2019-2020
Course Descriptions
Red Bank High School

English/Language Arts

Tier 2 English 9
This is a preview course for English 9. In this course, students review foundational skills for reading, writing, listening, speaking and conventions of the English language.

English 9
This course provides instruction on selected works of world literature, poetry, and nonfiction and their literary elements. Students are encouraged to know their level of reading and work on improving their reading skills to achieve college and career readiness; this improvement is accomplished with class work and student selected independent reading and vocabulary strategies. Grammar skills are reviewed, communication skills are practiced, and essays are written. Students study how informative texts (real-life, everyday texts) are structured and how the media uses different techniques to influence an audience. Media and technology are incorporated into the curriculum.

Honors English 9
This course of instruction challenges students to explore a variety of world literature, poetry, and nonfiction and their literary elements through classroom and independent reading. The reading of increasingly complex works will enable the students to advance in their reading skills. Advanced writing and communication skills are developed through a variety of modes of writing, listening, and speaking. Students study how informative texts (real-life, everyday texts) are structured and how the media uses different techniques to influence an audience; these are also new standards. The course emphasizes learning through independent research and presentation skills, creative writing, and group projects in which technology and media are incorporated. This course qualifies for three honors points.

English 10
This course is a continuation of the foundation formed in English 9 and includes intensive work in composition and further study of major works of world literature. In addition, skill development to prepare for 11th grade English will be emphasized. Reading and writing continue to be emphasized. Students again choose works to read independently to meet college and career readiness.

Honors English 10
This rigorous coursework, which continues the study of world literature, helps to prepare students for either AP Language and Composition or Honors English 11. Admission requires previous English teacher recommendation or parent waiver. This course is approved to receive three honors points.

English 11
This course is a continuation of the foundation formed in English 9 and 10. This course includes intensive work in composition communication and further study of major works of American literature. In addition, skill development to prepare for college admission tests will be emphasized.

Honors English 11
This is an accelerated course which includes the study of American literature with an emphasis on literary analysis and composition. Research projects and college admission test preparation are major components of the course. Admission requires parental request and/or teacher recommendation. This course is approved to receive three honors points.

Advanced Placement English 11-- Language and Composition
This year-long course fulfills the requirement for English 11 and engages students in becoming skilled readers of fiction and nonfiction, written in a variety of rhetorical contexts, and skilled writers who compose for a variety of purposes. This is the most rigorous course for juniors in the English department. Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript. College credit may be awarded based on exam results. Summer reading is required.

English 12
This course provides instruction in a variety of writing purposes, including college-level essays and research. Readings include major works of British literature. Common Core standards are emphasized in readiness for college and/or career.

Advanced Placement English 12-- Literature and Composition
This course fulfills the English 12 requirement. This year-long course demands a mastery of the English language, both spoken and written. The course follows the guidelines of the College Board and culminates in a nationwide examination which could earn college credit for the student. The work level is that of a college freshman, demanding strenuous outside reading, independent research, and interpretive writing Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript. College credit may be awarded based on exam results. This is the most rigorous English course available for seniors. Summer reading is required.
Prerequisite: *must have a score of 2 or higher on AP Language and Composition exam.*

Dual Enrollment English 12
This is a year-long course which emphasizes rhetoric and composition. Semester one focuses on developing skills in critical thinking and writing argumentative essays on contemporary nonfiction topics. Semester two is literature based and focuses on advanced skills in argumentative essay development through literary analysis of fictional works. Students learn to use research and the assigned texts to support their essay arguments in both segments.
Students must complete all enrollment documents with Chattanooga State in order to take this class. Students must also pay college fees and purchase textbooks each semester. Grant money is available for eligible students. Summer reading is required. An ACT of 18 or higher on the

English and Reading subtests, and a B average in English is recommended. This course is approved for four honors points.

Newspaper Sports Journalism
This course is best suited for students who have an interest in reporting RBHS sports, updating the school athletic website. Students must have after school flexibility to cover sporting events.

Yearbook Staff
This course is designed to give qualified students the opportunity to learn various phases of yearbook work while publishing The Roar. Interested students must apply to the staff and are then selected by the advisors. This is a year-long course.

