Technical Education concentration. And

Pass one of the following:

- A Board of Education CTE STEM-H credential examination, or
- And examination approved by the Board that confers a college-level credit in a STEM field.

### BOARD OF EDUCATION'S ADVANCED MATHEMATICS AND TECHNOLOGY SEAL

This seal will be awarded to students who earn either a Standard Diploma or Advanced Studies Diploma and satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a "B" average or better; and either

- Pass an examination in a career and technical education field that confers certification from a recognized industry, trade or professional association
- OR acquire a professional license in a career and technical education field from the Commonwealth of Virginia
- OR pass an examination approved by the board that confers college-level credit in a technology or computer science area.

The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

### **BOARD OF EDUCATION'S EXCELLENCE IN CIVICS EDUCATION SEAL**

This seal will be awarded to students who meet each of the following four criteria:

Satisfy the requirement to earn a Standard Diploma or an Advanced Studies Diploma

Complete Virginia and United States History and Virginia and United States Government courses with a grade of "B" or higher

Complete 50 hours of voluntary participation in community service or extracurricular activities, such as:

- Volunteering for a charitable or religious organization that provides services to the poor, sick, or less fortunate;
- Participating in Boy Scouts, Girl Scouts, or similar youth organizations;
- Participating in political campaigns or government internships, Boys State, Girls State, or Model General Assembly;
- Participating in school-sponsored extracurricular activities that have a civics focus.
- Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

Have good attendance and no disciplinary infractions as determined by local school board policies.

### **BOARD OF EDUCATION'S SEAL OF BILITERACY**

The Board of Education's Seal of Biliteracy certifies attainment of a high level of proficiency by a graduating high school student in one or more languages in addition to English, and certifies that the graduate meets of the following criteria:

The Board of Education's Seal of Biliteracy will be awarded to students who earn either a Board of Education-approved diploma and (i) pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level; and (ii) be proficient at the intermediate-mid level or higher in one or more languages other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction.

For purposes of this article, "World language" means a language other than English, and includes American Sign Language.

### **EARLY COLLEGE SCHOLARS PROGRAM**

The Early College Scholars Program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. The result is a more productive senior year and a substantial reduction in college tuition. Students earning a college degree in seven semesters instead of eight can save an average of \$5,000 in expenses.

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 (AP or Dual Enrollment) that will earn at least 15 transferable college credits.

Participating students sign an Early College Scholars Agreement, which is available online and in the RCHS School Counseling office. The agreement is also signed by the student's 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.

## **ENROLLMENT GUIDELINES FOR TRANSFER STUDENTS**

Once RCHS has received records from the previous school, the assigned counselor will call to schedule a registration appointment. To the extent possible, students who transfer in the middle of an academic year will be enrolled in courses that are similar to those in which they had been enrolled at their previous school. In the event that, due to course offerings at RCHS, a student is unable to enroll in a course that is similar to one in which he or she had been enrolled, the student will be given the opportunity to enroll in an alternate course that will not result in the denial of credit to the extent practical in the school setting; for example, if the student can "catch up" in the class or perform adequately without having completed the first part of the class. Determinations of credit for transfer students will be based on a review of individual circumstances. RCHS does not guarantee course credit if a student is unable to complete a course due to a transfer.

Students transferring from a public or non-public school will receive credit for all courses approved by the sending school and will be included in class rank only if they have attended RCHS for three out of the last four semesters.

RCHS may adjust students' grades to align with the RCHS grading scale and weighting policy. Students will receive weighted credits for courses designated by the sending school as Honors only if a comparable course is designated Honors at RCHS. Students will receive weighted credits for all AP courses taken at their sending school even if the course is not offered at RCHS. \*See page 17 for Class Weighting policy.

### FIRST-TIME TRANSFERS TO A VIRGINIA PUBLIC SCHOOL

**Course/Credit Graduation Requirements** – in compliance with HVAC 20-131-60 – for a student transferring into a Virginia public school for the first time in grades 9-12, graduation requirements depend on the grade the student is transferring into and when in the school year the student is transferring. A student is considered to have transferred at the **beginning** of the school year if 20 or fewer hours of instruction have been completed. A student is considered to have transferred **during** the school year if more than 20 hours of instruction has been completed.

#### VERIFIED CREDIT REQUIREMENTS FOR TRANSFER STUDENTS Entering 9<sup>th</sup> Grade 2018-2019 and beyond

Grade Upon Enrolling	Standard Diploma Required SOL Verified Credits
9 <sup>th</sup> Grade	5 Verified Credits (2 English, 1 Math, 1 Social Studies, 1 Science)
Beginning & During 10 <sup>th</sup>	5 Verified Credits (2 English, 1 Math, 1 Social Studies, 1 Science)
Beginning 11 <sup>th</sup>	5 Verified Credits (2 English, 1 Math, 1 Social Studies, 1 Science)
During 11 <sup>th</sup>	2 Verified Credits (1 English, 1 Student Selected)
Beginning 12 <sup>th</sup>	2 Verified Credits (1 English, 1 Student Selected)
During 12 <sup>th</sup>	Student must be given every opportunity to earn a diploma; if this is not possible, the school division should arrange to have the previous school award the diploma or seek a waiver of the verified credit requirement from VDOE.

	Advanced Studies Diploma Required SOL Verified Credits
9 <sup>th</sup> Grade	5 Verified Credits (2 English, 1 Math, 1 Social Studies, 1 Science)
Beginning & During 10 <sup>th</sup>	5 Verified Credits (2 English, 1 Math, 1 Social Studies, 1 Science)
Beginning 11 <sup>th</sup>	5 Verified Credits (2 English, 1 Math, 1 Social Studies, 1 Science)
During 11 <sup>th</sup>	4 Verified Credits (1 English, 3 Student Selected)
Beginning 12 <sup>th</sup>	4 Verified Credits (1 English, 3 Student Selected)
During 12 <sup>th</sup>	Student must be given every opportunity to earn a diploma; if this is not possible, the school division should arrange to have the previous school award the diploma or seek a waiver of the verified credit requirement from VDOE.

### HOME INSTRUCTION

Students who have been instructed at home who wish to be enrolled in the Rockbridge County Public Schools will be placed at the appropriate grade level as determined by school administrators. The following standards will be used to determine credits and grade placement at the high school level:

- Students pursuing a Rockbridge County High School diploma must in advance of requesting credit from home instruction, do the following:
  - Be qualified for home instruction by the Superintendent.
  - Register for classes with a school counselor,
  - Have a schedule approved by school officials.

- The majority of credits earned for graduation must be from courses taken and passed at RCHS. The following classes must be taken at RCHS.
  - English 11
  - English 12
  - US History
  - US Government
  - Two Math classes
  - Two Science classes
- All established class prerequisites must be met before a student may enroll in one of the above classes.
- A grade of Pass (P) will be given for credits earned through home instruction and will not be used in computing grade point average (GPAs).
- Availability of classes to students not pursuing a high school diploma can be restricted when enrollments exceed 75% of established capacities.

## **STUDENT SERVICES**

### **ENGLISH LANGUAGE LEARNER**

**English Language Learner (EL I):**

**1 Credit (Elective)**

**Grade: 9-12**

**Prerequisite: Level 1 or 2 EL Student**

This course is designed to provide instruction and reinforcement for students to develop basic vocabulary and reading comprehension skills that will enable level 1 or 2 EL students to understand vocabulary, phrases and expressions most commonly used in the English language. This course will also teach the fundamentals of grammar usage and mechanics for students acquiring basic English skills in speaking and writing. The student will participate in a variety of listening, speaking, reading and writing activities to gain an understanding of the English language.

The Rockbridge County Public Schools English as a Second Language (ESL) Program offers a variety of services to students with limited English proficiency as defined in Public Law 107-110 of the *No Child Left Behind Act of 2001*, Title VI of the Civil Rights Act of 1964, and the Code of Virginia [COV § 22.1-253.13:1 D.11]. The services described below are available to students who are English language learners.

- **Regular Classroom Instructional Support:** Instruction in English speaking, listening, reading and writing and/or instructional support in academic content areas occurs individually or in a small group within a classroom. This method of service provides the student with a greater opportunity to practice the English language and/or to receive assistance in acquiring academic content. The ESL teacher collaborates with the classroom teacher to modify lessons and to meet the student’s language needs and provides appropriate curriculum resources for learning the English language.
- **Resource Class:** Resource classes provide students with instruction and support in English language and academic content learning. The ESL teacher works in collaboration with the classroom/content teacher to modify academic content lessons and to add supports so students can learn English and academic information more easily.
- **Tutoring:** Tutoring provides students with individualized support in English language and/or in academic content learning. Tutoring can take place during the school day and/or before or after school.

### **SPECIAL EDUCATION PROGRAM**

The Special Education Department offers a variety of services to students found eligible for special education services under the Individuals with Disabilities Education Act. The following services are available to students with an Individualized Education Plan (IEP):

- **Consulting Services** – Consulting services are provided to students who are in regular education courses but require accommodations or modifications in order to be successful. The special education case

manager consults with the students, teachers, parents, and school counselors to ensure the student's IEP is being implemented and followed appropriately.

- **Academic Support Services** – Academic support is available to students in regular education courses as deemed appropriate by the IEP Team.
- **Academic Resource Classes** – Academic resource is a structured classroom setting with clear expectations to provide students with extra support while completing homework, studying for tests/quizzes, and working on projects. Progress of students is closely monitored to help ensure success.
- **Functional Classes** – This course of study is available as determined by an IEP team and only after a determination that the grade level Virginia Standards of Learning is not appropriate for the student even with the use of modifications, adaptations, supplemental aides and services. These courses will provide students real world application of skills in the areas of mathematics, reading, science, social studies, vocational education, and daily living skills.
- **Reading Intervention Classes** - Reading is an intervention program available to students who struggle with reading. The class utilizes a research-based reading program focused on a multi-sensory approach to decoding and encoding words phonetically through the steps of the program. Students progress while also developing reading comprehension through identifying and applying various reading strategies.
- **Transition Services** - Transition services are provided to all students who are served by the special education program. Beginning at the age of 14 (or earlier if appropriate), students begin considering Post-Secondary Employment, Post-Secondary Education, Post-Secondary Training, and Independent Living in order to ensure that their high school experience prepares them for adulthood.

## GIFTED EDUCATION PROGRAM

The Rockbridge County Public School division identifies students for gifted education services in the areas of general intellectual aptitude (GIA) and specific academic aptitude (SAA). "Such students demonstrate superior reasoning; persistent intellectual curiosity; advanced use of language; exceptional problem solving; rapid acquisition and mastery of facts, concepts, and principles; and creative and imaginative expression beyond their age-level peers in selected academic areas." (VAC20-40-20) The Rockbridge County Public School division identifies students who have demonstrated superior aptitude or have the potential for high levels of accomplishment in the areas of English, mathematics, social studies, science, and/or reasoning; however, "we actively seek ways to allow specific parts of the gifted education program to any child who exhibits talent or unusual interest in the areas where gifted programs exist." (*RCPS 2014-2019 Local Plan for Gifted Education*)

Referrals may be made at any time by parents, legal guardians, teachers, professionals, students, peers, self, or others. Referrals will be accepted for kindergarten through twelfth-grade students. Referral forms can be obtained from the school and/or division gifted education coordinator and should be returned to the school and/or division gifted education coordinator.

## SCHOOL COUNSELING DEPARTMENT

The Rockbridge County High School Counseling Department employs **four** full-time counselors, each of whom has a master's degree in counseling. Counselors are assigned by the student's last name, designed to follow the student throughout their time in high school. The primary responsibility of the school counselor is to promote the academic, personal/social and college/career development of all students. Students may seek out their counselor on their own or be referred by a parent/guardian, teacher, or administrator. The counselors follow the Ethical Standards for School Counselors as developed by the American School Counselor Association. The Department's Comprehensive School Counseling Program consists of:

- **Academic Counseling** - Counseling which assists students and their families in acquiring knowledge of the curricular choices available to students, to plan a program of studies, and a choice of majors, to arrange and interpret academic testing, and to seek post-secondary academic opportunities.
- **College and Career Counseling** - Counseling which helps students acquire information and to plan action about jobs, apprenticeships, and post-secondary educational and career opportunities.
- **Personal/Social Counseling** - Counseling which assists students to develop an understanding of themselves and the rights and needs of others; to know how to resolve conflict; and to help to define individual goals, reflecting interests, abilities, and aptitudes.

The school counseling department provides many resources to students and families throughout the school year, including workshops, classroom visits, and both direct and indirect student services. Please visit the department's website (<https://www.rockbridge.k12.va.us/domain/397>) for more information. The department also publishes a weekly College and Career Newsletter via email.

### **FEE WAIVERS**

The RCHS Counseling Department is the primary avenue for receiving fee waivers for college applications and standardized testing (PSAT, SAT, ACT, and AP tests). Students and families are encouraged to speak with their assigned counselor to determine eligibility and to receive any fee waivers.

### **STANDARDIZED TESTING**

The RCHS Counseling Department provides opportunities for students to prepare for standardized testing (i.e. the SAT and ACT). Any student that is eligible for testing accommodations at RCHS (through an IEP or 504) is not automatically eligible for testing accommodations through the College Board or the ACT. Accommodations of this kind must be applied for through your student's school counselor. Families are encouraged to speak with their counselor early in the student's high school career, as the accommodation request process can take many weeks.

## **HIGH SCHOOL PROGRAM PLANNING INFORMATION**

RCHS is proud to offer a diverse curriculum of over 100 different courses that are designed to prepare students for the finest colleges and universities, for the highly technical workplace of the 21<sup>st</sup> century, or for postsecondary technical training. RCHS is organized on a traditional seven period school day. Students have the opportunity to earn up to seven credits (excluding off-site courses or independent study credits) per year.

### **CREDIT REQUIREMENTS FOR GRADE CLASSIFICATION**

A student's progress towards graduation is dependent upon the number of courses which he/she has satisfactorily completed. Credit is given for each course for which a grade of "60" or higher is earned. The suggested minimum credit requirements for maintaining progress toward graduation is as follows:

10<sup>th</sup> Grade - 5 credits

11<sup>th</sup> Grade - 10 credits

12<sup>th</sup> Grade - 15 credits

### **HIGH SCHOOL COURSES TAKEN IN MIDDLE SCHOOL**

High School Courses that are taught at the middle school are the same as the courses taught at the high school and therefore carry high school credit. Classes resulting in one high school credit include Algebra I, Foundations of Agriculture, Technology Foundations, World Language courses, Earth Science, and World History/Geography I. World Languages taken in parts require the student to complete both Part A and Part B to receive one high school credit. Classes resulting in a half credit include Individual Development, and Digital Applications. These courses will count toward fulfilling the credits needed for graduation. The grades received in these courses are included on the transcript and in the student's GPA.

**Students may choose to have a high school credit-bearing course expunged from the transcript. Students must repeat the course in order to take the next sequential class. For example, if a student decides to remove Algebra I, the student must retake Algebra I before taking Geometry. Students who choose to have high school credit courses expunged from the transcript must do so before entering the 9<sup>th</sup> grade. Contact either the middle school or high school counselor to assist you with this process.**

### **HONORS CLASSES**

Rockbridge County High School offers many courses which are accelerated and more in-depth than those of their grade-level counterparts. These advanced courses prepare students for the challenging environment of a four-year college. A significant amount of work outside of the classroom is expected. See course descriptions for class expectations.

### **ADVANCED PLACEMENT COURSES**

The Advanced Placement (AP) Examination Program is a service provided by the College Board. High school students have

the potential to earn college credit based upon their scores earned on the AP Exams. The granting of AP credit is solely at the discretion of the college. Students enrolled in an AP course must work at a college level throughout the course and put forth their best effort on the tests to be successful. The benefits of taking Advanced Placement courses include:

- Getting a head start on college-level work
- Improving writing skills and sharpening problem-solving techniques
- Developing the study habits necessary for tackling rigorous coursework
- Studying subjects in greater depth and detail
- The opportunity to earn credit or advanced standing at participating colleges and universities.

**Students who take an AP course may choose to pay for and take the AP test at the conclusion of the course. Any student may take an AP test, even if he or she is not enrolled in an AP course. Reduced fees are available to students who meet College Board's financial need guidelines. Please see your school counselor.**

### DUAL ENROLLMENT COURSES

In partnership with **Mountain Gateway Community College (MGCC)**, students may be eligible to receive college credit for courses taken at Rockbridge County High School. Students must apply to **MGCC**, have a 3.0 GPA for academic courses and 2.0 GPA for Career and Technical courses, and submit all paperwork and payment if applicable by the registration deadline. Students are awarded college credit upon completing the course with a grade of "C" or better. Dual Enrollment offerings each year will be dependent upon availability of instructors. **Dual enrollment costs could be the responsibility of the student. Fees are set annually by MGCC.** Please see your school counselor or teacher for more information.

### GRADING SCALE/GRADE POINT AVERAGE/CLASS RANK

Class rank and grade point average are cumulative and are calculated on the basis of all final year grades for any course taken for high school credit. The students having the highest and next highest grade point average at the time of graduation and have attended RCHS for three out of the last four semesters are the valedictorian and salutatorian, respectively. The valedictorian and salutatorian must earn an Advanced Studies Diploma.

RCHS has a 4.0 quality point grading scale. Quality points (GPA) are assigned to numerical values for the purpose of determining a numerical average. Quality points are assigned to grades earned in all courses for which credit is received.

A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83

C+	77-79
C	74-76
C-	70-73
D+	67-69
D	64-66

D-	60-63
F	0-59
	No Credit

### COURSE WEIGHTING

Certain courses are weighted to reflect course difficulty for the purpose of establishing an equitable and fair class rank. Honors courses are weighted by applying an additional 0.5 quality point. Advanced Placement (AP) and Dual Enrollment courses (taken for college credit) are weighted by applying an additional 1.0 quality point. The weights do not apply in the case of failure of a course. The weighting policy is intended to provide incentives for students to accept the challenge of an advanced course work.

### VIRGINIA HIGH SCHOOL LEAGUE RULES FOR ATHLETICS, FORENSICS AND ONE ACT PLAY ELIGIBILITY

- o **28-4-1 Scholarship Rule:** The student shall be currently enrolled in not fewer than five subjects, or their equivalent, offered for credit and which may be used for graduation, and have passed five subjects, or their equivalent, offered for credit which may be used for graduation the immediately preceding semester for schools that certify credit on a semester basis. **Students may not count a repeat class as part of the five if they have previously received credit for the class. All classes must be initial credit only.**
- o **28-4-2 Age Rule:** The student shall not have reached the age of 19 on or before the first day of August of the school year in which he/she wishes to compete.

