

Washington Academy Online

2022-2023 Online Course Listing

Courses are Listed by Department

English

English 9
English 10
English 11 *
English 12 *^
English Composition

Science

Integrated Science
Biology ^
Chemistry ^
Physics ^
Marine Biology *

Math

Math Foundations
Algebra I
Geometry
Algebra II
Pre-Calculus ^
Personal Finance *
Business Math

Social Studies

World History
US History *^
Sociology *
Psychology *
Law & Order
International Business & Economics
Modern Day Apprenticeship
Robotics
Marketing & Entrepreneurship *
Computer Programming

Art

Digital Media
Art & Music Appreciation
Art History

Health & PE

PE (.5)
Health (.5)
Personal Health & Fitness (.5)

Foreign Language

Spanish I
Spanish II
Spanish III ^

**Lectures Provided*

^ AP Available

English

English 9

Grades Available: 9th

Type: Core

Pre-requisites: None

Honors Available: Yes

English for grade 9 is an integrated curriculum. Each unit contains thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Topics are presented in ways that help young adolescents relate literacy skills to other aspects of their lives. Speaking and listening lessons in Semester A emphasize collaborative discussion skills and peer review. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit. It also consists of integrated units focused on a theme or mode of study. Literature study focuses on the analysis of different forms of literature and on comparative studies of world literature and literature delivered in different media. Writing and informational text lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research.

English 10

Grades Available: 10th

Type: Core

Pre-requisites: English 9

Honors Available: Yes

English for grade 10 is an integrated curriculum, with each unit consisting of thematically related lessons in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. The skills that students practice for this course are similar to the skills in English 9 but require more independence and depth of thought. An introductory lesson at the start of each unit helps students identify any areas of weakness and review those topics before starting the more challenging grade 10 lessons. Writing assignments required include fiction, expository, and persuasive, and analytical models, emphasizing the use of details, evidence, and reasoning to support ideas. Speaking and listening lessons cover collaborative discussion skills, the peer review process, and how to plan and deliver informative speeches and presentations. Vocabulary development instruction is integrated into literature and informational text lessons. A literature study will focus on the analysis of different forms of literature and as well as the evaluation of various modes and forms of writing. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research.

English 11

Grades Available: 11th

Type: Core

Pre-requisites: English 9, English 10

Honors Available: Yes

English for grade 11 is an American Literature course, with units organized chronologically according to periods in literary history. As students read foundation works of literature and other historical documents written between 1600 and 1900, they'll review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Each module or unit begins with a lesson that provides historical context for the era and introduces themes that emerged in the literature of that era. Each lesson provides students with an opportunity to review basic analysis skills before applying those skills to works of literature or key historical documents. Lessons focused on more difficult historical documents include activities that help students comprehend the complex ideas in these works. Writing modes addressed in this course include narrative, reflective, persuasive, and analytical modes. Assignments emphasize the use of details, evidence, and reasoning to support ideas; writing lessons include model essays that demonstrate key features of each mode. The speaking and listening lessons will cover rhetoric, the peer review or writing workshop process, and performance skills. Vocabulary development instruction is integrated into literature and informational text lessons.

English 11 also consists of units focused on historical eras and literary movements of the 20th and 21st century, such as Naturalism, Imagism, the Harlem Renaissance, and Post-Modernism. Literature analysis lessons will focus on the forms of literature that were most commonly written during the Twentieth Century and how the forms, styles, and techniques of that century inform literature written today. Students will also evaluate various modes and forms of language expression, including single media and multimedia messages. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

English 12

Grades Available: 12th

Type: Core

Pre-requisites: English 9, English 10, English 11

Honors Available: Yes

In this course you will experience the novels, short stories, poetry, and non-fiction from countries around the world. You will discover that the writers in this course have ideas and lives as interesting as their work. You will discover many writers have unique writing styles, unique ideas, unique lives, and unique approaches to their art. You will also have the chance to do some unique work of your own. By reading contemporary work and some work of the 20th century you will also discover that “no matter what a writer’s origins, certain themes and events have been hard to run away from in the 20th and early 21st centuries.” As you read, it is my hope that you will come to an understanding that, “. . .reading literature from around the world is unlikely to teach you everything there is to know about a culture. But it may help. . .” Along this journey you will use technology, writing, reflection, vocabulary, research, and other academic and personal skills to help you learn to enter the world of your community, your country, and your world. As the poet Gwendolyn Brooks said, “I believe that we should all know each other, we human carriers of so many pleasurable differences. To not know is to doubt, to shrink from, sidestep or destroy.” So begin your own journey through the world, and do this by reading, writing about what you read, and experiencing the work of writers.