ACT Prep
This course is offered as an aid to students to help them learn the strategies in taking the ACT test and thereby help them in their goal of reaching college readiness scores. The course concentrates on English and Math sections strategies and representative material. The course consists of diagnostic tests, strategies, and practicing of those strategies to enhance scores.

Mathematics

Algebra I
This year-long course gives students a foundation in basic algebraic concepts that will be required to be successful in advanced mathematics. Topics covered include linear equations and inequalities, systems of equations and inequalities, linear functions, quadratic functions, exponential functions, polynomials, factoring, probability, and statistical analysis. Students will be introduced to the use of the graphing calculator. Upon completion the student earns 1 elective credit and 1 math credit.

Tier III Math Support – Algebra I
In this year-long skinny class, students will practice skills learned in their core Algebra I course. Students will receive additional help to ensure they are successful in their Algebra I class. Students will complete assignments on IXL

Geometry
This is a semester long course that studies the relationships in the plane and space. Students will study segments, angles, circles, parallel and perpendicular lines, triangles and their angles, triangle congruence, similarity, transformations, proofs, beginning trigonometry, surface area and volume. **Prerequisite**: *Algebra I*

Tier III Math Support - Geometry
In this semester-long skinny class, students will receive additional support to ensure their success in their Geometry class. Students will complete assignments on IXL, receive help with their homework and complete tests and quiz corrections to improve their grade in their core Geometry course.

Honors Geometry
This course covers the same skills as 'Geometry' but at a faster pace and with greater depth. Students in this class must complete several in-depth projects to satisfy the Honors component as approved by the Hamilton County Department of Education. **Prerequisite**: *Algebra I*. This course is approved for three honors points.

Algebra II
This year-long course is designed to build on students' prior knowledge of algebraic and geometric concepts. Students will develop algebra skills in multiple areas such as systems of equations, quadratic functions including imaginary and complex numbers, polynomial functions, exponential and logarithmic functions, radical functions, rational functions, trigonometry and statistics. **Prerequisites**: *Algebra I and Geometry*.

Tier III Math Support – Algebra II
In this year-long skinny class, students will practice skills learned in their core Algebra II course in order to achieve success in course completion. Students will complete assignments on IXL.

Honors Algebra II
This course covers the same skills as Algebra II, but at a faster pace and with greater depth. Students in this class must complete several in-depth projects to satisfy the honors component as approved by the Hamilton Co Department of Education**.** This course qualifies for three honors points. **Prerequisites**: *Grade of C or better in Geometry and completion of Algebra 1 or parent waiver.*

DEP Statistics
Students enrolled in this course will be simultaneously enrolled in Chattanooga State's MATH1530. This course includes sampling, data organization, variability and central tendency, probability, distributions and confidence intervals, hypothesis testing, and inference and correlation. This course requires tuition to be paid to Chattanooga State. This course qualifies for the TN Dual Enrollment Scholarship and four honors points. **Prerequisites:** *Algebra II; ACT Math score of 19 and Reading of 20; Admission to Chattanooga State's Dual Enrollment Program*

Applied Mathematical Concepts
This is a Junior/Senior level course suitable for students not planning to take calculus. Topics include statistics and probability, financial math, linear programming, logic, Boolean algebra, problem solving, data organization and interpretation, counting and combinatorial reasoning among other topics. **Prerequisite**: *Algebra II*.

State Dual Credit Pre-calculus
This semester-long course weaves together the previous study of algebra, geometry and mathematical functions into a preparatory course for calculus. The following topics are covered in this course: polynomial, rational, exponential, logarithmic, inverse, trigonometric functions and circular functions. Students have to opportunity to earn college credit (MATH 1730) by passing the challenge exam at the end of the course. This course qualifies for four honors points.

Prerequisites: *grade of B or higher in Algebra II, recommendation from Algebra II teacher OR parent waiver.*

Honors Calculus
This course is intended to give students an opportunity to cover such topics as the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration. This course is approved for Honors points. **Prerequisite**: *Pre-Calculus*

Bridge Math
This Senior-level math credit course is designed for students who have scored below a 19 on the ACT math subtest. The intent is to review and expand knowledge so that student may improve an ACT score at the end of the course and thereby eliminate the need for "remedial" math courses in college. Topics include but are not limited to: expressions and equations, linear and nonlinear functions, polynomials, analysis and probability and geometric application.

