



SEVEN OAKS CLASSICAL SCHOOL
High School Course Catalogue 1.0

ENGLISH & THE ARTS OF LANGUAGE

Ancient Literature [1002]

In the Ancient Literature course, students engage with the works of Greek and Roman authors composed between the eighth century BCE and the mid-fifth century CE as well as related works inspired by the literature of the classical world. Students read the Sumerian *Epic of Gilgamesh* (c. 2100), Greek lyric, the *Iliad*, the *Odyssey* (read in the summer), Sophocles' *Oedipus Cycle*, the *Aeneid*, Roman satire, Seneca's *Moral Epistles*, selections from Ovid's *Metamorphoses*, works by St. Augustine, and Shakespeare's *Julius Caesar*.

(Grade 9, 2 credits)

Medieval and Early Modern British Literature [1004]

Medieval and Early Modern Literature surveys important works of British literature from the Middle Ages to the 19th century. Titles include *Beowulf*, Chaucer's *Canterbury Tales*, Milton's *Paradise Lost*, Shakespeare's *Henry V* and *Hamlet*, Austen's *Pride and Prejudice*, and Dickens' *A Tale of Two Cities*. These works are supplemented by poetry and excerpts from works of other British authors who were active during this period.

(Grade 10, 2 credits)

AP English Language and Composition—American Literature [1056]

AP English Language and Composition American Literature introduces students to novels, essays, poetry, and short stories written by American authors. Works include Melville's *Moby Dick*, Hawthorne's *The Scarlet Letter*, Twain's *Huckleberry Finn*, and O'Connor's *A Good Man is Hard to Find* as well as one of Shakespeare's plays.

(Grade 11, 2 credits)

AP English Lit. & Composition—Modern Literature [1058]

AP English Literature and Composition introduces students to great literary works of the modern world written in the 19th and 20th centuries. Titles include Dostoevsky's *Crime and Punishment*, Conrad's *Heart of Darkness*, Kafka's *Metamorphosis*, and Orwell's *1984* in addition to one of Shakespeare's plays.

(Grade 12, 2 credits)

Logic & Rhetoric [1074]

Logic & Rhetoric provides an introduction to informal logic, including the study of logical fallacies. The course places an emphasis on inductive reasoning, strong versus weak and fallacious arguments, and probability. Informal logic concentrates on evaluating the content of an argument, and deals almost entirely with "ordinary language arguments" in the interchange of ideas between people.

(Grade 9, 1 credit)



Classical Grammar [1062]

Classical Grammar builds students' knowledge of the English language to prepare them to be effective writers. Through instruction in grammar and practice diagramming sentences, students gain mastery of the mechanics of the English language. Students also memorize passages from classic literature and oratory to develop their understanding of concise and eloquent writing. This course also trains students to write in cursive, keyboard, and utilize word-processing features.

(Grades 9-10, 1 credit over 2 semesters)

Classical Composition [1090]

Classical Composition teaches effective writing through instruction in the mechanics of the English language and the writing process for a persuasive essay. As well as reviewing the English grammar and memorizing passages from classic literature and oratory, students will practice narration and revision through progymnastic exercises. Students will learn to write persuasive essays through a process of invention, arrangement, and elocution, which demands them to look at both sides of the argument and discern which position they ought to defend. This course also trains students to write in cursive, keyboard, and utilize word-processing features.

(Grades 9-10, 1 credit over 2 semesters)

Classical Composition II [1098]

Throughout Classical Composition II, students will learn to compose and to defend their ideas, while developing their writing styles. By following a process of invention, arrangement, and elocution, students will observe models of effective writing in class and then practice composing their own thoughts, following this model. With feedback at each stage, students will be challenged to think logically and to revise their writing to say precisely what they mean. While the course focuses primarily on literature analysis essays, students will also imitate great authors' words, write responses to classic orations, and compose original narratives. This course also trains students to type and integrate quotations and citations in their papers in accordance with MLA.