Social Studies

U.S. History

Grades Available: 9th, 10th, 11th, or 12th

Type: Core

Pre-requisites: None

Honors Available: Yes

This course covers the discovery, development, and growth of the United States. Major topics include; American Indian cultures, European colonization of the Americas, and the causes and effects of the American Revolution. Geographical, economic, and political factors are explored as the key factors in the growth of the United States of America. U.S. History is a survey of the struggle to build the United States of America from the colonial period to the beginning of the twentieth century. By means of reading, analyzing, and applying historical data, students come to appreciate the forces that shaped our history and character as an American people. Not only are the topics of American history discussed, but students also explore research methods and determine accurate sources of data from the past. Knowing the facts and dates of history are just the beginning; each student must understand how history affects him or her.

U.S. History also includes a study of American life before the 1929 Stock Market crash and how the Roaring Twenties influenced society in the late 19th through early 20th centuries. Students will examine the causes and consequences of the Great Depression and move on into a detailed study of World War II with an emphasis on America's role in the conflict. The course continues with an analysis of the Cold War struggle and America's rise as a superpower. The Civil Rights and Women's rights movements, pollution and the environment, and American domestic and foreign policy will be examined. The course wraps up with a summary of current events and issues, including a study of the Middle East. This course begins with an assessment of life in United States pre-World War I and ends with the conflicts of the new millennium. Students look at the nation in terms of economic, social, and political trends. The experiences of the last century are summarized, including a look into the civil rights issues that have embroiled the nation in conflict. The development of the United States of America into a superpower is explored within a global context.

World History

Grades Available: 9th, 10th, 11th, or 12th

Type: Core

Pre-requisites: None

Honors Available: Yes

World History begins with a focus on the skills needed to read, understand, and analyze history, also demonstrating how historians and social scientists arrive at their conclusions about human history. It covers the history of civilization from hunter-gatherer societies through the characteristics of the earliest civilizations to the Enlightenment period in Western Europe. It explores early intellectual, spiritual, and political movements and their impact on interactions among world cultures. World History also applies the reading and analytical strategies to the events and movements that created the modern world. In the second semester, World History emphasizes the effects of the Industrial Revolution and changing attitudes about science and religion as well as the impact of European colonization. Students are encouraged to make connections between World War I and II and events related to the Cold War and between 19th-century imperialism and modern independence movements.

Mathematics

Math Foundations

Grades Available: 8th or 9th

Type: Core (optional)

Pre-requisites: None

Honors Available: No

In Math Foundations, students use arithmetic properties of subsets of integers and rational, irrational and real numbers by simplifying expressions, solving linear equations and inequalities, graphing equations, finding the equation of a line, working with monomials and polynomials, and factoring and completing the square. Students use properties of the number system to judge the validity of results, justifying each step of the procedure to prove or disprove statements. Students compute perimeter, circumference, area, volume and surface area of geometric figures. Students also use basic trigonometric functions defined by the angles of a right triangle.

Algebra I

Grades Available: 9th, 10th, or 11th

Type: Core

Pre-requisites: None

Honors Available: Yes

Algebra I will introduce students to the world of Algebra through expressions and equations. Students will evaluate algebraic expressions, solve linear equations and graph them. This course also steers students through various real-world scenarios with the emphasis on using basic statistics to interpret the information given and found. Students learn through online lesson materials, videos and interactive activities. The end of each unit tests students' understanding with a self-check quiz with feedback. Also included is a unit exam and project for students to apply what they have learned. Teacher feedback is provided throughout the semester. The second semester will build on the concepts learned in the first semester by providing a strong foundation in solving problems. Students will work with problems and applications that involve exponents, quadratic equations, polynomials and factoring methods, rational and radical equations, data analysis and probability. Students will interact with course materials through online lessons, videos, interactive questions and real-world applications.

