

updated September 2016

Course Descriptions

Whitmore School

ELECTIVES

ART HISTORY

Grade Level: 10, 11, 12

Credit: 1.0

Prerequisites: None

This course offers a broad view of the development of western art from early Greece to the present. Lessons link the development of art forms to their political, cultural, and religious settings. Students visit the world's heritage sites, museums, and galleries on- line to view examples of painting, architecture, and sculpture. Students learn characteristics of major art periods, acquire a basic art vocabulary, and develop skills in analyzing and observing art.

CAREER PLANNING

Grade Level: 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Career Planning directs students in determining and preparing for a career path according to their interests. Students compile a resume and associated documentation, engage in research, and utilize communication skills in preparation for an interview. Students edit their work for errors in sentence structure, usage, mechanics, and spelling.

COMMUNITY SERVICE

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Students will volunteer for a community organization in their neighborhood or in their home. These activities must not be compensated for monetarily or be part of regular family chores. The purpose of this course is to teach students how to give back to the community.

INDEPENDENT STUDY

Grade Level: 9, 10, 11, 12

Credit: 1.0

Prerequisite: None

Independent study allows students to choose a topic of interest to them and to research it. With an emphasis on composition, students learn how to choose and narrow their topics appropriately, and they learn how to research them using various online and print sources. The course culminates with the students writing a well-organized research essay on the topic. Students must learn and demonstrate proper techniques for citing their sources in their essays as well as demonstrating the

use of proper grammar, mechanics, and spelling. Students also learn to proofread and edit their essays for the aforementioned elements.

MENTORSHIP

Grade Level: 9, 10, 11, 12

Credit: 1.0

Prerequisite: None

The mentorship course encourages students to partner with a mentor from any of a wide range of professions in order to learn about that profession during a six week period. The students will shadow their mentors for two to four hours a day, at least three days a week, for the six week period. At the end of each week during the mentorship, the student will file updates on the process, usually explaining what s/he has done and what s/he has learned from each week's work. In the sixth week, students write an essay on the experience. They must demonstrate proper writing techniques in grammar, mechanics, and spelling, as well as demonstrating organization and clarity of purpose.

MUSIC APPRECIATION

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Music Appreciation students learn about the basic elements of sound as well as a brief history of Western music from the Baroque period to the modern era. For a final essay, students choose a specific style of music to write about.

PRE-COMPOSITION

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Pre-Composition guides students through the basic grammatical structure of the sentence. Students learn how to correctly build simple, compound, and complex sentences from components of phrases and clauses. Students learn proper agreement and punctuation, and they learn to avoid common grammatical stumbling blocks such as comma placement, relative pronoun case, and parallelism. Students also learn to structure and write different kinds of paragraphs including a process paragraph, narrative paragraph, definition paragraph, classification paragraph, and cause/effect paragraph. After completing this course, students will be able to control the fundamental aspects of writing and be ready to compose longer written work required in other high school courses.

SPANISH 1 (NCAA approved)

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Spanish 1 is an Introduction to the Spanish language and includes lessons on pronunciation, vocabulary, and grammar. Students learn the basic structure of Spanish, with an emphasis on verb conjugation, gender agreement, and commonly used irregular verb forms. The class also discusses the diverse culture of Spanish speaking countries.

SPANISH 2 (NCAA approved)

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: Spanish 1

Spanish 2 is a continuation of Spanish 1 and is the equivalent of the second year of High School Spanish. Along with occasional review from Spanish 1, this course focuses on new grammar, greater comprehension, and more vocabulary. Students work on advanced verb conjugation, the use of prepositions, and Spanish writing. All lessons include dialogues (with sound), which emphasize the vocabulary and grammar of the lesson.

SPEECH

Grade Level: 9, 10, 11, 12

Credit: 0.5

Prerequisite: None

Speech is a half credit course designed to teach students how to effectively listen to and finally give their own speech. Students will listen to and critique the speech-giving skills of three speakers, one of which must be physically attended and viewed by the student. They will also learn how to lead a group discussion and maintain order and focus among the group. Nonverbal communication is also covered in the course, so that students may learn that not all communication needs to be spoken, and that some things can be conveyed in a gesture. The final project is a 3-5 minute speech prepared and presented by the student in audio or video format.