(Grades 10-11, 2 credits)

Prerequisite: Classical Composition *or* Logic & Rhetoric



FINE ARTS ELECTIVES (Directed Electives)

Art Electives

Art History [4024]

Students taking Art History engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Students study classical works of art and artifacts; engage in historically relevant studio activities; discover social, political, and historical trends and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; and relate art to other disciplines.

(Grades 9-12, 1 credit)

Drawing I [4060]

In Drawing, students practice sketching, rendering, contour, and perspective drawing using different media while reflecting upon and refining their work. At the same time, students study the history of art, aesthetics, and production processes to equip them to analyze, interpret, theorize, and make informed judgments about works of art.

(Grades 9-12, 1 credit)

Digital Design I [4082]

Students in digital design engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students reflect upon and refine their work; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills.

(Grades 9-12, 1 credit)

Painting I [4064]

In Painting, students create abstract and realistic works of art using acrylic, oil, and watercolor paints on different surfaces. They experiment with a number of techniques such as stippling, gouache, wash, and impasto while reflecting upon and refining their work. At the same time, students study the history of art, aesthetics, and production processes to equip them to analyze, interpret, theorize, and make informed judgments about works of art.

(Grades 9-12, 1 credit)



Music & Theatre Electives

Beginning, Intermediate, & Advanced Chorus [4182; 4186; 4188]

Students in Chorus will be asked to employ the knowledge and skills garnered from previous years of musical study. This course will focus on learning and appreciating great works of musical history, primarily through the performance of these works. Coupling discussion and rehearsal, students will be guided in singing technique and vocal production as well as music theory, history, analysis, composition, and conducting as appropriate for better understanding the selected pieces of music. Music selected will include works by great classical and modern composers of a variety of genres in order to provide a rich and well-rounded musical experience.

(Grades 9-12, 1 credit)

Theatre I [4242]

In Theatre I, students will read, analyze, and perform pieces from some of America's most prolific playwrights. Students will study the history of American theatre and culture, employ high level reasoning skills in script and character analysis, and develop acting skills. Students will also attend a play and critique its direction, design, and performance.

(Grades 9-12, 1 credit)



FOREIGN LANGUAGES

(Directed Electives)

Ancient Greek I [2220]

Ancient Greek introduces students to the Greek alphabet, verb conjugations and tenses, noun and adjective declensions, and the power of Greek participles and particles. Students draw upon their knowledge of Latin and apply it to the morphology, grammar, and syntax of ancient Greek. Students translate practice sentences modified passages of Herodotus and Plato.

(Grades 10-12, 2 credits)

Prerequisite: Latin II or French II

Ancient Greek II [2222]

Second year Ancient Greek begins by reviewing vocabulary and forms learned in Ancient Greek I. In this course, students learn to recognize all tenses, voices, and moods of Greek verbs. In the second semester, students learn about the differences between Attic Greek and Homeric Greek before they read selections from Herodotus, Plato, and the *Iliad*.

(Grades 11-12, 2 credits)

Prerequisite: Ancient Greek I

French I [2020]

French I introduces students to effective strategies for beginning French language learning and to various aspects of French-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of French-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding French language and culture outside of the classroom. By the end of French I, students will reach the Novice High level on the ACTFL scale.

(Grades 9-12, 2 credits)



French II [2022]

French II builds upon effective strategies for French language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of French-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding French language and culture outside of the classroom. By the end of French II, students will reach the Mid-Intermediate level on the ACTFL scale.

(Grades 9-12, 2 credits)

Prerequisite: French I

Latin I [2080]

In Latin I, students receive thorough training in English syntax. They also learn the first three Latin noun declensions; first and second declension adjectives; all active indicative and imperative verb forms; a variety of case uses; personal pronouns; the demonstrative pronouns *hic*, *ille*, *iste*, and *is*; and the irregular verbs *esse* and *posse*. They translate a variety of practice sentences, modified passages of Catullus, Cicero, Horace, and Plutarch, and mythological stories.