Geometry

Grades Available: 10th, 11th, or 12th

Type: Core

Pre-requisites: Algebra I *Recommended*

Honors Available: Yes

Geometry is the study of the measurement of the world. What makes Geometry so engaging is the relationship of figures and measures to each other, and how these relationships can predict results in the world around us. Through practical applications, the student sees how geometric reasoning provides insight into everyday life. The course begins with the tools needed in Geometry. From these foundations, the student explores the measure of line segments, angles, and two-dimensional figures. Students will learn about similarity, triangles and trigonometric ratios. Students will also explore quadrilaterals and circles, and learn how an object is transformed, as well as how to represent that transformation algebraically and geometrically. Students calculate area and volume of 2-dimensional and 3-dimensional objects.

Algebra II

Grades Available: 10th, 11th, or 12th

Type: Core* (*Will be counted as Elective if student has taken Math Foundations or its equivalent*)

Pre-requisites: Algebra I & Geometry

Honors Available: Yes

Algebra II further extends the learner's understanding of major algebra concepts such as expressions, equations, functions, and inequalities. An emphasis will be placed on the use of appropriate functions to model real world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph. Algebra II's second semester builds on the concepts learned in the first semester and prepares the learners with the building blocks needed to dive deeper into trigonometry, pre-calculus and advanced probability and statistics.

Science

Integrated Science

Grades Available: 8th or 9th

Type: Core (optional)

Pre-requisites: None

Honors Available: No

Integrated Science is an introduction to the Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life. This is an introduction to the Physical Sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom, and reinforced through homework reading, and interesting labs that relate to everyday life.

Biology

Grades Available: 9th, 10th, or 11th

Type: Core

Pre-requisites: None

Honors Available: Yes

Biology introduces students to the scientific method and the major concepts of biology from an historical and practical viewpoint. The three major themes of this course are the cell, the molecular basis of heredity, and the interdependence of organisms. Students who take this class will have a deeper appreciation for the complexities of living organisms. Life on this planet, unlike anywhere else in the observable universe, is complex and highly organized. Whether examining life on the molecular or the planetary level, it exhibits a highly organized structure that inspires awe by its genius and complexity. In the last 50 years, discoveries have launched new branches of biology that have transformed the daily routine, from conception to death. New challenges await, such as the current crisis in ecology, global warming, and the resurgence in viral disease. To make rational choices in the 21st century, the citizen must have a basic understanding of biological concepts and the reasoning behind them. Biology is presented in a multimedia format using interactive modules, labs, narrated animation, text, and videos to present the study of life on this planet. Students work through and complete several self-check activities and quizzes for practice, and participate in self-reflection. In each unit, students complete the unit exam and deliver a unit project.

Chemistry

Grades Available: 10th, 11th, or 12th

Type: Core

Pre-requisites: Biology (*recommended*), Algebra I

Honors Available: Yes

In this course, students will discover what chemistry is, and how it is used and found all around us. The importance of the scientific method to solve real world problems will be investigated. Knowledge will be gained in the following areas: types of matter, atomic structure, chemical periodicity, chemical formula writing and naming, chemical equations. This course will also stress the important relationship between math and science while studying measurement, metric system and stoichiometry. Students will use higher order thinking throughout the entire course. An algebra background is recommended because of the amount and type of math involved. It follows the Chemistry 1 course. In the second semester, students will investigate chemical bonding, thermochemistry, and acids and bases. The importance of the scientific method to solve real world problems will be investigated. Knowledge will be gained in the following areas: organic chemistry, biochemistry, and nuclear chemistry. This course will also stress the important relationship between math and science. Students will use higher order thinking throughout the entire course. An algebra background is recommended because of the amount and type of math involved.

Physical Education & Health

Physical Education

Grades Available: 9th, 10th, 11th, or 12th

Type: Core

Pre-requisites: None

Honors Available: No

Physical Education encompasses learning how to live and maintain a healthy lifestyle. This course covers physical fitness, why it is important, how to have a healthy attitude, and how to stick with a healthy game plan. In this ever-changing world, physical fitness becomes more important and more difficult to find the time for. This course allows the student to discover how to make physical fitness not only a part of their daily life, but also see that it is attainable. This course leads the student to discover healthy behaviors and sets the tone for physical fitness as well as healthy exercise. PE for a Healthy Lifestyle will examine the emotional, physical, and scientific factors that influence physical performance. This course is designed for anyone, ranging from the beginner to advanced abilities.