### NCAA ACADEMIC ELIGIBILITY AND APPROVED COURSES

The NCAA Eligibility Center verifies the academic and amateur status of all student-athletes who wish to compete in Division I or II athletics. College-bound student-athletes who want to practice, compete and receive athletically related

financial aid during their first year at a Division I or II school need to meet specific course and test score requirements established by the NCAA. The NCAA does not set initial eligibility requirements in Division III. For current credit and testing requirements for Division 1 and Division 2 schools, please visit <http://www.eligibilitycenter.org>. Only RCHS courses that have been approved by the NCAA Eligibility Center are able to be used for eligibility. Please see the athletic director, or your school counselor for more information.

Interested students are strongly advised to register with the Eligibility Center no later than Junior year.

### **EARLY GRADUATION**

Students wishing to graduate early must receive the approval of the principal and their assigned school counselor through completion of an application. Applications are available in the school counseling office and must be completed no later than the last day of the school year preceding the student's intended final year in high school. For example, if a student wishes to graduate at the end of their Junior year, they must submit all application materials to their school counselor no later than the final day of their Sophomore school year. This allows us ample time to arrange a plan (i.e. utilizing summer school and/or after school programs to give the student every opportunity to be successful and ensure that required SOLs are completed. Any arrangements beyond these deadlines will be made at the discretion of the principal.

# ENGLISH

## English 9

*Grade Level: 9*

*Credits: 1 English Credit*

This course continues the development and utilization of English skills in reading, writing, speaking, organizing, and listening. This academic class emphasizes the reading and critical analysis of literature through short stories, drama, and novels. Language study includes vocabulary, usage, mechanics and grammar. Through varied and frequent short, analytical writing assignments, critical and creative book reviews, and imaginative compositions, students build upon their understanding of writing as a developmental process. Students practice discussion skills, cooperative learning skills, and oral presentation skills. Students will begin to use the library/resource lab and to develop research skills.

## English 9 Honors

*Grade Level: 9*

*Credits: 1 English Credit*

For this advanced course, students must be self-disciplined and willing to adhere to a high standard of excellence in their coursework. The curriculum consists of reading and analyzing classical and contemporary literature and writing literary analysis essays. In order to succeed in this class, students must demonstrate a strong work ethic, show responsibility for completing their assignments and possess the desire to learn. Throughout the year, students will be expected to read and analyze more than one piece of work at the same time, and many of the assignments are collaborative and require that all group members are focused and prepared to contribute fully. The class will include in-depth and analytical tests, assignments, and writings, and a student's base knowledge in literary and grammatical conventions should be strong. In addition, any student considering this course should be aware that motivation is a crucial component for success in this class and future honors and AP courses.

## English 10 – World Literature

*Grade Level: 10*

*Credits: 1 English Credit*

This course continues the development and utilization of English skills in reading, writing, speaking, organizing, and listening essential for college coursework and workplace readiness. This academic class emphasizes critical analysis of literature that encompasses several genres: short stories, novels, graphic novels, plays, essays, and poetry. Language study includes a study of affixes, grammar, and usage with emphasis placed on the recognition and use of phrases. Writing assignments include short in-class reactions to readings and in-depth persuasive papers and revisions. Students continue to develop cooperative learning and oral presentation skills with a primary focus on small group work. Research skills are introduced that prepare students for extensive research projects in their junior and senior years. Students explore research methods and materials in the library and learn to cite their information using the MLA style.

## English 10 Honors – World Literature

*Grade Level: 10*

*Credits: 1 English Credit*

For this advanced course, students must be highly motivated, intellectually curious, and academically committed. Literature study consists of reading and analyzing a variety of literary and nonfiction texts, comparing and contrasting the techniques authors use in literature of different cultures and eras. Student writing emphasizes expository and analytical writing, through which students expand their understanding of writing as a process, develop and refine arguments using rhetorical techniques, and advance their skills in revising to address a specific audience and purpose. Grammar, usage, and mechanics are reviewed throughout the year, with an emphasis on improving skills in punctuation (MLA formatting), active/passive voice, sentence structure, and paragraphing. The research process requires students to collect, evaluate, organize, and present accurate and valid information to create a research project, as well as learn to cite information using the MLA style. Language study continues to expand students' vocabulary through learning about connotations and denotations as well as Greek and Latin roots. Communication and collaboration skills are improved through small and large group discussions and presentations.

## English 11 - American Literature

*Grade Level: 11*

*Credits: 1 English Credit; 2 Verified English Credits with passing score on the End of Course SOL tests*

This academic course focuses on American literature and builds on the increasing expansion of skill development in reading, writing, research, speaking, organizing, and listening that is essential for college level work and

workplace readiness. Students read a variety of works surveying the development of American literature. Students enhance their language skills through advanced study and application of standard rules of usage, mechanics, and grammar with particular emphasis on the recognition and use of clauses and verbals. They complete a sophisticated study of vocabulary for SOL and SAT preparation. Through varied analytical and creative assignments, students reinforce their written and oral communication skills. They prepare at least one argumentative research paper based on a current issue.

### **Dual Enrollment English 11 - College Composition I (ENG 111)**

*Prerequisites: GPA of 3.0 or higher*

*Grade Level: 11*

*Credits: 1 English Credit; 2 Verified English Credits with passing score on the End of Course SOL tests; 3 college credits through Dual Enrollment*

This course combines the content for English 11 (American Literature) and ENG 111 (College Composition I) - This course introduces students to the writing process and the fundamentals of the academic essay. It teaches students to refine topics; develop and support ideas; investigate, evaluate and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences and purposes. Writing activities will include personal essays, arguments, summaries and paraphrases, documented essays and electronic communication. Students will also read a variety of works that survey the development of American literature. They will compare themes of various works and periods of literature and analyze expository materials for logical reasoning. In addition to many informal writing assignments, students will produce 20 pages of revised, graded text, including at least two documented essays in the first quarter.

### **Advanced Placement Language & Composition**

*Grade Level: 11*

*Credits: 1 English Credit; 2 Verified English Credits with passing score on the End of Course SOL tests*

The Advanced Placement Language and Composition course helps students advance their reading and writing skills by advancing their understanding of language. Through their examination of the rhetorical appeals and devices, students will become more adept at reading intricate texts and more proficient at writing rich, complex prose that communicates effectively. Students should be prepared to read and write extensively. While students will read works of fiction, this course focuses on non-fiction presented in a variety of rhetorical contexts, including essays, speeches, letters, as well as full length works. Students will utilize the writing process in order to explore their ideas and draft and revise their work. Through this process students will become more self-aware and flexible writers, paying particular attention to the roles of speaker, audience, and subject/purpose, in order to write in a variety of modes including but not limited to expository, analytical and argumentative compositions that introduce an elaborate central idea that is developed with appropriate evidence drawn from primary and/or secondary sources, cogent explanations, and clear transitions. Students should be prepared to read and write daily both in and out of class so as to participate fully in classroom discussions and activities. Members of this class should exhibit a curiosity for language and a love of both reading and writing. They should be motivated, independent, and responsible learners, and be prepared to take the AP Exam in May.

### **English 12 - British Literature**

*Grade Level: 12*

*Credits: 1 English Credit*

This course continues the development and application of English skills in reading, speaking, organizing, and listening essential for college coursework and the workplace. In this academic class, students read and analyze a variety of genres in British and world literature, including epics, drama, poetry, and novels. As part of their study of the development of British literature, students explore the historical and cultural context of representative works from Anglo-Saxon to modern times. Students continue to develop logical thinking and research skills, exhibiting their master of these skills through varied written and oral activities, including analytical papers and a 10-15 minute oral presentation. Students also complete an extended research project and essay based on their post graduation plan; the project and the essay include correct use of MLA formatting throughout. Additionally, students will demonstrate competence in communication skills through participation in class discussions, group work, and the mock interview project. Language study includes incorporation of vocabulary, application of standard usage, and consideration of purpose and audience to determine focus and style.

## **Dual Enrollment English 12 - College Composition II (ENG 112)**

*Prerequisites: Grade of C or higher in Dual Enrollment English 11/College Composition I (ENG 111) GPA 3.0 or higher*

*Grade Level: 12*

*Credits: 1 English Credit; 3 college credits through Dual Enrollment*

This course 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 read a selection of poetry, drama, short fiction, and novels from both American and British literature. Students are required to locate, evaluate, integrate, and document sources and effectively edit for style and usage. In addition to many informal writing assignments, students will produce a minimum of 20 pages of revised, graded text over the course of the year.

## **Advanced Placement Literature and Composition**

*Grade Level: 12*

*Credits: 1 English Credit*

English 12 AP helps students strengthen their skills as careful readers of literary texts, including poetry, drama, fiction, and non-fiction, through the meticulous examination of language and literary devices. In addition to many selections from the British Literature text and other sources, students read more than six major works over the course of the year. In conjunction with their reading, students discuss and write insightfully and persuasively. Student writing will be intensive, consisting of at least one formal paper each quarter, multiple reading journals, and many timed essays. Successful student writing is original, eloquent, fully developed, logically argued, and soundly supported by appropriate textual references. Members of this class should exhibit a love of both reading and writing. They will be held to high expectations and should be motivated and independent learners. The objective of the course is to improve students' reading and writing skills, thus preparing them to take the AP Literature and Composition exam in May, and more importantly, to prepare them for college success.

## **Creative Writing**

*Grade Levels: 10-12*

*Credits: 1 Elective Credit*

The course is designed to help highly motivated students write better in a writing workshop format. The class discusses the many sources of creative writing ideas, how to start writing, how to let a piece take on a life of its own, the power of using images from all senses; the importance of using the sounds of words; the importance of using precise diction; the effects of cadence and rhythm on meaning; the effects of forms, patterns and structures; the development of story, character, setting and point of view. The class will discuss model pieces, write their own, read them aloud, share their observations of others' work and revise their own pieces in a workshop setting. The class will free-write to designated prompts, engage in group writing exercises, write observations in journals, distill these ideas into pieces which can be discussed in a workshop and then be revised several times. Students should produce several poems or several pages of story each week. Students will be encouraged to publish their work. Students who do well in the class and want to repeat it may do so with approval from the teacher.

## **News Media and Film Studies**

*Grade Levels: 9-12*

*Credits: 1 Elective Credit*

News Media and Film Studies will explore a multitude of topics to engage learners in how they interact with media around them. The first semester of the class will be News Media focused. The topics will include: history of journalism, press law and ethics, constitutional protection of freedom of speech and press, newswriting, publication design, broadcast news, photojournalism, etc. The second semester of the class will be Film Studies focused. Students will view selections from films as well as full-length feature films from a variety of genres. As we study these films, students will also learn the basics of film analysis, genre, narrative structure, and develop skills to analyze, describe, and enjoy film as art and entertainment. The class will include weekly readings, screenings, and short writing assignments. Students should be motivated, curious, independent, and creative.

## **Journalism I, II, III**

*Grade Levels: 10-12*

*Credits: 1 Elective Credit*

Journalism I: This course is designed to teach the principles, techniques, and processes used in publishing a high-quality student newspaper. All students are required to write, revise, take pictures and participate in creating weekly broadcast videos. Much of the work takes place out of the class on the student's own time. Students need to be highly motivated, curious, independent, creative, prompt, personable, and dependable. This class combines academic classroom work,

teamwork, and business skills.

Journalism II: This course provides students with the opportunity to develop further the skills learned in Journalism I. Students are given increased responsibility and opportunity for leadership.

Journalism III: This course allows students to enhance the skills of writing, editing, ad design, ad sales, layout and photography already developed in Journalism I and II. The knowledge gained in the two previous years enables third-year students to develop more creativity and individuality in their leadership and in their peer-teaching of first and second-year students.

## HEALTH & PHYSICAL EDUCATION

### **Physical Education 9 / Health 9 / First Aid- CPR/AED TRAINING**

*Grade Level: 9*

*Credits: 1 Health/PE Credit & 1 First Aid Credit.*

Physical Education is designed to develop physical fitness and your overall health. Physical activities consist of physical fitness testing (state mandated), general fitness activities, bicycle safety and awareness, flag football, volleyball, basketball, badminton, disc golf, fitness stations and overall bodyweight exercises working towards lifelong fitness. Students are required to have a proper change of clothing daily for class. For hygiene reasons, the department strongly encourages students to shower after each class and bring fresh clothing when needed. It is the student's responsibility to bring their own towel.

Health 9 discusses and integrates a wide variety of health concepts, skills, and behaviors to plan their personal, lifelong goals. The students will study units in Physical Fitness and Personal Health, Human Anatomy/ Physiology, Nutrition, Dangers of Alcohol and Drugs, Body Systems, Family Life, and Communicable Diseases.

Requirements for the standard and advanced diplomas shall include a requirement to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation.

### **Physical Education 10 / Health 10 / Drivers Education**

*Grade Level: 10*

*Credits: 1 Health/PE Credit*

Physical Education consists of exercise and skill development in individual and team sports with an emphasis on lifetime activities. Units consist of physical fitness testing (state mandated), general fitness activities, flag football, advanced volleyball and basketball, badminton, floor hockey, bowling, softball, Frisbee, lacrosse, tennis and soccer. The students are required to have a proper change of clothing daily for class. For hygiene reasons, the department strongly encourages students to shower after each class and bring fresh clothing when needed. It is the student's responsibility to bring their own towel.

The purpose of driver education is to provide students with a detailed understanding of the fundamentals of driving and to foster responsible driving attitudes and behaviors. The students are required to complete a minimum of 36 hours of Driver Education classroom instruction. This curriculum consists of 11 modules that include: licensing responsibilities, basic maneuvering, information processing, driver performance and responsibilities, and making informed choices. Students will also learn about the importance of maintaining physical, mental, social, and emotional health which will include an increased understanding of mental illnesses, challenges, and treatments. Students will develop skills to promote self-care. Tests, quizzes and a final exam are required. This will take place during the first semester.

In tenth grade Health, students will demonstrate comprehensive health and wellness knowledge and skills. Their behaviors will reflect a conceptual understanding of the issues associated with maintaining good personal health. They will learn to serve the community through the practice of health-enhancing behaviors that promote wellness throughout life. This will take place during the second semester.

### **Strength Training I**

*Grade Levels: 9-12*

*Credits: 1 Elective Credit.*

This elective course is for individuals interested in building muscular strength and endurance. There will be a focus on core strength. The course serves as an introduction to weight lifting equipment and weight training for the novice. The students will learn proper form and handling of weight training equipment along with a general understanding of weight room safety and etiquette.

### **Strength Training II, III, IV**

*Prerequisites: Strength Training I*

*Grade Levels: 10-12*

*Credits: 1 Elective Credit*

This class will serve the intermediate and advanced lifter through the identification of individual goals and development of personalized weight training programs. The students will be introduced to the differences between absolute and relative strength. This class focuses on total body development.

## **HISTORY AND SOCIAL SCIENCES**

### **World History I**

*Grade Level: 9*

*Credits: 1 History & Social Science Credit*

Students examine the historical development of people, places, and patterns of life from ancient times until 1500 A.D. in terms of the impact on western civilization. The study of history rests on knowledge of dates, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking to raise questions and to show evidence in support of their answers. Skills developed include chronological thinking, historical comprehension, historical analysis, and historical research.

### **World History & Geography II (from 1500 to present)**

*Grade Level: 9*

*Credits: 1 History & Social Science Credit; 1 History & Social Science Credit with passing score on the End of Course SOL test*

World History II incorporates a study of history and geography from the Renaissance (1500 A.D.) to the present with a strong emphasis on the history and development of Western civilization. Topics include the evolution of scientific and technological revolutions which create new economic models; social and political changes; the biographies of individuals who contributed to societal development. Strong connections are drawn between historical events and contemporary issues.

### **World History & Geography II Honors**

*Grade Level: 9*

*Credits: 1 History & Social Science Credit; 1 Verified History & Social Science Credit with passing score on the End of Course SOL test*

This advanced and fast-paced course serves as a topical study of the major themes in the genre of modern World History, particularly the sub-genre of Western Civilizations. This survey course expects students to master a wide range of content material beyond the Virginia Standards of Learning. Additionally, students will gain the analytical and critical thinking skills necessary for understanding not only a complicated and turbulent global past but also how the modern world has been shaped by that past. This course is intentionally designed to aid in the preparation for further studies at the Advanced Placement and collegiate level. Students are expected to complete a variety of rigorous assignments including but not limited to extensive out of class readings, essays, projects, and research assignments.

### **Modern World History AP**

*Grade Levels: 10-12*

*Credits: 1 History & Social Science Credit*

This college-level course will provide students with an introduction to the field of world history, a discipline that focuses on viewing history from a global perspective rather than that of a particular culture or nation. The course provides students with a robust overview of major historical developments and processes from 1200 C.E. until the present day. Students will also gain an exposure to the basic reasoning processes and historical thinking skills that are used by world historians. The course is designed to imitate a 100-level introductory world history course offered at the undergraduate level (3 credit hours). Students should expect to devote a noticeable amount of time outside of class on reading and writing assignments. Students will have the opportunity to attempt to earn college credit for this class through the College Board AP Exam administered at the end of the year.

## **Virginia & U.S. History**

*Grade Level: 11*

*Credits: 1 History & Social Science Credit; 1 Verified History & Social Science Credit with passing score on the End of Course SOL test*

Students examine and analyze the development of American ideas and institutions from the Age of Exploration to the present. Students acquire knowledge of American culture through a chronological survey of major issues, movements, people and events in United States and Virginia history. Students 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.

## **Dual Enrollment Virginia & U.S. History (HIS 121/HIS 122)**

*Prerequisites: GPA of 3.0 or higher*

*Grade Level: 11*

*Credits: 1 History & Social Science Credit; 1 Verified History & Social Science Credit with passing score on the End of Course SOL test; 6 College Credits*

**HIS 121** A survey of American life from the pre-Colonial Era to 1877, with emphasis upon the political, cultural, diplomatic, and societal forces, which have shaped its development. This course explores the dynamics of imperial rivalry, relations between European, African and Native American peoples, economic development and regional differentiation, the emergence of revolutionary nationalism, westward expansion, and Civil War and Reconstruction.

**HIS 122** Surveys the general history of the United States from 1865 to the present and allows students to reach a basic understanding of the characteristic features of the United States' historical development in the late 19th, 20th & early 21st centuries. Students will learn about some of the important political, economic, social, intellectual, cultural and religious changes that shaped the development of the United States since 1865.