STRESS MANAGEMENT

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Students in this course will study the physiology of stress and the relaxation responses of the body. They will be provided with opportunities to gauge their own stressors and adaptation techniques and will have chances to learn tools for managing stress. In addition to learning the foundational work done on the study of stress and its effects, students will be able to identify stress in others and to develop programs of stress reduction.

TEST PREP CP

Grade Level: 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: Student must have completed one year with CompHigh/Whitmore School.

Test Prep is a course designed to teach students how to prepare for a variety of tests. Not only does this course cover strategies for the SAT and ACT, but it also help students manage test anxiety. Students will learn time management leading up to the test, how to manage the day of the test, and what to do after the test has been completed. Students will have the opportunity to demonstrate what they have learned with a comprehensive test at the end of the course.

TEST PREP GS

Grade Level: 10, 11, 12

Credit: 0.5

Prerequisite: Student must have completed one year with CompHigh/Whitmore School.

Test Prep is a course designed to teach students how to prepare for a variety of tests. Not only does this course cover strategies for career assessments, but also help students manage test anxiety. Students will learn time management leading up to the test, how to manage the day of the test, and what to do after the test has been completed. Students will have the opportunity to demonstrate what they have learned with a comprehensive test at the end of the course.

THINK ABOUT IT

Grade Level: 9, 10, 11, 12

Credit: 1.0

Prerequisite: none

“Think About It” is a course designed to engage students in the research and writing process in order to develop a more complete understanding of a particular topic. Students choose their topic and demonstrate that they can successfully narrow their focus of it. They are encouraged to fully develop their ideas in an organized essay once they have done their research, and they demonstrate that they can add their own voices to ongoing conversations using proper citation methods. Additionally, students must demonstrate the ability to use proper grammar, mechanics, and spelling to convey their ideas, and they practice editing their work for these elements.

COMPUTER SCIENCE- WEB DESIGN

Grade level 9,10,11,12

Credit: 1.0 credit

Prerequisite: None

Students do assignments and one final project relating to web design, including creating and designing their own web page. They learn the basics of HTML coding, Cascading Style Sheets (CSS), and do research on their own to learn about the Web, search engines, and troubleshooting.

WORK ETHICS/WORK EXPERIENCE

Grade level 9, 10, 11, 12

Credit: 1.0 credit

Prerequisite: None

Students will learn about accountability and responsibility in the work place. Some topics to be covered are proper dress, attitude, honesty, and respect. They will also learn about work safety practices, conflict management, working in teams, and effective communication skills. Students will also be able to submit work experience hours for this course. Students are required to journal about how the topics covered in the lessons relate to their experiences on the job.

WORK ETHICS (without work experience)

Grade level 9, 10, 11, 12

Credit: 0.5 credit

Prerequisite: None

Students will learn about accountability and responsibility in the work place. Some topics to be covered are proper dress, attitude, honesty, and respect. They will also learn about work safety practices, conflict management, working in teams, and effective communication skills.

ENGLISH

ENGLISH I

Grade Level: 9 (General Studies)

Credit: 0.5 or 1.0

Prerequisite: None

This course emphasizes the use of composition to reflect upon, analyze, and evaluate various literary texts. Students edit their work for errors in sentence structure, usage, mechanics, and spelling. They study representative pieces of world literature as unique reflections of their time and culture. They also engage in research processes and recognize various documentation techniques.

ENGLISH 2

Grade level: 10 (General Studies)

Credits 0.5 or 1.0

Prerequisite: English 1 or English 9

Through Greek literature, students analyze chosen readings and connect them to present day occurrences. By connecting their present with the past, students can make connections to the importance of ancient Greek literature. Students are responsible for the language mechanics of their work and must make corrections and edit as needed. Students also plan, compose, and edit a 5-paragraph essay with emphasis on strong introduction, conclusion, and supporting details. Students are also introduced to research and documentation.