Health (0.5)

Grades Available: 9th, 10th, 11th, or 12th

Type: Core

Pre-requisites: None

Honors Available: No

In this course, students acquire the knowledge and skills they need to lead a healthy life. The course focuses on the impact of personal decisions on the student's own health. Students learn how to find, evaluate, and use reliable information related to a variety of health topics. They also study the basic science behind nutrition, exercise, stress, and psychology, and examine how these factors affect a person's overall health. Each lesson in the course guides students in applying what they have learned in the lesson to their own lives and choices—and gives them a chance to discuss the topic with peers and instructors.

The Arts

Art I & II Concentrations:

- *Art History*
- *Art & Music Appreciation*
- *Theater Studies*
- *Digital Media*

Grades Available: 9th, 10th, 11th, or 12th

Type: Core

Pre-requisites: None

Honors Available: No

Electives

Modern Day Apprenticeship

Grades Available: 10th, 11th, or 12th

Type: Elective

Pre-requisites: None

Honors Available: No

This course introduces students to the basic business concepts that will help them understand how a business survives in today's economy and the role that consumers play in the same economy. Students will learn how to balance a checkbook, save for the future, and use credit wisely. Students will also learn how to create a resume and how to participate in a job interview.

The Career Planning semester guides students through the essential elements of the career planning process and the development of a defined career plan. Students will consider the many factors that impact career success and satisfaction. Using a process of investigation, research, and self-discovery, students will acquire the understandings critical to the career planning process. Upon completion of the course, students will have created a practical and comprehensive college or career transition portfolio that reflects their skills and abilities, as well as their interests, values, and goals.

Marketing & Entrepreneurship

Grades Available: 10th, 11th, or 12th

Type: Elective

Pre-requisites: None

Honors Available: No

This course will prepare students for certification in Entrepreneurship and Small Business. The modules are designed to cover all aspects of entrepreneurship including traits of successful entrepreneurs, business management, hiring employees, creating a company culture, managing finances, and marketing products and services. Each module will challenge students to put themselves in the role of an entrepreneur and consider how they will handle the extensive responsibilities of starting a business.

English Composition

Grades Available: 11th & 12th

Type: Elective

Pre-requisites: English I, English II

Honors Available: No

At the beginning of the semester, students consider the importance of word play exercises in improving their facility with language while building a compelling and creative writing style. Focusing on word nuances and precision, later lessons guide students to write in a variety of short modes—including poetry, song lyrics, prose poetry, short short stories, and creative nonfiction. There are several opportunities for peer review in this semester, during which students learn best practices for participating in writing workshops, and then revise their work using feedback from their peers. The second semester focuses on longer works of fiction: short stories, plays, and novels. Students learn basic techniques of plot and character development along with strategies for creating suspense and building a theme, and they have opportunities to write in several different genres. Lessons cover a few special topics as well, including graphic novels, animation, comedy, and improvisation. Students apply what they have learned about writing workshops and revising to the longer pieces of writing they create for this semester.

International Business & Economics

Grades Available: 10th, 11th or 12th

Type: Elective

Pre-requisites: None

Honors Available: No

This course introduces students to the basic business concepts that will help them understand how a business survives in today's economy and the role that consumers play in the same economy. Students will focus on how an educated consumer understands the economic decisions and how they can be made in many different ways - also how each has an opportunity cost associated with it. Furthermore, students will learn how effective business ownership includes understanding the activities businesses perform, forms of business ownership, all aspects of marketing, and business responsibilities to their community. and the role government plays in business. Career research and planning will help you match interests and skills to the ideal career path. In Part B of the course, students will be introduced to the principles and the applications of economics. Students will develop an understanding of limited resources, and compare it with unlimited wants and needs. Students learn how individual and national economic decisions are made to allocate goods and services among competing users. Students apply economic principles to think and problem solve. Students are encouraged to use their knowledge of the policies and institutions of economics to develop their own views on current economic and monetary issues.

