

# Rappahannock High School

## Warsaw, Virginia

### 2020-2021 Course Selection Guide

#### COURSE DESCRIPTIONS

##### English

**English 8** - This class contains an emphasis on the writing process, grammar, reading comprehension, vocabulary, and public speaking. We will implement the use of cooperative learning activities and technology to apply the material learned to the modern day world. Students will be required to do journal writing, vocabulary activities, essays, reading novels, and speeches. Students will be required to complete the English 8 reading and writing SOL.

**English 9** – This class contains a variety of high interest material in the form of short stories, poetry, drama and grammar. Spread throughout the books are units of “word attack,” “inferences,” “central focus,” and “relationships,” which focus on skill development in literature.

**English 10** – This class contains a variety of short stories, poetry, and drama. Units are arranged around the themes of “opener,” “being afraid,” “being different,” and “making decisions.” Emphasis is placed again on word attack, inferences, central focus, relationships and central meaning. Students will be required to complete the WorkKeys Business Writing test.

**English 11** – This class includes units on such themes as “self- reliance,” “human relationships,” “the global community,” and “environmental issues.” United States literature is the primary focus of the text. Continued emphasis is placed on skill building in word attack, inferences, central focus, and relationships. Students will be required to complete the End of Course Reading SOL.

**Advanced Placement English 11** is offered for the more advanced English student. This material is taught on the college level. Students receive information about the requirements when scheduling this class. Students will be required to take the AP English Language Exam in May. Students will be required to successfully complete the End of Course Reading SOL. **Summer work required.** *Prerequisite: Student must pass English 10 with a C or better.*

**English 12-** This class gives a chronological approach to the literature of England. Units include studies of the Anglo-Saxon period, the Medieval period, the Renaissance, the Age of Reason, the Romantic era, the Victorian era, and the Twentieth Century.

Students will write persuasive, narrative, and personal essays on the themes explored in literature, and a documented research paper will also be required.

**Advanced Placement English 12-** is offered for the more advanced English Student. This material is taught on the college level. Students receive information about the requirements when scheduling this class. Students will be required to take the AP English Literature Exam in May. **Summer work required.** *Prerequisite: Student must pass English 11 with a C or better.*

**Dual Enrollment English Composition (ENG 111/112, ENG 210/251 & SDV 100)** - This is a hybrid online/classroom class, and students learn MLA and APA research formats. Composition 111 introduces students to critical thinking and the fundamentals of academic writing. Writing activities will include exposition and argumentation with one non-research and four researched essays. Composition 112 continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of literary texts about the human experience. There are four required research essays and one major research paper. Advanced Composition 210 helps students refine skills in writing non-fiction prose. This course guides development of individual voice and style and requires five essays. SVD 100 introduces students to the basics of college life and the skills required to be successful. **Students must pass ENG 111 to go to ENG 112, and ENG 112 to go to ENG 210. \* Passing 111 and 112 are required for graduation, and students who get behind one unit or are failing at the withdrawal date will be removed from the course without their permission. Students who fail to complete all the courses or do not get a C or better in those completed will be required to reimburse Richmond County Public Schools for the cost of the class(es).**

## Mathematics

**Pre-Algebra** – This course includes Number and Number Sense: Relationships within the Real Number System, Computation and Estimation: Practical Applications of Operations with Real Numbers, Patterns, Functions, and Algebra: Linear Relationships, Measurement: Problem Solving, Geometry: Problem Solving with 2- and 3-Dimensional Figures, Probability and Statistics: Statistical Analysis of Graphs and Problem Situations. Students will be required to complete the Math 8 SOL.

**Algebra I (Part I/Part II)** – This course is required for 9<sup>th</sup>-grade students, who have not yet taken it. Material covered includes the natural numbers, variables, integers, rational numbers (fractions and decimals), real numbers, and solution of equations, inequalities, open sentences in two variables, polynomials, and basic concepts of geometry. Students will be required to complete the End of Course Algebra I SOL. (Students will be placed in Part I/Part II class at the discretion of administration and teacher recommendation.)