ENGLISH 3

Grade Level: 11 (General Studies)

Credit: 0.5 or 1.0

Prerequisite: English 1 & 2 or English 9 & 10

This course emphasizes communication and critical thinking skills. The non-college preparatory course focuses on the ability to think, speak, and write logically. Students analyze and evaluate the historical, cultural, political, and biographical influences on a variety of literary genres. Students apply writing skills and strategies to communicate effectively for different purposes. Students generate a clearly worded and effectively placed thesis statement to develop an essay that has a clear, logical progression of ideas in the introduction, body, and conclusion. Students apply listening, speaking, and media literacy skills and strategies to communicate for different purposes. Grammar and documentation skills are also directly reinforced in several lessons. Students edit all their work for errors in sentence structure, usage, mechanics, and spelling.

BUSINESS ENGLISH

Grade Level: 12 (General Studies)

Credit: 0.5 or 1.0

Prerequisite: English courses 9-11 or 1-3 completed

Business English is an upper level English course choice designed to prepare students to properly communicate in the business world. Students will learn to organize and write concise, correct, and complete business correspondence. They will learn to recognize and adapt messages for the intended audience while eliminating bias from the correspondence. Other topics covered include letter and memo formatting, report writing, documentation/plagiarism/paraphrasing, job/career research, resume writing, and more.

ENGLISH 9

Grade Level: 9 (College Prep)

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: Must complete requirements for assessment.

This course emphasizes the use of composition to expand writing, comprehension, and communication skills. Students edit their work for errors in sentence structure, usage, mechanics, and spelling. They study various genres and writing styles. They also engage in research processes and recognize various documentation techniques.

ENGLISH 9 Honors

Grade Level: 9

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: Must complete requirements for assessment.

Honors English 9 teaches students how to do critical analyses of literary and historical texts. It introduces the concepts of theme, tone, structure, pace, point of view, character development, context clues, word choice, and figurative language, guiding students in the application of these concepts as they analyze various types of texts. Students compose a range of writing including argumentative, narrative, and informative, as well as creating a multimedia project. Students strengthen their grammatical and self-expression skills both through the revision of their own writing as well as grammar exercises. This course is aligned to Common Core State Standards in English Language Arts.

ENGLISH 10

Grade Level: 10 (College Prep)

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: English 9

English 10 CP emphasizes research and response composition. Students write two response essays, one to a speech given by a professional speaker, and the second to a work of literature. Their responses should indicate that they comprehend what is being said and how it is being said. The work also allows students to demonstrate that they can add their own voices to others' conversations. Students then learn to construct research essays with an emphasis on using a variety of source material. They learn how to engage in research processes and how to evaluate the sources so that they can discriminate between good and poor choices. Moreover, students add the researched material to their work in order to craft a well organized and well argued essay. Finally, they learn how to incorporate their research into their essays using and recognizing various documentation techniques. Students also practice their proofreading and editing skills, looking for

and correcting errors in sentence structure, grammar, mechanics, and spelling. Finally they practice revising for organization, clarity, and word choices.

ENGLISH 10 Honors

Grade Level: 10

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: English 9

Honors English 10 guides students in refining their critical reading and writing skills through the examination of World literary and historical texts. Students explore the meaning of freedom, the tale of Pyramus and Thisbe reflected in Shakespeare, the gothic mystery genre, and the hero's journey reflected in Beowulf and the Odyssey. Students hone their grammar and self-expression skills as they discuss these topics in a variety of modes including argument, narrative, research, and multi-media projects. This course is aligned to Common Core State Standards in English Language Arts.

ENGLISH 11

Grade Level: 11 (College Prep)

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: English 9, 10

Students will refine and enhance their foundation in literature and the writing process through academic mastery. Throughout the course, the ability to think, listen, and write logically will be the primary focus as well as school-to-career experiences, including college entrance exam preparation. This course will emphasize proper grammar and mechanics while developing the writing process. Students will be asked to implement research and writing skills throughout the curriculum as well as adapt and evaluate literature.

