

LA LUMIERE SCHOOL
Character • Scholarship • Faith



2019-2020
Course Catalog

Our Mission

At La Lumiere School, we form **character**, cultivate **scholarship**, and explore **faith** in order to grow into more complete versions of ourselves.

Table of Contents

Creative Arts	2
English	6
Mathematics	10
Science	14
Social Sciences	18
Theology & Philosophy	23
World Languages	25

Creative Arts Department

We believe that the arts have intrinsic human value. Our program offers an emphasis on creativity and is accessible to students at all levels. We prioritize an interdisciplinary approach to the arts, forging connections between the arts and other subjects.

Graduation Requirements

- ❑ 0.5 credit of Creative Arts (graduation year 2020)
- ❑ 1 credit of Creative Arts (graduation years 2021 and beyond)

COURSES

Studio Art

0.5 credit | Prerequisites: None

Studio Art is a course designed to examine the building blocks of the artistic process. The course provides an opportunity for students to learn introductory skill sets in order to apply multimedia and interdisciplinary approaches to the principles and elements of art.

Photography

0.5 credit | Prerequisites: None

The Photography course aims to teach students to appreciate the images around them and create their own works of art using their cameras. Students will learn the technical aspects of manually controlling a camera (aperture, shutter speed, white balance, ISO, and focus). After learning the basics, students will apply their skills in a variety of domains, including cityscape, landscape, portrait, candid, food, and sport photography. The final assessment for the course will be creating a web portfolio of student work.

Art Lab

1 credit | Prerequisites: None

Art Lab is an in-depth exploration of problem-solving and visual thinking in the art-making process. This project based course is designed to build on the structure established in studio art. Students will continue to develop their art brains by creating their own work and learning the process of making through developing their own studio practice

Advanced Projects in Art

1 credit | Prerequisites: Previous Art courses, permission from the instructor

Advanced Projects in Art is a self-directed mentorship for the student wishing to pursue concentrated studies in specific media in order to prepare a portfolio for college. Each student will meet with the instructor individually culminating in a rigorous course of self-driven projects meant to enhance the students' art experience and goals.

Music Appreciation

0.5 credit | Prerequisites: None

Students will learn to trace the historical musical trends which have shaped the sounds of their favorite songs and musical artists. The course will begin with a four week exploration of the historical, social, cultural, and musical impact of the Blues on Contemporary Music. A second unit will explore the roots of Western European music. A final project will consist in performing a song, or an instrumental work for the class, either as a soloist or as an ensemble. This course fulfills students' first-year art-credit requirement.

Concert Choir

1 credit | Prerequisites: Instructor approval

Singing is the foundation of all music, whether choral or instrumental, so being a good singer is a stepping stone to being a great musician. Singing is the most personal of all music performance, since our bodies are our musical instruments. Concert Choir is a small group vocal music ensemble which helps students become more confident musicians by building character through music performance. All students at La Lumiere, both beginning and advanced, are invited to be in Concert Choir. Students will be given opportunities to become active learners in regard to vocal performance technique and concert planning, so that each performance of the Concert Choir is an expression of our individual and collective identity at La Lumiere.

Jazz Band

0.5 credit | Prerequisites: Two years experience playing an instrument

Jazz Band provides students who can play an instrument to expand their performance experience through improvisation. Students will gain a deeper understanding of the contribution of 20th century American Jazz to contemporary music of all genres. Through rhythmic complexity, and through experimentation with chords and scales, students will learn to be creative musicians.

Music Performance Skills I

0.5 credit | Prerequisites: One year participation in a La Lumiere music ensemble

This course is for students who have participated in a La Lumiere music ensemble for at least one year (Concert Choir, Jazz Ensemble, or Chamber Ensemble) or who have taken Music Appreciation. This course will combine opportunities for students to become more proficient on a musical instrument, or as vocalists, and to gain a deeper understanding of music-theory concepts. Students will apply music theory to performances in which they are active participants. These performances will involve students in several ways: as solo instrumentalists (or vocalists), as members of an in-class ensemble, as conductors, as composers, and as improvisers. All performances will take place in-class and will be directed toward developing long-term musicianship skills that will aid students in their participation in future music performances at La Lumiere and beyond.

