

English Department Course Descriptions

Note: Students MUST pass both the Reading AND Writing tests of the English End-of-Course SOLs (or a substitute test) to graduate with any type of Standard or Advanced Diploma.

ENGLISH 9

Prerequisites: Ninth Grade Status

Course reinforces vocabulary, grammar usage, and writing skills to create a solid foundation. The student is given more individual responsibility through the use of projects, oral and written reports, creative writing, and research presentations. A further understanding of a variety of literature is addressed through composition (narrative, literary, expository, and technical), class discussion, and group projects.

ENGLISH 9 Honors

Prerequisites: A "B" average or better in the previous year's English course and the recommendation of the previous year's English teacher.

Incorporates the four major literary genres: the short story, poetry, drama, and the novel. World literature in Grade 9 correlates with aspects of world geography, when applicable. The class utilizes a thematic approach to literature. Both in-class and outside/independent readings are required, with written and/or oral reports and analyses. Expectations are for students to begin using higher-level thinking skills and more critical/analytical study habits. Research skills are stressed. Internet/other technology usage is required. Vocabulary comes mainly from literature studied, but not exclusively. All major writing areas will be covered with expository writing/clarification purposes. It is expected that honors students are adept, able, and anxious to work at a more rapid and independent pace.

ENGLISH 10 [Writing SOL]

Prerequisites: Completion of English 9 or English 9 Honors

Focuses on the skills involved in critical thinking and the application of these skills to required work, including class discussions, compositions (emphasis on variety of expository formats), oral/written interpretation, informational reports (individual/group), and interactive projects. Students learn to communicate more effectively by concentrating on the four requirements of writing and speaking: relevance, clarity, accuracy and style. A thematic approach to the study of literature provides the students with literary models and examples that are applied to realistic problem-solving situations.

ENGLISH 10 Honors (Pre-AP) [Writing SOL]

Prerequisites: A "C" or above in English 9 Honors, or teacher recommendation and a "B" average or better in the previous year's English course, if first time entering an honors course.

Integrates reading, writing, speaking, listening and thinking skills in a meaningful way. The course works in conjunction with world history to reinforce and introduce historical concepts and contexts through literary and research exploration. Students will read a wide variety of world documentation and various critical thinking skills, such as literary analysis, reading comprehension, and effective oral communication. Students are expected to maintain a high level of commitment to the course, both for in-class and independent projects and studies.

ENGLISH 11 [Reading SOL]

Prerequisites: Completion of English 10 or English 10 Honors

Emphasizes the improvement and enhancement of communication skills. A thematic/chronological approach to American literature is the basis. Written reports/reviews, oral presentations, and concentrated vocabulary, research skills, and written composition (with an emphasis on persuasive and expository writing) are stressed.

AP Language (English 11 credit received) [Reading SOL]

Prerequisites: Completion of English 10 or English 10 Honors

Course engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. May require attendance at weekend review sessions. An opportunity to earn Dual Enrollment credits with RCC may also be available.

ENGLISH 12

Prerequisites: Completion of English 11 or AP Language

Focuses on the nature of language: how it originates and how it evolves to accommodate the needs of an ever-changing society. Students use historical models, as well as literary examples (emphasis on British literature), to analyze the recurrence of thematic ideas which have shaped history and inspired literature. Students learn how to adapt their own writing styles, as well as their speaking skills, to meet specific requirements, which range from simple presentations of data to persuasive, evaluative, and expository projects (including a formal technical research project and oral presentation).

AP LITERATURE (English 12 credit received)

Prerequisites: Completion of English 11 or AP Language

Through the close reading of selected texts, students consider the ways a writer uses structure, style and themes, as well as elements such as the use of figurative language, imagery, symbolism and tone. May require attendance at weekend review sessions. An opportunity to earn Dual Enrollment credits with RCC may also be available.

CREATIVE WRITING

Grade Level: Tenth – Twelfth

Prerequisites: None

Students learn how to produce individual poetry and prose through a workshop format that encourages the use of personal voice and style. **Students are expected to complete a portfolio each 9 weeks, with a final, extensive project in the last 9 weeks.** The course is focused on student-centered learning, in which they are responsible for their own level of learning and growth. Writing for publication is also a focus, and students will be expected to submit at least one work to a professional or other publication.

DRAMA I

Grade Level: Ninth – Twelfth

Prerequisites: None

Introduces students to the history of drama, the one-act play, Forensics, basic acting techniques and skills, and play production.

DRAMA II – IV

Grade Level: Tenth-Twelfth

Prerequisite: Drama I

Builds on lessons and techniques learned in Drama I.

Social Studies Department

Course Descriptions

WORLD HISTORY to 1500 (World History I) [SOL]

Grade Level: Ninth

Prerequisites: none

Course focuses on the early development of civilization to the Protestant Reformation. The influence of ideas, religion, people and events on modern society is the emphasis of the course. The student will gain an appreciation of the concepts of leadership, religion, social class structure, war, and ideas and how they shaped the modern world.