ENGLISH 11 Honors

Grade Level: 11

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: English 9, 10

Honors English 11 is an intensive literary analysis and critical thinking course. It includes the units "Humor" which looks at a Shakespearean comedy and early works of satire, "The Highest Court in the Land" which looks at the legal reasoning in Supreme Court cases, "Survey of American Literature" which looks at sample works from the Puritan period to Modernity exploring key themes of each literary movement, and "What is missing? Reading Omissions" in which students are encouraged to read historical and literary texts with an eye for what is left out. Through writing assignments of various lengths as well as specific exercises, students are encouraged to refine their use of syntax with a focus on style. Students must also lead a debate with at least two friends and complete a multimedia project. This course is aligned to Common Core State Standards in English Language Arts.

AMERICAN LITERATURE

Grade Level: 11, 12 (College Prep)

Credit: 1.0 (NCAA approved)

Prerequisites: English 9 and 10

American Literature allows students to delve into the variety of literature produced by American writers from colonial times forward. The course uses the poetry, essays, and short stories of American writers to teach key literary concepts and devices including style, imagery, irony, tone, diction, and structure. The class culminates in the writing of a final essay about several pieces of literature through which students practice the writing process of literary analysis, thesis formation, outlining, and drafting. **Can be taken in place of English 11.

ENGLISH 12

Grade: 12 (College Prep)

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisites: English 9-11

The course focuses on the reading and analysis of literature, development of writing skills, expansion of vocabulary, and enhancement of critical thinking skills. Students are exposed to the different genres through both reading and writing. It emphasizes essay writing in different styles and for different audiences to establish good writing skills. Students edit their work for content and for errors in sentence structure, usage, mechanics, and spelling. They read and critique canonical works, works of their own choosing, as well as studying works across different genres. They engage in research processes and documentation techniques. By the end of the course, students will have improved their reading, writing, research, critical thinking, and communication skills.

English 12 Honors Composition

Grade: 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisites: English 9-11

English 12 Honors Composition introduces students to the writing process as a series of steps building to a final draft. Students learn that formal academic writing is a particular rhetorical situation with specific requirements and standards including proper grammar and punctuation, formal diction, and use of present tense, active voice, third person and parallel structure. Students learn to write a thesis, then gather, organize, develop, and cohere information and ideas to support that thesis. They learn to use MLA style to format a page and to properly cite sources of information. Students learn the critical thinking skills of evaluating sources of information and recognizing logical fallacies. Students learn to use rhetorical devices to lend their academic writing personal style and strength.

CREATIVE WRITING

Grade Level: 11, 12

Credit: 1.0 (NCAA approved)

Prerequisite: English 10

This course focuses strongly on composition using various styles and techniques (including different genres and perspectives), manipulation and use of the written language, how to create or enhance the student's own voice, and how to enhance writing through analyzing and editing.

Students are expected to engage the teacher in discussion regarding work. They edit their work for errors in sentence structure, usage, mechanics, and spelling.

MATHEMATICS

PRACTICAL MATH

Grade level: 9, 10, 11, 12

Credit: 1.0

Prerequisite: None

This course explores how numbers are used in our daily lives. Emphasis is on monetary values including figuring out paycheck deductions, working with interest rates, and setting up a budget.

PRE-ALGEBRA

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Pre-algebra is an introductory course that prepares students for Algebra I. It includes study of variables and expressions, algebraic properties, like terms, integer operations, fraction operations, decimals, number line analysis, solving equations, ratios & proportions, percents, and application of formulas. Study includes both math theory and real-life application of concepts. Appropriate technology, including calculators and application software, is used regularly for instruction and assessment.

ALGEBRA I

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

Algebra I continues the study of algebraic concepts including operations with real numbers and polynomials; relations and functions; creation, graphing, and application of linear functions and relations; and an introduction to non-linear functions. Appropriate technology, from manipulatives to calculators and application software, will be used regularly for instruction and assessment.