SAILS Math (Seamless Alignment and Integrated Learning Support)
SAILS introduces college developmental math curriculum. The primary focus is to relearn critical math skills. Successful completion of the class gives students the equivalent of a 19 ACT math subscore. **Prerequisites**: *only open to seniors with a math ACT subscore of less than 19*

Science

Physical Science
This 9th grade course is a laboratory based science with emphasis on general chemistry and general physics. Students will focus on matter and chemical reactions along with force and motion.

Biology I
This is a laboratory course that takes the biochemical/ molecular approach to the study of living things. Topics include: basic cell structure and function, heredity, biotechnology, biological change, diversity, and ecology.

Honors Biology I
This is a laboratory course designed for the academically motivated student. An expanded curriculum will be offered with emphases on molecular and cellular biology, genetics, biochemistry, biological change and ecology. Independent study and critical thinking skills will be necessary. Projects that involve students' data collection and assimilation are required. This course is approved for three honors points.

Biology II
This is a laboratory course that provides students with the opportunity to focus on a particular aspect of life science in more detail. Students will explore marine life and ecosystems throughout this class. The academic standards for Biology II focus on organism classification and evolution with in-depth analysis of plants and animals.

Advanced Placement Biology
AP Biology is a college-level introductory biology course. This course is designed for students interested in a biology-related field as a potential post-secondary career. AP Biology focuses on 4 big ideas: Evolution, Energy in Living Systems, Heredity, and Systems. 40% of the course is lab based. Homework is a required component of the course. AP Biology also requires higher order thinking skills. Students who take this course must be dedicated and have a strong work ethic. Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript. This course is offered on a rotating schedule. **Prerequisites**: *Biology and Chemistry, preferably honors, with grades no lower than a B in both courses OR parent waiver.*

Chemistry
This is a heavily math-based course that applies mathematical concepts to understand laboratory measurements and the changes matter undergoes. Chemical & nonchemical labs will be performed to help students observe and understand how these interactions of matter occur. This class includes instrumentation, bonding, acid/base chemistry, stoichiometry, gas laws, radioactivity, and light. **Prerequisites**: *solid algebraic foundation including fractional conversions and successful completion of Biology recommended*

Honors Chemistry
This is a fast paced, heavily math-based laboratory course. This course applies mathematical concepts to understand laboratory measurements and the changes matter undergoes. Chemical & nonchemical labs will be performed to help students observe and understand how these interactions of matter occur. This class includes advanced math skills and critical thinking to learn about instrumentation, bonding, quantum mechanics, acid/base chemistry, stoichiometry, gas laws, radioactivity, and light. This course qualifies for three honors points.
Prerequisites: *solid algebraic foundation including fractional conversions and successful completion of Biology recommended*

Advanced Placement Chemistry
This is a college level chemistry course that fulfills a laboratory science requirement. Students will attain a depth pf understanding of chemistry fundamentals and competence in dealing with chemical problems. This course is heavy in mathematical computation, laboratory practices and oral/written expression of ideas. Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript. This course is offered on a rotating schedule. **Prerequisites:** *Chemistry I with teacher recommendation OR parent waiver and completion of Algebra II*

Honors Physics
This is an accelerated and challenging course for students interested in engineering and advanced studies in science. The course concentrates on an analytical and comprehensive lab program. This course is approved for three honors points. **Prerequisite**: *Chemistry and Precalculus*.

Geology
Offered to students who have been successful in at least three previous science courses and wish

to develop an understanding of the physical forces that shape the earth. Topics include minerals, rocks, fossils, volcanoes, water systems, earthquakes, landforms, map skills, regional geology. **Prerequisite**: *Biology*.

