

# Senior Course Selection

**Selections must add up to 36 Credits:**

**18 Shop Credits, 3 English Credits (1 course), 3 Senior Related Credits (1 Course),  
9 Elective Course Credits (3 courses), 3 Trimester Course Credits (3 Courses)**

- CVTE SHOP-Mandatory
- English 12-Mandatory
- 1 Science and 1 Math Course - Mandatory
- 1 CVTE Shop Related Course- Mandatory
- 3 Elective Courses- Must Choose 3
  - Related II, VHS Course, Biotechnology, Botany, Physics, Environmental Science, Human Body Systems, Applied Science, World History II (CP, Honors), African American History, AP European History, Calculus, Trigonometry, Algebra III, Pre-Calculus, Statistics (CP, AP)
- 3 Trimester Courses
  - Physical Education-Mandatory
  - United States Government and Politics –Mandatory
  - Local History, General Psychology, Research & Writing
    - Must Choose 1. ( Research & Writing recommended for College Bound Students)

**\*\*\* Students enrolled in an Advanced Placement (AP) course MUST take the AP Exam.**

## Senior English

<b>AP English Literature and Composition</b>	This course focuses on independent and challenging reading aligned with consistent writing assignments. It includes the close reading of selected works of fiction, drama, and poetry from the 16th to the 21st century; the development of critical thinking skills; formal and informal writing; and AP practice exercises, with the goal of success on the AP Examination in May. Because a high score on this examination may earn college credit, the course may be considered equivalent to college freshman English and is considered to be rigorous.
<b>Honors Senior English</b>	Honors English has a curriculum similar to Senior CP English but requires students to discuss and analyze literature in more depth and with a more rigorous pace. Students will work more independently and participate in student-driven class discussion. Students will also be expected to write with more focus and attention to the requirements of MLA format and standard research requirements. Students will be required to read additional selections from the supplementary book list.
<b>CP Senior English</b>	College Prep courses are designed to give students knowledge of great European writers with a focus on British Literature. Students will study great European writers and their lives and work, the complexities and evolution of the English language and the historical and cultural influences on literature. Students will analyze and interpret a variety of literature representing many genres and time periods across Europe. Students will demonstrate an understanding of these works through various styles of writing, including expository, argumentative, and narrative essays. Students will follow MLA guidelines in conducting both mini and sustained research assignments. They are also responsible for reading and testing on one self-selected novel in the first, second, and third quarters for the Accelerated Reader program. A notebook is required.

## Math

<b>AP Statistics</b>	This course is recommended for students planning to attend a four year college. Advanced Placement Statistics will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This is an Advanced Placement course which follows a set syllabus approved by The College Board. An AP test is taken at the end of the year to determine whether the student will receive college credit for this course. Students enrolled in AP Statistics should expect to complete lessons and assignments during both academic and shop cycles. Permission of the department head is mandatory.
<b>CP Statistics</b>	This college prep course is offered to students who have passed Algebra II. The course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This course is recommended for students who plan to attend a 2 or 4 year college - particularly those interested in the areas of psychology, sociology, health science and business related majors such as Accounting, Finance, Marketing, etc.

<b>Honors Differential Calculus</b>	This honors course is offered to students who have successfully completed Pre-Calculus or three years of Honors math courses. A strong mathematical background is required. Topics for discussion include functions, the derivative, techniques of differentiation; curve sketching, exponential and logarithmic functions, the integral and techniques of integration. This course is recommended for students who are interested in pursuing a STEM (Science, Technology, Engineering, and Mathematics) based major in college. Permission of the department head is mandatory.
<b>CP Pre-Calculus</b>	This course is offered to students who have completed three years of College Prep - Independent Math courses and have demonstrated superior mathematical skills. This course is recommended for students who are interested in pursuing a STEM (Science, Technology, Engineering and Mathematics) based major in college. Permission of the department head is mandatory.
<b>CP Trigonometry</b>	This college prep course is offered to those students who have passed all college prep math courses and successfully passed Algebra II CP with a grade of 80 or better. It is recommended for those who are interested in attending college and plan to enter fields such as: architecture, electronics, electrical, engineering, data processing, medical, and drafting. Topics include: trigonometric functions, solving right angles, radian measure, trigonometric identities, and graphing trigonometric functions. Permission of the department head is mandatory.
<b>CP College Math IV</b>	This CP-Supported course is intended to accelerate student learning in Algebra where curricular gaps may exist. The course will also include an SAT/Accuplacer Prep component. In addition, the course will consist of a number of project-based learning consumer math activities (data analysis, financial literacy) in order to relate Algebra to real world applications. Successful completion of Algebra II is a prerequisite.
<b>CP Algebra II *** Only if student did not pass in summer school</b>	The successful completion of Algebra I is a prerequisite for Algebra II. This course is recommended for all students that did not pass Algebra II during their junior year (or summer school) and are planning to continue on to a two or four year college.
<b>Virtual High School Course</b>	See List