GEOMETRY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: Algebra I

Geometry includes the study of geometric element definitions, inductive and deductive reasoning, Venn diagrams, angles, parallel lines, polygons, similarity, triangles, trigonometry, the Pythagorean Theorem, special right triangles, circles, polygon area, surface area and volume of spheres,

cylinders, cones, prisms and pyramids, distance calculation, transformations and proofs. Appropriate technology, including calculators and application software, is used regularly for instruction and assessment.

ALGEBRA II

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: Algebra I and Geometry

Algebra II includes the study of absolute value inequalities, factoring of polynomials, radicals, lines, linear inequalities, complex numbers, solving quadratic equations and inequalities, functions, inverse functions and compositions, variation, exponential and logarithmic functions, systems of linear equations, matrix operations, inversion, determinants, and conic section basics. Study includes both math theory and real-life application of concepts. Appropriate technology, including calculators and application software, is used regularly for instruction and assessment.

PROBABILITY & STATISTICS

Grade level: 9,10, 11, 12

Credit: 1.0 (NCAA approved)

Prerequisite: Algebra 1

Probability, Statistics, and Data Analysis is a course in which students learn the fundamental principles of probability and statistics and apply these principles to data analysis. Students are expected to install and utilize free computer software for manipulating data.

TRIGONOMETRY

Grade: 11, 12

Credit: 0.5 (NCAA approved)

Prerequisite: Algebra 1, Algebra 2, Geometry

The Trigonometry course is designed for the students who will continue to Precalculus or for the college-bound student. Trigonometric topics include graphing, analyzing, and applying the six trigonometric functions. Scientific calculators and/or graphing calculators are integrated throughout the course.

PRECALCULUS

Grade: 11, 12

Credit: 0.5 (NCAA approved)

Prerequisite: Algebra 1, Algebra 2, Geometry, 0.5 credit Trigonometry

Precalculus, as its name indicates, is designed to prepare you for Calculus. Topics include understanding functions from symbolic, tabular, and graphical perspectives, transformations and function composition, polynomial functions, rational polynomial functions, trigonometry, and conic sections. In addition to content mastery, the course goals are to further develop students' problem

solving and critical thinking skills. The difficulty level of the material increases significantly throughout the course. Students should be prepared to be challenged and work hard.

TRIGONOMETRY/ PRECALCULUS

Grade: 11, 12

Credit: 1.0 (NCAA approved)

Prerequisite: Algebra 1, Algebra 2, Geometry

The Trigonometry/ Precalculus course is designed for the college-bound student. Trigonometric topics include graphing, analyzing, and applying the six trigonometric functions. Scientific calculators and/or graphing calculators are integrated throughout the course. The Precalculus section, as its name indicates, is designed to prepare you for Calculus. Topics include understanding functions from symbolic, tabular, and graphical perspectives, transformations and function composition, polynomial functions, rational polynomial functions, trigonometry, and conic sections. In addition to content mastery, the course goals are to further develop students' problem solving and critical thinking skills. The difficulty level of the material increases significantly throughout the course. Students should be prepared to be challenged and work hard.

PHYSICAL EDUCATION

FITNESS & SAFETY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

Fitness and Safety students will learn about physical fitness, the important role that exercise plays in our lives and how we can safely incorporate exercise into our daily routine. Concepts covered are related to nutrition, proper stretching and cooling down, strength and cardiovascular training, prevention and first aid for sports injuries, and fitness for special populations.

HEALTH

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

This course emphasizes the importance of healthy lifestyle choices for one's overall health and quality of life. Students will learn various components of health to enhance their knowledge of personal, community and world health issues. They also engage in research to explore communicable and non-communicable diseases, health risk factors, and treatments and prevention.

PE

Grade Level: 9, 10, 11, 12

Credit: 0.5

Prerequisite: None

PE is a half credit course where students will submit a daily or weekly log of physical activity they take part in. Students will submit their time for approval and will have additional questions or documentation required of them to support the hours they submit.