Astronomy
This is an introduction to the field of astronomy. This laboratory based course will cover the origins and age of the solar system and universe. Students will be exposed to the latest data on star and galaxy formation. Students will gain first-hand knowledge of telescopes and constellations. Via the use of technology we will view the exotic features of the heavens and delve into the possibilities of life on other planets. **Prerequisite**: *Algebra I.*

Anatomy and Physiology
This laboratory course is for the serious student to develop an understanding of the functioning of the human body. Students who have an interest in the health field should explore this course. Dissection, chemical, and physiological experiments are an important part of this course. Students who are uncertain about AP Biology may choose to take this course as a prerequisite. **Prerequisites**: *Biology and Chemistry*.

Scientific Research and Design
A course designed to accommodate self-motivated students who are interested in doing a research project. This course may be a vehicle for innovative or focused study on special topics such as aerospace, engineering, mapping, water quality, grant writing, working for non-profits. Using the scientific method students will explore their topic using a minimum of 40 % of the class time in lab or doing fieldwork. **Prerequisites**: *Chemistry and Algebra II*

Geographic Information Systems (GIS)
This course teaches three different software programs for mapping: OSM, GQIS and GIS. We map for hurricanes, emergencies and regional needs. We also learn how to use drones and car rovers for mapping purposes. **Prerequisite**: *grades 10-12 only*

Advanced Placement Environmental Science
This course provides students with the foundation of scientific principles, concepts and methodologies that are required to understand the interrelationships of the natural world. Students will identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with the problems and examine alternative solutions for resolving and/or preventing them. The course will stress the following points of study: science as a process and method for learning more about our world, energy and matter conversions (not losses or gains) underlie all ecological and human processes, the earth itself as one complex and interconnected system, human alternations to natural systems, cultural and social context for environmental problems and the dependency of human survival on developing practices for sustainable systems. Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript. This course is offered on a rotating schedule.

Social Studies

World Geography
The five themes of geographic study (location, place, relationships, movement and regions) will be used to examine each world culture region through its geography, government and history, people and customs. This is an elective course.

World History and Geography
In this course, students will explore the major civilizations of the past which have laid the foundations for the modern world's society. Students will have the opportunity to develop critical thinking skills as they confront various historical interpretations and discover causes of present issues. This course is a graduation requirement.

State Dual Credit World History
This is an honors course that will allow students an opportunity to also earn college credit. It is a fast-paced course covering 25 learning objectives in World History. Students will be expected to work independently, produce written responses and interpret and analyze facts and concepts. Students will complete a challenge exam for the opportunity to earn college credit. This course qualifies for four honors points. **Prerequisite**: *Final grade of B or higher in previous social studies class.*

State Dual Credit American History
This is a one semester course meeting graduation requirements. It is designed to cover American history from 1865 (Reconstruction) to the present. A large focus is placed on cause-effect relationships and the investigation of primary and secondary sources so students receive the most accurate depiction of the American era being studied. Students will have the opportunity to earn college credit for this course via a challenge exam. This course qualifies for four honors points.

Honors State Dual Credit American History
This is a one semester course meeting graduation requirements. It is designed to cover American history from 1865 (Reconstruction) to the present. A large focus is placed on cause-effect relationships. Solid reading and writing skills are necessary to succeed. Students will learn how to analyze and think critically about primary and secondary sources in order to construct historically accurate and defensible arguments in the structure necessary to score well on the challenge exam. Students will have the opportunity to earn college credit via this exam. This course qualifies for four honors points.

Advanced Placement U.S. History
This is a challenging course that is meant to be the equivalent to a college freshman course and students will have the opportunity to earn college credit. It is a full year survey of American history from the migration of Native Americans across the Bering Strait through the Obama presidency. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and analytical thinking skills, essay writing and interpretation of primary and secondary sources. Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript. **Recommendation**:

successful Honors English 10 completion

Personal Finance
This nine-week, half credit course is designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Topics covered will include income, money management, spending and credit, as well as saving and investing.

Wallet Literacy
Students will research and navigate the day to day struggle and obstacles of personal financial needs to be a productive citizen in the United States economy. This is a year-long skinny course worth one full credit.

Economics
This is a 9 week study of human behavior in reproducing, distributing and consuming material goods and services. Theoretical learning is enhanced by the experience of organizing and operating a student company, by computer management and economic stimulation, and by weekly business consultant visits. Students earn .5 credit.