Music Performance Skills II

0.5 credit | Prerequisites: One year participation in a La Lumiere music ensemble

This course is for students who have participated in a La Lumiere music ensemble for at least one year (Concert Choir, Jazz Ensemble, or Chamber Ensemble) and have completed Music Performance Skills I. This course will combine opportunities for students to become more proficient on a musical instrument, or as vocalists, and to gain a deeper understanding of music-theory concepts. Students will apply music theory to performances in which they are active participants. These performances will involve students in several ways: as solo instrumentalists (or vocalists), as members of an in-class ensemble, as conductors, as composers, and as improvisers. All performances will take place in-class and will be directed toward developing long-term musicianship skills that will aid students in their participation in future music performances at La Lumiere and beyond.

AP Music Theory

1 credit | Prerequisites: Music Performance Skills I

The ultimate goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of this goal may be best promoted by integrated approaches to the student's development of: aural skills through listening exercises; sight-singing skills through performance exercises; written skills through written exercises; compositional skills through creative exercises; and analytical skills through analysis of musical scores.

Introduction to Drama

0.5 credit | Prerequisites: None

This is an introductory course that examines the history and art of theatre. Recognizing that drama is an ancient and continuing aspect of human civilization, the first part of the semester will explore the historical aspects of the theatre. Students will begin their study in ancient Greece, the setting surrounding the birth of theatre, as we know it, and then survey the major innovations that ushered drama into its modern existence. Several major works of the Western canon that represent hallmarks in the development of drama will be studied during this time. Recognizing that drama is not merely an artifact of the past, but is a living art, we will spend the second half of the semester writing and producing a one-act play. Students will be introduced to light design, set design and construction, sound design, costume design, make-up design, stage management, and properties.

English

Our English courses equip students to read critically, write clearly, speak effectively, and create thoughtfully. Students encounter powerful texts, write often both to discover and to present discoveries, and participate in a literary community committed to asking good questions of texts and to growing in analytical skills.

COURSES

ESL English

1 credit | Prerequisites: ELL status

Freshmen ESL aims to build confidence, knowledge, and abilities for studying and living in America, specifically as a boarder at La Lumiere. We will compare American history, culture and systems with those of students' own countries in order to deepen comprehension of self and others. The course will also develop listening, speaking, pronunciation, academic vocabulary & study skills.

Sophomore ESL Lab

1 credit | Prerequisites: ELL status and sophomore standing

This course runs concurrently with the Sophomore Literature and World History 2 classes. It aids ELLs with comprehension of literary works; develops vocabulary, writing, and discussion skills; builds confidence for participation in mainstream classes; provides time and space for working on assignments.

Introduction to Literature and Composition

1 credit | Prerequisites: None

In the introductory literature and composition course, students develop and sharpen their reading, writing, listening, speaking, and thinking skills. Throughout the year-long course, students explore a number of classical and contemporary texts, including novels, poems, essays, and plays. The goal of this course is to increase comprehension skills, practice writing skills daily, and read aloud from the texts, as well as the students' own papers. We strive for quality, active writing, and expect to see growth throughout the year.

Literature and Composition

1 credit | Prerequisites: Introduction to Literature and Composition

In this course, students learn to understand what makes a work worth reading, studying, and remembering. Careful attention is paid to developing literary analysis skills, both oral and written, and students also continue to pursue growth in their writing skills. This year-long course focuses on expanding student's literary knowledge by exploring novels, poems, songs, essays and plays from around the world that focus various topics. Through hands-on projects such as in-class debates, student led discussions, in-class simulations, along with a variety of writing assessments from blog writing to magazine articles to standard essays, students take ownership of their literature and composition growth and apply their knowledge across different mediums. Literature and Composition is a course designed to enlighten students with rich literature and composition skills they can take with them throughout their career as a student.