## **Virginia & U.S. History AP**

*Grade Level: 11*

*Credits: 1 History & Social Science Credit; 1 Verified History & Social Science Credit with passing score on the End of Course SOL test*

The course offers a survey of Virginia and U. S. History from 1492 to the present. A college- level text is required, and all parallel readings are typical of those required in a college-level course. Students must have superior writing skills and an ability to work with **minimal supervision** and direction. Students who enroll in this course must be prepared for a substantial amount of required reading. Much of that reading will be considerably more difficult than previously encountered. Students must possess skills needed to interpret primary documents and to write analytical essays. Students should be motivated, independent, and responsible learners, and be prepared to take the AP Exam in May.

## **Virginia & U.S. Government**

*Grade Level: 12*

*Credits: 1 History & Social Science Credit*

Students examine the philosophy and the structure and functions of American government at the federal and state levels. The focus is on political decision-making, comparative political and economic systems, global issues and the student's responsibilities as a citizen. Critical thinking and analytical writing are refined.

## **Dual Enrollment Government: American Government/State and Local Politics (PLS 135/PLS 136)**

*Prerequisites: GPA of 3.0 or higher*

*Grade Level: 12*

*Credits: 1 History and Social Science Credit; 6 college credits*

**PLS 135** This course teaches political institutions and processes of the national government of the United States. It focuses on Congress, the Presidency and the Courts and on their interrelationships and gives attention to public opinion, suffrage, elections, policy, political parties, interest groups, civil rights, domestic policy and foreign relations. We use case studies, both historical and contemporary, of government decision-making, to help the student gain an understanding of governmental operations and provide insight into contemporary social issues. We will cover these issues within the context of the American political system and the major institutions of the Constitutional system.

**PLS 136** Teaches structure, powers, and functions of state and local government in the United States as related to federalism; constitutionalism; elections; powers of legislative, executive, and judicial powers of state and local government; state-local-federal relations; fiscal matters; metropolitan issues; and policy issues, like health, education, criminal justice and welfare. The assignments in the course require college-level reading fluency and coherent communication through written reports.

A major objective of both courses is to provide you with the tools and knowledge necessary for the analysis of current political events that affect you and your society. We will study the interaction of political interests, ideas, institutions, and individuals to see how they result in public policy. Ideally, you will become more aware of your role in the political process and develop a better understanding of how the U.S. system of government and politics operates, and increase your ability for critical evaluation and expression.

### **Advanced Placement Government**

*Grade Level: 12*

*Credits: 1 History & Social Science Credit*

Advanced Placement United States Government and Politics (Fall Semester): This college-level course provides students with an introductory overview of the government and politics of the United States. The first part of the course surveys the constitutional origins, institutional structures, and basic policies of the United States Government. Then the course surveys United States politics by introducing students to the following topics: political culture, political ideology, both individual and institutional political participation, civil liberties, and civil rights. Students will also gain an exposure to the basic disciplinary practices that are used by political scientists. This course is designed to emulate a 100/200-level introductory political science course offered at the undergraduate level (3 credit hours). Students should expect to devote frequent time outside of class on reading, writing, and research assignments. Students will have the opportunity to attempt to earn college credit for this class through the College Board AP Exam administered at the end of the year.

Advanced Placement Comparative Government and Politics (Spring Semester): This college-level course provides students with an introductory overview of the comparative study of government and politics around the world. The course explores several key areas of study, such as political systems/regimes, political institutions, public policy/economic systems, and globalization. Students will learn about these topics by focusing on six key countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students will also gain an exposure to the basic disciplinary practices that are used by political scientists. This course is designed to emulate a 100/200-level introductory political science course offered at the undergraduate level (3 credit hours). Students should expect to devote considerable time outside of class to reading, writing, and research assignments. They will have the opportunity to earn college credit for this class through the College Board AP Exam administered at the end of the year.

### **African American History**

*Grade Level: 10-12*

*Credits: 1 Elective Credit*

In this course, students will examine the role that African Americans have played in American history. The course begins by studying the role of Africans in the Atlantic World prior to the Age of Colonization and continues until contemporary times. Students should expect to be introduced to mature themes and content, as the course will cover topics such as the enslavement of African Americans and the pursuit for civil rights that is still continuing today.

### **Introduction to African American Studies Dual Enrollment (HUM 220) - must take with Intro to Non-Western Cultures DE**

*Prerequisites: GPA of 3.0 or higher*

*Grade Level: 11-12*

*Credits: .5 Elective Credit; 3 college credits*

Presents an interdisciplinary approach to the study of African-American life, history, and culture. Examines specific events, ideologies, and individuals that have shaped the contours of African-American life. Studies the history, sociology, economics, religion, politics, psychology, creative productions, and culture of African-Americans. The assignments in this course require college-level reading, analysis of scholarly studies, and coherent communication through properly cited and formatted written reports.

### **Introduction to Non-Western Cultures Dual Enrollment (HUM 216) - must take with Intro to African American Studies DE**

*Prerequisites: GPA of 3.0 or higher*

*Grade Level: 11-12*

*Credits: .5 Elective Credit; 3 College Credits*

Introduces students to beliefs, historical developments, and forms of creative expression that have shaped cultures in regions outside Europe and North America (non-western). Studies the cultures, values, creative expressions, and historical development of selected non-western regions of the world: Asia, Africa, Middle East, Oceania, or the Pre-Columbian Americas. This is a Passport and UCGS transfer course.

### **Special Topics in History - Must take both semesters**

*Grade Level: 9-12*

*Credits: 1 Elective Credit (does not count toward History credits needed for graduation)*

#### **Introduction to World Religions (one semester)**

This general education course will examine many of the major religions of the world. This includes but is not limited to religions that originated in Southwest Asia (Judaism, Christianity, Islam), East Asia (Daoism, Confucianism, Shinto), and South Asia (Hinduism, Buddhism, Jainism, Sikhism). The class will give students a basic understanding of these religions in terms of their historical development, worldview, and ritual practices. Students will also briefly explore the development of religions as well as the impact that religions have on the modern world. This class will be approached from an academic perspective, rather than a theological perspective. Students will be expected to complete some outside of class reading assignments (including religious texts as primary sources), and some minor outside of class writing and research assignments.

#### **20<sup>th</sup> Century American History (one semester)**

This course will take a more detailed look at understanding and examining the events of 20<sup>th</sup> century America and the impact those events had on American history. Themes of immigration, war, changes in society, as well as American government are topics to be explored. Examples of events in American history to be covered would include, but are not limited to, the World Wars, Great Depression, Cold War, and Civil Rights Movements. Students will analyze how 20<sup>th</sup> century events impacted America at that time, as well as how they have shaped American history since. Students will be expected to complete outside of class reading assignments and to complete a variety of assignments which could include essays, projects or research assignments.

### **Sociology Honors**

*Grade levels: 10-12*

*Credits: 1 elective credit*

Students examine the way people interact with one another in society, and the ways that society influences individual and group actions. Sociology involves learning about relationships within groups, between groups, and in society as a whole. Topics studied include culture, group dynamics (such as conformity, obedience, and norms), deviance, criminal justice, social inequalities/power dynamics, family, work, religion, medicine, media, and sports. Students will be expected to complete journal, reading, and writing assignments outside of class

## **MATHEMATICS**

### **Algebra I**

*Grade Level: 9*

*Credits: 1 Math Credit; 1 Verified Math Credit with passing score on the End of Course SOL test*

The focus of this course is on building connections between concrete mathematics and abstract concepts. This course includes the study of real numbers, development of algebraic vocabulary, identification of properties of numbers and operations, simplification of numerical and algebraic expressions, solutions of equations and inequalities, and exploration of graphing techniques. Emphasis is placed on the development of skills in factoring polynomials, simplification of rational expressions, and working with radicals. Students will acquire proficiency in coordinate graphing, solving systems of equations, working with relations and functions, and solving quadratic equations. Students will use graphing calculators extensively in class.

#### **Algebra I Part I**

*Grade Levels: 9*

*Credits: 1 Elective Credit\*; One Math Credit upon completion of Algebra 1 Part II*

Algebra I Part I is the first year course of a two-year algebra sequence covering the same topics as Algebra I. In this two-year sequence, students have additional time to develop the algebraic skills needed to succeed in higher mathematics. The course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols. The active engagement of students along with the use of manipulatives and technology, particularly DESMOS- an online graphing program that will be required for SOL testing, will allow students to develop an understanding of the mathematical principles they are learning. Students will take the Algebra I Standards of Learning test at the end of the second year.

## **Algebra I Part II**

*Prerequisites: Successful completion of Algebra I Part I*

*Grade Levels: 10*

*Credits: 1 Elective Credit\*; 1 Verified Math Credit with passing score on the End of Course SOL test*

Algebra I Part II is the second-year course of a two-year algebra sequence covering the same topics as Algebra I. In this two-year sequence, students have additional time to develop the algebraic skills needed to succeed in higher mathematics. The course focuses on the development of problem-solving skills and the acquisition of mathematical vocabulary and symbols. The active engagement of students along with the use of manipulatives and technology, particularly graphing calculators and DESMOS, will allow students to develop an understanding of the mathematical principles they are learning. Students will take the Algebra I Standards of Learning test.

*Education's Guidelines on Credit Accommodations allow students with disabilities who are eligible for credit accommodations in mathematics to use each part of Algebra I, Parts I and II, to earn a standard credit towards the three mathematics credits required for the Standard Diploma only.*

## **Geometry**

*Prerequisites: Successful completion of Algebra I*

*Grade Levels: 9-11*

*Credits: 1 Math Credit; 1 Verified Math Credit with passing score on the End of Course SOL test*

The focus of this course is the development of reasoning skills and methods of justification. Emphasis is placed on the study of plane and three-dimensional geometry, coordinate and transformational geometry, and the use of geometric and algebraic models to solve problems. Course content includes topics such as points, lines, and planes; angles; polygons; perpendicular and parallel lines; proportionality and similarity; coordinate geometry; circles; solid figures; Pythagorean theorem; and trigonometric ratios. Geometric proofs and problem solving are used to develop analytical reasoning skills and to improve the ability of the student to apply logic in the analysis of problems. Special Projects may be assigned. Students will use graphing calculators extensively in class.

## **Geometry Honors**

*Prerequisites: Successful completion of Algebra I*

*Grade Levels: 9-10*

*Credits: 1 Math Credit; 1 Verified Math Credit with passing score on the End of Course SOL test*

*Requirement: Graphing calculator TI-83/84 plus provided by the student. These calculators will also be needed for college preparatory standardized testing. (Special arrangements will be made for students who cannot purchase a calculator)*

For this course, students must be highly motivated and possess strong mathematical skills. This advanced class offers a challenging and accelerated study of geometric concepts as well as building on Algebra I skills. The focus is on the development of reasoning skills and methods of justification. Emphasis is placed on the study of plane and three-dimensional geometry, coordinate and transformational geometry, and the use of geometric and algebraic models to solve problems. Course content includes topics such as points, lines, and planes, angles, polygons, perpendicular and parallel lines, proportionality and similarity, coordinate geometry, circles, solid figures, and trigonometric ratios. Strong emphasis is placed upon geometric proofs and problem solving to develop analytical reasoning skills and to improve the ability of the student to apply logic in the analysis of problems. Students will use graphing calculators extensively in class.

## **Algebra, Functions and Data Analysis**

*Prerequisites: Successful completion of Algebra I*

*Grade Levels: 10-12*

*Credits: 1 Math Credit*

This course expands on the skills learned in Algebra I with a focus on applying them to real world applications. Major topics include utilizing algebra to: outline an annual budget, research loans, develop a small business, and plan out a road trip. Students will use technology to gather relevant data from the internet and make appropriate calculations. Students will work individually and collaboratively on short-term and long-term projects, and present their ideas to their classmates.

## **Computer Math**

*Prerequisites: Successful completion of Algebra, Functions and Data Analysis*

*Grade Levels: 11-12*

*Credits: 1 Math Credit*

This course expands on the skills learned in Algebra, Functions and Data Analysis with a focus on using computers to accomplish tasks. Major topics include using spreadsheets to manage finances, creating circuits to practice logic, and basic

computer programming. The goal of the course is to promote real-life problem-solving skills and financial independence.

## **Algebra II**

*Prerequisites: Successful completion Geometry*

*Grade Levels: 10-12*

*Credits: 1 Math Credit; 1 Verified Math Credit with passing score on the End of Course SOL test*

The focus of this course is on developing an understanding of advanced algebraic concepts. Concepts which have been presented in Algebra I and Geometry are reviewed, expanded, and strengthened. Emphasis is placed on the study of functions, polynomials, rational expressions, and complex numbers. New topics to be introduced include transformational graphing, and sequences and series. Mathematical models for solving practical applications are developed.

## **Algebra II Honors**

*Prerequisites: Successful completion Geometry*

*Grade Levels: 10-11*

*Credits: 1 Math Credit; 1 Verified Math Credit with passing score on the End of Course SOL test Requirement: Graphing calculator TI-83/84 plus provided by the student. These calculators will also be needed for college preparatory standardized testing. (special arrangements will be made for students who cannot purchase a calculator)*

For this course, students must be highly motivated and possess strong mathematical skills. This advanced class offers a challenging and accelerated study of advanced algebraic concepts. Emphasis is placed on the study of functions, polynomials, rational expressions and complex numbers. New topics that are covered include transformational graphing, matrix operations, sequences and series, logarithms, probability, and trigonometry.

## **Grade 12 Capstone**

*Prerequisites: Successful completion Algebra II*

*Grade Levels: 12*

*Credits: 1 Math Credit*

This course is designed to prepare college-bound seniors with skills that will be essential for success in freshman level classes. Students going to college but not planning to major in a math-related field will find this class especially helpful. The course is application-based and combines mathematics concepts learned in previous high school courses with research methods and computer application skills. Students will frequently practice research based writing skills in preparation for college level work. Instruction will be delivered through researching real life issues to produce projects that demonstrate understanding and could possibly be presented to appropriate community leaders.

## **Pre-Calculus**

*Prerequisites: Successful completion of Algebra II*

*Grade Levels: 11-12*

*Credits: 1 Math Credit*

*Requirement: Graphing calculator TI-83/84 plus provided by the student. These calculators will also be needed for college preparatory standardized testing (Special arrangements will be made for students who cannot purchase a calculator).*

The focus of this course is to prepare students for the study of Calculus by strengthening Algebra II skills and by developing an understanding of trigonometry and advanced algebraic concepts. Emphasis will be placed upon a review of Algebra II skills, use of trigonometric methods, analysis of functions (including exponential and logarithmic functions), and an introduction to the study of limits. The course is designed to provide the skills and problem-solving abilities in college level mathematics for those students not majoring in mathematics or engineering.

## **AP Precalculus**

*Grade Levels: 11-12*

*Credits: 1 Math Credit*

*Requirement: Graphing calculator TI-83/84 plus provided by the student. Special arrangements will be made for students who cannot purchase a calculator)*

The goal of this course is to prepare students for AP Calculus. The course is intended for students who have mastered the concepts presented in Geometry and Algebra II. Students will further investigate topics from these courses both graphically and analytically. Emphasis is placed on deriving formulas and finding ways to work problems without a calculator. Major topics include functions, logarithms, trigonometry, vectors, conics, sequences and series. This course is designed to develop the skills and problem-solving abilities that are required in college level mathematics and science courses.

## **Pre-Calculus Dual Enrollment (MTH 163/164)**

*Prerequisites: Successful Completion Algebra II; GPA 3.0 or higher*

*Grade Levels: 11-12*

*Credits: 1 Math Credit; 6 College Credits if taken for Dual Enrollment*

*Requirement: Graphing calculator TI-83/84 plus provided by the student. These calculators will also be needed for college preparatory standardized testing. (special arrangements will be made for students who cannot purchase a calculator)*

The focus of this course is to prepare students for the study of Calculus. The course is intended for those students who grasped the concepts presented in Algebra II and Geometry. Emphasis is placed on college algebra, matrices, algebraic, exponential, and logarithmic functions, trigonometry, analytic geometry, conics, and vectors. This course is designed to develop the skills and problem-solving abilities that are required in entry level college mathematics. This course is not recommended for students who plan to take AP Calculus BC/DE. Students planning on taking AP Calculus BC during their senior year should register for Pre-Calculus Pre-AP.

### **AP Statistics**

*Prerequisites: Successful completion of Algebra II*

*Grade Levels: 11-12*

*Credits: 1 Math Credit*

*Requirement: Graphing calculator TI-83/84 plus provided by the student. These calculators will also be needed for college preparatory standardized testing. (special arrangements will be made for students who cannot purchase a calculator)*

This course presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing (one-sample and two-sample case for mean and proportion), correlation, and simple linear regression. Selected nonparametric testing procedures are also introduced. Technology will include graphing calculators. Students should be motivated, independent, and responsible learners, and be prepared to take the AP Exam in May.

### **AP Calculus AB/Dual Enrollment (MTH 263)**

*Prerequisites: Pre-Calculus, AP Pre-Calculus, or Pre-Calculus DE; GPA 3.0 or higher*

*Grade Level: 12 Credits: 1 Math Credit; 4 College Credits if taken for Dual Enrollment Requirement:*

*Requirement: Graphing calculator TI-83/84 plus provided by the student for college preparatory standardized testing. (special arrangements will be made for students who cannot purchase a calculator)*

This course is intended for seniors who have passed DE or Pre-AP Pre-Calculus but are not ready for AP Calculus BC. This is a college level course with college credit available through the Advanced Placement Test or Dual Enrollment credit, so the expectations of effort and performance are very high. The course is divided into two main topics: differential and integral calculus. Concepts include limits, continuity, rates of change, area under a curve, and the Fundamental Theorem of Calculus. Emphasis is placed on developing problem solving skills to apply calculus in real-world situations and communicating mathematical solutions verbally and in writing. Technology will be used to experiment, interpret results, and verify conclusions. Completion of a summer assignment prior to the first day of class is expected.