U.S. Government and Civics
This is a 9 week course designed to explain the rights and responsibilities of the citizen in a democratic society and develop an awareness and concern for the rights and well-being of others. Students earn .5 credit.

African-American History
This course examines the lives and contributions of African-Americans from the early 1600s through modern America. Students will explore and consider the relationship between geography and the growth of slavery, urban and rural African-American communities and institutions leading up to and during the Civil War, the rise of Jim Crow and the migration of African-Americans through the early 20th century. Students will also investigate the impact of the Harlem Renaissance, the conditions and roles of African-Americans during the Great Depression and World War II, the successes and failures of the Civil Rights Movement and current issues in African-American lives.

Sociology
Behavioral science course that examines the way people act, react, and interact with one another in their everyday lives and under extraordinary circumstances.

Psychology
Designed to focus on the individual as he applies facts and principles on human behavior to better understand himself, his relationship with others, and his future relationship in marriage, family, and society.

Contemporary Issues
The students will use skills to examine the issues that impact the contemporary world. These include historical, cultural, economic and geographic factors that have raised certain issues to levels of concern in our nation and around our globe.

Modern History through Film
This is an elective course designed for students who love history and film. The course focuses on colonialism to present. The class will compare and contrast how well the film portrays history accurately. Some films that are watched include The Patriot, Pearl Harbor, Cinderella Man, Hidden Figures and Forrest Gump.

History of RBHS Sports
Students in this course are in charge of preserving and highlighting the history of RBHS sports through bulletin board displays, upkeep and changing of trophy cases and displays, storing and managing of past yearbooks, trophies, newspapers and other artifacts. *Administration and faculty recommendation required.*

Old Testament Bible History
This course provides an academic overview of the entire Old Testament beginning with the creation account and a study of early civilizations and extending through the captivity and restoration of Israel. Emphasis is given to understanding the patriarchal culture and the Abrahamic covenant. Students are introduced to the era of the Judges, the united kingdom of Israel, and the poetry and wisdom literature of the Bible.

New Testament Bible History
New Testament Survey provides an academic overview of the entire New Testament beginning with the time between the testaments. Students engage in a comparative study of the four gospels and trace the development of the early church. Emphasis is given to the life, work, death and resurrection of Jesus. Students also analyze the missionary journeys of Paul and the many challenges to the early church.

Fine Arts

General Music/Fine Arts Appreciation
In this course, students will experience six weeks each of General Music, Intro to Art and Intro to Theatre. This course is for 9th graders only and fulfills the required Fine Arts course for graduation.

Music Theory
Suited for musicians with some musical training, this course will guide students in exploring how music is created and structured. Students will analyze various pieces in score, hymn and piano form with an introduction into composition. Elements of ear training are also included.

Instrumental Music I (Beginning Band)
This course is designed for students with no musical training at all or musicians desiring to learn a new instrument. One evening concert at the end of the semester is required.

Instrumental Music II (Concert Band 1st semester)
This course is designed for students with woodwind, brass or percussion experience. Daily rehearsals as a group are required as are two evening concerts during 1st semester.

Instrumental Music III (Concert Band 2nd semester)
A continuation of Instrumental Music II, the students in this course will be evaluated by a panel of judges. Two evening concerts are required during this 2nd semester course.

Instrumental Music IV
This is a course designed for advanced band students only. It is used to prepare students for auditions. Auditioning for Junior Clinic, Senior Clinic, Jazz Clinic, UTC Honor Hand and/or All-County Band is required. Participation in solo/ensemble is required.

Theatre Arts
Students will become familiar with Theatre vocabulary, history, genres, set design, backstage crew responsibilities, and performing alone and in a group in front of the class. The class will execute backstage crew tasks at the school play performance to be held at the end of the semester. This includes building and painting sets, being in charge of costumes, props, makeup, admissions, programs, video, photography, and possibly appearing as extras onstage. This will be their Final Exam.

Visual Art 1
This beginner art course is designed to develop skills in design, idea development, aesthetics and individual personal interest in art. Focus is on art history, elements of art and principles of design.