Literature Seminar: Hyphenated America

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

America is a unique amalgamation of cultures. From Asian-American to African-American, Latino-American to Middle-Eastern-American, the hyphenated peoples of America navigate multiple cultures simultaneously, and this “melting pot” is expressed through American television, music, literature and film. This course will focus on the rich diversity within American literature and cinema, exploring historical background and discussing the intersection of cultures as plumbed in those mediums. Students can expect to read novels by underrepresented authors along with the adapted screenplay of that novel to analyze and discuss how characters, themes, and content translate between different forms of written work. The basis of this course is to engage literature and the connections it has to visual media. Students will continue to build on their reading skills by digging deep into texts and making intertextual connections between the literatures of diverse authors.

Literature Seminar: Shakespeare in Tandem

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

Four hundred years after his death, William Shakespeare is still influencing new audiences through his works, which are celebrated for their universality and timeless genius. In fact, Shakespeare's work has been adapted time and time again. Filmmakers, playwrights, and novelists have recognized the connections between Shakespeare and our present lives and have converted his stories into films, plays, and novels. But have they worked? In this course, students will study at least three Shakespeare plays, each in tandem with modernized versions of those plays and discuss and analyze whether the themes and characters in these plays really do work in more modern settings. The course aims to cover a range of comedies, tragedies, and histories.

Literature Seminar: Outsiders and Underdogs

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

Why do we root for the underdog? In this course, students will be studying the classic underdogs in literature, from Ben Franklin's construction, to *Oliver Twist*, to some short stories of O. Henry, to the children's novels by Horatio Alger, to *Huckleberry Finn*, to the modern little guys of *Willy Loman*, and all the way to *Annie*. The goal of this course is to examine the rags-to-riches archetype - both how it appears in literature across cultures and historical time periods and the ways it is re-applied in contemporary society. In the literature seminars, students continue to develop the skills for literary study through intensive reading and writing.

Literature Seminar: Women Writers

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

What is women's literature? What can women's literature do 'and for whom? Is this even a meaningful way to categorize literature? This course introduces students to a range of female authors such as Virginia Woolf, Kate Chopin, and Zora Neale Hurston. We will read important statements in feminist theory alongside our primary texts to provide us with a critical vocabulary for literary analysis. In the literature seminars, students continue to develop the skills for literary study through intensive reading and writing.

Writing Seminar: Writing about Film

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

From movie theaters to living rooms, laptops to cell phones, films have seeped into every corner of our lives. In this writing course, students will take a critical look at films and hone their analytical and critical writing skills. Students will be introduced to different film elements, such as *mise en scene*, narrative, and cinematography, and students will also be trained to see the literary elements in good film. Why is the color "red" representing the protagonist? How does the change of scenery between two scenes reveal the character motivation? Students will gain experience with short and long-form reviews, argumentative and analytical papers, and formal critical essays.

Writing Seminar: Nature and Technology

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

In the Nature and Technology writing seminar, students develop their writing skills while exploring the theme of nature and technology. Students read a variety of texts focused on this theme in order to identify the major concerns and perspectives and compose several types of writing in response to the theme (including expository writing, creative writing, and/or poetry). The goal of the writing seminars is to move beyond mere mechanics and

produce writing that is clear, coherent, and creative. Students will improve research skills in order to refine topics and organize what is known about a topic, develop a controlled yet unique style and voice, and use a variety of strategies to adapt writing to various audiences and purposes.

Writing Seminar: Passions and Pastimes

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

In the Passions and Pastimes writing seminar, students develop their writing skills while exploring various human passions and pastimes, including sports, the arts, and leisure activities. Students read the work of contemporary writers such as David Foster Wallace and Roger Ebert to identify the conventions and concerns of the genre, and compose several types of writing (expository and creative) in response to the themes uncovered. The goal of the writing seminars is to move beyond mere mechanics and produce writing that is clear, coherent, and creative. Students will review grammar and research methods in preparation for college writing.