WORLD HISTORY to 1500 (World History I) Honors [SOL]

Grade Level: Ninth

Prerequisites: none

Course content same as above; however, Honors World History I students will be able to ask and answer questions on a higher level. Honor classes also do more group work.

WORLD HISTORY from 1500 (World History II) [SOL]

Grade Level: Tenth

Prerequisites: World History I

Course focuses on the development of modern civilization and the events, people, and ideas which shaped modern society. Emphasis is placed on the time beginning around 1500 (The Renaissance, Reformation, Age of Exploration) to the present. The student will gain an appreciation of the role the concepts of leadership, religion, social class structure, war, intellectualism, and technological development play in modern society.

WORLD HISTORY from 1500 (World History II) Honors [SOL]

Grade Level: Tenth

Prerequisites: A "C" or above in World History I Honors, or teacher recommendation and a "B" average or better in World History I, if first time entering an honors course.

Course content same as above; however, Honors World History II students will be able to ask and answer questions on a higher level. Honor classes also do more group work.

VIRGINIA/UNITED STATES HISTORY [SOL]

Grade Level: Eleventh – This or Honors VA/US History Required for Graduation

Prerequisites: World Geography or World History I or World History II

Studies the major events that shaped the history of Virginia as well as the U.S. Concepts such as freedom, democracy, and revolution are emphasized as well as the social, political, economic, and intellectual forces are stressed as they shaped the history of the nation. Historical events and trends are related to current trends and issues.

VIRGINIA/UNITED STATES HISTORY Honors [SOL]

Grade Level: Eleventh – This or Regular VA/US History Required for Graduation

Prerequisites: A "B" or better in World Geography or World History I or II and teacher recommendation.

Surveys United States history from its beginning to the present. It is a lecture-style class with outside reading and written assignments. The class is designed for college-bound juniors and may be taken in place of Virginia/U.S. History.

VIRGINIA/UNITED STATES GOVERNMENT

Grade Level: Twelfth – This course is required for Graduation

Prerequisites: VA/US History

Surveys the origins of American government. Topics include the role of the individual; citizens' right and responsibilities; the relationship between national, state, and local government; and the organization and functions of the different levels of government in a federal system.

SOCIOLOGY

Grade Level: Eleventh -Twelfth

Prerequisites: None

Studies the basic organization and functions of various social institutions. Investigates the ways in which people interact with one another and the causes and consequences of this interaction. The student also applies the tools and concepts learned to analyze social institutions and issues that exist in society.

PSYCHOLOGY

Grade Level: Eleventh-Twelfth

Prerequisite: None

If you have ever wondered what makes people tick, or if you want to gain some insight into your own behavior, then you need to take this course. Enter the world of psychology, the discipline that dares to explore the most complex topic on earth: you.

Mathematics Department Course Descriptions

ALGEBRA I [SOL]

Prerequisites: None

Students work with equations and inequalities and operations with polynomials, factoring polynomials, as well as solve polynomial equations by factoring. Other topics considered: relations, functions, and graphs in the coordinate plane (linear and quadratic), systems of linear equations and inequalities in two variables, radicals, and quadratic equations.

GEOMETRY [SOL]

Prerequisite: Completion of Algebra I

The course is designed for those who have successfully completed the Algebra I standards and stresses the use of points, lines, and planes to define other geometric shapes. Emphasis is placed on developing the students' thinking ability through a variety of inductive and deductive reasoning activities which use two and three dimensional figures. Application to real life situations is extensive through the use of models, algebra, and calculator skills.

ALGEBRAIC FUNCTIONS AND DATA ANALYSIS (AFDA)

Prerequisite: Completion of Algebra I and Geometry

This course provides students with additional instruction in algebraic functions as well as expanding on the concepts taught in both Algebra I and Geometry. This course is for students who may need additional practice and instruction in algebraic functions to be prepared for the rigor of Algebra II.

ALGEBRA II/TRIGONOMETRY [SOL]

Prerequisite: Completion of Algebra I and Geometry

Algebra II/ Trigonometry is designed for those students who have mastered the Algebra I standards. It extends the students' Algebra I skills and includes: graphing of conics, trigonometric functions, logarithms, matrices, determinants, and an introduction to statistics. Emphasis is placed on career and technology applications. Use of the graphics calculator is extensive.

ALGEBRA II/TRIGONOMETRY Honors [SOL]

Prerequisite: A "B" or better in the previous math course, a passing grade on the end of course SOL test for the previous math course, and a teacher recommendation.

The honors courses will adhere to the same curriculum as the standard courses but will offer enrichment exercises as well as in depth studies of various topics. The courses will be more accelerated and challenging and will require a great deal of independent work.

ALGEBRA III (Capstone)

Prerequisite: Successful completion of Algebra II

Comprise an intensive course designed to augment certain twelfth-grade students' skills in mathematics necessary for college and career readiness. Students complete task modules requiring intensive mathematical analysis and problem solving, research, use of technology, individual and group performances and presentations, and other modern college and career skills while applying academic content.