Civics (.5 credit)

Grades Available: 9th, 10th or 11th

Type: Flexible (Social Studies)

Pre-requisites: None

Honors Available: No

In this course students will understand the significance of government, law, and politics. They will examine the United States foundational documents and how they shaped the United States government. Students will examine the purposes and functions of federal, state and local government, the justice system, political systems the environment, and the economy. Learners will evaluate their role and civic responsibility to their families, communities, and country including voting and being a productive member of society. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society including interpersonal skills and respecting differences in others including disabilities. Learners will follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and Power Point presentations to enhance and reinforce learning. Learners receive frequent feedback from teacher and peers through discussions. By the end of the course students will have a deep understanding of their civic responsibilities as well as the difference one individual can make in society.

Psychology

Grades Available: 10th, 11th or 12th

Type: Flexible (Social Studies)

Pre-requisites: None

Honors Available: No

In Psychology, the student begins with a brief history of psychologists and their experimental methods. Next they examine personality theories. Then human development from the infant stage through adult stage is explored. Finally, the last part of the course is about consciousness: sleep, dreams, and conscious-altering substances. Students are encouraged to increase their own self-awareness as they move through the course.

Intro to Personal Finance

Grades Available: 11th or 12th

Type: Elective

Pre-requisites: Algebra I, Geometry

Honors Available: No

This course is designed to help students budget, keep a checkbook and filing system, deal with debt and credit, and become wiser consumers. Students will learn how money and the dynamics surrounding it affect their relationships, their lifestyles, and their retirement.

Business Math

Grades Available: 11th, or 12th

Type: Elective

Pre-requisites: Algebra I, Geometry

Honors Available: No

This course focuses on the mathematics involved in making wise consumer decisions. Students explore the many ways in which mathematics affects their daily lives. The first semester will cover paychecks and wages, taxes, insurance, budgets, bank accounts, credit cards, interest calculations, and comparison shopping. Second semester topics include vehicle and home purchasing, investing, and business and employee management.

Spanish I, II, III

Grades Available: 9th, 10th, 11th, or 12th

Type: Elective

Pre-requisites: None

Honors Available: No

Spanish I is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts, grammatical concepts, and cultural information will be introduced in context while incorporating various listening, speaking and writing activities.

Students build upon the foundation developed in Spanish I. They continue to build vocabulary, learn new verb tenses and other grammar concepts, and they increase their ability to communicate with others. They learn new concepts, like reflexive verbs, infinitive expressions, commands, the imperfect tense. Semester B will continue building on vocabulary, grammar concepts and communicating effectively in the target language. You will explore new countries where Spanish is spoken and continue to keep abreast of current events in the Spanish-speaking world.

Marine Biology

Grades Available: 9th, 10th, 11th, 12th

Type: Flexible (Science)

Pre-requisites: None

Honors Available: No

About 70% of the Earth is covered by water. Even today, much of the world's oceans remain unexplored. Marine scientists make exciting new discoveries about marine life every day. In this course, students will discover the vast network of life that exists beneath the ocean's surface and study the impact that humans have on the oceans.

Pre-Calculus

Grades Available: 11th or 12th

Type: Flexible (Mathematics)

Pre-requisites: Algebra I, Geometry, Algebra II

Honors Available: No

In this course, students will understand and apply concepts, graphs and applications of a variety of families of functions, including polynomial, exponential, logarithmic, logistic and trigonometric. An emphasis will be placed on use of appropriate functions to model real world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph. A scientific and/or graphics calculator is recommended for work on assignments, and on examinations. Pre-Calculus Part B covers the major units of Introductory Trigonometry and Graphs, Trigonometric Equations and Identities, Analytical Trigonometry, Sequences and Series, Conic Sections and an Introduction to Calculus. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph.

Law & Order

Grades Available: 11th or 12th

Type: Flexible (Social Studies)

Pre-requisites: None

Honors Available: No

Students learn about the American legal system. They examine ethics, court systems, criminal law, and law of torts. They examine how the court systems work together, and what misconduct results in going to court. It is important to also understand your consumer rights. As they progress through the course, they will also gain an understanding from a business perspective what is right and wrong business actions and employment laws. As an employee or employer it is important to understand the laws that protect the employee and employer. The study will focus on the formation of a business and the basic legal issues associated with each type of business.