(Grades 8-12, 2 credits)

Latin II [2082]

Students in Latin II spend the first quarter reviewing Latin concepts from Latin I. They learn possessive and reflexive pronouns; numerous uses of the ablative case; third declension adjectives; the present and perfect passive system of indicative verbs; the relative pronoun; numerals; the interrogative pronoun; and fourth declension nouns. They translate a variety of practice sentences, modified passages of Catullus, Cicero, Horace, and Plutarch, and mythological stories.

(Grades 8-12, 2 credits)

Prerequisite: Latin I

Latin III [2084]

In the first quarter of Latin III, students review concepts learned in Latin II. New concepts include fifth declension nouns; participles; the ablative absolute; the passive periphrastic; infinitives of all tenses and voices; indirect statement; comparative adjectives; the subjunctive mood; jussive and purpose clauses; result clauses; and the sequence of tenses. Focus turns from translation of sentences to translation of extended passages from Livy, Caesar, Vergil, Horace, and other authors. Students translate prepared passages and hone their sight translation skills.

(Grades 9-12, 2 credits)

Prerequisite: Latin II



Latin IV [2086]

Students taking Latin III complete their study of Latin grammar. New concepts include indirect questions; *cum* clauses; the irregular verbs *ferō*, *volō*, *nolō*, *fiō*, *eō*, and *malō*; proviso clauses; conditional sentences; relative clauses of characteristic; the gerund and gerundive; and fear clauses. For the first time, students confront the thought and artistic expressions of great Latin writers in their full complexity and beauty. Course readings include actual passages from the works of Ennius, Cato the Elder, Varro, Nepos, Cicero, Julius Caesar, Livy, Pliny the Elder, Sallust, Catullus, Vergil, Horace, and Ovid.

(Grades 9-12, 2 credits)

Prerequisite: Latin III

Advanced Placement Latin [2092]

AP Latin is an advanced Latin course that develops students' abilities to translate passages from Caesar's *De Bello Gallico* and Vergil's *Aeneid* into English as literally as possible, to help them understand the context of the written passages, and to understand the reasons behind the particular styles of writing and the rhetorical devices employed by the authors. This course will provide students with tools to read Latin prose and poetry aloud and with accurate comprehension and appreciation. This course is also designed to give students the experiences needed for success on the College Board AP Latin examination.

(Grades 10-12, AP, 2 credits)

Prerequisite: successful completion of Latin IV



HISTORY, GOVERNMENT, AND ECONOMICS

Ancient History [1548]

Ancient History covers significant events and cultures of Western societies up to the start of the “Decline and Fall” of the Roman Empire. Students study the early civilizations of Egypt, Mesopotamia, the Fertile Crescent, and the Hebrews. Then, students delve into ancient Greece, the Roman Republic, the Roman Empire, and the development of Christianity and the early Christian Church. Primary sources for this course include the Genesis, the Law Code of Hammurabi, Herodotus, Plato’s *Republic*, Aristotle’s *Nicomachean Ethics*, “The Apology of Socrates”, Thucydides, Plutarch’s *Lives*, Livy, Polybius, Tacitus, Suetonius, Matthew, and Paul.

(Grade 9, 2 credits)

Medieval & Early Modern History [1570]

Medieval & Early Modern History begins with an overview of Roman civilization and its legacy upon Western culture, the flowering of Byzantium and the rise and expansion of Islam. Students then examine the Middle Ages, Renaissance, Reformation, Scientific Revolution, and the Age of Discovery. Primary source texts include selections from Procopius, the Corpus Juris Civilis, Augustine, Rule of Saint Benedict, Einhard, Aquinas, Niccolo Machiavelli, Erasmus, Luther, Vergerius, Locke, Rousseau, Montesquieu, and Adam Smith.