### **AP Calculus BC/Dual Enrollment (MTH 263/264)**

*Prerequisites: Pre-Calculus, AP Pre-Calculus or Pre-Calculus DE (MTH 163/164); GPA 3.0 or higher*

*Grade Level: 12 Credits: 1 Math Credit; 8 College Credits if taken for Dual Enrollment (4 per semester)*

*Requirement: Graphing calculator TI-83/84 plus provided by the student for college preparatory standardized testing (special arrangements will be made for students who cannot purchase a calculator)*

Topics studied in this course are based upon the Calculus BC curriculum as prescribed by the College Board. This is a college level course with college credit available through the Advanced Placement Test or Dual Enrollment credit, so the expectations of effort and performance are very high. The course is intended for students who have a thorough knowledge of analytical geometry and extensive understanding of functions (including trigonometric functions) as presented in Algebra I & II, Geometry, and Pre-Calculus. The course is divided into two main topics: differential calculus and integral calculus. Within this framework, students investigate the central concepts of calculus, including limits, continuity, rates of change, and area under a curve. Major emphasis is placed on the development of problem solving skills based on these concepts, and applications of calculus in real-world situations will be stressed. Students planning to take this course should take Pre-Calculus Pre-AP during their junior year (see description above.) Students planning on taking AP Physics C Mechanics must also enroll in AP Calculus BC. Completion of a summer assignment prior to the first day of class is expected.

### **AP Computer Science Principles**

*Prerequisites: Successful completion of Geometry*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course offers a multidisciplinary approach to teaching the underlying principles of computation. Students will be introduced to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Students will be expected to participate in the AP examination in the spring.

## SCIENCE

### Earth Science

*Grade Levels: 9*

*Credits: 1 Science Credit; 1 Verified Credit with passing score on the End of Course SOL test*

Earth Science provides the foundation for most of the science courses offered. This course examines earth's features and processes and its placement in the universe. Emphasis is placed on the constant changes that earth undergoes, and how those changes affect landforms, rock structures, and life itself. The class provides instruction in the areas of astronomy, meteorology, geology, ecology, and oceanography through laboratory experiences, group activities, projects, and writing assignments.

### Environmental Science

*Grade Levels: 9*

*Credits: 1 Science Credit*

This course explores, investigates, and analyzes fundamental components and interactions that make up the natural systems of the earth. Investigations of concepts in geology, biology, and chemistry are necessary to understand and address environmental issues for our students today. Focus on scientific inquiry includes earth systems and resources such as rocks, solid earth, soils, atmosphere, oceans; land and water use; ecosystems; population dynamics; energy resources and consumption; pollution; and global change. This course is founded on the Virginia Environmental Science Course Content and Process Guidelines which are designed to continue the student investigations that began in grades K-8. These outcomes integrate the study of many components of our environment, including human interaction on the physical world, the living environment, resource conservation, and legal and civic responsibility. Instruction focuses on student data collection and analysis through laboratory experiences, field work, and community involvement.

### Biology

*Grade Level: 9-10*

*Credits: 1 Science Credit; 1 Verified Science Credit*

This laboratory-oriented course is designed to provide students with a background in biological concepts while experiencing proper experimental design and analysis. The course builds on concepts taught in Earth Science and uses these concepts to focus on the life processes within the cell such as photosynthesis, cellular respiration, and protein synthesis. Other units include cell reproduction, genetics, biotechnology, evolution, taxonomy, and ecology. Research skills, projects, and laboratory reports are utilized to assist students in developing higher level thinking skills.

### Biology Honors

*Grade Level: 9-10*

*Credits: 1 Science Credit; 1 Verified Science Credit with passing score on the End of Course SOL test*

Biology Honors is a rigorous course which prepares students for the Biology Advanced Placement course. Students will be expected to develop proper laboratory skills, demonstrate experimental design, and write at an advanced technical level. The course provides an in-depth look at all areas covered in biology. Additional work outside of the classroom, rigorous tests, independent projects, and formal papers will be emphasized. ONLY students who are willing to commit to additional time outside of the classroom should consider taking this course. Students successfully completing the course will be strongly encouraged to register for Biology AP their junior year.

### Chemistry

*Prerequisite: Algebra II or concurrent enrollment*

*Grade Levels: 10-12*

*Credits: 1 Science Credit; 1 Verified Credit with passing score on the End of Course SOL test*

This course introduces students to fundamental concepts and skills in chemistry through interactive demonstrations and hands-on laboratory experiences. Students will explore key chemistry topics that build on one another, with a strong emphasis on applying mathematical principles. To foster critical thinking and prepare for college-level coursework, students will engage in written reports, projects, and laboratory documentation. Daily homework assignments will be essential for reinforcing concepts and ensuring mastery of the material.

### **DE Chemistry 101/Chemistry Honors**

*Prerequisite: Algebra II or concurrent enrollment*

*Grade Levels: 10-12*

*Credits: 1 Science Credit; 1 Verified Science Credit with passing score on the End of Course SOL test*

Chemistry Honors is an accelerated course that prepares students for AP Chemistry. Students should be prepared for a rigorous pace of study, as the course work and laboratory work progress through the topics of matter and reactions, and an introduction to thermochemistry, equilibrium, kinetics, and electrochemistry. Strong math skills are essential to the applied mathematical calculations that will be utilized throughout the coursework and laboratory work. Students should be able to commit to additional time outside of the classroom for problem sets, reading, and lab work.

### **Earth Science II: Advanced Studies in Earth Science Topics**

*Grade Levels: 10-12*

*Credits: 1 Science Credit*

ES II builds upon topics covered in Earth Science and delves deeper into areas such as oceanography, geology, climate impact, and astronomy. This course will also explore historical and contemporary environmental issues. Students will inquire into regional and global environmental issues in geoscience and identify causes, effects, and potential solutions to problems. Students will also explore evidence for changes in ocean temperatures and sea levels, examining how climate changes affect weather and environments. Laboratory experiences, independent and group research investigations, and projects will assist each student in developing a sound understanding of the Earth, space, and human impact.

### **Biology II: Human Anatomy and Physiology Honors**

*Prerequisites: Biology or Biology Honors*

*Grade Levels: 10-12*

*Credits: 1 Science Credit*

The course is rigorous and lab oriented, designed to educate the student in the structure and function of the human body. Students interested in pursuing a four-year degree in the life sciences or in a medical field are strongly encouraged to consider this course. Class presentations, research, formal laboratory reports, dissections, and lab practicals (assessments) are utilized to enhance learning and prepare the student for college science courses.

### **Chemistry II**

*Prerequisite: Chemistry*

*Grade Levels: 11-12*

*Credits: 1 Science Credit*

The Chemistry II course is designed for students who have successfully completed first year chemistry, either honors or CP, and are interested in continuing their study in advanced topics. Students will apply their first year chemistry skills to explore a greater depth of concepts in the following areas of study—Solutions, Kinetics, Equilibrium, Thermochemistry, Electrochemistry, Biochemistry, and Organic Chemistry. The course will help students use advanced chemistry concepts to recognize real world STEM applications, careers, and current events. This course is not designed to prepare a student to take the Advanced Placement (AP) Chemistry test.

## Physics

*Prerequisites: Algebra II*

*Grade Levels: 11-12*

*Credits: 1 Science Credit*

This course affords students the opportunity to develop an awareness of fundamental concepts of physics through experimentation. Emphasis is placed on laboratory, project design and solving physical problems through the application of physical laws, geometry and trigonometry. Physics prepares college-bound students with the concrete knowledge of mechanics, energy, acoustics, optics, and electricity.

## Advanced Placement Biology

*Prerequisite: Biology, Chemistry or concurrent*

*Grade Levels: 10-12*

*Credits: 1 Science Credit*

AP Biology is an accelerated, college-level biology course. Extensive readings, lectures and laboratory work provide the student with the same material offered in a college biology course. Topics covered include genetics, microbiology, molecular biology, comparative anatomy, evolution, and ecology. This course is very rigorous, requiring additional hours outside of class time for laboratory work and reading. Students should be motivated, independent, and responsible learners, and be prepared to take the AP Exam in May.

## Dual Enrollment Chemistry (CHM 101/102)/ Advanced Placement Chemistry

*Prerequisite: Algebra II and Chemistry; GPA of 3.0 for Dual Enrollment*

*Grade Levels: 11-12*

*Credits: 1 Science Credit; 8 College Credits*

AP Chemistry is a second year chemistry course which is designed to be the equivalent of two semesters of college general chemistry and its laboratory (8 credit hours). Topics include matter, solutions, thermochemistry, reactions, kinetics, equilibrium, acid-base equilibrium, and electrochemistry. This course is very rigorous, requiring additional hours outside of class time for laboratory work, reading, and problem sets. Students should be motivated, independent, and responsible learners, and be prepared to take the AP exam in May.

## Advanced Placement Physics C: Mechanics

*Prerequisite: Concurrent enrollment in AP Calculus BC.*

*Grade Level: 12*

*Credits: 1 Science Credit*

AP Physics is a rigorous calculus-based course which focuses on Newtonian mechanics. Use of calculus in problem solving and in derivations is expected to increase as the course progresses. The course includes weekly labs, problem sets and projects and is designed to prepare students for post-secondary studies in math and science. Students should be motivated, independent, and responsible learners, and be prepared to take the AP Physics C: Mechanics Exam in May. Because of the pace at which calculus topics will be used in this course, students in AP Physics C Mechanics must also be enrolled in AP Calculus BC.

## WORLD LANGUAGES

To receive an Advanced Studies Diploma, students are required to earn three credits in one world language or two credits in each of two languages. Not all four-year colleges require a world language for admission; however, many strongly recommend students taking two years of one. Students who exit the program with a score of intermediate- mid or above language proficiency, along with a passing score on their 11th grade English SOL will receive the prestigious Virginia Seal of Biliteracy on their diploma.

## Latin I

*Grade Levels: 9-12*

*Credits: 1 World Language Credit*

Students are introduced to basic Latin grammar and vocabulary and read Latin stories about Roman history, daily life, and Greek and Roman mythology. Class activities develop Latin reading and translating skills, expand Latin and English grammatical facility, and enlarge the student's English vocabulary through a focus on derivatives. Regular assignments in English provide opportunities to investigate cultural topics from the ancient world. Co-curricular activities include local club activities, regional and national contests and opportunities for analytic and creative writing. Students are expected to spend 30 minutes daily on class preparation.

## **Latin II**

*Credits: 1 World Language Credit*

*Prerequisites: Latin I*

*Grade Levels: 9-12*

Students conclude their introduction to basic vocabulary, grammar and reading skills, and then begin study of advanced grammar. Cultural emphasis is on daily life, the historical background of the Roman nation and government, and on the topography and monuments of Rome in light of the Latin readings under study. The same co-curricular opportunities are offered as in Latin I. Students should expect to spend 30 minutes daily on class preparation.

## **Latin III Honors**

*Prerequisites: Latin II*

*Grade Levels: 9-12*

*Credits: 1 World Language Credit*

Students conclude their study of the remaining advanced grammar. Transition is made to reading authentic, unadapted Latin. Students read selections from a variety of Roman authors in both prose and verse, including Livy, Caesar, Cicero, Eutropius, Augustus, Ovid, Martial, and Vergil. Students master advanced grammatical forms and constructions and specialized vocabulary particular to each author and continue to develop their vocabulary of Latin derivatives. Emphasis is placed upon analysis and interpretation of Roman culture through its literature. Students participate in class discussions, small group projects, and individual research on topics relating to the social, political, and historical contexts of the literary works. Co-curricular activities like those for other levels are offered. The Latin SAT Subject Test may be taken at the end of this course (and a score of 600 or higher qualifies the student for VA bi-literacy upon graduation).

## **Latin Advanced Placement**

*Prerequisites: Latin III*

*Grades Levels: 11-12*

*Credits: 1 World Language Credit*

This class will follow the AP Latin curriculum as prescribed by the College Board. Students will be expected to complete a summer reading assignment. The course is devoted to a close reading in Latin of selections of Vergil's Aeneid, the letters of Pliny, and a survey of classical and post-classical Latin texts, as well as a study of the cultural and historical background of these Latin texts. New syntax and vocabulary are studied as they are met in the literature. The emphasis of the curriculum, however, lies in the study of the authors' styles, themes, imagery, and place in their society and the history of western literature. Co-curricular assignments include the reading and analysis of critical essays as secondary resources and student writing of analytical essays. Grading is based on quizzes, tests, translations, contributions to class discussions, projects, and essay writing. The AP exam in May is encouraged (especially for fifth and sixth year students), but not required. In addition to the usual contests and certamina, seniors are eligible to compete for regional and national scholarships in the classics. A score of 3-5 on the AP exam or a score of 1-2 on the ACTFL ALIRA test qualifies students for the VA B-literacy Seal upon graduation.

## **Spanish I**

*Grade Levels: 9-12*

*Credits: 1 World Language Credit*

Spanish I students will engage in novice low levels of interpersonal speaking and writing, presentational speaking and writing, as well as interpretive reading and listening. The core of the course is grammar study and its use in conversational skills. An overview of Hispanic countries and historical characters are included in the cultural study. Classwork and projects promote communication skills, cultural awareness, and connections with other disciplines. Students are expected to dedicate at least 30 minutes daily to class preparation.

## **Spanish II**

*Prerequisite: Spanish I*

*Grade Levels: 9-12*

*Credits: 1 World Language Credit*

Spanish II students will engage in novice mid to high levels of interpersonal speaking and writing, presentational speaking and writing, as well as interpretive reading and listening. The core of the course is grammar study and its use in conversational skills. An overview of Hispanic countries and historical characters are included in the cultural study. Classwork and projects promote communication skills, cultural awareness, and connections with other disciplines. Students are expected to dedicate at least 30 minutes daily to class preparation.

### **Spanish III**

*Prerequisite: Spanish II*

*Grade Levels: 9-12*

*Credits: 1 World Language Credit*

Spanish III students will engage in intermediate to high levels of interpersonal speaking and writing, presentational speaking and writing, as well as interpretive reading and listening. After a brief review of the basic grammar structures previously acquired, the course emphasizes the development of skills in narration, expressing hopes and wishes, and reporting facts in the past. Students are expected to work on independent and group projects that develop communicative skills, cultural awareness, and connections with other disciplines. Classroom instruction is primarily in Spanish with brief grammar explanations in English. Students are expected to dedicate at least 30 minutes daily to class preparation.

### **Spanish III Honors**

*Prerequisite: Spanish II*

*Grade Levels: 9-12*

*Credits: 1 World Language Credit*

Spanish III Honors students will engage in intermediate high levels of interpersonal speaking and writing, presentational speaking and writing, as well as interpretive reading and listening. Students will focus on AP global themes throughout the course in order to prepare for success in the upper levels of Spanish. The course emphasizes the development of skills in narration, expressing hopes and wishes, and reporting facts in the past. Students are expected to work on independent and group projects that develop communicative skills, cultural awareness, and connections with other disciplines studied. Students will be required to use Spanish in their daily interactions in class with the teacher and other students. Students are expected to dedicate at least 30 minutes daily to class preparation.

### **Dual Enrollment Spanish IV (SPA 201-202)**

*Prerequisites: Spanish III; GPA 3.0 or higher*

*Grade Levels: 10-12*

*Credits: 1 World Language Credit; 6-8 College Credits if taken as Dual Enrollment*

This course continues to develop understanding, speaking, reading, and writing skills. May include oral drill and practice. Spanish IV Honors/DE students will engage in intermediate mid to high interpersonal speaking and writing, presentational speaking and writing as well as interpretive reading and listening. This course is designed to introduce the student to the history and literature of Spain and Latin America and to the advanced structures of the Spanish language. Listening, reading, speaking, and writing activities are designed to challenge highly motivated individuals. Students acquire cultural competency through historical, literary, and journalistic readings as well as by viewing authentic video and film samples from various Spanish-speaking countries. Individual and group projects that enhance language and cultural acquisition are assigned each quarter. Additionally, students must use Spanish as the language of communication on a daily basis. Students will focus on AP global themes throughout the course in order to prepare for Spanish V AP. The pace of this course is designed to match the intensity of college level study. Students are expected to dedicate at least 30 minutes daily to class preparation.

### **AP/Dual Enrollment Spanish V (SPA 203-204)**

*Prerequisites: Dual Enrollment Spanish IV GPA 3.0 or higher.*

*Grade Levels: 10-12*

*Credits: 1 World Language Credit; 6-8 College Credits if taken as Dual Enrollment*

This course continues to develop understanding, speaking, reading, and writing skills. May include oral drill and practice. Spanish V AP/DE students will engage in intermediate high interpersonal speaking and writing, presentational speaking and writing as well as interpretive reading and listening. This course is designed for the student who has reached an advanced level of language development and is able to acquire information about the Spanish world through literature, film, periodicals and fine arts. Students are expected to complete projects and to make extensive presentations on topics of personal, political, literary, and artistic interest. Communication skills are enhanced through consistent use of the Spanish language both in and outside of the classroom. The course will emphasize preparation for the Advanced Placement examination, employing exercises and materials designed by the College Board and by the teacher. AP students will focus on the AP global themes throughout the year. AP activities include preparation of in-depth oral reports, completion of practice tests and voice recordings in addition to Podcasts and weekly news articles. Reading selections correspond to a survey of Spanish and Spanish American literature. Grammar is reviewed and perfected in the context of the literary selection under discussion. Selections are taken from actual texts designed for native speakers as well as from AP texts. Willingness to perfect language skills both in and outside of the classroom will contribute significantly to student success. Students should be motivated, independent, and responsible learners, and be prepared to take the AP Exam in May. A score of 3 or higher on the AP Spanish Language and Culture exam will qualify students to earn the Virginia Seal of Biliteracy. Students are expected to dedicate at least 30 minutes daily to class preparation.

### **Dual-Enrollment Spanish VI (SPA 212-213)**

*Prerequisites: Dual Enrollment/AP Spanish V; GPA 3.0 or higher*

*Grade Levels: 12*

*Credits: 1 World Language Credit; 6-8 College Credits if taken as Dual Enrollment SPA 212-213*

Intermediate Spanish Conversation I-II. Continues to develop fluency through emphasis on idioms and other complex sentence structure. May include oral drill and practice. Readings and discussions are conducted in Spanish. Spanish VI DE students will engage in advanced low interpersonal speaking and writing, presentational speaking and writing as well as interpretive reading and listening. This course is designed to give advanced students the opportunity to refine and increase their abilities to write, read, and speak Spanish. The course will have a strong emphasis on oral proficiency. Cultural and literary readings and selected Spanish-language films are among the materials on which class discussion and assignments may be centered. A grammar review, focused mainly on typical areas of difficulty, will be included. The course will be conducted entirely in Spanish. Students are expected to dedicate at least 30 minutes daily to class preparation.

## **FINE AND PERFORMING ARTS**

### **Introduction to Art**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

*This course should not be taken with Studio Art & Design I.*

This is a base level art course in which artworks are condensed and concrete. Students will explore the basic elements and principles of art and the curriculum will cover basic Virginia Art SOLs. Students will explore various methods including painting, drawing, and mixed media. A sketchbook is maintained in class for exploration and reflection only, not for homework. Upon completion of this course, students have the option to take Studio Art & Design II.

