

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 or in your neighborhood or in the 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.

CREATIVE WRITING

Grade Level: 11, 12

Credit: 1 unit

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 teacher in discussion regarding work. They edit their work for errors in sentence structure, usage, mechanics, and spelling.

ECONOMICS

Grade Level: 9, 10, 11, 12
Credit: 0.5
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.

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.

INTRODUCTION TO PSYCHOLOGY

Grade Level: 9, 10, 11, 12
Credit: 0.5 or 1.0
Prerequisite: None

Students in this course will learn the basics of psychological theories and the founding contributors to the field of psychology in addition to the history of the science, the biology of the mind and methodologies of research. There is a final project.

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 it during a six week period. The students will mirror 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: 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.

SPANISH 1

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

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: Spanish 1

Spanish 2 is a continuation of Spanish one, 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

A half credit course designed to have students learn 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.

THINK ABOUT IT

Grade Level: 9, 10, 11, 12

Credit: 1.0

Prerequisite: none

Think is a course designed to engage students in the research and writing process in order to develop a fuller 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.

TOOLS FOR WRITING

Grade level 9,10,11,12

Credit: 1.0

Prerequisite: None

This course focuses on grammar and sentence structure. Students analyze sentences to identify their underlying structure. Once analysis is mastered, students will learn to properly punctuate sentences. Students also write essays and learn some basic skills for essay writing.

COMPUTER SCIENCE- WEB DESIGN

Grade level 9,10,11,12

Credit: 0.5 or 1.0

Prerequisite: None

Students do four projects relating to web design, including creating and designing their own web page. They learn the basics of HTML coding and do research on their own to learn about the Web, search engines, and troubleshooting.

WORK ETHIC/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.

ENGLISH

ENGLISH I

Grade Level: 9
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
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 and conclusion, and supporting details. Students are also introduced to research and documentation.

ENGLISH 3

Grade Level: 11
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
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

Credit: 0.5 or 1.0

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 10

Grade Level: 10

Credit: 0.5 or 1.0

Prerequisite: English 9

This course 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 11

Grade Level: 11

Credit: 0.5 or 1.0

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.

AMERICAN LITERATURE

Grade Level: 11, 12

Credit: 1.0

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

Credit: 0.5 or 1.0

Prerequisites: English 9-11

The course focuses on the reading and analysis of classic 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 a variety of canonical works, and they also critique works of their own choosing, as well as studying works across different genres. They engage in research processes and recognize various documentation techniques. By the end of the course, students will have improved their reading, writing, research, critical thinking, and communication skills.

MATHEMATICS

PRACTICAL MATH

Grade level: 9, 10, 11, 12

Credit: 1.0

Prerequisite: None

This course gives life examples of how numbers are used in our daily lives. Emphasis is on monetary values from 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

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.

ALGEBRA II

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: Algebra I

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.

GEOMETRY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

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.

TRIGONOMETRY

Grade: 11, 12

Credit: 0.5

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

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.

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 life 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

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

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

Prerequisite: None

This course takes the student on a journey through the human body. Each system is discussed per lesson. The course culminates with taking what was studied and delving deeper into a subject with a research paper.

BIOLOGY

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

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.

CHEMISTRY (LAB SCIENCE)

Grade Level: 10, 11, 12

Credit: 0.5 or 1.0

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

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

Prerequisites: None

This course uses science fiction and current research to study introductory physics concepts. 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 9, 10, 11, 12

Credit: 1.0

Prerequisite: None

ENVIRONMENTAL SCIENCE (LAB SCIENCE)

Grade level: 9,10,11,12

Credit: 0.5 or 1.0

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

Grade Level: 10,11,12

Credit: 0.5 or 1.0

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.

SOCIAL STUDIES

AMERICAN GOVERNMENT

Grade Level: 9, 10, 11, 12

Credit: 0.5 or 1.0

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.

AMERICAN HISTORY

Grade Levels: 9-12

Credit: 0.5 or 1.0

Prerequisites: None

An in-depth study of our nations 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 either of their own choosing or of an assigned topic. The study asks students to work independently and along side the teacher to complete and comprehend each lesson to its fullest. American History is an important subject for every student to be exposed to and others from outside the US. The understanding and appreciation of a nations history is one of the most important things you can take anywhere you go.

WORLD GEOGRAPHY

Grade Levels: 9th, 10th, 11th, and 12th grades

Credit: 0.5

Prerequisites: None

Course Description: 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: 9th, 10th, 11th, and 12th grades

Credit: 0.5 or 1.0

Prerequisites: None

Course Description: 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.