Visual Art 2
This is an intermediate art class designed to build on what was learned in Visual Art 1 and expand skills. This course aims to help students find their own artistic voice. Focus will be on both 2D and 3D elements as well as problem solving skills, critical thinking and idea development. **Prerequisites***: students must have earned a grade of C or better in Visual Art 1.*

Visual Art 3
This advanced art course will help students produce bodies of work that have strong emphasis on personal interest. Students will focus of studio habits and working artists as a career. Students will express themselves through advanced levels of critical thinking, problem solving, and knowledge of art history and aesthetic abilities. **Prerequisites***: students must have earned a grade of B or higher in Visual Art 2*

Foreign Language

Spanish I
This is a state mandated course introducing the Spanish language. Students will acquire basic skills in reading, writing, listening and speaking Spanish. During the semester, students will appreciate and participate in culturally appropriate activities based on the various Spanish-speaking cultures. There is no prerequisite for Spanish I.

Honors Spanish I
This course is an introduction to the Spanish language. Students will acquire skills in reading, writing, listening and speaking Spanish. The course also emphasizes culture, providing students with opportunities to study and explore culture in depth. This course qualifies for three honors points.

Spanish II
This class is a continuation of Span I. Students will acquire reading, writing, listening and speaking skills in the Spanish language. In additions, students will continue to explore culture and increase their knowledge of Spanish speaking peoples. **Prerequisite***: successful completion of Spanish I*

Honors Spanish II
This course offers students an opportunity to explore the language and cultures more in-depth. The course equally emphasizes all areas of language and culture learning: speaking, reading, writing and listening. Additionally, students will have more opportunities to explore culture through trips and events. Lastly, Honors Spanish II students have the opportunity to continue their Spanish studies with Spanish III/IV. This course qualifies for three honors points. **Prerequisite***: successful completion of Spanish I with a final grade of 80 or higher*

Honors Spanish III/IV
This course will prepare students to successfully engage in the Spanish-speaking culture, both domestically and abroad. Emphasis will be on fine-tuning speaking and listening skills through culturally relevant activities, while reinforcing the reading and writing skills learned in previous Spanish courses. The goal for students who take this advanced foreign language course is to receive a national Seal of Biliteracy on their high school diploma after successfully passing a test, indicating they are bilingual, with intermediate level or better. **Prerequisite***: successful completion of Spanish II with a final grade of 80 or higher*

P.E. / JROTC

Lifetime Wellness
This course combines concepts from both health and physical education. Topics covered include nutrition, recreation, team sports, drug awareness, first aid and safety, sexual education, plus goal setting strategies and monitoring of personal fitness levels (aerobic and anaerobic activities). This course is a ninth-grade level course and required for graduation.

Weight Training
This course is designed to enhance athletic performance. It consists of proper lifting techniques, plyometric exercise, flexibility, form running and implementation of agility drills.

Team Sports
This class is designed for students interested in learning skills and strategies of team sports. Sports may include but not be limited to baseball, kickball, badminton, volleyball and basketball.

Adapted PE/Physical Education II
This course is offered to students interested in becoming peer assistants to students with severe disabilities. The curriculum includes activities that are adapted or modified to meet individual needs in physical educations. Students may apply (by teacher recommendation) as peer assistant for this class with either the teacher or the Exceptional Education Department Chair.

JROTC I & II
An introduction to ROTC, and the Military Services (Army), leadership theory, drill and ceremonies, first aid, map reading, techniques of oral communications, marksmanship and safety, rafting and mountaineering. Uniforms, provided by the department, are worn on average once per week. This course is a year-long, grants 2 credits, and satisfies the requirement for Lifetime Wellness.

JROTC III & IV
An advanced study of the topics covered in the first year program. Armed services, college ROTC and service academy opportunities are explained and discussed. Additional subjects introduced are Foundations for success (written and verbal communication skills), and Service Learning projects. This course is year-long, grants 2 credits, and along with JROTC I & II satisfies the requirement for Personal Finance and PE.

JROTC V & VI
An upperclassman course which gives the cadets the opportunity to exercise leadership by supervising and instructing underclassmen. Citizenship and American History are covered in depth in conjunction with the class projects and the service learning project, which consists of numerous small group projects, combines and culminates in the final service learning project. Cadets are given instructions for senior ROTC program tuition scholarships. This course is year-long, grants 2 credits, and along with credits in JROTC I, II, III & IV satisfies the requirement of U.S. Government.