### **Studio Art & Design I**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

*This course should not be taken with Intro to Art*

This is a sequential course that covers knowledge that leads into Studio Art & Design II. This beginning level art course has an emphasis on self-motivated studio production and artistic development. Students should have a strong desire to do art and to begin building their portfolio. Studies are comprehensive with art history and multi-level projects. Students create innovative, original works which communicate ideas and personal life experiences such as clay whistles, block prints, and metal artworks. A sketchbook is maintained in class for exploration and idea development only, not for homework. Creative processes incorporate elements and principles of art and art history knowledge. Methods include painting, ceramics, drawing, metalwork, printmaking, sculpture, digital art, and mixed media

### **Studio Art & Design II**

*Prerequisites: Studio Art & Design I, or Introduction to Art*

*Grade Levels: 10-12*

*Credits: 1 Fine Arts Credit*

Studio Art & Design II students continue to build upon previous art knowledge. Students also explore a variety of new media in drawing, acrylic painting, screen printing and sculpture as well as innovative mixed media processes. Cultural perspectives and art appreciation are a basis for original art creation and self-expression. A sketchbook is maintained in class for exploration and idea development only, not for homework. There will be a continued emphasis on studio production and artistic development, building a well-crafted portfolio of work. Methods include painting, collage, ceramics, drawing, screen-printing, metalwork, printmaking, sculpture, digital art, and mixed media.

### **Studio Art & Design III**

*Prerequisites: Studio Art & Design II*

*Grade Levels: 11-12*

*Credits: 1 Fine Arts Credit*

Studio Art & Design III students use more sophisticated materials and techniques in drawing, painting and sculpture. Emphasis is on innovation and developing a unique, artistic point of view. Students enjoy designing the surface of a chair, creating sculptures from found objects, and creating architectural pieces from clay. A sketchbook is maintained in class for exploration, idea development, and portfolio documentation only, not for homework. There will be a

continued emphasis on studio production and artistic development, continuing to build a well-crafted portfolio of work. Methods include painting, fiber arts, assemblage, ceramics, drawing, block printing, metalwork, printmaking, sculpture, digital art, and mixed media.

### **Studio Art & Design IV Honors**

*Prerequisites: Completion of any three of the following courses: Introduction to Art, Studio Art & Design I, Studio Art & Design II, Studio Art & Design III, Ceramics I, Ceramics II, Decorative & Functional Arts*

*Grade Levels: 12*

*Credits: 1 Fine Arts Credit*

Studio Art & Design IV students continue building knowledge of art technique, presentation, and art history, using sophisticated and unconventional materials. Emphasis is placed on cultivating a well-crafted portfolio of work, building on past artworks, which advance the student's artistic vision. Students are encouraged to innovate while expressing their unique point of view. Students are self-motivated and have autonomy within the coursework. Students enjoy creating works inspired by indigenous peoples, creating conceptual artworks based in reality, creating a series of works based on a common theme. A sketchbook is maintained in class for exploration, idea development, and portfolio documentation only, not for homework. Methods may include drawing, painting, fiber arts, assemblage, collage, ceramics, drawing, printing, metalwork, sculpture, digital art, and mixed media.

### **Decorative and Functional Art**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

This course is an introduction to decorative and utilitarian crafts. Students are given the opportunity to work with a variety of materials, tools and projects. The importance of good craftsmanship is stressed for each assignment. Students study and create works inspired by various art techniques and cultures. Media and topics may include paris-craft, polymer clay, fiber arts, basketry, bead art, paper molas, stained glass mosaics, Ukrainian eggs, silk painting, and marbling. Occasionally, art appreciation is included when certain units are introduced. Students should be willing to try a variety of materials and be respectful of tools.

### **Ceramics I**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

Ceramics I is designed to introduce you to hand building techniques. It is expected that you have an interest in ceramics and are willing to work in this one medium for an entire year. Traditional and experimental sculpture techniques are explored, as well as various decorative finishes. Each nine weeks, students will have a wheel required project. Additionally, students will learn how a kiln functions and participate in a firing. Students will keep weekly logs to document processes, glazing, cone firing, and techniques.

### **Ceramics II**

*Prerequisites: Ceramics I*

*Grade Levels: 10-12*

*Credits: 1 Fine Arts Credit*

Ceramics II is designed to further explore hand built and wheel thrown techniques. Students will continue developing knowledge of ceramics traditions and techniques while building a body of ceramic works. The importance of good craftsmanship is stressed for each assignment. Students study and create works inspired by various art techniques and cultures. Students will keep weekly logs to document processes, glazing, cone firing, and techniques

### **Ceramics III**

*Prerequisites: Ceramics II*

*Grade Level: 11-12*

*Credits: 1 Fine Arts Credit*

Ceramics III is designed for students to hone skills and techniques learned in prerequisite classes. Students will be constructing ceramic pieces that follow the guidelines/topics stated in the syllabus. Students are to build on knowledge of ceramic tradition and techniques while planning and building ceramic pieces. Students will be independently creating/studying a creation of works that are inspired by a combination of various techniques, artists, and cultures. Students will keep a detailed weekly log to document assignment ideas/progression processes, glazing, cone firing, and techniques.

### **Survey of Theatre and Dance I, II, III, IV**

*Prerequisites: Survey of Theatre and Dance II, III, and IV requires the prior level prerequisite course(s).*

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

Theater courses are sequential courses determined by the number of years of the student's participation. Students must be comfortable being seen on stage by an audience. Theater classes introduce and explore theater and dance as performing arts. Students will develop skills of improvisation as a theatrical and choreographic tool. Students will study the physical space and processes of theater, culminating in the creation of a central piece - a play, musical, and/or one act - for performance. We will explore the relationship between theater and dance in relation to structure, representation, mechanics of the performance space, and the crafts of directors, designers, playwrights, actors, stage crew, dancers, and choreographers.

### **Photography I**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

This course is designed to teach students how to take and print interesting, fine art photographs with digital cameras. This course includes instruction in composition, digital technology, archival printing and the history of photography. Students who take this course must have strong time management skills. They will be required to take 50-100 photographs per week independently outside of class in order to have adequate choices for their assignments.

### **Photography II**

*Prerequisites: Photography I*

*Grade Levels: 10-12*

*Credits: 1 Fine Arts Credit*

Photography II students continue to build upon the conceptual and compositional foundations learned in Digital Photography I. Time management skills are critical in order to independently build and maintain a comprehensive portfolio of images. Students will explore sophisticated software techniques and new media, including darkroom and analogue film applications. Weekly assignments will require a significant amount of work outside of the classroom. Optional projects may require lab fees and/or student-supplied photography equipment, but are not required for the course.

### **Photography III Honors**

*Prerequisites: Photography II*

*Grade Levels: 11-12*

*Credits: 1 Fine Arts Credit*

Photography III Honors offers an independent exploration of photography in a student-driven and uniquely focused manner. Students will refine their personal style and approach to photography. This year-long concentration on developing an individual aesthetic will result in a carefully selected and crafted body of work. This collection of images can take form as a portfolio of prints, a solo art exhibit, a book, or a website. Candidates for Photography III Honors should be serious, independently driven students focused on photography as either a means of expression, communication, or potential career choice.

### **Photography IV Honors**

*Prerequisites: Photography III Honors*

*Grade Levels: 12*

*Credits: 1 Fine Arts Credit*

Photography IV Honors students will continue to expand their collection of uniquely stylized images in an independent and open-ended manner. Students will complete projects with focused intention while maintaining a detailed sketchbook journal. The objective of this course is to support senior photography students in refining a strong portfolio for college applications, or to help prepare students to monetize their photography skills. Photography IV Honors students should be independent, practiced, and committed to pursuing photography as a possible career choice, or as a potential path of study in college.

## **Photojournalism I, II**

*Grade Levels: 10-12*

*Credits: 1 Fine Arts Credit*

Students learn the principles, techniques, and processes used in publication. They apply these skills to the production of our award-winning yearbook. Students study formatting, copy-writing, layout design, photography, proofreading, editing, and financial applications. Using a page-layout program and Adobe Photoshop, students produce the yearbook using digital computer technology. Students are involved in ad sales in the community, yearbook sales and distribution, and financial recordkeeping for a substantial budget. Successful participation in Photojournalism I, II, and III requires the ability to work both independently and cooperatively with a minimum of adult supervision. Some after-school work is required. There is a substantial amount of interaction with the community (both personally and by telephone) and with other students and teachers in the high school. The most important requirement for continued success in this program is the student's willingness to make a year-long commitment to the yearbook and to meeting publication deadlines. Students in second- and third-year classes accept leadership and responsibility for creative design and copy development. They work with first-year students to assist in skills development.

## **Photojournalism III, IV Honors**

*Prerequisites: Photojournalism II*

*Grade Levels: 12*

*Credits: 1 Fine Arts Credit*

Senior staff members take on leadership roles in Photojournalism III honors with an expectation of independent responsibility. Staff roles are determined by student interest and ability. Editors can elect to take Photojournalism IV Honors in addition to Photojournalism III Honors, providing an added independent work opportunity. Members of the senior staff are expected to take ownership of the yearbook program, mentor new staff members, and steer the publication in a successful direction while meeting real-world publishing deadlines.

## **Choir - Vox Jubilate**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

This class is a mixed choir of high and low voices and is designed to cater to students with multiple years of experience as well as students with no experience. If students are desiring to make music, appear in regular performances, and learn music this class is for them. The choir will study music theory, ear training, style, music history, and meaning behind music throughout the school year as well as grow as a community both in the classroom and outside of the classroom. Individuals will be given different material and expectations based on their grade and skill level.

## **Symphonic Band**

*Pre-Requisites: Previous experience with school band*

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

Symphonic Band focuses on the performance element of music making both individually and in large groups. Students will individually perform scales, solo repertoire, and small group repertoire at varying levels of difficulty based on the grade and skill level of the student. As an ensemble, students will be presented with a variety of musical styles and difficulty levels. This ensemble presents several outside of school performances per year. Other areas of music education that will be studied include: theory, ear training, history, style, multicultural, and composition.

## **Percussion Ensemble (9/10/11/12)**

*Grade Levels: 9-12*

*Credits: 1 Fine Arts Credit*

Percussion Ensemble focuses on the performance element of music making that is specifically related to percussive instruments. Students will individually perform scales, solo repertoire, and small group repertoire at varying levels of difficulty based on the grade and skill level of the student. As an ensemble, students will be presented with a variety of musical styles and difficulty levels. Other areas of music education that will be studied include: theory, ear training, specific instrument technique, history, style, multicultural, and composition.

## **Marching Band**

*Pre-Requisites: Previous experience with school band for instrumentalists/ auditions for drumline and colorguard*

*Grade Levels: 8-12*

*Credits: .5 Fine Arts Credit*

Marching Band is a performance class that meets outside of school hours. This group is made up of students spanning from 8th to 12th grades and includes traditional concert setting wind instruments, as well as drumline, front ensemble, and colorguard. This class explores the art of movement and music by preparing a competition show for the Fall season that is then presented at all home football games and various competitions throughout the season. This group requires commitment and community focus to find success. The band has two weeks of band camp prior to the start of school and meets three times a week after school for rehearsal.

### **Jazz Band**

Pre-Requisites: must be in a music class that meets during the school day & have previous experience with school band

Grade Levels: 9-12

Credits: .5 Fine Arts Credit

Jazz band meets after school once a week, starting after the Marching Band student. Two Jazz bands are offered. One is made up of traditional instrumentation and the other is for all students interested in joining. For the traditional instrumentation ensemble, students will need to submit an audition. Instruments and numbers included are:

Alto Saxophone (2)

Tenor Saxophone (2)

Baritone Saxophone (1)

Trumpet (4)

Trombone (4)

Rhythm Sections

Piano

Guitar

Bass Guitar

Drum Set

Auxiliary Percussion

Auditions and information regarding Jazz Band will be sent out on the 1st of October. Once rehearsals begin, each ensemble will perform during the RCHS December and Spring Concert, as well as performances outside of school.

## **CAREER AND TECHNICAL EDUCATION**

### **AGRICULTURE**

#### **Biological Applications in Agriculture**

*Grade Levels: 9-10*

*Credits: 1 CTE Credit*

This course applies biological principles to agriculture, food, and natural resources. Competencies emphasize and reinforce standards of learning for biology with agricultural applications. Students explore the biological principles associated with an agriculture business by focusing on both animal and crop production. Participation in FFA activities, leadership development events (LDEs), and career development events (CDEs) is encouraged.

#### **Horticulture Science**

*Prerequisites: Biological Applications in Agriculture*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

This course prepares students for postsecondary educational career programs and entry-level positions in the horticulture industry. Instruction includes safety in the horticulture industry, the science of horticulture and nursery plant production, greenhouse operation and management, landscape design, and turf management. Through hands-on activities, students will identify and manage plant-growing substrates and propagate and grow horticultural plants in the greenhouse and land laboratory. Participation in FFA activities, leadership development events (LDEs), and career development events (CDEs) is encouraged.

### **Forestry & Wildlife Ecology**

*Prerequisites: Biological Applications in Agriculture*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

This course provides instruction in the management of the forest as a resource and as a business. Students develop knowledge in tree physiology, forest ecology, silviculture, and the management and marketing of forest products. Strong emphasis is placed on developing career skills for the forestry industry. Participation in FFA activities, leadership development events (LDEs), and career development events (CDEs) is encouraged.

### **Equine Science**

*Prerequisites: Biological Applications in Agriculture or Small Animal Care I*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

In this course, students learn how to care for and manage horses. The major instructional areas include equine health, nutrition, management, reproduction, training, evaluation, and showmanship. Additional instruction in tools, equipment, equine facilities management, business management of equine enterprises, and the economics of boarding, training, and merchandising horses is included. Participation in FFA activities, leadership development events (LDEs), and career development events (CDEs) is encouraged.

## **AEROSPACE TECHNOLOGY**

The Aerospace Technology (Drone) program prepares students for entry into a broad range of career fields including engineering, aerospace technologies, electrical and instrumentation, videography, aviation, and drone technology. The program connects students to high-order learning by using drone flight and partnerships between multiple education, community, economic development, and government entities.

Students will build and understand exciting systems associated with electronics & instrumentation, with special emphasis on UAV flight, FPV (first person video) flight, flight control, aerodynamics, and technology. Classes emphasize analytical problem-solving, experimentation, projects, teamwork, creative thinking, data collection/recording, video production and analysis, and entrepreneurship.

### **Aerospace Technology I**

*Grade Levels: 9-11*

*Credits: 1 CTE Credit*

This course offers an introduction to the aerospace industry through a hands-on approach and exploration of topics such as flight, space, and supporting technologies. Students explore the aviation and space industries by examining the history of aviation, aerodynamics and aircraft components, flight conditions, airport and flight operations, space systems, rocketry, and living and working in space. This course will also develop skills for students to prepare for careers in flying, troubleshooting, designing, building and repairing drones, model airplanes and rockets. Students will be working individually and on teams to safely and effectively operate, race and repair drones, shoot/edit video and explore and experience related careers.

### **Aerospace Technology II**

*Prerequisites: Aerospace Technology I*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

This course provides an advanced exploration of flight, space travel, and supporting technologies through a practical approach centered around problem solving. Students explore concepts in aircraft operations, aircraft design, flight safety, and maintenance; airport infrastructure; and small unmanned aircraft systems (SUAS). This real-world class is entirely project and problem-based to help prepare for the FAA Part 107 drone pilot license and jobs for the drone and aerospace industries such as drone pilots, designers, electronic technicians, videographers, and mission planners. Students will continue to build on skills from the level one course to help develop real world drone and model aircraft flying skills to work with program partners for industry application internships, mentorships, and entrepreneurship development.

## **SMALL ANIMAL CARE**

Students in the Small Animal Care program learn how to care for and manage small animals ranging from rodents to birds to household pets. The three-course program progresses through increasingly more challenging content ending with veterinary science which prepares students for careers in animal hospitals or related facilities. Students are encouraged to participate in FFA to further develop and practice skills learned in the classroom.

### **Small Animal Care I**

*Grade Levels: 9-11*

*Credits: 1 CTE Credit*

Students learn how to care for and manage small animals, focusing on instructional areas in animal health, nutrition, management, reproduction, and evaluation. Course content also includes instruction in the tools, equipment, and facilities for small animal care, and provides activities to foster leadership development. Live animal handling may occur. FFA, SAE, or related student organization activities are encouraged.

### **Small Animal Care II**

*Prerequisites: Small Animal Care I*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

Students continue to learn how to care for and manage small animals. Students develop their skills in the training and grooming of companion animals, focusing on specific needs of various breeds. Instruction includes handling animals and grooming/caring for coats, as well as technical and maintenance functions related to animal health. Live animal handling may occur. The course also affords students the opportunity to practice leadership skills. FFA, SAE, or related student organization activities are encouraged.

### **Veterinary Sciences**

*Prerequisites: Small Animal Care II*

*Grade Levels: 11-12*

*Credits: 1 CTE Credit*

Veterinary Science prepares students for postsecondary education and/or careers in veterinary medicine or related fields. Students develop their skills in anatomy, nutrition, medical terminology, sanitation, clinical exams, and handling animals. Live animal handling may occur. Course content also includes facility maintenance, and office functions, as well as safety practices. The National FFA Organization, Supervised Agricultural Experience (SAE), or related student organization activities are encouraged.

## **BUSINESS AND INFORMATION TECHNOLOGY**

All business courses are excellent electives for college bound students as well as students planning to enter the workforce after high school. To be a business completer, students must complete two full credits of business courses. Economics and Personal Finance (a graduation requirement) cannot count toward a business completer sequence. Three pathways are offered; information technology, entrepreneurship, and business finance.

### **Economics and Personal Finance**

*Grade Levels: 11-12*

*Credits: 1 CTE Credit*

This class will prepare students for a financially independent life beyond high school. Students will explore strategies for a job, budgeting, using credit wisely, buying cars and houses, and investing in the future. In addition, students will examine the fundamentals of a market economy, including the laws of supply and demand, production and consumption of goods and services, money and banking, and government spending and taxation.

### **Economics and Personal Finance Dual Enrollment (FIN 107)**

*Prerequisites: GPA of 2.0 or higher*

*Grade Levels: 11-12*

*Credits: 1 CTE Credit; 3 College Credits if taken for Dual Enrollment*

This course provides a comprehensive survey of the principles of economics, with special emphasis on the American economy and its participation in world markets. It examines the fundamental operations of a market economy, including the laws of supply and demand, the production and consumption of goods and services, gains from trade, market efficiency, forms of business organization, market structure, money and banking and government spending and taxation.

