

K-12 Gifted Education for the Whole Child

# **High School Course Guide**

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# Important Notice

This course guide works in tandem with the high school handbook and the student/community handbook. This course guide includes required core courses as well as elective courses. Please note, not all courses are offered each school year. Yearly course offerings are based on current student needs and staffing availability.

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# **English**

# English 9: 1.0 credit

English/Language Arts I (9th grade) courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

# English 10: 1.0 credit

English/Language Arts II (10th grade) courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

# English 11: 1.0 credit

English/Language Arts III (11th grade) courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.



# **English Electives**

# Creative Writing: 0.50 credit/semester

Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one particular form (such as poetry or playwriting).

# English Composition: 0.50 credit/semester

English Composition courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

#### Journalism: 0.50 credit/semester

Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.



### Lit to Film: 0.5 credit credit/semester

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on one or several genres, such as poetry, essay, biography, short story, drama, and so on. Students determine the underlying assumptions and values within the selected works; and examine the structure, techniques, and intentions of the genre being studied. Oral discussion is an integral part of these genreoriented courses, and written compositions are often required.

# Literary Movements: 0.50 credit/semester

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills) but use literature written by authors who share a particular characteristic such as religion, culture, or gender. Students determine the underlying assumptions and values within the selected works, reflect upon the influence of a common characteristic, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.

# Literature & History of Social Movements: 0.50 credit/semester

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on the literature written during or reflecting a particular social movement. Students determine the underlying assumptions and values within the selected works, reflect upon the influence of societal events and social attitudes, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.



# Media Concepts: 0.50 credit/semester

Applied English and Communications courses teach students communication skills (reading, writing, listening, speaking) concentrating on "real-world" applications. These courses usually emphasize the practical application of communication as a business tool, using technical reports and manuals, business letters, resumes, and applications as examples, rather than emphasize language arts skills as applied to scholarly and literary materials.

# Speech: 0.5 credit credit/semester

Public Speaking courses enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

# Survey of Literature: 0.50 credit/semester

Literature courses offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.

# World Literature: 0.50 credit/semester

World Literature courses use representative literature selections from ancient and/or modern times from countries around the world. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is an integral part of literature courses, and written compositions are often required.



# **Mathematics**

# Algebra I: 1.0 credit

Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

# Algebra II: 1.0 credit

Algebra II course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

# Geometry: 1.0 credit

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

#### Pre-Calculus: 1.0 credit

Calculus courses include the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus. Typically, students have previously attained knowledge of pre-calculus topics (some combination of trigonometry, elementary functions, analytic geometry, and math analysis)



# Trigonometry: 1.0 credit

Trigonometry courses prepare students for eventual work in calculus and typically include the following topics: trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers.

# **Mathematics Electives**

# Algebraic Literacy: 0.50 credit/semester

Algebraic Literacy develops algebraic skills necessary for manipulating expressions and solving equations. Topics in the course include radicals, complex numbers, polynomials, factoring, rational expressions, quadratic equations, absolute value equations and inequalities, systems of linear equations, related applications, and math learning strategies.

#### Business Math: 0.50 credit/semester

Business Math courses teach and have students apply algebra concepts to a variety of business and financial situations. Applications usually include income, insurance, credit, banking, taxation, stocks and bonds, and finance.

#### Informal Mathematics: 0.50 credit/semester

Informal Mathematics courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and highlight the connections among mathematical topics and between mathematics and other disciplines. These courses approach the teaching of general math, prealgebra, and pre-geometry topics by applying numbers, and algebraic and geometric concepts and relationships to real world problems.



# Mathematical Modeling: 0.50 credit/semester

Mathematical Modeling courses build upon students' knowledge of algebra and geometry to analyze information using statistical methods and probability, simulate change using mathematical relationships and spatial and geometric modeling, and critically assess and make decisions or solve problems based on quantitative data and logical reasoning.

# Science

# Biology: 1.0 credit

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

# Chemistry: 1.0 credit

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

#### Earth Science: 1.0 credit

Earth Science courses offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.



# **Science Electives**

# Biotechnology: 0.50 credit/semester

Biotechnology courses involve the study of the bioprocesses of organisms, cells, and/or their components and enable students to use this knowledge to produce or refine products, procedures, and techniques. Course topics typically include laboratory measurement, monitoring, and calculation; growth and reproduction; chemistry and biology of living systems; quantitative problem-solving; data acquisition and display; and ethics. Advanced topics may include elements of biochemistry, genetics, and protein purification techniques.

#### Environmental Science: 0.50 credit/semester

Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.

#### Forensic Science: 0.50 credit/semester

Forensic Science courses provide an overview of the theoretical understanding and practical application of forensic science techniques. These courses explore the applied science and the fields of biology, chemistry, physics, and crime science investigation. Topics typically covered may include genetics, anthropology, toxicology, entomology, ballistics, pathology, computer forensics, fire debris and trace evidence among others.

#### Health Science: 0.50 credit/semester

Health Science courses integrate chemistry, microbiology, chemical reactions, disease processes, growth and development, and genetics with anatomy and physiology of the body systems. Typically, these courses reinforce science, mathematics, communications, health, and social studies principles and relate them to health care.



# **Social Studies**

# Government: 0.5 credit/semester

Government is a semester course. It examines the basic principles of the American constitutional, legal, and political systems. Students will explore topics that have immediate impact on their lives and will be able to look at government from a variety of perspectives. The Government program is committed to helping students develop and improve academic skills in reading, writing, speaking and critical thinking skills.

# Personal Financial Literacy: 0.50 credit/semester

Personal Financial Literacy (PFL) courses provide students with an understanding of the concepts and principles involved in managing one's personal finances. These courses emphasize lifespan goal-setting, individual and family decision making, and consumer rights as well as topics that are commonly associated with personal finance so that one can become a financially responsible consumer. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also investigate the effects of the global economy on consumers and the family.