PRE-CALCULUS

Prerequisite: Geometry, Algebra II/Trigonometry

Pre-calculus reviews coordinate geometry, points, lines, and conic sections, plus algebraic solutions, graphing inequalities and functions. It expands into circular and triangular trigonometry, logarithms, vectors, and an introduction to concepts necessary for Calculus.

PRE-CALCULUS Honors

Prerequisite: A "B" or better in the previous math course, a passing grade on the end of course SOL test for the previous math course, and a teacher recommendation.

In addition to the topics covered in the standard pre-calculus course, this course will include determinants, probability, and limits. The honors courses but will offer enrichment exercises as well as in-depth studies of various topics. The course will be more accelerated and challenging and will require a great deal of independent work.

AP STATISTICS

Grade Level: Eleventh, Twelfth

Prerequisite: Probability and Statistics

Introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1. exploring data: describing patterns and departures from patterns. 2. sampling and experimentation: planning and conducting a study. 3. anticipating patterns: exploring random phenomena using probability and simulation. 4. statistical inference: estimating population parameters and testing hypotheses. May require attendance at weekend review sessions.

AP CALCULUS AB

Grade Level: Twelfth

Prerequisite: Precalculus

The courses emphasize a multi-representational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. The connections among these representations also are important. May require attendance at weekend review sessions.

Science Department Course Descriptions

EARTH SCIENCE [SOL]

Grade Level: Ninth

Earth science connects the study of the Earth's composition, structure, processes, and history; its atmosphere, fresh water, and oceans; and its environment in space. The course emphasizes historical contributions in the development of scientific thought about the Earth and space. Students practice interpretation of maps, charts, tables, and profiles; the use of technology to collect, analyze, and report data; and science skills in systematic investigation. Problem solving and decision-making are also an integral part of the course, especially as they relate to the costs and benefits of utilizing the Earth's resources. Major topics of study include plate tectonics, the rock cycle, Earth history, the oceans, the atmosphere, weather and climate, and the solar system and universe.

EARTH SCIENCE Honors [SOL]

Grade Level: Ninth

This course covers more material with greater depth than introductory Earth Science.

BIOLOGY [SOL]

Grade Level: Tenth

Prerequisites: Earth Science (recommended)

Biology emphasizes the basic principles of life and the way organisms carry out those functions necessary for life. The course covers scientific methods; basic chemistry and biochemistry; ecology; cell structures, functions and processes; genetics; and structures and functions of microorganisms, fungi, plants and animals. The study will include laboratory investigations, discussions, research and projects.

BIOLOGY Honors [SOL]

Grade Level: Tenth

Prerequisites: Earth Science (recommended)

This course covers more material with greater depth than introductory biology.

CHEMISTRY [SOL]

Grade Level: Eleventh or Twelfth

Prerequisite: A "C" or better in Algebra I, Geometry, Earth Science, and Biology, and completion or concurrence of Algebra II; passing scores on Earth Science and Biology SOLs

Chemistry is a scientific discipline that includes descriptive, mathematical, and problem solving approaches. This course focuses on the descriptive and problem solving aspects of chemistry and how chemical principles apply to everyday life. It includes basic laboratory procedures and safety, but focuses more on the principles behind chemical phenomena.

FORENSIC SCIENCE

Grade Level: Eleventh or Twelfth

Prerequisite: Biology

This course is designed to introduce the student to the scientific and legal aspects of forensic sciences. This class will include looking at the theory and practice of using DNA, blood, toxicology, and physical evidence in the investigation of crimes and authentication of documents. The class will also stress the problem solving approaches needed to reconstruct events on the basis of evidence.

BIOLOGY II/ECOLOGY

Grade Level: Eleventh or Twelfth

Prerequisite: Biology

A projects-based class that integrates the sciences (Earth Science, Life Science, Physical Science and Chemistry) to provide students with a better understanding of the natural world. The focus will be on topics and themes that will impact the student and community. Ongoing projects (school garden, local water quality monitoring and ecosystem mapping) will demonstrate real science and provide involvement and ownership to the students.

ANATOMY AND PHYSIOLOGY

Grade Level: Eleventh or Twelfth

Prerequisite: Biology

Anatomy and Physiology is an overview of the gross anatomy and physiology of the human body. Students leaving the A&P class should have an understanding of all body systems, locations and functions. Students will have knowledge of medically related anatomical terms that would allow for further course work in career related classes. This will be accomplished through various learning methods including sketching body systems and dissection as well as traditional book learning.

OCEANOGRAPHY

Grade Level: Eleventh or Twelfth

Prerequisite: Biology

Oceanography, the science that studies all aspects of the ocean, is a multidisciplinary science that studies the geology, chemistry, biology and physics of oceans.

AP CHEMISTRY

Grade Level: Eleventh or Twelfth

Prerequisite: Algebra II concurrently

Course seeks to provide students a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems and contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. Differs qualitatively from the regular chemistry course with respect to the kind of textbook used, the topics covered, the emphasis on chemical calculations and the mathematical formulation of principles, and the kind of laboratory work done by students. May require attendance at weekend review sessions.

AP ENVIRONMENTAL SCIENCE

Grade Level: Twelfth

Prerequisite: Completion of Biology and Chemistry

Provides 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. May require attendance at weekend review sessions.