Writing Seminar: The Art of Rhetoric

0.5 credit | Prerequisites: Literature and Composition or approval from department chair

The Art of Rhetoric will give students the rhetorical skills needed to argue persuasively and to communicate well. We will study classical rhetorical devices, seeing how those devices resonate in modern prose. We will read outstanding essays, focusing not only on WHAT is said but HOW. We will focus on style, rhetorical invention, writing for multiple purposes, and making grammatical choices for meaning rather than mere correctness. Students will learn and apply numerous rhetorical devices to multiple genres (including expository writing, creative writing, and/or poetry.)

AP English Literature and Composition

1 credit | Prerequisites: B+ or higher in 11th grade English or approval from department chair

As indicated by the Advanced Placement designation, this is a rigorous college-level English literature course. We will explore literature from ancient to modern times, from Western and non-Western authors, from the fiction, drama, and poetry genres. Students will demonstrate mastery of the elements of literature through written and oral analysis of the works studied, including an independent research project. We will also improve our ability to interact with the ideas of others through class discussion, the study of secondary sources, and written responses. An ongoing study of vocabulary and literary terms will make us more observant readers and more precise writers. We expect all students in the course to take the AP English Literature exam in May.

Mathematics

The Mathematics department prides itself in its diversity and experience, and response to the needs of our students. Throughout their time at La Lumiere, students will develop a relationship with math faculty that promotes both self-advocacy and self-reliance. Each course focuses on problem solving and critical thinking and prepares students for any field of study.

Graduation Requirements

- ❑ 4 credits of Mathematics, to include Algebra 1, Algebra 2, and Geometry (PreCalculus recommended)
- ❑ Students must take a Mathematics class each semester while at La Lumiere

COURSES

Algebra 1

1 credit | Prerequisites: None

This is a first year course designed to develop and strengthen the essential basic mathematical techniques that will be used extensively in future courses. This course will focus on the development of mathematical problem solving skills. Topics include: equations; inequalities; linear functions; systems; exponents; polynomials; factoring; radicals; quadratics.

Algebra 2

1 credit | Prerequisites: C- or higher in Algebra 1 or approval from the department chair

Algebra 2 is a second year algebra course designed to prepare students for higher mathematics classes. Topics covered will include; properties of numbers, equations and their graphs, systems of equations, intro to matrices, polynomials, rational expressions, quadratic equations, conic sections, logarithmic and exponential equations, including problem solving and applications in all of these areas. This course will focus on developing reasoning and problem solving skills.

Algebra 2 - Honors

1 credit | Prerequisites: B+ or higher in Algebra 1 or approval from the department chair

Algebra 2 Honors is an in-depth second year algebra course designed to prepare students for higher mathematics classes. Topics covered will include; properties of numbers,

equations and their graphs, systems of equations, matrices, polynomials, rational expressions, quadratic equations, conic sections, logarithmic and exponential equations, including problem solving and applications in all of these areas. This course will be fast paced and cover the topics listed above in-depth.

Geometry

1 credit | Prerequisites: C- or higher in Algebra 2 or approval from the department chair

Geometry is an examination of the properties of two- and three-dimensional figures, and the application of algebraic reasoning to find lengths and measures. Topics include: points, lines, planes and angles; measurement; constructions using a compass and an iPad application; proofs; congruence and similarity; polygons and polyhedron; transformations; perimeter, area, and volume; circles.

Geometry - Honors

1 credit | Prerequisites: B+ or higher in Algebra 2 or approval from the department chair

Honors Geometry is an accelerated examination of the properties of two- and three-dimensional figures, and the application of algebraic reasoning to find lengths and measures. Topics include: points, lines, planes and angles; measurement; constructions using a compass and an iPad application; proofs; congruence and similarity; polygons and polyhedron; transformations; perimeter, area, and volume; circles. This course emphasizes on application and enrichment in order to develop a deeper understanding of topics.