Sociology

Grades Available: 10th, 11th or 12th

Type: Flexible (Social Studies)

Pre-requisites: None

Honors Available: No

Sociology examines the basics of sociology, which is the study of society including individuals, human groups, and organizations. The course is divided into four main areas: the sociological perspective, social structures, inequality in society, and social institutions and change. Students will examine controversies around social change, inequality, gender, and race. The course revolves around an overview of the field with projects that offer the student a chance to explore from a sociologist's perspective.

Personal Health & Fitness

Grades Available: 9th, 10th, 11th, or 12th

Type: Elective, or Core

Pre-requisites: None

Honors Available: No

This course takes students through a comprehensive study of nutritional principles and guidelines. Students will learn about world-wide views of nutrition, nutrient requirements, physiological processes, food labeling, healthy weight management, diet related diseases, food handling, nutrition for different populations, and more. Students will gain important knowledge and skills to aid them in attaining and maintaining a healthy and nutritious lifestyle.

AP Biology

Grades Available: 11th or 12th

Type: Flexible (Science)

Pre-requisites: Biology (*recommended*), Algebra I

Honors Available: No

This course is taught at the college level and designed to prepare students to take the Advanced Placement Examination and score high enough to earn college credit in those colleges that recognize the examination. College level textbooks are used. The course will cover all of the topics in the AP Biology Course Description. These include biochemistry, cell structure and function, cell energetics, cellular reproduction and communication, heredity, molecular genetics, evolution, ecology, diversity of organisms, structure and function of plants and animals, and comparative anatomy.

AP Chemistry

Grades Available: 11th or 12th

Type: Flexible (Science)

Pre-requisites: Chemistry (*recommended*)

Honors Available: No

This course is taught at the college level and is designed to prepare students to take the Advanced Placement Examination and to score high enough to earn college credit in those colleges that recognize the examination. College level textbooks are used. The course will cover all of the topics in the AP Chemistry Course Description. These include an introduction to chemistry as the study of change, gases, thermochemistry, quantum theory, chemical bonding, crystals, phase changes, solutions, chemical kinetics, chemical equilibrium, acids and bases, entropy, electrochemistry, nuclear chemistry, metallurgy, alkali and alkaline metals, nonmetallic metals, transition metals, organic chemistry, and synthetic and natural organic polymers.

AP Spanish

Grades Available: 11th & 12th

Type: Elective

Pre-requisites: Spanish I, Spanish II

Honors Available: No

The AP Spanish Language and Culture course is an advanced language course in which students are directly prepared for the AP Spanish Language and Culture test. It uses as its foundation the three modes of communication: interpersonal, interpretive and presentational. The course is conducted almost exclusively in Spanish. The course is based on the six themes required by the College Board: (1) global challenges, (2) science and technology, (3) contemporary life, (4) personal and public identities, (5) families and communities, and (6) beauty and aesthetics. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. Students should expect to listen to, read, and understand a wide-variety of authentic Spanish-language materials and sources, demonstrate proficiency in interpersonal, interpretive, and presentational communication using Spanish, gain knowledge and understanding of the cultures of Spanish speaking areas of the world, use Spanish to connect with other disciplines and expand knowledge in a wide-variety of contexts, develop insight into the nature of the Spanish language and its culture, and use Spanish to participate in communities at home and around the world. The AP Spanish Language and Culture course is a college level course. The intensity, quality, and amount of course material can be compared to that of a third-year college course.

AP Biology

Grades Available: 11th or 12th

Type: Flexible (Science)

Pre-requisites: Biology (*recommended*), Algebra I

Honors Available: No

This course is taught at the college level and designed to prepare students to take the Advanced Placement Examination and score high enough to earn college credit in those colleges that recognize the examination. College level textbooks are used. The course will cover all of the topics in the AP Biology Course Description. These include biochemistry, cell structure and function, cell energetics, cellular reproduction and communication, heredity, molecular genetics, evolution, ecology, diversity of organisms, structure and function of plants and animals, and comparative anatomy.