AP BIOLOGY

Grade Level: Twelfth

Prerequisite: Completion of Biology and Chemistry

Aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. May require attendance at weekend review sessions.

Foreign Language Department Course Descriptions

SPANISH I

Prerequisites: A "B" or better in English 8 or English 9 is recommended

The students are introduced to the Spanish language and culture, increasing their awareness of the Spanish speaking influences in their lives. Reading, writing, and oral skills are initiated to facilitate the students' ability to communicate in the language. Emphasis is placed on basic grammar, comprehension, and conversation. In addition to the textbook, students practice their skills using a workbook.

SPANISH II

Prerequisites: A "C" or better in Spanish I

Spanish II reinforces vocabulary, grammar and usage to create a solid foundation of skills. Students further develop their conversational and writing abilities in the target language while practicing with a workbook that supplements the textbook.

SPANISH II Honors

Prerequisites: A "B" or better in Spanish I or the recommendation of Spanish teacher

Spanish II Honors incorporates the past, present and future tenses in oral, written, and reading exercises. Students learn to communicate more effectively by concentrating on enunciation, pronunciation, and idiomatic expressions using a variety of oral and written assignments. A Spanish novel supplements the textbook and workbook. The class is taught predominately in the target language with the exception of grammar instruction. Students are expected to be able and anxious to move at an accelerated pace.

SPANISH III

Prerequisites: A "C" or better in Spanish II

The students continue to improve their reading, writing, and speaking skills. A Spanish novel at the intermediate level is used to emphasize and refine grammar, culture and history of Spanish speaking countries. Student use of the language becomes more personalized through a weekly journal.

SPANISH III Honors

Prerequisites: A "C" or better in Spanish II Honors or the recommendation of Spanish teacher

Spanish III Honors incorporates a variety of tenses and moods. The improvement and enhancement of communication skills is emphasized. A Spanish novel with accompanying video series is used to expand comprehension skills. Weekly journals promote written expression. Students apply their skills in dramatic performances in the target language. Students are expected to maintain a high level of commitment to the course. Attendance is important as much of the assessment is based on class participation. The student is responsible for making up missed classes after school.

SPANISH IV Honors

Prerequisites: A "C" or better in Spanish III Honors or recommendation of Spanish teacher.

Spanish IV Honors expands on a variety of tenses while focusing on the differentiation between the indicative and subjunctive moods. Classic Spanish literature of the Spanish Golden Age is studied and related to the political situations of the period. The rise and fall of the Spanish kingdom is explored. Students apply their cumulative skills in dramatic performances using the target language. Students are expected to maintain a high level of commitment to the course. Assessment is largely based on class participation, making attendance important. Students are responsible for making up missed classes after school.

SPANISH V Honors

Prerequisites: A "C" or better in Spanish IV Honors

Taught in combination with Spanish IV Honors.

FRENCH I

Prerequisites: A "B" or better in English 8 or English 9 is recommended

The students are introduced to the French language, culture, and French –speaking world thus increasing their awareness of the French influences in their lives. Reading, writing, speaking, and listening skills are emphasized and continue throughout the language sequence. Basic grammar and vocabulary are highlighted via thematic units. Students complete a thorough study of the city of Paris and its major monuments. In addition to the textbook, students practice their skills using a workbook and viewing video segments which correlate with the text.

FRENCH II

Prerequisites: A "C" or better in French I

Students continue vocabulary expansion and tense changes. Students further develop their conversational and writing abilities in the target language while practicing with a workbook that complements the textbook. Practice is also given in listening comprehension via audio and videotapes. Reading practice is provided via supplemental readers. Students complete an in-depth study of the Francophone province of Quebec in addition to studying major provinces in France.

FRENCH II Honors

Prerequisites: A "B" or better in French I and/or the recommendation of the teacher

Students continue with vocabulary expansion and tense changes. In addition to supplemental readers, a mystery story is also read during the year. Students keep a weekly journal to focus on strengthening writing skills. The class is taught predominately in the target language with the exception of grammar instruction. Students are expected to be able and anxious to move at an accelerated pace.

FRENCH III Honors

Prerequisites: A "C" or better in French II Honors, or a "B" or better in French II plus the recommendation of the teacher if entering for first time

Students are expected to use the target language in a more open-ended fashion via oral presentations and a weekly journal. A French reader supplements the textbook and workbook. The class is taught predominately in the target language. The history and culture of French-speaking countries is emphasized via individual projects. Students read a full-length novel during the second semester of French III.

Business Department Course Descriptions

ACCOUNTING

Grade Levels: Tenth – Twelfth

Prerequisites: None

Students study the basic principles, concepts, and practices of the accounting cycle. Students learn fundamental accounting procedures using a manual system.

DE ACCOUNTING - ADVANCED

Grade Levels: Eleventh, Twelfth

Prerequisite: A "C" or better in Accounting

Students gain in-depth knowledge of accounting procedures and techniques used to solve business problems and make financial decisions. Students use accounting and spreadsheet software to analyze and interpret business applications. 8 credits from RCC.