JROTC VII & VIII
An advanced course focusing on psychology of leadership, command and management challenges, interpersonal communications and leading/planning and completing the numerous cadet battalion functions to include the annual formal inspection. Small unit leadership challenges, teaching skills, career planning, financial planning, environmental awareness, and advanced citizenship are covered in leadership labs, seminars and practical exercises. This course is year-long and grants 2 credits.

Career & Technical

Career Explorations – Technical Department
Students will be exposed to a variety of careers by rotating classes through the year. Goal setting, educational requirements for careers and other essentials for success are included. Many areas of interest are included from the Career and Technical Education Department. This course is for 9th graders only.

Principles of Engineering and Technology
Principles of Engineering & Design is an introductory course, which develops student problem solving skills using the design process. Students learn how to analyze a problem, research solutions, develop solutions, build the best solution, test the solution and improve the solution. Students also learn how to document each step of the design process, with an emphasis placed on sketching, formal drawings, and 3D modeling. The projects are open-ended meaning there can be more than one correct solution. This is a foundational course for anyone wanting to become an engineer, designer, architect or work in the construction, manufacturing, or transportation industries.

Engineering and Design 1
Students dig deeper into the engineering design process, applying math, science, and engineering standards to hands-on interdisciplinary projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software and our digital fabrication lab. Students are exposed to engineering careers and experiences throughout the year.

Computer Science Foundations
Computer Science Foundations introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. This course serves as a great lead-in to AP Computer Science Principles.

Advanced Placement Computer Science Principles
AP Computer Science Principles is a college level course which offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Course standards follow those set by the College Board. Students must take the culminating AP exam to receive five honors points and to retain AP designation on their transcript.

Marketing I
Students will learn about the basics of business and economics. They will interact with fellow students in creative and competitive activities that simulate business concepts in the real world. This course satisfies the Economics graduation requirement.

Entrepreneurship
In this class, students will experience the process of creating a business idea, pitching the idea to real Chattanooga investors and running an actual business. This course satisfies the Economics graduation requirement.

Work-Based Learning
In this course, students will spend their time developing and demonstrating employment skills by working in a position tied to their future careers. They will have to opportunity to do this as team

members in the school's ROAR Store or as interns with the school's corporate partner. This course can count as the 3rd or 4th course completing a student's high school elective focus for Career and Technical students and can serve as an elective for students from other areas of elective focus.

Computer Aided Drafting 1
Stresses sound development of basic drafting skills using both conventional and computer –aided drafting methods. Both architectural and mechanical drafting problems will be assigned. No artistic ability is required, but a sound working knowledge of basic math is.

Computer Aided Drafting 2
An extension of skills acquired in Drafting I and is designed for students who wish to pursue a career in drafting or to be used in pre-engineering, interior design, or pre-architecture. Only computer-aided mechanical and architectural drafting problems will be assigned. Recommended for students who successfully complete CAD 1.

Advanced Drafting & Design
Is a class in which computer-aided drafting software will be used to create complex engineering drawings including plan views, assembly drawings, welding, section, 3D representations, and bill-of-materials. Emphasis is placed on drawing projects with increasing complexity. **Prerequisite**: *Instructor approval*.

Broadcasting 1
Designed to give students a broad overview of the television industry and basic television production. Students will learn videography, editing, reporting, newsgathering, anchoring (broadcast journalism) and how to put together a newscast. The curriculum also includes production instruction in directing, switching, audio, graphics and studio operations.

Broadcasting 2
Will teach advanced newsgathering and television production skills. Students will train to produce student newscasts ("The Mane News") and eventually take over the show. **Prerequisite**: *Media I AND instructor approval*.

Broadcasting 3/4
Students will produce the newscast ("The Mane News") as well as another major TV production (i.e. entertainment show, game show, soap opera, drama or sit-com). Students will also have the opportunity to provide technical assistance for extra-curricular activities. This course may be taken for two years. **Prerequisite**: *Media I and II AND instructor approval.*