### **Computer Information Systems Dual Enrollment (ITE 152)**

*Prerequisites: GPA of 2.0 or higher*

*Grade Levels: 9-12*

*Credits: 1 CTE Credit; 3 College Credits if taken for Dual Enrollment*

This year-long course is designed to help students master the skills and knowledge they will need to effectively use computers in business and in life. Students will learn concepts in computer hardware, computer software, networks and the Internet, and cybersecurity. Students will complete various projects in word processing, spreadsheets, databases, and multimedia presentations using Microsoft Office programs. Microsoft Office Specialist (MOS) training and testing for industry certification will be offered in this course. This course is foundational for students who wish to pursue careers in Business, Computer Science, Cybersecurity, or Information Technology fields.

### **Design, Multimedia, and Web Technologies**

*Grade Levels: 9-12*

*Credits: 1 CTE Credit*

This course offers students more advanced training in designing projects and presentations using desktop publishing, graphic design, multimedia presentation, and Web page design software. Students will design projects such as newsletters, business cards and brochures using Microsoft Publisher and Microsoft Word. Students will develop and deliver multimedia presentations using Microsoft PowerPoint. Students will learn coding in HTML and CSS to create Web sites, and will develop Web sites using Web design software. Students will prepare and be tested for Microsoft Office Specialist (MOS) certification in PowerPoint.

### **Cybersecurity Dual Enrollment (ITN 260)**

*Prerequisites: Computer Information Systems; GPA of 2.0 or higher*

*Grade Levels: 10-12 or instructor approval*

*Credits: 1 CTE Credit; 3 College Credits if taken for Dual Enrollment*

This course introduces students to the expanding career field of cybersecurity. Students will explore the foundations of cybersecurity and investigate cybersecurity careers. Students will gain essential knowledge of networking and cybersecurity concepts. Skills will be developed in the areas of configuring networks, social engineering, personal cybersecurity, network security, threat mitigation, and cyber forensics. This course serves as a capstone course for the information technology program as well as a gateway course for students pursuing a college degree in cybersecurity. Microsoft Certified Fundamentals training and testing for industry certification will be offered in this course.

### **Cybersecurity II**

*Prerequisites: Computer Information Systems; GPA of 2.0 or higher*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit; 3 College Credits if taken for Dual Enrollment*

Cybersecurity II is designed to teach computer and network administration and security. Students learn cybersecurity concepts, including the practice of protecting systems, networks, and programs from digital attacks. Cybersecurity is defined as the steps and processes taken to protect networks, devices, programs, and data from unauthorized access that can result in theft or damage. Students learn to establish, implement, and maintain security networks.

## **COMMUNICATION SYSTEMS**

### **Communication Systems**

*Grade Level: 9 -12*

*Credits: 1 CTE Credit*

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

## **Graphic Communication Systems**

*Prerequisites: Communications Systems*

*Grade Level: 10-12*

*Credits: 1 CTE Credit*

This course provides experiences related to a wide range of tools and materials used to reproduce information and images. Several mediums are used, including paper, metal, plastic, and fabric. Students develop competencies in message design, composition, and assembly, and message transfer and product conversion.

## **MANUFACTURING SYSTEMS**

### **Materials and Processes**

*Grade Level: 9, 10 & 11*

*Credits: 1 CTE Credit*

Students focus on physical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis as well as the use of tools and equipment related to analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials. This single-period lab course is recommended for students interested in technical careers and others wishing to improve their technological literacy.

### **Manufacturing Systems I**

*Prerequisites: Materials and Processes*

*Grade Level: 10-12*

*Credits: 1 CTE Credit*

This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students participate in individual and team activities to create products that demonstrate critical elements of manufacturing.

### **Manufacturing II**

*Prerequisites: Manufacturing Systems I*

*Grade Level: 11 - 12*

*Credits: 1 CTE Credit*

Students develop an in-depth understanding of automation and its applications in manufacturing. Activities center on flexible manufacturing processes and computer integrated manufacturing (CIM). Students work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing.

### **Manufacturing III**

*Prerequisites: Manufacturing Systems II*

*Grade Level: 12*

*Credits: 1 CTE Credit*

Students focus on physical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis as well as the use of tools and equipment related to analysis, testing, and processing of metals, plastics, woods, ceramics, and 3 composite materials. Students will gain first-hand experience manufacturing real world projects.

## **FAMILY AND CONSUMER SCIENCE**

Family and Consumer Sciences programs facilitate student progress toward a set of unifying goals in the areas of academic achievement, cultural and environmental issues, health and safety, individual and family relations, leadership and workplace ethics, and application of technology.

### **Nutrition & Wellness**

*Grade Level: 9-12*

*Credits: 1 CTE Credit*

***Credential Opportunity: Leadership Essentials, Workplace Readiness & Nutrition, Food, and Wellness (When students have completed Culinary Arts)***

Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem solving are emphasized.

## **Introduction to Family and Consumer Sciences (Intro to Culinary Arts and Intro to Hospitality)**

*Grade Level: 9-10*

*Credits: 1 CTE Credit*

This introduction course provides students with opportunities to explore career options within the Hospitality & Tourism Career Cluster. During the year, students will spend a semester in the Culinary Lab and a semester in the Hospitality Lab. Students will investigate food safety and sanitation, culinary preparation foundations, basic culinary skills, diverse cuisines, service styles, nutrition and menu development, and the economics of food. Students will also explore the industries of lodging, food and beverage, travel and tourism, and recreation and fitness. Postsecondary education options and career opportunities within the food service, hospitality, and tourism industries will also be covered, focusing on developing professional skills and using emerging technologies to prepare for employment in this global industry.

## **CULINARY ARTS**

### **Culinary Arts I**

*Prerequisites: Introduction to Culinary Arts*

*Grade Level: 10-11*

*Credits: 2 CTE Credits*

In Culinary Arts I, students begin the foundations for a comprehensive knowledge of the food service industry and with opportunities to build technical skills. Students examine and practice basic rules and procedures related to kitchen and food safety, kitchen sanitation procedures, and emergency measures. Students explore the purchasing and receiving of goods and study fundamental nutritional principles and guidelines. As they explore food preparation techniques, students practice applying these techniques to the preparation and serving of basic food products. The ServSafe Food Handler Course and Certification Test will be utilized during this course to ensure student knowledge of the content area while applying basic Career & Technical Education skills.

### **Culinary Arts II / Optional MGCC Dual Enrollment (HRI 158)**

*Prerequisites: Culinary Arts I; GPA of 2.0 or higher.*

*Grade Level: 11-12*

*Credits: 2 CTE Credits; 3 Optional DE Credits*

In Culinary Arts II, students continue to build on the opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food preparation techniques including garde manger and baking, refine their dining room serving skills, develop menus, perform on-site and off-site catered functions, and strengthen their business and math skills. Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of culinary arts are emphasized. Industry certification is offered using the ServSafe Food Safety and Sanitation Manager Certification Course Materials, Content, & Certification Exam

### **Culinary Arts III (Specialization)**

*Prerequisites: Culinary Arts II*

*Grade Level: 12*

*Credits: 1 CTE Credit*

The Culinary Arts III, (Specialization) curriculum provides students with continuing opportunities to obtain comprehensive knowledge of the food service industry as well as to expand their technical skills in a food service specialty. Students explore careers and refine their skills in implementing safety and sanitation standards, applying nutritional principles, planning menus, using business and math skills, and selecting and maintaining food service equipment. Students will specialize in the following areas: Catering/Banquet and Quantity Food-Preparation Techniques. The ServSafe Food Allergens Course and Certification Test will be utilized during this course to expand student knowledge of today's challenges in the food service industry with the always changing dietary needs and requirements of customers.

## HOSPITALITY

### Hospitality, Tourism, and Recreation I

*Prerequisite: Into to Hospitality*

*Grade Level: 10-11*

*Credits: 1 CTE Credit*

Students begin preparation for employment in hospitality industries by focusing on principles of operations in food services, recreation, hospitality planning, and business relations. Special attention is paid to the development of culinary skills (food sanitation, food preparation, and serving) and customer service skills.

### Hospitality, Tourism, and Recreation II

*Prerequisites: Hospitality, Tourism, and Recreation I*

*Grade Level: 11-12*

*Credits: 2 CTE Credits*

*Credential Opportunity: Virginia Destination Professional Certification (Complete Process)*

Students continue preparation for employment in hospitality industries by focusing on principles of operations in travel and tourism, lodging, food services, hospitality planning, and business relations. Special attention is paid to the development of skills used in the lodging industry (rooms, sales and marketing, front office, and housekeeping divisions) and customer-service skills.

## TEACHERS FOR TOMORROW

### Introduction to Va Teachers for Tomorrow

*Grade Level: 9 & 10*

*Credits: 1 CTE Credit*

This course fosters student interest in, understanding of, and appreciation for the teaching profession and introduces students to careers in education. Students will develop self-awareness, collaborate with peers, build positive learning environments and discover learner differences. The curriculum is designed to help students set attainable professional goals in the education and training career cluster. This course introduces students in the high school Virginia Teachers for Tomorrow program, contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

### Virginia Teachers for Tomorrow I

*Grade Level: 11-12*

*Credits: 1 CTE Credit*

Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTfT classroom and field experience; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Educators Rising.

### Virginia Teachers for Tomorrow II

*Prerequisites: Virginia Teachers for Tomorrow I*

*Grade Level: 11-12*

*Credits: 1 CTE Credit*

Students continue to explore careers in the Education and Training Career Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.

## HEALTH AND MEDICAL SCIENCE

The healthcare industry is booming. Tremendous shortages in many specialized health occupations continue to exist. Students with well-developed health care competencies will find a wealth of employment opportunities. A variety of post-secondary educational options are also available for program completers who desire further training.

### **Nurse Aide I Dual Enrollment (HCT 100/110)**

*Prerequisites: Biology; GPA 2.0 or higher.*

*Recommended course prerequisites: Algebra I, Geometry*

*Grade Level: 10<sup>th</sup> or 11<sup>th</sup>*

*Credits: 2 High School CTE Credits; 3 College Credits per semester if taken as Dual Enrollment*

Nurse Aide I, offered as an occupational preparation course beginning at the 10<sup>th</sup> or 11<sup>th</sup>-grade level, is regulated under the Virginia Board of Nursing. It emphasizes the study of nursing occupations as related to the healthcare system. Students study growth and development across the lifespan, simple body structure and function, and medical terminology. They are introduced to concepts of infection prevention and disease processes. Students receive entry-level skill training in patient/nurse aide relationships; measuring and recording of vital signs; cardiopulmonary resuscitation; and general patient care. Work-based learning may be offered as part of this course. The Nurse Aide I course introduces students to careers in nursing, health professions, and STEM-H professions. Students must maintain American Heart Association's Cardiopulmonary Resuscitation (CPR) & Emergency Cardiovascular Care (ECC) training during this course. Recommended prerequisite(s): Introduction to Health and Medical Sciences 8302 Some healthcare facilities that accept federal funding (e.g., Medicare, Medicaid) may require criminal background checks and drug screens for students participating in a clinical experience. An updated immunization record will be required prior to the student participating in the clinical experience. An application will be required for consideration to become a student in the Nurse Aide I class NOTE: This course has specific state laws and regulations from a governing medical board or agency.

### **Nurse Aide II Dual Enrollment (HCT 101/102)**

*Prerequisites: Completion of Nurse Aide I, GPA of 2.0 or higher.*

*Grade Level: 11<sup>th</sup> or 12<sup>th</sup>*

*Credits: 2 High School CTE Credits; 3 College Credits per semester if taken as Dual Enrollment*

Nurse Aide II is an occupational preparation course emphasizing body systems and diseases as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. Students receive skills training and hands-on clinical experiences in a healthcare setting. Work-based learning in a healthcare facility is part of the course. Students must maintain American Heart Association's Cardiopulmonary Resuscitation (CPR) & Emergency Cardiovascular Care (ECC) training during this course. This course requires students to meet the Virginia Board of Nursing required clock hours to be eligible to take the National Nurse Aide Assessment Program (NNAAP) exam.

Additionally, this course includes the approved opiate competencies for health and medical sciences education. Some healthcare facilities that accept federal funding (e.g., Medicare, Medicaid) may require criminal background checks and drug screening for students participating in a clinical experience. An updated immunization record will be required prior to the student participating in the clinical experience. NOTE: This course has specific state laws and regulations from a governing medical board or agency. A COVID-19 vaccine may be required depending on the long-term care facility's policy regarding this. If a vaccine is not required, facilities may require all students to undergo daily testing for COVID-19.

### **Emergency Medical Technician (EMT I & II)**

*Prerequisites: Meet all OEMS prerequisites for EMT certification, Background check and drug screen required for clinical rotations; less than 20 days absent essential in order to test for certification*

*Grade Level: 11-12 (Minimum 16 years old by first day of school)*

*Credits: 2 CTE Credits*

This course is based on the current National Emergency Services Educational Standards. Students explore and apply the fundamentals of emergency medical services, anatomy, physiology, pathophysiology, and medical terminology as it relates to patient care. Students develop skills in assessing and providing care to patients. All aspects of emergency care are covered including medical, trauma, shock, and resuscitation. Supervised field experience outside of normal school hours is required. Successful completion of all course requirements and instructor endorsement will lead to eligibility to take the NREMT and Virginia EMT certification examinations. POTENTIALLY OFFERED OFF CAMPUS.

## FIREFIGHTING

## **Firefighting**

*Prerequisites: 16 years old before the first day of class*

*Grade Level: 11th and 12th*

*Credits: 3 High School CTE Credits*

This course challenges students academically, mentally, and physically and meets the standards of National Fire Protection Association (NFPA) 1001-2019, leading to the opportunity to obtain a Firefighter I certification. Students will also obtain certification in Hazmat Ops, CPR/First Aid, ICS 100,200,700,800. Students will earn a sequential elective through this course. Upon successful completion of the firefighting program, students will receive a total of 3 high school credits. This course will consist of 3 periods in the student's daily schedule. Students must be 16 years old by the first day of class. Students cannot have excessive absences in prior classes and must be in academically good standings with the school system. Students will be required to follow the procedures and policies of Rockbridge County Fire and Rescue as they will be assigned as students under this agency. All missed days must be made up on dates determined by the instructor. Failure to make up missed days will result in an incomplete for the course. There are many physical requirements for this class. Students will be required to move simulated victims that are adult weight. Students will be required to climb ladders and set the ladders safely. Students will be required to wear PPE at all times during skills evolutions which may include wearing a Self-Contained Breathing Apparatus (SCBA). The students will be required to crawl and stoop for extended times and may be subject to tight areas which can feel claustrophobic. There are many other tasks that can be strenuous for the students. The students may be subjected to sensitive material related to the Fire service. Students respond to situations caused by simulated hazardous materials (HAZMAT) situations, accidents, and natural disasters by managing resources such as medevac helicopters, emergency medical personnel, technical rescue teams, and community-based organizations. Students will become familiar with the procedures, equipment, and technologies used by current fire departments. The students will be tested at the conclusion of the class using live fire training. While the live fire training is controlled it can pose potential dangers. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

## **ENGINEERING AND ARCHITECTURE TECHNOLOGY**

The Engineering and Architecture program provides students with the technical skills and knowledge for a wide variety of engineering and architecture careers. Students utilize and apply their core education skills in math and science to problem solve, design, and create models and prototypes using CAD (computer aided drawing), shop tools, and a 3D printer. Students who complete the Engineering and Architecture I course then take either Engineering II or Architecture II will receive a Career and Technical Education program completer certificate and have the opportunity to take the NOCTI Technical Drafting or Architectural Drafting Assessment.

### **Engineering and Architecture I**

*Grade Levels: 9-10*

*Credits: 1 CTE Credit*

In this foundation course, students learn the basic language of technical design, while they design, sketch, and make technical drawings, illustrations, models, and prototypes of real design problems using industry-standard CAD (computer aided drawing) software. Experiences include creating engineering and architectural working drawings, inventing, 3-D computer modeling, and career planning. Students also use modeling tools such as a 3D printer to develop prototypes and models from drawings for presentation, testing, and competition.

### **Architecture II**

*Prerequisites: Engineering and Architecture I*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

Students learn the principles of architecture and increase their understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential building designs, renderings, model making, structural details, building codes, and community planning. Students use CAD (computer aided drawing) software and established standards and codes to prepare models for presentation and maintain a portfolio starting with their Engineering and Architecture I portfolio. The course provides information helpful for the homeowner and is especially beneficial to the future architect, interior designer, or home builder.

### **Engineering II**

*Prerequisites: Engineering and Architecture I*

*Grade Levels: 10-12*

*Credits: 1 CTE Credit*

Students learn the principles of design and engineering and increase their understanding of the design process as it relates to production and engineering fields. Students will be required to use problem solving skills with a focus on individual initiative and team problem solving. Students develop a fully dimensioned production set of drawings using CAD (computer aided drawing), materials cost estimates, and purchase orders. Students will learn material types and characteristics as well as manufacturing processes to better understand what is needed to produce a prototype. Students will continue to develop their Engineering and Architecture I design portfolio.

### **Engineering and Architecture III**

*Prerequisites: Either Engineering II or Architecture II*

*Grade Level: 10-12*

*Credits: 1 CTE Credit*

Students use a graphic language for product design and technical illustration, increase their understanding of drawing techniques learned in the prerequisite courses, research design-related fields, and identify the role of advanced drawing and design in manufacturing and construction industry processes. Students apply the design process, analyze design solutions, reverse engineer products, create 3-D solid models using CAD, construct physical models, and create multimedia presentations of finished designs. In this capstone course, students will complete a thesis project working with a mentor in their chosen real-world job.

## **ELECTRONICS TECHNOLOGY**

The Electronics Technology programs prepare students for entry into a broad range of electrical engineering and robotics engineering careers. Also, students will be well prepared for continued education at universities, community colleges, and technical schools. During the Electronics & Robotics Technology courses, students will build and understand many exciting systems such as audio amplifiers, autonomous vehicles and robotic controls. Students will also be introduced to several computer programming languages. All of the electronics and robotics classes emphasize analytical problem-solving, hands-on experimentation, projects, teamwork, creative thinking, data collection/recording and oral and written communication skills.