COMPUTER INFORMATION SYSTEMS

Grade Levels: Ninth – Twelfth

Prerequisite: Documented Keyboarding Skills

Students apply problem-solving skills to real-life situations through word processing, spreadsheet, database, and multimedia presentation software, and through integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies.

COMPUTER INFORMATION SYSTEMS - ADVANCED

Grade Levels: Tenth – Twelfth

Prerequisite: Completion of Computer Information Systems

Students apply problem-solving skills to real-life situations through advanced integrated software applications, including multimedia presentations, printed and electronic desktop publications, and website development. Students work individually and in groups to explore advanced computer maintenance activities, telecommunications, programming, and networking.

BUSINESS LAW

Grade Levels: Eleventh-Twelfth

Prerequisites: None

Students examine the foundations of the American and Virginia legal systems. Students explore economic and social concepts as they relate to legal principles and to business and personal laws. Special emphasis will be placed on contract law, bailments, torts, and the Virginia juvenile justice system. Three field trips are planned: District Court, Federal District Court, and the Virginia Supreme Court. The class will culminate in a mock trial in front of the student body, with students assuming all roles in the court.

DESIGN, MULTIMEDIA, AND WEB TECHNOLOGY I

Grade Levels: Ninth - Twelfth

Prerequisite: Documented Keyboarding Skills

Students develop proficiency in using desktop publishing software to create a variety of printed and electronic publications. Students will incorporate journalistic principles in design and layout of publications. Students work with sophisticated hardware and software to develop Web sites and multimedia presentations.

PRINCIPLES OF BUSINESS AND MARKETING

Grade Levels: Ninth – Twelfth

Prerequisites: None

Students discover the roles of business and marketing in the free enterprise system and the global economy. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions as consumers, wage earners, and citizens. The real world impact of technology, effective communication, and interpersonal skills are evident throughout the course. This course also supports career development skills and explores career options.

ENTREPRENEURSHIP

Grade Levels: Tenth – Twelfth

Prerequisites: None

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle.

No unlawful barriers related to gender, color national origin or age will be tolerated by our school system. All CTE classes and all activities are open to all students.

Physical Education Department Course Descriptions

PHYSICAL EDUCATION/HEALTH

Grade Level: Ninth

Note: Successful completion of this course is required for graduation.

Promotes life-long health-related physical activity. Emphasis will be placed on the development of team sport skills and physical fitness development. Team sports that will be taught include football, volleyball, basketball, soccer, badminton, and softball. The physical fitness component will improve cardiovascular fitness, muscular strength and endurance, as well as flexibility.

PHYSICAL EDUCATION/HEALTH - DRIVER'S EDUCATION

Grade Level : Tenth

Note: Successful completion of this course is required for graduation.

Emphasizes health, team and individual sports, and driver's education. The purpose of driver's education is to provide students with the knowledge, motivation, and insight needed to become responsible members of the highway transportation system. To achieve this objective, the driver education program is based on an analysis of the tasks an individual must perform when operating a motor vehicle within the system. Enrollment in driver's education should be restricted to students who will become 16 years of age during, or shortly following, the completion of the program. Classroom instruction consists of 36 periods of instruction and 14 periods of in-car instruction (7 driving and 7 observing).

WEIGHT LIFTING

Grade Level: Eleventh and Twelfth

Introduces basics of weight training relative to student objectives. Students learn the definitions of strength, endurance, flexibility, warm-up, cool down, sets, repetitions, frequency, rest intervals, and the various types of lifts for specific sports and muscle groups. The types of lifts are determined by the specific sport or objective in which the student wishes to reach. Proper form must be understood in order to gain maximum benefits and to complete the activities safely. Spotting techniques are necessary for certain lifts, especially with heavy weights. Safety in the weight room is stressed constantly.

ADVANCED CONDITIONING

Grade Level: Eleventh and Twelfth

Advanced Conditioning is a class designed to achieve a high level of physical conditioning with emphasis on running and development of cardiorespiratory endurance and body composition. Student objectives for this class would include, but not be limited to, preparation for competition, training for a physically demanding event, or a need to be in top physical shape. Students will also have time to work on muscular strength and endurance on off days in the weight room. Running sneakers and proper athletic attire required.

Marketing Department Course Descriptions

FASHION MARKETING

Grade Levels: Ninth – Twelfth

Prerequisites: None

In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applied to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied.

FASHION MARKETING – ADVANCED CO-OP **Credit: 2 (includes work period)**
ADVANCED NON CO-OP **Credit: 1**

Grade Levels: Tenth – Twelfth (co-op credit only for Eleventh and Twelfth graders)

Prerequisites: Completion of Fashion Marketing

Students with a career interest in apparel and accessories marketing gain in-depth knowledge of the apparel and accessories industry and skills important for supervisory-management employment in apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/service technology, and supervision as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. Co-op students are employed in the community and must work a required number of hours to earn 1 credit.