## Science

<b>Honors Physics Lab</b>	This is the next college preparatory course in the science honors program designed to challenge outstanding science students who wish to prepare themselves for college. A strong background in Algebra is required. The course will be a math intensive introduction to the study of motion, electricity, magnetism, fluid dynamics, sound, light and quantum physics. The prerequisite for this course is a 70 or higher in Honors Chemistry or department head approval.
<b>CP Physics Lab</b>	This challenging college preparatory course is designed to prepare students to be successful in college. A strong background in Algebra is required. The prerequisites for this course are grades of 70 or better in Chemistry and Algebra II.
<b>CP Biotechnology Lab</b>	Biotechnology is a laboratory based course in which students will acquire a basic understanding of the study of biotechnology. The major topics will include the study of DNA as a diagnostic tool, forensic science, genetic engineering, cloning, and ethical conduct in biotechnology. The course will also emphasize the basic laboratory skills needed in modern biotechnology laboratories. The prerequisite for this course is a 70 or higher in chemistry or physical science.
<b>CP Human Body Systems</b>	In this course, students will be introduced to the anatomy (structures) and physiology (functions) of the major human body systems. Students will gain knowledge of the functioning of the human body through a variety of laboratory exercises and they will study comparative anatomy by dissection of both invertebrate and vertebrate animals. Additionally, pathology of the human body will be discussed, along with prevention strategies.
<b>CP Botany</b>	The scientific study of plants and their relationship to the environment. This course will provide instruction related to the broad fields of botany with emphasis on the scientific and technical knowledge related to the discipline. Special emphasis will be in the practice of gene technology, laboratory and inquiry based genetic and hormonal experiments. The student will discover and understand the modern perspective of plant genetics as it relates to crop production and environmental issues. Topics in this course include information on plant anatomy and physiology, plant growth, plant diversity, general botany, soil analysis, crop gene modification detection, hormonal regulation of plant growth and its implications, phylogenetic and taxonomic classification, burgeoning concepts of plant social and intellectual structure, cellular energetics, gardening and land use, etc. Time will be spent in the classroom and in the greenhouse.
<b>CP Environmental Science Lab</b>	This college preparatory course will further develop students' understanding of environmental issues pertaining to ecological interactions and ecosystem structure. Prerequisites for this course are grades of 70 or higher in chemistry or physical science.
<b>CP Chemistry Lab *** Only if student did not pass in summer school</b>	This challenging college preparatory course is designed to aid students in further developing the skills they will need to be successful in college. An understanding of Algebra is necessary to be successful in this course. The prerequisite for this course is an 80 or higher in Biology (Lab) and a 70 or higher in Geometry.

<b>CP Physical Science Lab</b> *** Only if student did not pass in summer school	This college preparatory course is designed to aid students in further developing the skills they will need to be successful in college. An understanding of Algebra is necessary to be successful in this course.
<b>Virtual High School</b>	See List