**Geometry-** This course is designed to help students develop powers of partial visualization, to see the role of inductive and deductive reasoning in mathematical and

non-mathematical situations, and to appreciate the need for clarity of language. Areas covered include: elements of sets through angle relationships, perpendicular and parallel lines and planes, congruent triangles, similar polygons, circles, construction and loci, and coordinate geometry. Students may be required to complete the EOC Geometry SOL. *Prerequisites: Student has met or is meeting requirements for math and is working towards an advanced studies diploma.*

**Algebra, Functions & Data Analysis** (*gr. 10 – 12*) - Algebra, Functions, and Data Analysis is a course in high school for students to mathematically strengthen and extend the concepts that students encountered in Algebra 1 and Geometry. Through investigation of mathematical models, students will strengthen conceptual understanding in mathematics and develop connections between statistics and algebra.

**Algebra II** - This course is a continuation of material completed in Algebra I. It proceeds through sequences and series, linear and quadratic relations and functions, polynomials, rational algebraic expressions, radicals and irrational numbers, polynomial functions, complex numbers and exponents. Students may be required to take the EOC Algebra II SOL. *Prerequisites: Student has met or is meeting requirements for math and is working towards an advanced studies diploma.*

**Pre-Calculus** – This course is designed to prepare students for Calculus, either in high school or college. Topics include understanding functions from symbolic, tabular, and graphical perspectives, transformations and function composition, polynomial functions, rational polynomial functions, trigonometry, and conic sections. In addition to content mastery, the course goals are to further develop students' problem solving and critical thinking skills. *Prerequisites: Algebra II grade of a C or better.*

**Probability and Statistics** - This course focuses on the basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions. Students learn the fundamental ideas of probability and apply them in developing statistical methods. The study of statistics includes the interpretation of statistical graphs, measurement of central tendency and variation, regression, and correlation. *Prerequisites-Successful completion of Algebra II.*

**Dual Enrollment Pre-Calculus (MTH 161/162, taken at RCC)** – Study of Math 163 presents college algebra, matrices, and algebraic, exponential, and logarithmic functions. Many application problems and examples are drawn from real life situations. Math 164 is offered the second semester and this course presents the detailed concept of trigonometry, analytic geometry, sequence and series and its relevance to real life problems. Students are required to pay the RCC tuition for the class. If the student completes the course with a C or better RCPS will reimburse the student 50% of the tuition after grades have been submitted. Please contact Mrs. Brown with additional questions about assistance.

**\*\* In order for students to enroll in DE Statistics/Applied Calculus or DE Calculus they must have taken and passed DE Pre-Calculus with a C or higher.**

**DE Statistics/Applied Calculus (MTH 245/261, taken at RCC)** - Statistics presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, correlation, and linear regression. Applied Calculus introduces limits, continuity, differentiation and integration of algebraic, exponential and logarithmic functions, and techniques of integration with an emphasis on applications in business, social sciences and life sciences. Students are required to pay the RCC tuition for the class. If the student completes the course with a C or better RCPS will reimburse the student 50% of the tuition after grades have been submitted. Please contact Mrs. Brown with additional questions about assistance. *Prerequisite: Students must have taken DE Pre-calculus and passed with a C or better.*

**Dual Enrollment Calculus (MTH 263/264, taken at RCC)** - Continues the study of analytic geometry and the calculus of algebraic and transcendental functions including rectangular, polar, and parametric graphing, indefinite and definite integrals, methods of integration, and power series along with applications. Students are required to pay the tuition for the class. Students are required to pay the RCC tuition for the class. If the student completes the course with a C or better RCPS will reimburse the student 50% of the tuition after grades have been submitted. Please contact Mrs. Brown with additional questions about assistance. *Prerequisite: Students must have taken DE Pre-calculus and passed with a C or better.*

## **Science**

**Physical Science** - Physical Science explores the characteristics of matter and energy. This course is an introduction to chemistry and physics. Areas of study include the characteristic properties of matter, atomic structure and theory, basic chemistry, motion, forces, nuclear energy, sound waves, light waves, electricity, and electromagnetism. Students will be required to complete the Science 8 SOL.