SPORTS AND ENTERTAINMENT MARKETING

Grade Levels: Tenth-Twelfth

Prerequisites: None

Students develop skills in the areas of marketing analysis, event marketing, communication, and human relations, along with a thorough understanding of the sports, entertainment, and recreation industry and career options available. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

MARKETING - CO-OP **Credit: 2 (includes work period)**
NON CO-OP **Credit: 1**

Grade Levels: Eleventh, Twelfth

Prerequisites: None

Students are introduced to functions and foundations involved in the marketing of goods, services, and ideas and achieve skills necessary for successful marketing employment. Students study risk management, selling, promotion, pricing, purchasing, marketing-information management, product/service planning, distribution, and financing. Foundation skills include economics, human resources, and marketing and business necessary for success in marketing occupations. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied. Co-op students are employed in the community and must work a required number of hours to earn 1 credit.

DE MARKETING

Grade Level: Eleventh, Twelfth

Prerequisites: Successful completion of the RCC placement test and instructor approval.

D.E. Marketing is a two semester college level course designed to help students master the basic marketing concepts. You will be introduced to marketing theories, concepts, practices, applications and the impact of technology on the marketing efforts of companies. There will be interactive assignments that will consist of in-class discussions (group and individual) relating marketing topics to real-world situations; case studies concerning ethics which will force you to think like marketing managers though issues that deal with marketing; online learning activities and written activities to reinforce marketing principles and practices. You will also apply concepts and skills mastered in the course to a marketing plan at the end of the course. You will receive three credits from RCC at the end of the school year.

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Health Occupations Course Descriptions

EMERGENCY MEDICAL TECHNICIAN (EMT) I and II - DE Credit: 2 (yearlong)

Grade Levels: Students need to be 16 years of age by first day of school

Prerequisite: Successful completion of the Rappahannock Community College Placement Test

Students focus on the role and responsibilities of emergency rescue workers, basic medical terminology, and health care skills that include first aid; cardiopulmonary resuscitation; aseptic technique; and related anatomy, physiology, and disease knowledge. Supervised work education is provided in a hospital or with rescue squads and managed by the HOE teacher. 8 credits from RCC.

NURSING ASSISTANT I and II - DE

Grade Levels: Eleventh – Twelfth

Credit: 2 (yearlong)

Prerequisites: Successful completion of the Rappahannock Community College Placement Test

Emphasizes the study of nursing occupations as related to the health care system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to microbes and disease. They receive elementary skill training in patient-nurse's assistant relationships; taking and recording of vital signs; cardiopulmonary resuscitation; and bathing, feeding, dressing, and transporting of patients in hospitals and nursing homes. On-the-job instruction in nursing homes and hospitals is part of the course. All competencies for a certified nursing assistant are met. 9 credits from RCC.

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Technology Education Department

Course Descriptions

TECHNOLOGY FOUNDATIONS

Grade Levels: Ninth-Twelfth

Prerequisites: None

In this beginning high school course in the Design and Technology program, students acquire a foundation in technological material, energy, and information and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. They work in groups to build and control systems with engineering in the development of a technology.

TECHNICAL DRAWING

Grade Levels: Ninth – Twelfth

Prerequisites: None

In this foundation course, students learn the basic language of technical design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architecture students.

ARCHITECTURAL DRAWING

Grade Levels: Tenth – Twelfth

Prerequisite: Technical Drawing

Students learn the principles of architecture and increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and commercial building designs, rendering, model making, structural details, and community planning. Students use computer-aided drawing and design (CAD) equipment and established standards or codes to prepare models for presentation. The course provides information helpful for the homeowner and is especially beneficial to the future architect, interior designer, or home builder.

No unlawful barriers related to gender, color national origin or age will be tolerated by our school system. All CTE classes and all activities are open to all students.

Trade/Industrial Education Course Descriptions

Note: Students in all Trade/Industrial classes will take an OSHA safety course and receive a 10 hour OSHA card. Also, the students will take a CPR class and receive a CPR card if both courses have been passed.

CARPENTRY I

Grade Levels: Students must be 16 years old

Prerequisites: None

Students enrolled in this program learn fundamental skills associated with layout, framing, and construction materials and install wooden products.

CARPENTRY II

Grade Levels: Students must be 16 years old

Credits: 2 (yearlong course)

Prerequisites: Carpentry I

In this program, students lay out, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools. Instruction in common systems of framing, construction materials, estimating, and blueprint reading is included. Upon completing both courses, the students will receive transcripts and certificates from the University of Florida.

ELECTRICITY I

Grade Levels: Tenth, Eleventh

Prerequisites: None

Students develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory, navigate the National Electrical Code Book, select and install conductors, and work with panelboards, switchboards, and generators.

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Fine Arts Department Course Descriptions

Art

ART I – Foundations of Art and Fundamentals of Design

Grade Levels: Ninth – Twelfth

The student who elects to take Art I will be expected to further his/her technical abilities and knowledge of art in working with a variety of media. Emphasis will be on an in-depth study and application of skills and concepts in drawing and other media. Students can expect a variety of activities that range in the drawing and painting fields. Students will also be asked to keep a sketchbook. A \$15 art fee is required.