Precalculus

1 credit | Prerequisites: Algebra 2 and Geometry or approval from the department chair

Precalculus starts the year reviewing skills learned in previous algebra courses and then focuses on more difficult concepts. Topics covered will include: Trigonometry, Functions, Equations and their graphs, Systems of Equations, Matrices, Polynomials, Rational Expressions, Logarithmic and Exponential equations, Sets and Sequences, including problem solving and applications in all of these areas. This course will focus on developing reasoning and problem solving skills while providing a foundation for additional mathematical studies.

Precalculus - Honors

1 credit | Prerequisites: B+ or higher in Algebra 2 and Geometry or approval from the department chair

Precalculus Honors is a fast-paced review of algebra skills, followed by an in-depth study of trigonometry. The class will prepare students for advanced math classes by developing problem-solving skills, solidifying algebra skills, and building resilience. Topics covered include: linear and quadratic functions, polynomial and rational functions, exponential and

logarithmic functions, trigonometric functions, polar coordinates and vectors, conic sections, systems of equations, combinatorics, and applications in all of these areas.

Finite Math

1 credit | Prerequisites: Algebra 2 and Geometry or approval from the department chair

Finite Math is an introduction to mathematical topics with applications to business, management, and social science. The course starts with a review of sets and numbers, followed by an introduction to data sets, counting arguments (combinations and permutations), and the Binomial Theorem, which sets the foundation for elementary probability theory and some basic statistics. The last topics are financial mathematics.

AP Calculus AB

1 credit Prerequisites: B+ or higher in Precalculus and approval from the department chair

AP Calculus AB is equivalent to the first two semesters of a general college Calculus course; primary topics are differentiation (rates of change, function analysis, optimization, related rates, and other applications) and antidifferentiation (indefinite integrals, initial value problems, definite integrals, area and volume applications). Students will be expected to complete homework assignments both on paper and electronically, and will have comprehensive, cumulative tests at regular time intervals throughout the year.

AP Calculus BC

1 credit | Prerequisites: AP Calculus AB and approval from the department chair

AP Calculus BC is equivalent to the first three semesters of a general college Calculus course; it encompasses all subjects from Calculus AB, and expands upon those topics with the inclusion of several others (slope fields, Euler's method for differential approximation, more advanced types of integration including integration by parts and partial fraction integrals, parametric and polar equation calculus, and sequences and series as they relate to representation of a polynomial function). Students will be expected to complete homework assignments both on paper and electronically, and will have comprehensive, cumulative tests at regular time intervals throughout the year.

Statistics

1 credit | Prerequisites: Successful completion of Geometry

This course introduces students to the use of statistical methods in reasoning, problem-solving, and making predictions. Students study techniques of data analysis, including graphical and numerical approaches. They learn principles of probability and probability distributions in the context of a variety of problems. They also learn how make decisions and predictions with data through the construction and analysis of confidence intervals, hypothesis tests, and p-values.

AP Statistics

1 credit | Prerequisites: B+ or higher in Precalculus or approval from the department chair

AP Statistics serves to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students in the course will be exposed to four broad conceptual themes: (1) Exploring data by observing patterns and departures from patterns; (2) Planning a study by deciding what factors to study and how to measure the factors that you want to study; (3) Anticipating patterns by producing models using probability theory and simulations; and (4) Statistical inference in order to confirm models.

Introduction to Computer Programming

0.5 credit | Prerequisites: Geometry or approval from the instructor

Introduction to Computer Programming is an examination of the logic, syntax, structure, and construction of computer programs. Students learn how to build interactive, practical programs and games using variables, conditional statements, loops, and methods. The primary focus of study is on the use of the Java programming language in preparation for the Advanced Placement Computer Science A course.