SCIENCE

ANATOMY AND PHYSIOLOGY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

This course takes the student on a journey through the human body. Each system and its relationship to other systems is discussed. Hands-on activities allow students to explore the functions of several systems.

BIOLOGY (LAB SCIENCE)

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

Biology is the study of life – the basic characteristics and functions of living organisms and their place in our environment. Laboratory and field investigations are the primary means for developing problem-solving skills and for developing knowledge and understanding of biological concepts. Topics include the history of biology; the cell and cell processes; genetics and heredity; cycles in nature; photosynthesis and respiration; ecology; plants, animals, and microorganisms; continuity of life; and the interaction of science, technology, and society.

HONORS BIOLOGY (LAB SCIENCE)

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

Biology is the study of life – the basic characteristics and functions of living organisms and their place in our environment. Laboratory and field investigations are the primary means for developing problem-solving skills and for developing knowledge and understanding of biological concepts. Topics include the history of biology; the cell and cell processes; genetics and heredity; cycles in nature; photosynthesis and respiration; ecology; plants, animals, and microorganisms; continuity of life; and the interaction of science, technology, and society. The honors level course covers the same basic topics in biology as the regular level course, but includes more rigorous labs and projects to deepen students' engagement with the scientific process.

CHEMISTRY (LAB SCIENCE)

Grade Level: 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: Algebra 1, Geometry, at least 1st semester of Algebra 2

Chemistry uses an atoms-first approach and coverage includes the parts of the atom and the basics of nuclear chemistry; electronic configurations of atoms including orbitals, covalent and ionic

bonding, Lewis structures, and VSEPR theory; intermolecular forces; periodic properties, nomenclature, and descriptive chemistry; chemical reactions, including balancing, the mole concept, stoichiometry (including limiting reagents), equilibrium; thermodynamics, solutions and electrolytes, concentration; gas laws, including static and non-static conditions; acids, bases, pH, and equilibrium; and organic functional groups. Students must show proficiency in dimensional analysis, provide cogent short answers to various concept questions, demonstrate the ability to research information not directly provided in the lessons and cite sources correctly, and complete safe, home-based experiments that include full laboratory reports.

CONCEPTUAL CHEMISTRY

Grade Level: 9-12

Credit: 0.5 (NCAA approved)

Prerequisites: None

In this course, cooking is used to study introductory chemistry concepts. Topics include atoms, molecules, the periodic table, chemical reactions, balancing simple chemical equations, acids and bases, types of mixtures, and freezing points. The concepts are also applied in a final research project. Online research is a regular part of this course.

CONCEPTUAL PHYSICS

Grade Level: 9-12

Credit: 0.5 (NCAA approved)

Prerequisites: None

This course uses science fiction and current research to study introductory physics concepts and touch on ideas in theoretical physics. Topics include the electromagnetic spectrum, Doppler effect, star evolution, the solar system and universe, distance and time relationships, theory of relativity, quantum mechanics, and the many worlds theory. The concepts are applied in a final research project. Online research is a regular part of this course.

EARTH SCIENCE

Grade Level: 9-12

Credit: 1.0 (NCAA approved)

Prerequisites: None

Earth Science introduces students to a broad study of the Earth with topics including astronomy, geology, oceanography, meteorology, and ecology. Students explore the Earth's dynamic systems from its position in the universe to the ecology of its soil. Hands-on activities reinforce students' scientific exploration, and the scientific method is emphasized in the process of critical thinking about challenges facing the planet.

ENVIRONMENTAL SCIENCE (LAB SCIENCE)

Grade level: 9,10,11,12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

Environmental Science provides an overview of basic environmental issues, including climate change, sustainability, pollution, depletion of natural resources, renewable energy, loss of biodiversity, deforestation, soil fertility and erosion, and waste disposal. It also explores the history of the environmental movement, the politics and ethics involved in environmental issues, and the regulations that help limit environmental damage. Students are expected to explore their own impact on the environment and ways to mitigate that impact. The four projects are designed to help students assess the environmental damage in their own ecosystems and determine their own environmental footprint. The five labs are designed to give students hands on experience in observing and assessing natural systems and how they function. The topics include the recycling of wastes, soil erosion, stream health, invasive species, backyard ecology, energy audits, and acid rain.