# U.S. History: 1.0 credit

United States History is a two-semester course in which the history and civilization of America are examined from a broad perspective. The course focuses on analysis of important concepts, events, and people in the American experience. Course activities and instruction are designed to develop further the academic skills which will help the student better comprehend this and other areas of study. The student is asked to use the historical method and to examine carefully the social, political and economic forces which shaped America.



# World History: 1.0 credit

World Studies is a year-long interdisciplinary course required for all 10th graders involving the study of both World History/Geography and World Literature. The course of study may encompass ancient civilizations to the present day with a focus on European, African, and Asian cultures in order to complement previous studies of North American cultures. Students will develop skills in the five basic areas of: Chronological thinking, Historical comprehension, Historical analysis and interpretation, Historical research capabilities, and Historical issues-analysis and decision making. Themes which will guide instruction and student learning will be: Cause and Effect, Continuity and Change, Global Awareness, Unity and Diversity, and Human and Environmental Interaction.

# **Social Studies Electives**

# Anthropology: 0.50 credit/semester

Anthropology courses introduce students to the study of human evolution with regard to the origin, distribution, physical attributes, environment, and culture of human beings. These courses provide an overview of anthropology, including but not limited to both physical and cultural anthropology.

# Comparative Religion: 0.50 credit/semester

Comparative Religion courses survey and compare the various forms and values of several world religions, offering students a basic understanding of the world's diverse religious faiths and practices. Course topics typically include the belief systems of adherents; the relationships among humans, nature, ancestors, and the spiritual world; and the historical development of each religion.

# Contemporary World Issues: 0.50 credit/semester

Contemporary World Issues courses enable students to study political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.



### Humanities: 0.50 credit/semester

These courses have the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on the literature written during or reflecting a particular time period (such as the French Revolution, the 1960s, or the 20th century). Students determine the underlying assumptions and values within the selected works, reflect upon the influence of societal events and social attitudes, and compare the points of view of various authors. Oral discussion is an integral part of literature courses, and written compositions are often required.

# Intro to Human Geography/Human Geography: 0.25 credit/semester

Human Geography introduces students to the systematic study of patterns and processes that have shaped the ways in which humans understand, use, and alter the earth's surface. Students use spatial concepts and landscape analysis to examine human social organization and its environmental consequences and also learn about the methods and tools geographers use in their science and practice.

# Intro to Philosophy/Philosophy: 0.50 credit/semester

Philosophy courses introduce students to the discipline of philosophy as a way to analyze the principles underlying conduct, thought, knowledge, and the nature of the universe. Course content typically includes examination of the major philosophers and their writings.

# Intro to Psychology/Psychology: 0.50 credit/semester

Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.



# Intro to Sociology/Sociology: 0.50 credit/semester

Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

# Mythology: 0.25 credit/semester

Mythology courses introduce students to the origins and meaning of myths, including how cultures use myths to explain natural or social phenomenon. Students will explore the major themes, stories, characters, and archetypes present in the mythologies of several different cultures.

#### PBL Humanities: 0.50 credit/semester

Project Based Learning Humanities courses examine and evoke student responses to human creative efforts and the world in particular historical periods and in particular cultures. Course content includes exploration, analysis, synthesis, and various responses to cultural traditions, including viewing, listening, speaking, reading, writing, performing, and creating. The courses may also examine relationships among painting, sculpture, architecture, and music through projects.

# World People Studies: 0.50 credit/semester

World People Studies courses allow students to study various types of subgroups that have something in common such as religion, gender, or culture. Similar in style to World Area Studies, but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture.



# Fine/Practical Arts

# Spanish I: 1.0 credit

Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

### Spanish II: 1.0 credit

Spanish II courses build upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

# Spanish III: 1.0 credit

Spanish III courses focus on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students may include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.



# Fine/Practical Arts Electives

Spanish Culture: 0.50 credit/semester

Spanish Culture courses provide students with an introduction to the Spanish language and the culture(s) of Spanish-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

# **General Electives**

Academic Success Lab: 0.25 credit/semester

Lab courses are designed to be an extension of the particular subject area they are named after where hands on projects can be conducted.

Life Seminar: 0.25 credit/semester

Life (Learning Important skills For Everything) Seminar courses provide students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses emphasize such topics as goal-setting, decision-making, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.

Peer Mentoring: 0.25 credit/semester

Peer Mentoring courses allow students to serve as leaders to reduce conflict among their fellow students. Students may work individually or as part of a group to solve problems and promote mutual support among their peers.



# Seminar: 0.25 credit/semester

Seminar courses vary widely, but typically offer a small peer group the opportunity to investigate areas of interest. Course objectives may include improvement of research and investigatory skills, presentation skills, interpersonal skills, group process skills, and problem-solving and critical thinking skills. Seminars aimed at juniors and seniors often include a college and career exploration and planning component.

# Senior Internship: 0.50 credit/semester

Workplace Experience courses provide students with work experience in a field related to their interests. Goals are typically set cooperatively by the student, teacher, and employer (although students are not paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

# Service Learning: 0.25 credit/semester

Community Service courses provide students with the opportunity to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.

#### Student Assistant: 0.25 credit/semester

This course provides an opportunity for students to receive practical work experience with various subject area teachers.



#### Whole Child Enrichment: 0.25 credit/semester

Whole Child Enrichment courses focus on creating a balance in a demanding academic high school program. Participation in opportunities such as theater productions, sports, arts, mindfulness, etc. encourages students to share their energies and special talents while developing awareness, concern, and the ability to work cooperatively with others. The goal of educating the whole child and fostering a more compassionate citizenry comes alive in an immediate way when students reach beyond themselves and their books.