ART II – Advanced Art

Grade Levels: Tenth – Twelfth

Prerequisite: Completion of Art I

Students who elect to take Art II will be expected to develop their own individual style and will work with traditional and alternative processes and techniques. Students will explore a higher level of drawing techniques and themes. They will also explore other forms of art. This course is designed for serious art students who are highly motivated. Students will be asked to keep a sketchbook. A \$15 art fee is required.

ART III – General Studio Advanced Portfolio

Grade Levels: Eleventh – Twelfth

Prerequisite: Completion of Art I and Art II and teacher recommendation

Students who elect to take this course will be expected to be highly motivated and self-directed. This course will give serious art students opportunities to choose media that they wish to reach a high level of mastery. The students will be expected to work independently with periodic guidance and direction from the art instructor. Students will be asked to keep a sketchbook. A \$15 art fee is required.

ART IV – Drawing Studio Advanced Portfolio/Independent Study

Grade Levels: Twelfth

Prerequisite: Completion of Arts I, II, and III and teacher recommendation

Students who elect to take this course will be highly motivated and self-directed, as well as ready to begin preparing their portfolio for college. This course will give serious art students opportunities to choose media that they wish to reach a high level of mastery. This course is specifically designed for those students who will pursue art in college or at a higher institution of learning. The students will be expected to work independently with periodic guidance and direction from the art instructor. Students will be asked to keep a sketchbook. A \$15 art fee is required.

Music

BAND - ADVANCED

Grade Levels: Ninth - Twelfth

Prerequisite: Positive record from past instrumental music classes, a recommendation from an instrumental music teacher, and the successful completion of an audition/interview

Coursework includes the study of various musical concepts, numerous performance opportunities in and out of school, and consistent challenges. All Advanced Band members are expected to participate in the MHS Marching “Charger” Band.

CONCERT CHOIR

Grade Level: Ninth-Twelfth

Prerequisite: None

An ensemble of all levels of singers, this group’s focus is on acquiring musical literacy, basic musical skills, and healthy vocal production. Performance opportunities include Fall, Winter, and Spring concerts, District Assessment, Graduation, and other community-based events.

BEGINNING GUITAR

Grade Level: Ninth-Twelfth

Prerequisite: None

Students learn basics for playing guitar. Must provide own instrument.

MUSIC HISTORY

Grade Levels: 9-12

Prerequisite: None

Coursework includes study of music history, theory and composition from the beginning of written music to contemporary music styles.

Other Course Offerings

TEACHERS FOR TOMORROW

Grade Level: Eleventh-Twelfth

Prerequisite: Have and maintain a minimum 2.7 grade point average, submit three satisfactory teacher recommendations, and submit a brief essay and application

The Teachers for Tomorrow Program is offered to high school juniors and seniors interested in pursuing a career in education. The program is designed to attract teacher candidates to the field of education through exposure to a world-class curriculum and hands-on experience that focuses on teaching.

TEACHERS FOR TOMORROW II

Grade Level: Twelfth

Prerequisite: Completion of Teachers for Tomorrow and permission of instructor

Students complete an internship in an elementary classroom.

YEARBOOK

Grade Level: All

Prerequisites: Completed application for competitive selection.

Students learn how to produce a yearbook publication from beginning to end. Students will also learn the PageMaker program, how to take and crop pictures, and how to write captions and body type. Course is fast paced with preset deadlines and occasional Saturday workdays.

Special Education Course Descriptions

Only students in the following categories will be eligible for any of the classes listed below:

SECTION 504

Students who are identified as eligible for a Section 504 plan, based upon a specific disability, will be served if it is determine their condition interferes with academic performance. The student's teachers will work as a team to implement individualized adaptations and modifications necessary for the student's success in the classroom.

SPECIAL EDUCATION

Students who are identified as eligible for an Individualized Education Plan (I.E.P.) will be placed in courses according to their diploma track.

RESOURCE

Grade Level: Ninth – Twelfth

Credit: 0

The purpose of resource class is to provide direct remediation and support for the student's assigned coursework. Study skill instruction will be delivered a needed. This course is offered *only* to students pursuing an advanced diploma, standard diploma, or modified standard diploma.

PRACTICAL ENGLISH

Grade Level: Ninth – Twelfth

Credit: 0

This course will enable students to become proficient in functional reading and language arts skills. The outcomes for each student are individualized based upon Standards of Learning and the students' IEP. A variety of materials and instructional methods will be used to ensure student success. Open *only* to students not pursuing a modified standard or standard diploma

PRACTICAL MATH

Grade Level: Ninth – Twelfth

Credit: 0

This course will enable students to become proficient in functional mathematical skills. The outcomes for each student are individualized based upon Standards of Learning and student's IEP. A variety of materials and instructional methods will be used to ensure student success. Open only to students not pursuing a modified standard or standard diploma.

PRACTICAL SCIENCE

Grade Level: Ninth – Twelfth

Credit: 0

This course will enable students to become proficient in functional science skills. The outcomes for each student are individualized based upon Standards of Learning and student's IEP. A variety of materials and instructional methods will be used to ensure student success. Open only to students not pursuing a modified standard or standard diploma.