**Environmental Science** - The study of many components of our environment, including the human impact on our planet. These outcomes focus on scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the environment, and legal and civic responsibility. Instruction will focus on student data collection and analysis through laboratory experiences and field work. \*This course is recommended for students pursuing the Standard diploma.

**Earth Science**- This course introduces the four main branches of Earth Science: meteorology, geology, oceanography, and astronomy. Students will master a basic understanding of these concepts and how they are related to everyday life. The course will include laboratory experiments along with other practical "hands on" activities. Students will be required to complete the End of Course Earth Science SOL. \*This course is recommended for students pursuing the Advanced studies diploma.

**Biology**- The study of biology is the study of life, and therefore addresses the main themes common to all life on our planet: cells as the basic unit of life, acquiring and using

energy, reproduction, growth and development, responding to the environment, and change over time. These are the major areas of study, and scientific investigation as a way of inquiry to explore and develop these themes is emphasized. Students will be required to take the End of Course Biology SOL.

**Chemistry** - The study of "change" and atomic theory. This course is designed to give students a good foundation in the basic principles of chemistry. *Prerequisite: Students should have successfully completed or currently enrolled in Algebra II.*

**Conceptual Physics** - How stuff works. This course provides a conceptually-based exposure to the physical world using real world applications. Topics will include: motion, projectiles, energy, electricity, waves, light, and sound.

**Physics** – This course is a broad survey of classical and modern physics. It is designed to enable students to appreciate the role of physics in today's society and technology. Emphasis is placed on the fundamental laws of nature on which all science is based. *Prerequisite: Students should have successfully completed or currently taking Algebra II.*

**AP Environmental Science (gr. 11-12)** - The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. Unlike most other introductory-level college science courses, environmental science is offered from a wide variety of departments, including geology, biology, environmental studies, environmental science, chemistry, and geography. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. *Prerequisite: Students should have completed Biology with a C or better.*

## **History**

**Civics and Economics** – This course will examine the roles citizens play in the political, governmental, and economic systems in the United States. Students will examine the constitutions of Virginia and the United States, will identify the rights, duties, and responsibilities of citizens, and will describe the structure and operation of government at the local, state, and national levels. Students will be required to complete the Civics 8 SOL.

**World History I-** Students will study events from first recorded history to 1500 AD. Students will be required to complete the End of Course World History I SOL.

**World History II-** Students will study humankind and how humans have thought, behaved, and interacted across the ages. To accomplish this, students will study events from 1500 AD to present by examining the following concepts: patterns of population;

economic networks and exchange; uses and abuses of power; haves and have-nots; expressing identity; science, technology, and the environment; spiritual life and moral codes. By the end of the course, students will have a better understanding of who they are, how and why the world got to be the way it is, and how to be global citizens in the 21<sup>st</sup> century. *Prerequisite: Students must pass World History I with a C or better.*

**United States History** - This course will provide comprehensive coverage of American history from prehistory to the present and will follow the Virginia Standards of Learning. It will be a blending of social and political history and geography to provide students with a broad view of America's past and present. A multicultural perspective will be used and the skills of interpreting charts, primary sources, political cartoons, and other historical documents will be developed. Students may be required to complete the EOC US History SOL.

**United States Government**- This course will provide comprehensive coverage of the American political system from its ancient origins to the present and will follow the Virginia Standards of Learning. It will be a blending of social, political, economic, and historic functions of government to provide students with a broad view of America's past and present. There will be a strong emphasis placed on the current events that currently shape our political system. A multicultural perspective will be used and the skills of interpreting charts, primary sources, political cartoons, and other historical documents and analyzing current events will be developed.