PHYSICS (LAB SCIENCE)

Grade Level: 10,11,12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisites: Algebra I, first Semester Algebra II

The course focuses on the core concepts of Algebra based Physics preparing the student for future college level Physics courses. The key concepts of the course have a main focus on mechanical physics with introductory level electro-magnetics and wave mechanics.

PHYSICAL SCIENCE (LAB SCIENCE)

Grade Level: 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisites: None

This course is the foundation course for all high school science courses. Students will study basic chemistry with topics in properties of matter, atomic structure, and chemical reactions and basic physics with topics in energy, force, motion, machines, light, sound, electricity, and magnetism.

SOCIAL STUDIES

AMERICAN GOVERNMENT

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

American Government students learn the basics of American government including history, composition, and general duties carried out by the three branches. Specific topics covered include the Declaration of Independence, the American Revolution, the Continental Congress, the US

Constitution and Bill of Rights, the Emancipation Proclamation, the US Supreme Court and other various topics leading up to the present government. Students are expected to research current events in American government as well as independently pursue topics that pique their interest.

HONORS AMERICAN GOVERNMENT

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

American Government students learn the basics of American government including history, composition, and general duties carried out by the three branches. Specific topics covered include the Declaration of Independence, the American Revolution, the Continental Congress, the US Constitution and Bill of Rights, the Emancipation Proclamation, the US Supreme Court and other various topics leading up to the present government. The honors level course delves deeper into the historical roots of the U.S. government as well as the functioning of our democracy today. Additional topics beyond those included in the regular level class include The Campaign Process, The Media, Interest Groups, Social Welfare Policy, Economic Policy, Foreign and Defense Policy. Students are expected to be able to use primary sources to do research in the honors level class.

AMERICAN HISTORY

Grade Levels: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisites: None

An in-depth study of our nation's history from the early beginning of English colonization to WWII and beyond; this class covers many interesting topics. Students are required to read individual lessons, review articles, then write several essays. The course asks students to work independently and alongside the teacher to complete and comprehend each lesson to its fullest. Students are required to think critically about primary historical documents including political cartoons, letters, and articles that shed light on the cultural context of historical events.

INTRODUCTION TO PSYCHOLOGY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisite: None

Students in this course will learn the basics of psychological theories and the history of psychology. Topics also include the biology of the mind, methodologies of research, ethical standards in the profession, and psychological disorders. Assignments combine outside research with traditional lessons. Students are encouraged to think critically about the purpose and application of psychology in society and their own lives.

WORLD GEOGRAPHY

Grade Levels: 9, 10, 11, 12

Credit: 0.5 (NCAA approved)

Prerequisites: None

This course explores the connection between the student and the world around them by emphasizing how geography and its related topics such as weather, climate, population density, and resource availability affect our lives every day.

WORLD HISTORY

Grade Levels: 9, 10, 11, 12

Credit: 0.5 or 1.0 (NCAA approved)

Prerequisites: None

This survey course covers world history from the Industrial Revolution (Approximately the 1830's) through the collapse of communism in the 1990's. The course emphasizes key historical concepts through a variety of lesson formats. Emphasis is placed upon the student being able to utilize both internet and traditional sources to obtain information. Students are required to think critically about the causes, effects, and implications of historical events.

ECONOMICS

Grade Level: 9, 10, 11, 12

Credit: 0.5 (NCAA approved)

Prerequisite: None

In this course, students study and compare the different economic systems of the world, as well as take an in-depth look at how the U.S. economy works. Some of the topics covered include the law of supply and demand, competition models, international trade, government spending, commercial banks and the federal reserve system, income inequality, unemployment and poverty, labor unions and specialization of labor, budgets and consumer assistance, and more. Students will explore these topics through online research assignments, hands-on interactive applications, and traditional lessons.