### **Electronics Technology I**

*Prerequisites: Required Algebra or Instructor approval.*

*Grade Levels: 9-10*

*Credits: 1 CTE Credit*

The first year of Electronics Technology provides students with an understanding of electronic components, schematic symbols, circuit building, soldering, direct current (DC) circuits, alternating current (AC) circuits, semiconductors and motor control circuits for robotics. Students are introduced to electronic components such as resistors, capacitors, inductors, relays, diodes, transistors, integrated circuits (IC) and DC motors. Students conduct electronic experiments combining theory with practical applications. During laboratory exercises students construct electronic circuits such as power supplies, audio amplifiers, and DC motor control circuits.

### **Electronics Technology II**

*Prerequisites: Electronics Technology I*

*Grade Levels: 10-11*

*Credits: 1 CTE Credit*

This course provides an in-depth study of digital electronics and robotic motor control circuits. Advanced topics include digital logic circuits, programmable ICs, microcontroller programming, and the completion of the OSHA-10 safety course. Students must successfully complete the OSHA-10 certification component of this course to continue in the Electronics courses. Students will also learn how to program and interface a microcontroller to control motors for Robotics applications.

### **Electronics Technology III**

*Prerequisites: Electronics Technology II*

*Grade Levels: 11-12*

*Credits: 1 CTE Credit*

This course provides a focus and emphasis on Electronics Technology. This course is recommended for students pursuing Electrical Engineering in college. During this course, students will study advanced semiconductor circuits, optical semiconductors, wireless communication & radio theory, electronics CAD (Computer Aided Design), printed circuit board design, circuit board etching and audio amplifiers. During the second semester, students will study audio amplifiers and finish the year constructing an audio power amplifier. The Electronics Technology III course also prepares the students to take a portion of the industry recognized Certified Electronics Technician (CET) exam.

## **TRADE AND INDUSTRIAL PROGRAMS**

### ***Auto Body Technology***

Auto Body repair and refinishing gives students the opportunity to restore and refurbish damaged vehicles. Using modern equipment and techniques, students return vehicles to their original condition. Technical work and hands-on shop experience provide the knowledge and skills needed to enter the collision repair field, a technical school, or a college/university for further training. *To ensure shop safety, students with more than 10 unexcused absences in the prior school year may be excluded from trade and industrial programs.*

#### **Auto Body Technology I**

*Grade Levels: 10-11*

*Credits: 1 CTE Credit*

Through classroom instruction and shop experience, students gain knowledge and skills needed for collision repair of the modern automobile. This course emphasizes the organization of assembly and disassembly of different automobiles, using basic hand tools and power tools. Students will be taught using I-Car and ASE certified materials. Students must complete SP2 safety training within the first 3 weeks of the semester in order to remain enrolled in the course.

#### **Auto Body Technology II**

*Prerequisites: Auto Body I; previous completion of SP2 safety training; if classes become full, an application process will determine student enrollment*

*Grade Level: 11/12*

*Credits: 2 CTE Credits*

Previously learned skills will be refined through continued classroom instruction and shop experience, students gain knowledge and skills needed for collision repair of the modern automobile. This course emphasizes the organization of assembly and disassembly of different automobiles, using specialized tools and equipment, suspension work, various types of welding, and frame damage diagnosing. Students will be taught using I-CAR and ASE certified materials.

#### **Auto Body Technology III**

*Prerequisites: Auto Body II; if classes become full, an application process will determine student enrollment*

*Grade Level: 12*

*Credits: 2 CTE Credits*

Previous skills are refined through continued instruction and extensive emphasis will be placed on Automotive Refinishing. The process of removing finishes, preparing for a finish, applying finishes, and troubleshooting refinished areas, and mixing of paint with computerized systems to ensure a paint match will be addressed. Also the area of automotive compound and polish application will be instructed. Auto Body Repair II will be using the nationwide professional training sources of I-CAR and ASE certified materials.

## **AUTOMOTIVE TECHNOLOGY**

The automobile industry has entered the high-tech age. This program offers the opportunity to develop a basic knowledge of automotive fundamentals and the skills necessary to inspect, diagnose, and repair modern motorized vehicles. Through classroom presentations and hands-on lab experience, students are provided entry-level training on shop equipment and automobiles. *To ensure shop safety, students with more than 10 unexcused absences in the prior school year may be*

*excluded from trade and industrial programs.*

### **Automotive Technology I**

*Grade Levels: 10-11*

*Credits: 1 CTE Credit*

Students wanting to learn about the automotive industry will gain basic understanding of the technology and mechanics involved in vehicle maintenance and repair. This course introduces students to career options, use of automotive tools and equipment, automotive shop safety, and basic repair. Students must complete SP2 safety training within the first 3 weeks of the semester in order to remain enrolled in the course.

### **Automotive Technology II**

*Prerequisites: Auto Technology I; if classes become full, an application process will determine student enrollment*

*Grade Level: 10-11*

*Credits: 2 CTE Credits*

This course includes a hands-on program of instruction for learning the theory of internal combustion engines. Students learn tool use and identification, identification of engine parts, functions of lubrication systems, and engine tune-up procedures. Units of instruction also covered are fuels, carburetion, measurement of parts, engine assembly and disassembly techniques, daily service operations, and engine maintenance. Safety precautions and the development of safe work habits are emphasized throughout the program.

### **Automotive Technology III**

*Prerequisite: Automotive Technology II; ; if classes become full, an application process will determine student enrollment*

*Grade Level: 11-12*

*Credits: 2 CTE Credits*

This advanced program continues the development of skills begun in Automotive Technology I. More intensive hands-on work is included to develop good work habits and to develop the skills and knowledge required to secure a job in the automotive repair field. Seniors may be eligible to participate in on-the-job training during the second semester of this course.

## **CARPENTRY AND BUILDING TRADES**

A variety of employment opportunities are available to individuals who complete this program. Instruction includes methods and techniques in building construction. Students with allergies (dust, paint, etc.) should consult a physician prior to enrollment in this program. To ensure shop safety, students with more than 10 unexcused absences in the prior school year may be excluded from trade and industrial programs.

### **Building Trades I**

*Grade Levels: 10*

*Credits: 1 CTE Credit*

Building Trades I introduces students to skills in the four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by earning the Occupational Safety and Health Administration (OSHA) 10 card as they build or repair residential structures, using a variety of materials and tools. Students will also learn current residential building codes associated with the trades.

### **Building Trades II**

*Prerequisite: Building Trades I; if classes become full, an application process will determine student enrollment*

*Grade Level: 11*

*Credits: 2 CTE Credits*

Development of entry-level skills continues with the construction of storage sheds and small, single-family dwellings that include the need for plumbing, finish carpentry, and electrical wiring skills. This course leads to successful transition into postsecondary education for careers in carpentry and related fields such as construction management, architecture, and others. Students will become proficient in assembling and installing various types of residential components including rigging, foundations, floors, walls, ceilings, roofs, trusses, stairs, doors, windows, decks, and porches. Students will learn job estimating procedures.

### **Carpentry III: Cooperative Education**

*Prerequisite: Building Trades II; if classes become full, an application process will determine student enrollment*

*Grade Level: 12*

*Credits: 2 CTE Credits*

Carpentry III is an advanced course that allows students to gain in-depth knowledge and hands-on experience in construction industry skills using work-based learning methods of instruction, providing students with practical, on-the-job experience in addition to what he or she has already mastered in Carpentry I and II. Co-op gives students the opportunity to learn through supervised work experience. Formal and informal evaluations of student progress, including feedback from employers, are completed. Limited seats are available for this course.

### **Building Management**

*Grade Level: 10-12*

*Credits: 1 CTE Credit*

Students obtain the knowledge and skills to perform the upkeep of commercial and public buildings and grounds through hands-on training in cleaning operations, building repairs, electrical work, plumbing, and grounds maintenance. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) provides experiential learning opportunities related to students' career goals and/or interests, integrated with instruction and performed in partnership with local businesses and organizations.

## **WORK EXPERIENCE**

### **Cooperative Education Work Experience (Co-op)**

*Prerequisites: Enrolled in a CTE program; application*

*Grade Levels: 11-12*

*Credits: 1 CTE Credit opportunity for additional credit for employment*

Designed to give students the opportunity to learn through supervised work experience, this one-credit course integrates students' educational activities in CTE programs with on-the-job training. Co-op students are guided by a formal, individualized, written training plan with approved work site employers. These plans define specific academic and workplace skills to be mastered during the 11-15 hours per week of work experience. Formal and informal evaluations of student progress, including feedback from employers, are completed.

### **Internships**

*Grade Level: 11-12*

*Credits: 1 Credit for every 280 hours worked May earn up to 2 credits*

An Internship is an opportunity for students to work and earn school credits in a paid or unpaid environment. There are two types of internship opportunities offered for students. The first type of internship gives students practical skills, real-life experience of the workplace, and greater knowledge of an industry they hope to pursue in the future. This not only helps them gain critical work skills and decide if the career they are experiencing is right for them, it also enables them to make valuable work contacts and acts as an important stepping stone to securing a job. This type of internship may be paid or voluntary and can either be during the school day or after school on a part-time or full-time basis during breaks and summer. The second type of internship is a structured method of combining classroom-based education with practical work experience. This type of internship is taking on new importance in helping students make the school-to-work transition, service learning, and experiential learning initiatives. Normally with this type of internship, students work part-time after school and on weekends. More hours may be worked during breaks and summer time if students are interested. This also can act as a stepping stone to securing a job and allow students to make valuable work contacts.

## **EVENING COURSES**

### **Construction**

#### **Introduction to Construction (BLD 110)**

*Prerequisites: GPA of 2.0 or higher*

*Grade Levels: 9-10*

*Credits: 1 Semester CTE Credit*

This course introduces students to general construction principles including safety, proper use of hand and power tools, measurement and conversion, and other construction concepts by focusing on electrical and gas applications in residential building construction. Students must complete SP2 safety training within the first 3 weeks of the semester in order to remain enrolled in the course.

## **Heating, Ventilation, & Air Conditioning**

### **HVAC I Dual Enrollment (AIR 121/122)**

*Prerequisite: GPA of 2.0 or higher*

*Grade Levels: 10-11*

*Credits: 1 CTE Credit; 8 College Credits if taken for Dual Enrollment*

This program prepares students to install, repair, and maintain the operating conditions of heating, air conditioning, and refrigeration systems. Students work with piping and tubing, study heat and electricity, install duct systems, and comply with EPA regulations. Students will troubleshoot mechanical and electrical failures and identify the difference between the two. Students will also have the opportunity to become OSHA 10 certified.

### **HVAC II (AIR 134/154)**

*Prerequisites: HVAC I; GPA of 2.0 or higher*

*Credits: 1 CTE Credits; 7 College Credits if taken for Dual Enrollment*

This program prepares students to install, repair, and maintain the operating conditions of heating, air conditioning, and refrigeration systems. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year. Options for certification testing will be available by taking the CFC test certified by the EPA. All students will complete SP2 safety training online. Completion of this sequence may prepare students for employment in a variety of HVAC occupations. Students will also have the opportunity to become OSHA 10 certified.

## **OFF CAMPUS**

### **Welding**

*Grade Levels: 11-12*

*Credits: 2 CTE Credits*

Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Professional welders are in high demand and can earn accordingly. Students in Welding I are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn all safety-related practices and techniques, including earning the OSHA 10 card.

## SPECIAL EDUCATION

### **Pre-Vocational Education**

*Grade Levels: 9-10*

*Credits: 1*

Students learn work-related skills that will enable them to find and keep a job. This class is classroom based learning which teaches foundational skills related to workplace comprehension, social skills, compensation, individual living, jobsite specifics, positive co-worker/employer relationships, and understanding job site appropriate behavior. Students may take this course for two years. During the fourth marking period, students will be given the opportunity for hands-on practical application of skills taught in the classroom. This course is a prerequisite for Work Experience.

### **Work Experience I**

*Prerequisites: Pre-Vocational Education*

*Grade Levels: 10-11*

*Credits: 1*

This is a work skills class for students who have completed Pre-Vocational Education but are not yet ready for community-based work experiences. In this course, students utilize daily "hands on" work activities to reinforce the skills they learned in Pre-Vocational Education. The course includes a classroom component with lessons and activities to reinforce meaningful and beneficial student work and job skills. The course is designed to improve work skills to prepare students for future participation in Work Experience II. Students will also have an opportunity to improve their work skills through "peer role modeling" and jobs around campus in locations such as the library, office, and athletic areas. They will work side by side with upperclassmen who have demonstrated good work skills and good character skills.

### **Work Experience II**

*Prerequisites: Work Experience I*

*Grade Levels: 10-11*

*Credits: 2*

This course is a community-based program intended for sophomores and juniors. Students will travel weekly into the community and perform job-related tasks at local businesses and service providers. Students will also participate in other work-related tasks in school. Both settings emphasize important skills such as following directions to complete a specific task, following safety rules, understanding the difference between quality and quantity work, and getting along with coworkers and supervisors.

### **School to Work**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 11- 12, and post-graduates*

*Credits: 2*

This course assists students with transition from school to work. The classroom component functions like an employment agency assisting students to identify skills and interests, career pathways, and prepare resumes. Students will investigate career opportunities; identify skills and training needed for future jobs and different ways to complete the work-related tasks. Students will daily perform basic duties and jobs associated with several different skill-related industries utilizing hands-on experiences in the school setting such as landscaping and preparing sport fields. Students will perform basic duties and jobs associated with the service industry.

### **Reading I, II, III**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 1*

Reading is an intervention program available to students who struggle with reading. The class utilizes a research- based reading program focused on a multi-sensory approach to decoding and encoding words phonetically through the steps of the program. Students progress through the levels while also developing reading comprehension through identifying and applying various reading strategies.

**Academic Resource**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 0*

Resource classes are available to students as a separate class period as deemed appropriate by the IEP team. Academic resource is a structured classroom setting with clear expectations to provide students with extra support while completing homework, studying for tests/quizzes, and working on projects. Progress of students is closely monitored to help ensure success.

**Academic Reading**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 1*

Academic Reading is designed for high school students who read substantially below grade level. Emphasis is on building foundational reading skills necessary for independent reading and comprehension in context using a multisensory approach. Students in Academic Reading will focus on phonemic awareness, vocabulary development, comprehension, text reading, word recognition, and reading fluency based on their individual needs.

**Academic Science**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 1*

Academic Science is designed for high school students taking the Virginia Alternate Assessment Program (VAAP). This course will focus on scientific reasoning and investigation, the fundamental concepts of biology, and the interactions of life forms and ecosystems. Students taking Academic Science will focus on the study and function of animal and plant cells, DNA and genetic traits, photosynthesis, and the role of bacteria and viruses. Students will explore how living and nonliving factors in an ecosystem interact with each other and how these interactions might change over time.

**Academic History/Social Studies**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 1*

This course will explore key events, people, and ideas that impact our world from ancient times to current events in the areas of World Geography, World History I and II, and Virginia/United States History. Students taking Academic History/Social Studies will focus on selected content in the areas of Geography, History, Economics, and Civics.

**Academic English**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 1*

Academic English is designed for high school students who demonstrate a basic understanding of English skills that are substantially below grade level. Emphasis is on building foundational reading, writing, speaking, and listening skills necessary to increase English skills. Reading comprehension skills are targeted through use of various novels, vocabulary, and writing assignments.

**Academic Math**

*Prerequisites: Based on Individualized Education Program (IEP)*

*Grade Levels: 9-12*

*Credits: 1*

Academic Math is designed for high school students whose math skills are substantially below grade level. Functional math skills such as counting money, check balancing, telling time, and word problems are emphasized. Students in academic math focus on improving their math skills utilizing all four basic operations based on their individual needs.

## **Adaptive PE**

*Prerequisites: Based on Individualized Education Program (IEP)*

Grade Levels: 9-12

Credits: 1

Adaptive Physical Education is designed to develop physical fitness and overall health, as determined by the IEP team. Physical activities consist of physical fitness testing (state mandated), general fitness activities, bicycle safety and awareness, flag football, volleyball, basketball, badminton, disc golf, fitness stations and overall bodyweight exercises working towards lifelong fitness.

## **ADDITIONAL CREDIT-BEARING OPPORTUNITIES**

### **Courses Taken at Mountain Gateway Community College (Off-Site)**

*Prerequisites: GPA of 3.0 or higher Grade*

*Levels: 9-12*

*Credits: varies by course*

Through a partnership with **Mountain Gateway** Community College, RCHS students are able to take college-level courses at a rate determined by **MGCC** per credit hour. This opportunity is designed to allow students to begin collegiate coursework during their high school career, and/or to pursue courses not currently offered at RCHS. Interested students should speak with their school counselor and principal. Applications are available in the counseling office. **Students must abide by MGCC policy, dates, and deadlines.**

*Grades Reporting, Transcripts and Class Rank:* Courses taken at **MGCC** that are required for RCHS graduation will be denoted on the RCHS transcript upon completion of the course (verified by submission of a **MGCC** transcript). These courses will receive a grade (not pass/fail), will be weighted with the Dual Enrollment weight, and will be denoted on the RCHS transcript and included in calculation of GPA and Class Rank. All other courses will not be included on the RCHS transcript, in GPA calculation, or class rank. However, students are encouraged to send their **MGCC** transcripts when applying to college.

### **Independent Study**

*Prerequisites: Application and approval by Independent Study Coordinator, Principal, and Counselor*

*Grade Levels: 10-12*

*Credits: 0.5 credits per semester will be awarded on a pass/fail basis*

Independent Study provides the opportunity for students to study a topic of intense personal interest that is not offered in the RCHS curriculum. This opportunity is prioritized to juniors and seniors. However, sophomores may apply as long as they are in good academic standing and approved by the independent study coordinator. Due to the transition during freshman year preference is given to juniors and seniors. Students will have the opportunity at the end of the semester and the first two weeks of each semester to sign up for an independent study. All independent studies must be conducted during the scholastic year. In the proposal, students state objectives, specific problem definition, methods of learning, end product, and criteria for evaluation. Included in the proposal is a commitment from an advising mentor, with a plan for meeting with the student for advising and consultation during the independent study semester. The course is pass/fail, and upon successful completion, 1/2 credit per semester is awarded. A final presentation at the end of the semester is required. Students may submit a proposal for further study for the second semester and a continuation form will be filled out or students may select a different study, but a new packet will need to be completed. For more information, please click the link:

[https://docs.google.com/document/d/1Zhqwd5RFjwHfDI\\_-KwL4dZw37OjSaef2QsJIT7RAZ0/copy](https://docs.google.com/document/d/1Zhqwd5RFjwHfDI_-KwL4dZw37OjSaef2QsJIT7RAZ0/copy)

### **Summer School**

Students who need to recover courses due to unsuccessful completion during the school year should strongly consider attending a four-week credit recovery opportunity. This enables students to move forward in their course requirements without retaking the course in future school years.