**Advanced Placement U.S. Government** - This course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. Students will be required to take the AP US Government Exam in May. *Prerequisite: Students must pass US History with a C or better.*

## **Health and Physical Education**

**Health and Physical Education 8** - This course of study will focus on physical fitness, sport appreciation, skill development, and technology (as it relates to sport), exercise, and health related issues. Major emphasis will be placed on cardiovascular fitness, muscular strength, and flexibility. Twice per year the students will be tested using the President's Challenge Physical Fitness Assessment.

**Health and Physical Education 9** – Physical activities covered in this course include leisure time activities such as badminton, table tennis, paddle tennis, and horseshoes. Advanced team sports such as basketball, volleyball, softball, track and field, and lacrosse and field hockey are also offered. Speedball and folk dancing may be included. Areas covered in health education include prevention and control of disease, consumer health, mental health, drugs, alcohol, tobacco, and health careers. Students will meet the CPR and first aid graduation requirements in this course.

**Health and Physical Education 10** – Physical activities in this course are soccer, basketball, horseshoes, modern dance, touch football, volleyball, track and field, softball, table tennis, lacrosse, field hockey, and paddle tennis. Health areas studied are environmental health, first aid and self-medical health, mental health, personal and family survival, and driver education. *Prerequisite: Health and Physical Education 9.*

### **Required Course for Graduation**

**Dual Enrollment Personal Finance** (*gr. 11-12*) - This course designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will explore personal and household budgets, simulate use of checking and saving accounts, demonstrate knowledge of finance, debt, and credit management, and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions.

### **Foreign Language**

**Introduction to Spanish** - This course is a study of the language, culture and customs unique to the Spanish-Speaking world. Students will learn the course material at an introductory level via the four basic modes of communication 1) reading, 2) writing, 3) listening, and 4) speaking. Students will study basic Spanish (numbers, time, alphabet, days of the week, greetings, etc.) and complete an in depth study of the culture and geography of the Spanish-speaking countries.

**Spanish I** (*gr. 9-12*) – This is a beginning course in Spanish including practice in reading, speaking, and understanding the language and customs of Latin America and other Spanish speaking countries. Much emphasis is placed on grammar, pronunciation, and conversation. *Students desiring to begin a foreign language should have attained a C average or higher in their English classes.*

**Spanish II** – This course is a continuation of the study of Spanish I. Emphasis is placed on conversation, reading, and the study of customs and history of Latin America.

**Spanish III** – This course is continuation of Spanish II with emphasis placed on conversation, reading, and writing. Focus will be placed on resolving individual student difficulties in oral presentation and spontaneous conversation. There will also be directed student interaction, i.e. debates, interviews, and summaries. The student will also read some selections from Spanish and Latin American literatures.

**DE Spanish III (SPA 101/102)** - Introduces understanding, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure. *Prerequisite: Students must have a C or higher in Spanish I & II and meet the qualifying requirements.*

## **Career and Technical Education Electives**

**Introduction to Power, Structural, and Technical Systems** - This is a non-agricultural shop class. Studies concentrate on woodworking, cold metal work and areas of interest, being available to individual students. This course is approximately 25% classroom work and 75% shop work. Specific areas of study plans, shop safety, tool identification, power equipment use, painting, and finishing. Each student is responsible for completing individual projects. There is a \$15.00 fee associated with this course.

**Agricultural Structural Systems** - This class will involve advanced carpentry, cold metal, and concrete work. It will also introduce concepts and hands-on applications of electricity and plumbing. Members of this class will be expected to design, analyze, prepare an estimate, and complete projects assigned to them along with projects of their own. They will also learn about the financial aspects of completing a job. Students will be expected to be able to work independently as well as a part of a team. *Prerequisite: Student must have taken and passed Intro to Power, Structural, and Technical Systems.*

### **Horticulture Sciences -**

#### **Jobs for Virginia Graduates (12th grade only) -**

**Accounting I** – Emphasis is placed on accounting principles as they relate to manual and computerized financial systems. Students will become familiar with business terms and the meaning of debits, credits, assets, liabilities, and capital as related to the bookkeeping cycle in the simplest form. Students use journals and ledgers along with balance sheets and income statements to show the financial condition of a business. Payrolls, taxes (sales and income), accounts payable and accounts receivable are presented as part of the cycle so that students are prepared to fill positions in any of these departments.