(Grade 10, 2 credits)

American History to Reconstruction [1542]

This early American History course begins with a reflection upon key Enlightenment ideas and events that helped to shape the founding of America. This is followed by a chronological study of American History beginning with the Colonial Period and ending with the Civil War and Reconstruction. Key primary texts include works of Paine, Adams, Washington, Jefferson, Madison, Hamilton, Tocqueville, Douglass, and Lincoln. Students analyze selections from seminal court cases from the period.

(Grade 11, 2 credits)

Modern American & World History: 1870 – Present [1528]

In Modern World History, students continue their study of American history, beginning with the Gilded Age and concluding with a survey of 21st century history. Content also includes major topics in world history. Primary sources include selections from Mahan, T. Roosevelt, Wilson, Churchill, FDR, MLK, Jr., JFK, Reagan, and Thatcher, as well as seminal court cases.

(Grade 12, 2 credits)

Economics [1514]

Economics provides students with an introduction to macro- and microeconomic principles with an emphasis on the American free enterprise system and an examination of current economic issues. Since economics is “the study of mankind in the ordinary business of life,” this course aims to help students to become informed and responsible citizens. Readings include selections from Smith, Bastiat, Marx, Keynes, Hayek, Hazlitt, Kirk, et al.

(Grade 11, 1 credit)

Graduation Requirement



United States Government [1540]

Students in American Government study the theoretical underpinnings of the American republic, its ideals and principles of self-government, and developments in the institutions, theories, and processes of American politics, to help them become well-informed and responsible citizens. Students read original political writings, ancient to modern, the Founding documents of this nation including the Declaration of Independence, the U.S. Constitution, and Federalist Papers, landmark Supreme Court cases, as well as contemporary secondary sources.

(Grade 11, 1 credit)
Graduation Requirement

History Electives

Indiana Studies [1518]

Indiana Studies is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included and student will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

(Grades 9-12, 1 credit)
Counts as an Elective



MATHEMATICS

Algebra I [2520]

The first course in Algebra is a study of the fundamental ideas and processes of elementary Algebra, with an emphasis on the structure of mathematics. This structure builds a framework to which ideas can be attached and creates an understanding of mathematics as a unified and connected body of knowledge. This course lays a foundation for subsequent courses in mathematics and in other subjects by developing logical thinking and reasoning abilities. Course content includes variable expressions, equations and functions, equalities and formulas, properties of real numbers, systems of equations, variations, operations with polynomials, factoring, quadratic equations, irrational numbers, right triangles and trig functions.

(Grades 8-12, 2 credits)
Graduation Requirement

Algebra I Lab [2516]

Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently enrolled in Algebra I. This course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

(Grade 8-12, 2 Elective credits)

Course must be taken concurrently with Algebra I.

Does not count for Math credit unless a student is on the General Diploma graduation track.

Geometry [2532]

Geometry develops students' mental and logical mathematic skills that they can apply to problems and situations in our everyday world. This course begins with a review of Algebra I concepts that are used in Geometry. Students develop the skills to identify the subject of proofs for congruent triangles, the perpendicularity and properties of lines and planes; recognize the qualities of polygons, prisms, pyramids, and other two- and three-dimensional geometric figures; and understand the areas and volumes of geometric figures, including circles and spheres.

(Grade 9-10, 2 credits)
Prerequisite: Algebra I
Graduation Requirement



Algebra II [2522]

The second Algebra course provides a deeper study of the concepts learned in Algebra I with the introduction of logarithms, conic sections, polynomial functions, and sequences and series. The goals of Algebra II are to expand students' understanding of algebraic concepts and develop the powers of thinking and reasoning in order to increase their proficiency in problem solving. Course content includes equations and inequalities, linear equations and functions, linear systems and matrices, quadratic functions and factoring, polynomials, rational exponents and radical functions, exponential and logarithmic functions, rational functions, conic sections, sequences and series, trig ratios and functions, and trig graphs and equations.