AP Computer Science A

1 credit | Prerequisites: Prerequisites: B+ in Introduction to Computer Programming and approval from the instructor

Advanced Placement Computer Science A is an in-depth analysis of computer science principles and object-oriented program design using the Java language. Students will construct organized, efficient programs; analyze classes, methods, and concepts; and learn to troubleshoot and debug Java methods and classes as they prepare for the Spring AP exam.

Python Programming

1 credit | Prerequisites: Successful completion of AP Computer Science A and approval of the Instructor

This course is an extended guided independent study of computer science principles using the Python programming language, for students who have successfully completed the AP Computer Science A course. Students are challenged to construct a variety of Python programs that demonstrate a wide range of applications and principles. Study includes advanced topics and features including animated graphics, recursion, list comprehensions, regular expressions, and lambda operators.

Science

The Science department encourages students to explore their world at every scale, from microscopic to intergalactic. We strive to provide our students with a wide array of valuable educational experiences, providing hands-on laboratory activities whenever practical in order to complement learning through other course activities. We believe that a solid foundation in the natural sciences provides our students with the tools they will need to think critically and evaluate issues logically as they prepare for the future.

Graduation Requirements

- ❑ 3 credits of Science
- ❑ Biology is required. Chemistry and Physics are strongly recommended.

COURSES

Biology

1 credit | Prerequisites: None

Biology is a course devoted to the study of the characteristics of life and of living things and how they interact with one another. The subject matter deals with how living things are organized, (i.e. how they are put together), how they function (i.e. how life processes happen), the relationships between different organisms and between organisms and their environment (i.e. classification and ecology), and how organisms adapt to changes in their environment. Emphasis in this course is on the development of an understanding of the concepts through lab activities, demonstrations, problem solving activities, class discussions, and other types of activities in order to provide a solid foundation for future work in science.

Chemistry

1 credit | Prerequisites: Successful completion of Biology course

Chemistry: A Survey Course is a non-honors, introductory chemistry course examining the properties of matter the changes it undergoes. This class will cover a wider breadth of material than the honors course, though not to the same depth or intensity. It will help prepare students who may find themselves taking a Chemistry class in college with a basic working knowledge of the language and principles of chemistry. The course begins by examining the periodic table of elements and the properties of matter followed by a study

of light, the energy of electrons and electron configurations. Then the course continues by studying the writing chemical formulas and nomenclature in advance of learning how to write and balance chemical reactions before performing a study of stoichiometry, ending the year with a study of the gas laws. The course places more emphasis upon conceptual knowledge, with a less rigorous problem solving and laboratory experience.

Chemistry - Honors

1 credit | Prerequisites: B+ or higher in Biology or approval from the department

Chemistry: A First Year Study is an introductory course examining the properties of matter and the changes that it undergoes. This course will prepare the student to take a Chemistry class in college or to take the Advanced Chemistry course during their Junior or Senior year. The course is designed to be a rigorous preparation for a student who plans to study the sciences in college for a future career in science, engineering, medicine, veterinary school or pharmacy school. The course begins by examining the periodic table of elements and the properties of matter followed by a study of light and the energy of electrons. Then the course continues by studying the writing of chemical formulas and nomenclature in advance of learning how to write and balance chemical reactions before performing a study of stoichiometry. The year finishes off with a study of the gas laws and colligative properties of solutions. The course places emphasis on problem solving and lab experiences in order to prepare a proper foundation for future studies in a science course.

Advanced Biology

1 credit | Prerequisites: B+ or higher in Chemistry, Chemistry (honors), or approval from the instructor

The goal of advanced biology is to prepare students for a science major college biology course and to introduce students to extensively used lab techniques and procedures. In the first semester, students focus on cell biology. In the second semester, students study molecular genetics, cell division, and biotechnology. Over the course of the year, students will become skilled using the compound microscope, pipettes, a spectrophotometer, and gel electrophoresis units. In addition, students will learn how the processes of spectrophotometry, chromatography, gel electrophoresis, bacterial transformations, restriction enzymes, and PCR (polymerase chain reaction) are used as tools in the laboratory.