**Dual Enrollment Computer Information Systems (gr. 9-12)** – Computer Information Systems is a one-year, single-period course designed to introduce students to microcomputer technology and business applications using spreadsheets, databases, graphics, and beginning level word processing. This course also included an introduction to the BASIC programming language and telecommunications.

**Business Law** – This course will examine the foundations of the American Legal system and explore the economic and social concepts as they relate to legal principles and to business and personal law.

**Dual Enrollment Entrepreneurship (gr. 11-12)** – Presents various steps considered necessary when going into business. This Course includes areas such as product-service analysis, market research evaluation, setting up books, ways to finance



startup, operations of the business, development of business plans, buyouts versus starting from scratch, and financing.

**CyberSecurity Fundamentals** (*gr.9-12*) - Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

**JROTC (I – IV)** – The JROTC program prepares students for leadership roles while making them aware of their rights, responsibilities and privileges as Americans. The mission of JROTC is to motivate young people to be better citizens. The program promotes graduation from high school, and provides instructional opportunities which benefit the student, community and nation. Students must participate in the physical fitness and weekly dress requirements. There are also outside of school activities that are required.

### **Fine Arts Electives**

**Art (I & II)/(III & IV)** – This course offers an introduction to the art making process. Students learn how to use the elements of art: line, color, space, form, texture, shape, and value and the principles of design: balance, rhythm, pattern, emphasis, contrast, unity and movement to create works of art based on skill levels. Students are acquainted with different media and techniques such as painting, drawing, printmaking, photography, model making, and drawing. There is a \$15.00 fee associated with this course.

**Instrumental Band** – This course is open to all students with previous band experience. It provides students with opportunities for varied participation in programs at football games, parades, community events, concerts and graduation activities.

**Choral Music** – This class is open to all students. Students in the class participate in three concerts each year. Meetings of the choir are held during school hours. Students who can play a piano may assist in providing music for the group, according to their level of skill.

**Introduction to Piano** - Introductory piano for the students with little or no prior keyboard study. This course emphasizes development of basic keyboard skills, music reading, music of other genres, and conceptual understanding pertinent to early level study. The course includes introduction to transposition, harmonization, sight reading, improvisation, and basic keyboard repertoire.

**Music Discovery** – This course will be an introductory course in the principles of Music Technology and Music Appreciation. The foundation of the course is based on the

knowledge of having students to explore and use creative techniques. This will enhance their knowledge of music recording and composition understanding with historical references and key figures in the development of music.

**Introduction to Theater** – The purpose of Introduction to Theatre is to increase students' understanding, appreciation, and critical perceptions of the theatrical event. Readings and lectures will focus on the elements of theatrical practice; artists and innovators of theatre throughout history; and on the theatre's development as an art form and a social phenomenon. Students must participate in all productions including the VHSL Competition in the Fall Semester.

### **Math Elective**

**Coding for the iPad** - This course guides students in the process of coding through swift playgrounds on the iPad. It starts off with solving interactive puzzles to introduce key programming concepts. Then the students will start coding actual apps that they can post to the Apple App store. *Prerequisite: because of the logical and analytical nature of coding, the students will need to have successfully completed Algebra I with a C or higher.*

### **Social Studies Electives**

**Psychology (gr. 11-12)** - This course focuses on individual behavior and why an individual thinks, feels, and reacts to certain stimuli. Major emphasis will be placed on research methods, stages in childhood and adolescence, how the brain works, altered states of consciousness, psychological testing, and psychological disorders. *Prerequisite: student must earn a C or better in both English 10 and Biology.*

**Sociology (gr. 11-12)** – This course will examine how individuals, groups, and institutions interact to make up human societies. You will learn about sociological perspectives, culture, social structures, and social inequality. You will study people and the roles they play in society, both as individuals and groups. *Prerequisite: Students must have passed the World History I course with a C or higher and have an overall GPA of a 3.0.*