(Grade 10, 2 credits)

Prerequisite: Algebra I

Graduation Requirement

Pre-Calculus [2564]

Students in Pre-Calculus study real numbers, functions and their graphs, trigonometric relationships, sequences, and series. This course provides the necessary foundation for Calculus. It includes all the content of a regular Pre-Calculus course in the areas of linear programming, applications of polar coordinates, and topics from discrete mathematics. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. Course content includes trig ratios in a triangle, relations among trig ratios, relations in a triangle, angles and rotations, radian measure addition formulas, trig identities, graphs of trig functions, inverse functions and trig equations, variation of graphs and functions, exponential and logarithmic functions, polynomials, systems of equations and inequalities, and sequences and series.

(Grade 11-12, 1 credit per course)

Prerequisites: Algebra II, Geometry

Trigonometry [2566]

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of seven strands: conics, unit circle, geometry, periodic functions, identities, polar coordinates, and vectors. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

(Grade 11-12, 1 credit per course)

Prerequisites: Algebra II, Geometry



Advanced Placement Calculus AB [2562]

Single variable calculus introduces students to the problems of tangents, rates of change, minima, maxima, and infinitesimals. Students study the meaning of differentiation (finding the tangent to a curve at any point) and integration (finding the area under a curve). Students learn the intricacies of these two processes and their intimate relationship as inverse procedures. Students are exposed to the scientific impact of calculus and its invaluable roles in physics, engineering, chemistry, biology, economics, sociology, and any other field where rates of change are prevalent. Students are taught to appreciate how calculus affects the way we understand the world.

(Grade 12, AP, 2 credits)

Prerequisites: Pre-Calculus & Trigonometry



PHILOSOPHY

Moral Philosophy [0514 Humanities]

In Moral Philosophy, students are introduced to questions which have always occupied the greatest minds:

What is the good life? What does it mean to "know yourself?" What is happiness, and where is it to be found?

Through reading, discussing, and writing about the works of the great Western philosophers, students compare and contrast different schools of thought and begin to formulate their own answers. Students first read C.S.

Lewis' *The Abolition of Man* to introduce them to the difference between subjectivism and objectivism and different concepts of nature, and then apply these categories to various primary texts. Philosophers read include Plato, Aristotle, Augustine, Aquinas, Machiavelli, Hobbes, Locke, Rousseau, and Nietzsche.

(Grade 12, 1 credit)



PHYSICAL EDUCATION

Health & Wellness [3506]

In Health & Wellness, students develop a deeper appreciation of the factors that affect a person's well-being. They learn strategies for living a healthy lifestyle, monitoring personal health, preventing disease, managing interpersonal relationships, and dealing with emotions and conflicts in a healthy way. This course inspects the influence that family, peers, media, and technology have on health behaviors. Finally, students learn how to access reliable information, products, and services to maintain and improve health.

(Grades 9-12, 1 credit)
Graduation Requirement

Physical Education I [3542]

In Physical Education, students continue to learn the basics of team sports as they participate in activities and games designed to increase athletic knowledge and abilities as well as promote health and fitness.

(Grades 9-12, 1 credit)
Graduation Requirement

Physical Education II [3544]

In Physical Education II, students participate in activities and games designed to increase athletic knowledge and abilities as well as promote health and fitness.

(Grades 10-12, 1 credit)
Prerequisite: Physical Education I
Graduation Requirement



SCIENCE

Anatomy and Physiology [5276]

Students studying Anatomy and Physiology learn that it is the branch of natural science dealing with the structural organization of living things. For centuries anatomical knowledge consisted largely of observations of dissected plants and animals. The proper understanding of structure, however, implies knowledge of function in the living organism. Anatomy is therefore inseparable from physiology, which is sometimes called functional anatomy. As one of the basic life sciences, anatomy is closely related to medicine and to other branches of biology.