Ecology

1 credit | Prerequisites: Successful completion of Biology

Using the physical campus at La Lumiere as a laboratory as much as possible, this course will seek to identify basic ecological principles including populations, ecosystems and human impact on the Earth. There will also be elements of field biology such as taxonomic identification, collection and conservation. Emphasis will be placed on current topics such as climate change, population, invasive species, National Parks, and species conservation.

Advanced Chemistry

1 credit | Prerequisites: Chemistry (Honors), a B+ or higher in Chemistry (Non-Honors), and approval from the instructor

Advanced Chemistry is a course designed to cover advanced topics that build upon what the students have learned in a first year general chemistry course. The course begins with a review of material from the first year topics adding some new information not previously covered. The course then studies the advanced topics of Enthalpy and Entropy in Thermodynamics, Chemical Kinetics, Chemical Equilibrium and Buffers, Electrochemistry and finishes them year off with some basic Organic Chemistry. The course places emphasis on developing competence in problem solving skills, on developing the ability to think clearly while expressing ideas in a logical manner, and on developing and perfecting lab skills and techniques. At the end of the course students can opt to take the AP Chemistry exam.

Anatomy and Physiology

1 credit | Prerequisites: Successful completion of Biology and Chemistry or department approval

Anatomy and Physiology at La Lumiere is a Science elective course designed for upperclassmen to explore an interest in the human body; how it is structured and how it functions. The class will meet everyday for 45 minutes to learn and review material related to both anatomy and physiology of the human body. Material will be delivered approximately 50% lecture based, 25% group and activity based (including laboratory work) and 25% individual presentation based. There will also be daily homework and/or reading assignments.

Physics

1 credit | Prerequisites: Successful completion of Biology

Physics is a yearlong survey that combines a conceptual approach to the subject with regular lab experiences and mathematical formulas. Mathematics is the language of physics, so students will regularly use skills learned in their math classes. Problem-solving skills are particularly emphasized. Topics covered include: motion, force, energy, electricity, magnetism, light, sound, particle physics, and modern physics.

AP Physics 1

1 credit | Prerequisites: Department approval

AP Physics 1 is an algebra-based physics course that is meant as a strong foundation to college physics classes. Students participate in a combination of hands-on laboratory activities and topic explorations along with collegiate-level problem sets to practice their logical reasoning skills. Topics covered in this course include a full study of basic kinematics and dynamics, circular and rotational motion, work and energy, sound and

mechanical waves, and basic DC electrical circuits. Students will be asked to demonstrate their proficiency through laboratory and logical reasoning exercises.

AP Physics 2

1 credit | Prerequisites: Department approval

AP Physics 2 is an algebra-based physics course that is meant to continue the foundation formed in AP Physics 1. Students participate in a variety of hands-on laboratory activities and demonstrations, along with more traditional collegiate-level problem sets to practice their logical reasoning skills. Topics covered in this course include fluid dynamics, pressure and density, thermodynamics, geometric optics, electromagnetic waves, magnetism, and modern and nuclear physics. Students will be asked to demonstrate their proficiency through laboratory and logical reasoning exercises.

Social Sciences

The Social Science department is committed to teaching students more than just the dominant versions of events. We encourage students to think critically about history in order to foster students' understanding of diverse cultural perspectives across different time periods. Through differentiated instruction and project based learning, students connect with history beyond the facts and figures. We value knowledge of the past as a way to comprehend the present and future.