### **Health and Physical Education Elective**

**Weight Training (gr. 11 & 12)** – This course designed to teach students the physical and psychological advantages of having regular physical activity and healthy eating habits. This is a basic weight training course in which principles of weight training are discussed and applied to provide a foundation of total body strength and muscle. Basic knowledge relevant to the physiology of strength, muscle power, size and endurance are considered with respect to methods of achieving specific goals. *Prerequisite: student must have earned a B or better in Health/PE 9 & 10 and must not have exceeded more than 3 times of not dressing out in their Health/PE 9 & 10 courses for the year.*

## **Other Electives**

**DE Teachers for Tomorrow (SDV 110)** (*gr.11 -12*) - Teacher Cadet is an innovative, curriculum-based college level course designed to attract talented young people to the education profession through a challenging introduction to teaching. The Teacher Cadet Program seeks to provide high school students insight into the nature of teaching, the problems of schooling, and the critical issues affecting the quality of education in America's schools.

**Yearbook** – Students enrolled in this course will be specifically responsible for designing and publishing the Rappahannock High School yearbook as well as taking pictures at home games/events and selling ads. Students interested in taking this course should be creative, have basic design skills, be good writers, and be approved by the yearbook teacher. *Prerequisite: B or better in previous year English and basic computer skills.*

### **Cultural Topics: Literature, Writing, & Performance** (*grades 10-12*):

Learn about and debate a wide variety of literature and perspectives that explore a wide range of cultural topics and sociopolitical issues: love; death; stereotypes; tattoos; racism; sexism and gender discrimination; religious persecution; politics; interracial dating; the n-word and other racial slurs; the politics of hair texture, hairstyles, and hair color; stop the violence movements; manhood; womanhood; bitterness; the politics of skin color (light skin vs. dark skin conflicts); Life in the South during Segregation & The Civil Rights Movement; passing for white; acting white; acting black; “The Negro Artist and The Racial Mountain”; “Hip Hop: The Love of My Life”; and various other cultural topics. Learn how to react to and interact with those people or groups that you may oppose when it comes to different cultural viewpoints/perspectives; learn how to address controversial views and/or issues in a responsible manner/respectful way. Write about and perform your own original poetry, spoken word, rap, songs, and stories that explore those same topics and issues. Take on leadership roles to facilitate Richmond County Public Schools’ multicultural diversity efforts: preparing and reading the morning and afternoon cultural announcements, creating and maintaining cultural heritage displays at RHS and RCEM, hosting and/or performing in student-centered events such as the Lyrics Out Loud monthly open mic during the I/E Period; local area open mics at RCEM, The Orchard, and Farnham Manor; and the Poetry Out Loud National Recitation Contest.

**READ 180** - READ 180 is based on a blended instructional model that includes whole-group instruction and three small-group rotations, adaptive software, differentiated instruction, and independent reading. Students will be scheduled in this course at the discretion of administration.

**Service Leadership** (*gr. 10-12*) – This course will require student leaders to plan, implement, and evaluate projects. In doing so, the student will be using both problem-solving and leadership skills. The student will be challenged to understand their role in leadership and to identify ways in which they interact with others. *Prerequisites: 3.0 or higher GPA, 2 letters of recommendations, one from a teacher and one from a*

community leader. There will be outside service hour requirements. Students may not earn BETA service hours for these leadership activities.

**8<sup>th</sup> Grade Seminar** - This class is designed to help students build a solid foundation for becoming a successful RHS high school student. Emphasis will be placed on increasing basic knowledge content in math, science, civics, and English to provide support in their core classes. Students will continue to increase independent reading, writing, and oral communication skills. Students will also develop and/or strengthen basic computer skills. Students will develop and personalize study skills they will then be able to utilize across the curriculum.

- \***Classes that do not meet course number requirements may not be offered.**\*
- \***Student course selection does not guarantee that students will be placed in those selected classes.**