Also available is a virtual 6-week online option for PE 9/Health 10, PE 10/Health/Driver's Ed, and Economics and Personal Finance.

Please talk to your school counselor to discuss and sign up for the summer school opportunities.

## NON CREDIT-BEARING OPPORTUNITIES

### Early Release

*Prerequisites: Approval by counselor and/or administrators*

*Grade Levels: SENIORS ONLY*

*Credits: 0*

To be eligible for early release, seniors must have met all SOL requirements (passed all state assessments required by the VDOE and diploma type). Remediation classes will be provided during the instructional day for any senior who needs to retake an SOL assessment.

### Teacher's Aide (TA)

*Prerequisites: Must be requested of Principal by the teacher; Student must have counselor AND administrator approval*

*Grade Levels: 11-12*

*Credits: 0*

### Directed Study (Study Hall)

*Prerequisites: Approval by counselor AND administrator; Application process*

*Grade Levels: Senior Preference*

*Credits: 0*

Directed Study is an opportunity for students to have a period to work on assignments during the school day. There are a limited number of spaces available so students are encouraged to register for this opportunity when registering for courses for the next school year.

## COURSE SELECTION AND POST-SECONDARY PLANNING GUIDE

The RCHS School Counseling Office can assist students and families with College and Career Planning. The Department's website (<https://www.rockbridge.k12.va.us/domain/397>) has many helpful resources. All students and families are also encouraged to subscribe to the department's weekly email newsletter, which contains information about scholarship opportunities, enrichment opportunities, standardized testing dates, college visit dates, and much more.

### PREPARATION FOR COLLEGE

All colleges have different entrance requirements. Before you select high school courses, check the requirements of several colleges that interest you. If you are undecided about a college, use the following guidelines in making high school course selections.

- Take four years of math and science. Most four-year colleges require at least Algebra II for admission.
- Take at least three years of a world language. Many colleges do not list a world language requirement, but indicate that three or four years are highly desirable.
- Colleges prefer that students take the most challenging courses possible, pursue a full academic program for four years, and demonstrate service to the community. Course selections should be a reflection of your career pathway.
- Students should take the Preliminary Scholastic Aptitude Test (PSAT) in the 10th and/or 11th grade. If a four-year college is a part of your career pathway, then you should take the Scholastic Aptitude Test (SAT) and/or American College Testing (ACT). It is strongly recommended that college-bound students take their first SAT or ACT test in the spring of their junior year, as this allows you to retake the test(s) in the summer or early in your senior year. Fee Waivers are available for eligible students. Please see your school counselor. If you are eligible for any testing accommodations at RCHS (with a 504 or IEP), **you are NOT automatically given accommodations for the ACT or SAT. You must ask your school counselor to assist you in applying for these accommodations.** Requesting accommodations can take up to a few months to receive approval, so families are advised to begin this process early.
- Always seek the advice of your parents, teachers, and school counselor.

## **APPLYING TO COLLEGE**

School Counselors are able to assist families with the college application process. The RCHS Counseling Department hosts annual workshops for both parents/guardians and students to discuss the application process and financial aid opportunities. Students are strongly encouraged to meet with their school counselor regularly during senior year to discuss their applications.

At the beginning of the school year, seniors will be provided with paperwork to inform their school counselors of where they intend to apply to college, a “brag sheet” to provide their counselor with information about them for a letter of recommendation, and a guide for how to send their high school transcript. It is the student’s responsibility to complete this paperwork by deadlines established by the RCHS Counseling Office in order to guarantee that application materials be sent from RCHS to each college by the student’s intended deadlines.

Fee Waivers are available for the PSAT, SAT, SAT Subject Tests, the ACT, and College Applications for eligible students. Please see your school counselor to inquire if you are eligible for a fee waiver. Eligible students are responsible for asking their counselor for a fee waiver before signing up for the respective test or submitting their college applications.

## **PREPARATION FOR EMPLOYMENT**

There are many opportunities for students to prepare for entry into a career. Through the Career & Technical Education (CTE) department, students can earn industry certifications that enable them to be employable in several career fields immediately upon graduation. Use the following guidelines in choosing courses to prepare for employment.

- Take CTE introductory courses in the ninth and tenth grades to discover which program is most interesting to you.
- Choose a CTE pathway that interests you and ask your teacher or counselor the order in which you should take the courses in order to gain the necessary skills to work in that occupational area. You will need to be enrolled in courses for at least two years to complete the CTE programs.
- Plan your program to include the courses necessary to gain occupational skills and certifications. Also, include other courses that may be related to your chosen career pathway.

## **CAREER PATHWAYS**

The courses that students take in high school can have an effect on their career choices. This guide to high school courses has been prepared so that students will have a firm idea of what the courses offer, what careers they may lead to, and the possible effects on their future plans. As students select courses, they are urged to explore all of their academic options. The RCHS Program Pathway Reference Guide will assist in the development of an Academic and Career Plan. This guide is located at the end of this book.

## ROCKBRIDGE COUNTY HIGH SCHOOL ACADEMIC and CAREER PLAN

Student Name:		Class of:
Post-Secondary Goal:		Diploma Type:
Career Interest:		
Program Pathway		
Industry Credential		

High School Credits Earned prior to 8 <sup>th</sup> Grade:		
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Subject	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Total
English						
Math						
Science						
History and Social Studies						
PE / Health						
World Language						
Fine Art / CTE						
Econ and PF						
Elective						
Elective						
<b>Total Credits</b>						
SOLs Taken:						Math: Science: History: Reading: Writing: TOTAL:

Comments:

Student Initials:	Date	Date	Date	Date
Guardian Initials:	Date	Date	Date	Date
Counselor Initials:	Date	Date	Date	Date

## RCHS CAREER PATHWAYS REFERENCE GUIDE

<b>Social Science &amp; Language Arts</b>				
<i>Potential College Majors</i>	Advertising, Journalism, Special Education, Early Childhood Education, Public Relations, Real Estate, Languages, Library Science, Human Resources, Social Work			
<i>Sample Occupations</i>	Journalist, Teacher, Historian, Curator, Librarian, Realtor, Legislator			
<b>Subjects</b>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
English	English 9 English 9 Honors	English 10 English 10 Honors Journalism I Creative Writing	English 11 English 11 AP English 11 DE Journalism I, II Creative Writing	English 12 English 12 AP English 12 DE Journalism I, II, III Creative Writing
Social Science	World History II World History II Honors	World Geography Honors World History AP	VA/US History VA/US History AP VA/US History DE Econ & Personal Finance Econ & Personal Finance DE Sociology Honors World History AP World Geography Honors	VA/US Government VA/US Government AP VA/US Government DE Econ & Personal Finance Econ & Personal Finance DE Sociology Honors World History AP World Geography Honors
World Language	Latin I, II, III Spanish I, II, III	Latin I- AP Spanish I-IV H	Latin I- AP Spanish I-V AP	Latin I- AP Spanish I-V AP

<b>Mathematics &amp; Science Programs</b>				
<i>Potential College Majors</i>	Accounting, Architecture, Nursing, Biology, Chemistry, Engineering, Math Education, Computer Science, Insurance & Risk Management			
<i>Sample Occupations</i>	Accountant, Engineer, Architect, Nurse, Math Teacher, Doctor, Computer Programmer			
<b>Subjects</b>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Mathematics	Algebra I Geometry Geometry Honors	Geometry Geometry Honors Algebra II Algebra II Honors	Algebra II Algebra II Honors Pre-Calculus Pre-Calculus DE Pre-Calculus PreAP Pre-Calculus AP Statistics AP AFDA	Pre-Calculus Pre-Calculus DE Pre-Calculus PreAP Statistics AP Calculus I AB AP/DE Calculus BC AP/DE Statistics AP Computer Science AP AFDA
Sciences	Earth Science Environmental Science Biology Biology Honors	Biology Biology Honors Biology II: Anatomy & Physiology Earth Science II: Advanced Studies Chemistry Chemistry Honors/DE	Biology II: Anatomy & Physiology Earth Science II: Advanced Studies Biology AP Chemistry Chemistry Honors/DE Chemistry AP/DE Physics Physics AP	Physics Physics AP Biology AP Chemistry AP/DE Biology II: Anatomy & Physiology Earth Science II: Advanced Studies

<b>Fine Arts Program</b>				
<i>Potential College Majors</i>	Art, Art History, Music, Art Education, Music Theory, Music Education, Film Arts, Graphic Design, Photography, Interior Design, Dance, Studio Arts			
<i>Sample Occupations</i>	Acting, Artist, Dancer, Interior Decorator, Musician, Graphic Designer, Photographers			
<b>Subjects</b>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Fine Arts	Introduction to Art Studio Art & Design I Decorative and Functional Art Survey of Theatre and Dance Percussion Ensemble Choir Jazz Band Symphonic Band	Introduction to Art Studio Art & Design I Studio Art & Design II Ceramics I Decorative and Functional Art Survey of Theatre and Dance Photography I Photojournalism Percussion Ensemble Choir Jazz Band Symphonic Band	Introduction to Art Studio Art & Design I, II, III Ceramics I, II Decorative and Functional Art Survey of Theatre and Dance Photography I Photography II, III Photojournalism I, II, III Percussion Ensemble Choir Jazz Band Symphonic Band	Introduction to Art Studio Art & Design I, II, III, IV Ceramics I, II Decorative and Functional Art Survey of Theatre and Dance Photography I Photography II, III Photojournalism I, II, III Percussion Ensemble Choir Jazz Band Symphonic Band

<b>Trade and Industrial</b>				
<i>Potential College Majors</i>	Vocational studies are available in various fields			
<i>Sample Occupations</i>	Auto Body Repair, Auto Mechanic, Carpenter, Construction Manager, Small Business Owner, HVAC Technician			
<b>Program</b>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Auto Body Technology		Auto Body I	Auto Body II	Auto Body III
Automotive Technology		Automotive Tech I	Automotive Tech II	Automotive Tech III
Building Trades		Building Trades I Building Maintenance	Building Trades II	Carpentry III
Heating Ventilation & Air Conditioning <i>*Dabney Courses are in the evenings</i>			*Intro to Construction (BLD 110) *HVAC I (AIR 121/122)	*Intro to Construction (BLD 110) *HVAC I (AIR 121/122) *HVAC II (AIR 134/154)
Completer Sequence	Students must complete a Level I class and a Level II class in the same program.			
Industry Credentials possible	ASE Certifications, OSHA Certification and NOCTI Building Trades Maintenance Assessment			

<b>Aerospace Technology</b>				
<i>Potential College Majors</i>	Aerospace Engineer, Chemistry, Physics, Biological Science, Computer Science, Mathematics			
<i>Sample Occupations</i>	Aeronautical Drafter, Aerospace Engineer, Aerospace Engineering Technician, Electro-Mechanical Technician, Electronics Engineering Technician, Engineer Engineering Technician, Human Factors, Engineer Power Systems Engineer, Quality Engineer, Aircraft Mechanic and Service Technician Aircraft Structure, Surfaces, Rigging, and Systems Assembler			
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	
Aerospace Technology I	Aerospace Technology I Aerospace Technology II	Aerospace Technology I Aerospace Technology II	Aerospace Technology I Aerospace Technology II	
Completer Sequence	Two years of Aerospace Technology courses			
Industry Credentials possible	Workplace Readiness Skills			

<b>Communication Systems</b>			
<i>Potential College Majors</i>	Communications, Marketing and Media, Human Resources, Information Systems Technology		
<i>Sample Occupations</i>	Computer Security Specialist Radio, TV Broadcast Technician Sound Engineering Technician Telecommunications Equipment Installer, Repairer, Commercial Photographer Fashion Illustrator Graphic Designer Illustrator Interior Designer Media Planner, Buyer Multimedia Artist, Animator Photographic Process Technician		
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Communication Systems	Communication Systems Graphic Design	Communication Systems Graphic Design	Communication Systems Graphic Design
<b>Completer Sequence</b>	Two years of Communication Systems courses		
<b>Industry Credentials possible</b>	Workplace Readiness Skills, Brainbench Photoshop		

<b>Manufacturing</b>			
<i>Potential College Majors</i>	Construction Engineering, Forest Engineering, Operations Research		
<i>Sample Occupations</i>	Occupational Health and Safety Specialist Safety Engineer, Electro-Mechanical Technician Industrial Engineer Industrial Engineering Technician Manufacturing Systems Engineer Millwright Precision Inspector, Tester, or Grader Production Manager		
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Material & Processes	Manufacturing I	Manufacturing II	Manufacturing III
<b>Completer Sequence</b>	Two years of Manufacturing courses		
<b>Industry Credentials possible</b>	Workplace Readiness Skills		

<b>Electronics &amp; Robotics</b>			
<i>Potential College Majors</i>	Engineering, Industrial Technology, Machine Technology, Mechanical Design and Technology, Technology Education, Electronics, Robotics		
<i>Sample Occupations</i>	Architect, Engineer, Computer Designer, Computer Operator, Draftsman, Instrumentation Operator, Lab Technician, Electronics Technician		
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Electronics Technology I	Electronics Technology II	Electronics Technology III	
<b>Completer Sequence</b>	Two years of Electronics Technology courses		
<b>Industry Credentials possible</b>	OSHA Certification and Certified Electronics Technician Exam (CET-EM1)		

<b>Small Animal Care</b>			
<i>Potential College Majors</i>	Veterinary Tech, Veterinary Science, Zoology		
<i>Sample Occupations</i>	Vet Tech, Veterinarian Boarding Kennel Owner or Tech		
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Small Animal Care I	Small Animal Care II	Veterinary Science	Equine Science
<b>Completer Sequence</b>	Completion of Small Animal Care I and II		
<b>Industry Credentials possible</b>	ELANCO Veterinary Medical Applications Certification		

<b>Architecture &amp; Engineering</b>			
<i>Potential College Majors</i>	Engineering, Industrial Technology, Landscape Architecture, Machine Technology, Mechanical Design and Technology, Technology Education		
<i>Sample Occupations</i>	Architect, Engineer, Computer Designer, Computer Operator, Draftsman, Instrumentation Operator, Lab Technician,		
9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>
Architecture & Engineering I	Architecture Drawing II Engineering Drawing II	Architecture & Engineering III	
<b>Completer Sequence</b>	Two years of drafting & design technology classes.		
<b>Industry Credentials possible</b>	NOCTI Technical Drawing; NOCTI Architectural Drawing		

<b>Agriculture</b>			
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<i>Potential College Majors</i>	Landscape/Turf Management, Forestry, Horticulture, Parks & Recreation, Environmental Management, Environmental Science, Sustainable Agriculture		
<i>Sample Occupations</i>	Farmer, Researcher, Scientist, Small Business Owner		
<b>9<sup>th</sup></b>	<b>10<sup>th</sup></b>	<b>11<sup>th</sup></b>	<b>12<sup>th</sup></b>
Biological Applications in Agriculture	Horticulture Science Forestry & Wildlife	Horticulture Science Forestry & Wildlife	Horticulture Science Forestry & Wildlife
<b>Completer Sequence</b>	Two years of agriculture classes.		
<b>Industry Credential possible</b>	Workplace Readiness		

<b>Business &amp; Information Technology</b>				
<i>Potential College Majors</i>	Accounting, Information Systems Technology, Computer Software, Administration Support Technology, Finance, Business Administration, Information Technology, Marketing			
<i>Sample Occupations</i>	Clerical Staff, Bookkeeper, General Business, Graphic Designer, Administrative Assistant, Entrepreneur, Accountant, Advertising and Promotions Manager Art Director Marketing Communication Manager Marketing Manager Multimedia Artist, Animator Public Information Director Public Relations Manager Sales Manager Trade Show Manager			
<b>Program</b>	<b>9<sup>th</sup></b>	<b>10<sup>th</sup></b>	<b>11<sup>th</sup></b>	<b>12<sup>th</sup></b>
<b>Information Technology</b>	Computer Information Systems	Design, Multimedia, & Web Technology	Personal Finance & Economics	Cybersecurity DE
<b>Completer Sequence</b>	Students must complete two years of business & technology courses <i>excluding</i> Personal Finance & Economics			
<b>Industry Credentials possible</b>	Microsoft Certification, MTA Certification, W!SE Financial Literacy			

<b>Culinary Arts, Hospitality, Tourism, &amp; Recreation</b>				
<i>Potential College Majors</i>	Culinary Arts, Professional Catering, Tourism and Event management, Hotel and Restaurant Management			
<i>Sample Occupations</i>	Chef, Bed and Breakfast owner, Caterer, Travel Agent, Hotel Manager, Flight attendant, Meeting/event manager			
<b>Program</b>	<b>9<sup>th</sup></b>	<b>10<sup>th</sup></b>	<b>11<sup>th</sup></b>	<b>12<sup>th</sup></b>
<b>Culinary Arts</b>	Introduction to Family & Consumer Sciences Nutrition and Wellness	Culinary I	Culinary II	Culinary III
<b>Hospitality &amp; Tourism</b>	Introduction to Culinary Nutrition & Wellness	Introduction to Family & Consumer Sciences Nutrition and Wellness	Hospitality I	Hospitality II
<b>Completer Sequence</b>	Completion of two years of courses			
<b>Industry Credentials possible</b>	ServSafe Manager Certification			

<b>Health &amp; Medical Science</b>				
<i>Potential College Majors</i>	Public Administration, Human Services, Early Childhood Development, Social Sciences, Nursing, Radiography, Physical Therapy Assistant, Respiratory Assistant, Emergency Medical Service, Health Information Technology			
<i>Sample Occupations</i>	Substance Abuse Rehabilitation Counselor, Public Management, Human Services, Child Care, Chef, CPN, LPN, RN, OT, PT, X-Ray Technician, Nutritionist, Doctor, EMT, Firefighter			
<b>Program</b>	<b>9<sup>th</sup></b>	<b>10<sup>th</sup></b>	<b>11<sup>th</sup></b>	<b>12<sup>th</sup></b>
<b>Health Assistant</b>			Nurse Aide I	Nurse Aide II
<b>Emergency Medical Technician</b>			Emergency Medical Technician	Emergency Medical Technician
<b>Completer Sequence</b>	Completion of two years of courses in the same program.			
<b>Industry Credentials possible</b>	Certified Nurse Aide Assessment (CAN), Emergency Medical Technician Exam (EMT)			