PRACTICAL SOCIAL STUDIES

Grade Level: Ninth – Twelfth

Credit: 0

This course will enable students to become proficient in functional social studies skills. The outcomes for each student are individualized based upon Standards of Learning and student's IEP. A variety of materials and instructional methods will be used to ensure student success. Open only to students not pursuing a modified standard or standard diploma.

INDEPENDENT LIVING SKILLS

Grade Level: Ninth, Tenth

Credit: 0

This course will provide students who are not pursuing a standard diploma, instruction to become proficient in functional living skills. Students will be introduced to a variety of materials and methods, including written tasks, hands-on training, experiential, and community-based instruction. Skills will include communication, social, home living, health nutrition, finance, recreation/leisure, self-advocacy, safety, transportation, and transition.

VOCATIONAL SKILLS

Grade Level: Eleventh, Twelfth

Credit: 0

This course will provide students with the vocational instruction necessary to become proficient in job-related skills. These skills will ensure student transition to the post-secondary goals.

Chesapeake Bay Governor's School for Marine and Environmental Science

The Chesapeake Bay Governor's School provides high-ability students from the Northern Neck and Middle Peninsula with a rigorous curriculum through enrichment, exploratory, investigative, and career awareness experiences. Through the integration of math, science, technology, and research, woven with marine and environmental sciences, students have the opportunity to foster an appreciation and respect for environmental issues. Admission to the Chesapeake Bay Governor's School is based upon an application process open to rising sophomores. Admission is competitive and is based on previous math and science courses, teacher recommendations, standardized achievement testing, science/math activities, and honors. Students receive dual enrollment credit from RCC.

Bridging Communities Programs

Programs are available for juniors and seniors in each of the five school divisions (including Middlesex). Limited seats are available for each program. Enrollment in the Technical Center is a competitive, application process. All students enrolling will take college placement tests.

Pre-Engineering Technology/STEM

Prerequisite: Technology Education recommended

The junior year 3 credit program introduces students to a variety of engineering fields and related careers. Students will study and explore engineering technology design, fundamentals of modeling and applying engineering design processes to real world problems. Instruction will include robotics. The senior level dual enrollment class introduces students to concepts common in most engineering technology occupations, and students will learn how statics figures in engineering technology problems. A community based Service Learning project will be a part of this class. This program is recommended for students interested in a university engineering technology degree or community college engineering technology programs.

Heating, Ventilation, Air Conditioning and Refrigeration (HVAC)

Prerequisite: Any Agriculture, Technology or other mechanical related class is recommended

This two-year program provides six high school credits and eighteen college credits. The program prepares students to install, repair, and maintain heating, air conditioning, and refrigeration systems. Students will study heat, heat transfer, electricity and electronics related to HVAC, duct systems and tubing. EPA regulations and certifications will be emphasized. Students completing this program will take the EPA Refrigerant Recovery certification test.

Criminal Justice (Administration of Justice)

Senior level class offers dual enrollment option with RCC

This two-year program provides six high school credits and fifteen college credits from Rappahannock Community College. The program introduces the career fields of law enforcement, corrections and private security. Examples of topics studied include crime prevention, collecting evidence, criminal investigations, and maintaining law and order.

Culinary Arts

One year completer program using New Kent High School commercial kitchen

This one year program is available to juniors or seniors. Students will earn four high school credits and thirteen college credits. Students will practice the management and production skills used in commercial and other large food establishments. Students will plan, select, store, prepare and serve food and food products, study nutrition, sanitation and food safety, and learn to use commercial equipment. After high school graduation students can complete the college certificate program in three semesters. Students will take the National Restaurant Association ServSafe certification and Pro Start certification tests. In addition to chef or cook, occupational options include baker, pastry chef, and food service manager and many other specialties.

Diesel Equipment Technology

Dual Enrollment program with J. Sargeant Reynolds Community College

Prerequisite: Any technology or other mechanical related class is recommended.

Prerequisite: Enrollment in JSRCC and passing the VCCS placement tests

This is a two-year, dual enrollment program with J. Sargeant Reynolds. Students will earn thirty college credits as they learn shop procedures, diesel truck electrical systems, power trains, hydraulics and pneumatics, air brakes, fuel systems and diesel engine reconditioning. After graduating from high school, students will be able to complete this program at Reynolds Community College in less than one year.

Modeling and Simulation

Prerequisite: Computer Information Systems or similar Business/IT class

Students in this two-year program will earn six high school credits and twenty-five college credits. This certificate program is designed to prepare students with entry-level skills to enter web design, game design and animation/modeling fields. Students will learn to use software such as Adobe Photoshop, Illustrator, Dreamweaver, Fireworks and Flash to create advanced web pages and designs for numerous digital applications. In the second year students will use architectural based 3-D software such as 3D Studio Max for basic modeling, will add motion to scenes, and will practice the basics of game design. A school based Service Learning project will be part of the second year of this program. Students will also work with Microsoft software to create portfolios. Occupational options include graphic designers, multimedia artists and animators, applied software engineer technologist.

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