### Senior Elective Courses

<b>AP European History</b>	This is a vigorous blended course, which requires participation in the Moodle platform, online discussions and the completion of various shop assignments. <b>All students are required to sit for the AP exam.</b> This course is recommended to students who have successfully completed Honors World History I or have been recommended for placement by their teachers.
<b>African American Studies</b>	The African American Studies course is designed to develop an understanding of the causes, character, and consequences of the African American experience and its influence on both the world and the United States. Students will gain an appreciation of the richness, diversity, and contributions of African American culture to national and international life. The course will include a comprehensive review of important people, events and ideas that have played a key role in shaping the history and culture of African Americans. Content will highlight dynamic contemporary topics and contributions made by members of the Greater New Bedford African American community.
<b>Honors World History II</b>	This course, which mirrors the content provided in College Prep World History II, <i>emphasizes writing, analysis of primary and secondary sources, and articulate discussions of challenging materials, within a blended classroom setting.</i> <b>Students will demonstrate and master their skills through a capstone and/or extensive research-based class projects.</b> This course is offered to students who have demonstrated advanced skills in reading and writing. This course is offered to students who have successfully completed Honors World History I or have been recommended for placement by their teachers.
<b>CP World History II</b>	Students study the rise of the nation state in Europe, the French Revolution, and the economic and political roots of the modern world. They will study the origins and the consequences of the Industrial Revolution, 19 <sup>th</sup> century political reforms in Europe, and imperialism in Africa, Asia, and South America. They will examine the causes and consequences of the great military and economic events of the past century, including World War I, the Great Depression, World War II, the Cold War, and the Russian and Chinese revolutions. Students will also study the rise of nationalism and the continuing political, ethnic, and religious conflicts in many parts of the world.
<b>Additional Math Course</b>	See list above or Virtual High School List
<b>Additional Related Course</b>	The senior related elective course will build upon career and technical knowledge and add to occupational licensure hours. This elective course will allow students who are intending to enter the workforce upon graduation to enhance their technical skills in all Career and Technical areas including but not limited to: Trade specific code knowledge, Engineering skills, Microsoft Office Certifications, NATEF Certification, 1st Class Fireman's Certification, Medication Administration Program, and Troubleshooting oil & gas heating systems.
<b>Additional Science Course</b>	See list above or Virtual High School List
<b>Virtual High School Course</b>	See list options (including Foreign Language) <ul style="list-style-type: none"> <li>• <b>Once students are enrolled in a full-year VHS course they will not be allowed to drop the course</b></li> </ul>

### Trimester Courses ( 1 Credit) - Mandatory

<b>Senior Physical Education</b>	The twelfth grade physical education course allows students to choose activities that meet their skill level and interest while promoting lifelong fitness. Curriculum is focused on gameplay in which students incorporate skills learned during freshmen and sophomore year.
<b>United States Government &amp; Politics</b>	This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework; federalism; the three branches of government, including the bureaucracy; civil rights and liberties; political participation and behavior; and policy information. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. In addition, the course will examine the role and responsibilities of local, state and federal government in the context of addressing issues related to contemporary American society. The core objective of the course will be the completion of a student led non-partisan action civics project. This is a single trimester course.

### Trimester Courses ( 1 Credit) - Elective (Please Choose One – 1)

<b>CP Local History</b>	Students study the history of Old Dartmouth, which became New Bedford, Dartmouth, Fairhaven, Acushnet, and Westport. Students will learn about the importance of the whaling industry and major figures in the anti-slavery movement. This course includes a field trip that highlights the interesting local history students will be uncovering.
<b>CP Psychology</b>	General Psychology introduces students to the seminal theories of modern psychology and traces the evolution of psychology to its acceptance as an empirical science. In addition, it provides a comprehensive overview of human development and the effects of environment and heredity on individuals. The anatomy and function of the brain, human behavior, personality, perception and various modes of learning are topics which are emphasized in this course. Students considering professions in education, nursing and law enforcement may find this course particularly useful.
<b>CP Economics and Finance</b>	This course covers topics related to economic concepts, personal finance and the operation of a small business. Small business topics include sole proprietorships, partnerships, corporations, workman’s compensation, social security, taxes, permits, licenses, insurance, and retirement systems. Topics in economics will include supply and demand market structures, the role of government, the national economy, financial institutions and trade. Students will also be introduced to important personal finance. Students considering owning a small business or a career in business or finance may find this course particularly useful.
<b>CP Sociology</b>	The ultimate goal of the course is to help students acquire a broad and deep understanding of social forces that influence the world in which we live. Students considering a profession in criminal justice, social work education and healthcare may find this course particularly useful.
<b>Research &amp; Writing</b>	This course focuses on college and career research and writing - Recommended for college-bound students

### Virtual High School Courses

VHS Learning offers high school core, elective, and Advanced Placement® courses. Students may supplement the school's offerings by enrolling in one of the following VHS Learning courses. \* **Students taking an AP VHS course must take the AP Exam.** \*\* **Once students are enrolled in a full-year VHS course they will not be allowed to drop the course**

- Spanish I
- Portuguese
- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Computer Science Principles
- AP Physics (Algebra Based)

Other VHS courses may be available with prior approval from the Director of Curriculum, Instruction, Assessment, and Accountability.