Physics

Grades Available: 11th or 12th

Type: Elective

Pre-requisites: Chemistry, Biology

Honors Available: No

Students begin their exploration of physics by reviewing the International System of Units (SI), scientific notation, and significant digits. They then learn to describe and analyze motion in one and two dimensions. Students learn about gravity and Newton's laws of motion before concluding the course with an examination of circular motion. Students apply mathematical concepts such as graphing and trigonometry in order to solve physics problems. Throughout the course, students apply their understanding of physics by playing roles like science museum curator and elementary teacher. Physics continues the student's exploration of mechanics while also guiding them through some other important topics of physics. Students begin by exploring simple harmonic motion, wave properties, and optics. Students then learn the basics of thermodynamics and fluids. Afterwards, the students explore the principles of electricity and magnetism. Finally, students explore the area of physics known as Modern Physics, which includes topics such as the photoelectric effect, nuclear science, and relativity. This is a trig based course. It is assumed you know and can use trigonometry.

AP Chemistry

Grades Available: 11th or 12th

Type: Flexible (Science)

Pre-requisites: Chemistry (*recommended*)

Honors Available: No

This course is taught at the college level and is designed to prepare students to take the Advanced Placement Examination and to score high enough to earn college credit in those colleges that recognize the examination. College level textbooks are used. The course will cover all of the topics in the AP Chemistry Course Description. These include an introduction to chemistry as the study of change, gases, thermochemistry, quantum theory, chemical bonding, crystals, phase changes, solutions, chemical kinetics, chemical equilibrium, acids and bases, entropy, electrochemistry, nuclear chemistry, metallurgy, alkali and alkaline metals, nonmetallic metals, transition metals, organic chemistry, and synthetic and natural organic polymers.

AP Calculus AB & BC

Grades Available: 11th or 12th

Type: Flexible (Mathematics)

Pre-requisites: Algebra I, Geometry, Algebra II

Honors Available: No

This AP Calculus course is designed with the intent for students to incorporate the concepts of all previous math courses and expand upon these concepts with the implementation of Limits. Emphasis is placed upon the multi-representational approach to calculus where problems and their solutions are explored and interpreted graphically, numerically, analytically and verbally. Students will also be required to explain their answers in written form and will be asked to compare their written response to the AP grading rubric and explain why they feel they should receive that grade. Students are required to use graphing calculators with the capabilities ascribed by the College Board: (apcentral.collegeboard.com). These calculators will be used in a variety of ways including multi-representation of equations (graphs and tables) and also for conducting explorations with various functions and how different values change the look of the function.

AP U.S. History

Grades Available: 11th or 12th

Type: Flexible (Social Studies)

Pre-requisites: None

Honors Available: No

AP United States History is an intensive full year course divided into two semesters. The course focuses on exploring and analyzing American historical events, individuals and cultural trends. You will be prepared with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. This first semester course covers the time frame of 1492 to 1877, and the second semester course covers the time frame 1878 to present. This course is designed to prepare students for the Advanced Placement exam in United States History that is administered by the College Board Educational testing center. The class satisfies the United States History requirement for graduation

AP English Language and Composition

Grades Available: 12th

Type: Core

Pre-requisites: English 9, English 10, English 11

Honors Available: No

This course helps students prepare to take the Advanced Placement Language and Composition Exam™ administered by the College Board. The first semester focuses on the concepts and skills needed to analyze argumentative texts and to build solid arguments—starting with the choices that experienced authors make when they write to persuade an audience. Students learn and apply best practices for constructing, revising, and refining their own arguments. Writing assignments in Semester A include rhetorical analyses of straightforward written arguments as well as satirical texts and visual approaches to persuasion. Students will be asked to develop several formal argumentative essays and also to practice new skills by writing less formal journal entries throughout the semester. The pace and level of work required by this course is similar to that required in a college-level composition course, so students should be prepared to work independently and to complete all assignments in a way that makes good use of their time.

The second semester of AP English Language and Composition focuses on writing tasks that require synthesis and documentation. Students will analyze many examples of synthesis essays and apply what they learn as they create their own texts based on multiple sources. They will also take a closer look at the use of visual and multi-modal or multimedia evidence when used as support for an argument, and they'll consider how to incorporate these unique approaches into their own attempts at persuasion.