(Grades 11-12, 2 credits)

Prerequisite: Biology

Biology [3024]

As a science course, Biology involves laboratory experiences, note taking, and discussion designed to help students understand current theories and models. The extensive vocabulary of biology is learned within a conceptual, historical and philosophical framework. Major themes include the following: life is emergent, organized and complex; living systems change through time; living systems interact with their environment and depend on other systems; living systems are related to members of other generations by genetic material passed along during reproduction; growth of an individual conforms to a well-defined pattern of differentiation controlled by the organism's genetic makeup; living systems require matter and energy to maintain organization; and living systems maintain a relatively stable internal environment through their regulatory mechanisms and behavior.

(Grade 9, 2 credits)

Graduation Requirement

Chemistry I [3064]

Chemistry covers the fundamental concepts of the discipline of chemistry. This includes content mastery, a grasp of chemistry's historical development, the capacity for careful and critical observation, an understanding of science's proper relation to other disciplines, and an appreciation of the discoverable order inherent in reality. Course content includes units, measurement, dimensional analysis, laboratory safety, elements, compounds, mixtures, historical development of atomic structure and the periodic table, periodic trends, bonding, chemical names and equations, types of reactions, stoichiometry, states of matter, changes of state, gas laws, solutions and colligative properties, acids and bases, titrations and pH, thermochemistry and calorimetry, spontaneity, reaction rates, oxidation-reduction reactions, balancing redox, electrochemistry, nuclear chemistry, organic chemistry, basic functional groups and reaction mechanisms, biochemistry, carbohydrates, lipids, and proteins.

(Grade 10-12, 2 credits)

Prerequisites: Algebra II (can be taken concurrently with Chemistry I)



Physics I [3084]

In Physics, students primarily pursue a conceptual approach. Once concepts are fully understood, they engage in numerical exercises that illustrate their application of those concepts. Course content includes Newton's first law, linear motion, Newton's second law, Newton's third law, momentum, energy, rotational motion, gravity, projectile and satellite motion, atomic nature of matter, solids, liquids, gases, temperature, heat and expansion, heat transfer, change of phase, thermodynamics, vibrations and waves, sound, musical sounds, electrostatics, electric current, magnetism, electromagnetic induction, properties of light, color, reflection and refraction, light waves, light emission, light quanta, the atom and the quantum, the atomic nucleus and radioactivity, nuclear fission and fusion, special theory of relativity, and the general theory of relativity.

(Grades 9-11, 2 credits)

Prerequisites: Algebra I or II

Advanced Placement Biology [3020]

AP Biology is designed to help students develop a conceptual framework for understanding modern biology and to facilitate an appreciation of science as a process. To ensure that these goals are met, integration of the hierarchy of life (from the elements to the biosphere) is tied to the lesson, unit, or concept that is being addressed in the classroom. This allows easy synthesis of the four Big Ideas and the Enduring Understandings identified in The College Board's AP Biology Curriculum Framework into any or all of each level of this hierarchy.

(Grade 11-12, AP, 2 credits)

Prerequisites: Biology I and Chemistry I

Advanced Placement Chemistry [3060]

AP Chemistry cultivates understanding of chemistry through inquiry-based investigations as students explore topics such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

(Grades 11-12, AP, 2 credits)

Prerequisites: Chemistry I, Algebra II, Pre-Calculus/Trigonometry

Advanced Placement Physics II [3081]

AP Physics 2 is an Algebra-based is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics.

(Grade 12, AP, 2 credits)

Prerequisites: Physics I, Calculus (can be taken concurrently)



SENIOR TUTORIAL

Senior Tutorial [1094]

Senior Tutorial is the capstone course for students at Seven Oaks. The focus of the course is the creation of a 15 page senior thesis, the topic of which emerges from the school curriculum. The student interacts with a great text and an enduring human question such as: “What does it mean to be human?”, “What is a citizen?”, “What is justice?”, “Who is a hero?”, “What is the beautiful?”, “What is the good life?”. Each senior writes, publically delivers, and defends his or her thesis before a panel of peers and faculty. A portion of this one-semester course is spent on college readiness. Students build their résumés, visit with college admissions counselors, and complete college and scholarship applications.

(Grade 12, Honors, 1-2 credits)