<b>AP® Biology</b>	The Advanced Placement course in Biology is equivalent to a full-year Freshman Biology course taught at any major University. Students will be reading the same text that is used at many major colleges and universities, and working at a rigorous pace to cover the material and prepare for the Advanced Placement Examination in May. Upon successful completion of the exam, students may receive college credit and will be well-prepared for any future Biology course. This class will build upon prior knowledge of Biology. The course covers topics such as molecular genetics, biochemistry, human anatomy and physiology, cell biology, plant biology and ecology. Using the text, the Internet, class discussions, and projects, the course will cover a tremendous amount of material in order to give students a complete understanding of the study of biology. Biweekly examinations will test students' knowledge of the material as well as prepare them for the AP® examination. Due to the volume and level of the material, this course is designed to challenge extremely motivated students who have a strong interest in the Biological Sciences.
<b>AP® Calculus AB</b>	The Advanced Placement Calculus AB course is equivalent to the Calculus I college-level course. The rigor and pace of this course is consistent with calculus offerings at many colleges and universities and will prepare students for the Advanced Placement Exam. Upon successful completion of the exam, students may receive college credit and will be well-prepared for additional advanced mathematics coursework. AP® Calculus AB builds upon prior knowledge in previous mathematics course work. Students will explore topics within the three big ideas covered in the course: (1) limits, (2) derivatives, and (3) integrals. This course allows students to gain conceptual understanding through discussions, group activities and investigations. Students will learn how to use the graphing calculator to help solve problems, experiment, interpret results, and support conclusions. In order to prepare for the exam, students will complete weekly AP® practice quizzes and unit exams that will conform to the constraints of the AP® exam.

<b>AP® Chemistry</b>	This Advanced Placement Chemistry Course is equivalent to a full-year Introductory Chemistry college-level course. The rigor and pace of this course is consistent with that of many major colleges and universities, and will prepare students for the Advanced Placement Examination in May. Upon successful completion of the exam, students may receive college credit and will be well-prepared for additional advanced chemistry coursework. AP® Chemistry builds upon prior knowledge of Chemistry. Students will investigate topics such as chemical reactions, stoichiometry, atomic theory, periodicity, and bonding, states of matter, thermodynamics, kinetics and equilibrium. This course incorporates a variety of textbook and multimedia resources and will require students to perform hands-on and virtual experiments to develop a deeper understanding of chemistry. Students will engage in collaborative activities such as class discussions, contribute to class data and attend regular “lab meetings” throughout the course. AP practice quizzes and unit exams will help prepare students for the AP examination. Due to the rigor and pace of the content, this course is designed to challenge extremely motivated students who have a strong interest in Chemistry.
<b>AP Environmental Science</b>	This Advanced Placement Environmental Science course is equivalent to a one semester, college level, environmental science course. The rigor of this course is consistent with colleges and universities and will prepare students for the Advanced Placement exam in May. Upon successful completion of the exam, students may receive college credit and will be well-prepared for advanced environmental studies coursework.
<b>AP Computer Science Principles</b>	According to the College Board, the AP® Computer Science Principles course (AP® CSP) 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 is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.
<b>AP Physics</b>	This Advanced Placement Physics 1 course is equivalent to a first semester, algebra-based, introductory Physics college-level course. The rigor of this course is consistent with colleges and universities and will prepare students for the Advanced Placement exam in May. Upon successful completion of the exam, students may receive college credit and will be well-prepared for advanced physics coursework.
<b>CP Portuguese</b>	The primary goal of this course is to engage students in getting acquainted with the Portuguese language and culture and, therefore, to develop the abilities to communicate and to think in Portuguese. The practice with the Portuguese language will mainly involve skills of listening and speaking, but also reading and writing. Introductory knowledge of the Portuguese people, language and culture will certainly be a focal point in this course. The class will also explore Portuguese language and cultural influence throughout the world, while instilling attitudes such as those of curiosity and respect for the convictions of others.
<b>CP Spanish 1</b>	Spanish 1 is an introductory course focusing on the core skills of listening, speaking, reading and writing. Guided by the standards of the American Council on the Teaching of Foreign Languages (ACTFL), students will not only learn to communicate in Spanish but also gain an insight into the cultural aspects of Spain and other Spanish-speaking countries. Using multimedia tools, students will participate in discussions, complete written activities, record and listen to Spanish audio files, engage in collaborative projects, and explore history, architecture, the arts, literature and foods of the Spanish-speaking world.
<b>CP Spanish 2</b>	Spanish 2 is a continuation of Spanish 1. Semester 1 begins with a review of Spanish 1 skills. As they progress, students will continue to learn new listening, speaking, reading and writing skills adding to their knowledge of Spanish vocabulary. Students will also continue to explore and deepen their appreciation of the culture of Spain and other Spanish-speaking countries. Students will participate in discussions, complete written activities, record and listen to Spanish audio files, and engage in collaborative projects.