Graduation Requirements

- ❑ 3 credits of Social Science coursework
- ❑ Must include World History and U.S. History courses

COURSES

World History 1

1 credit | Prerequisites: None

This course introduces students to world history by studying prehistoric and ancient cultures. It begins in prehistory and concludes with the fall of the Roman Empire. Examining change and continuity, throughout the world, will allow students to trace the origins of human societies. Cave paintings, megalithic structures, and various artifacts will be studied, as well as a number of other primary sources, such as, The Narmer Palette, Hammurabi's Code, Sennacherib's Prism, and The Cyrus Cylinder, among other historical documents, in order to learn how to evaluate evidence. The central goal of this course is to teach students how to think like historians. Developing critical thinking skills and learning how to ask the right questions will enable students to gain insights into the past. Furthermore, analyzing maps and migration patterns will help students expand their geographical knowledge. The history of religion will also be taken into account so that students may recognize the pivotal role it has played in human history. Finally, this course aims to cultivate an interest and appreciation for life by the study of diverse cultures.

World History 2

1 credit | Prerequisites: World History 1

The World History II course will be a thematic exploration of major world developments and cultures from the Renaissance through the Second World War. The course will begin

with the end of the "Dark Ages" and continue through the political, social and economic changes which shifted the direction of history throughout the continents of Europe, Asia, and Africa. A goal of this course will be the use of various problem-solving and critical-thinking strategies to solve historical problems. In this design, history class is not the passive presentation of events. Students will be required to assume the active role as a participant in history engaged individually and cooperatively in active learning. A variety of primary sources will be utilized throughout the duration of the year, including but not limited to: maps, art, architecture, music, poetry, literature, and historical texts. Throughout class meetings more emphasis is placed on students understanding themes and interconnections in world history and less emphasis on students memorizing facts of isolated events.

AP World History

1 credit | Prerequisites: B+ or higher in World History 1 or department approval

This course explores major political, social, economic, and cultural developments from prehistory to the present day. The course will be broken down into major chronological areas in global history, focusing on thematic issues involving comparisons and analyses of changes and continuities over time. Although roughly chronological, the course occasionally takes the "long view" over several centuries. The vast chronological and geographical breadth of our topic will be mitigated by unifying themes stressed throughout the course including, but not limited to, the following: The nature and reliability of historical evidence, the interaction between human beings and their environment, the development and interaction of cultures (including exploration and cross-cultural influences in belief systems, arts, patterns of thought, science, and technology), the creation, expansion and interaction of economic systems on a regional, transregional and global scale, and the development and transformation of social structures. In addition, the course emphasizes the acquisition and development of historical skills such as crafting historical arguments, reasoning chronologically, comparing and contextualizing, and synthesizing and applying historical interpretation. Students are expected to take the AP World History exam upon completion of the course.

US History

1 credit | Prerequisites: Successful completion of World History 2 or AP World History

This course is an Introduction to the History of the United States of America. Great emphasis will be placed on studying the social history of normal people from various backgrounds. All of the content of the course will be introduced in the form of a lecture. Once students have a cursory understanding of the events, they then read primary documents from the time to determine what the most accurate narrative might be. In lieu of a history textbook, this course relies heavily on lesson plans from the Stanford History Education Group. For students to properly analyze primary sources, they will practice sourcing, contextualizing, corroborating, and close-reading. These skills are important to discovering the truth about past events, but they are also critical in our present time.

Students should be able to apply these very methods to current media in order to determine what are the accurate accounts of what happened, and what is misleading or sensationalized. The course starts in the Jamestown settlement and ends at the Cold War.

AP US History

1 credit | Prerequisites: Successful completion of World History 2 (A- or above) or AP World History (B+ or above)

This course is intended to be an expansion of the knowledge learned in a US History course. This course will require students to go well beyond the memorization of historical facts and dates. Students will be expected to explore a variety of historical sources, both primary and secondary. In their exploration of United States History from 1491 to the present-day, students will be expected to develop historical thinking skills and apply critical analysis to the craft historical arguments. The course will seek to develop the four historical thinking skills set forth by the AP curriculum, chronological reasoning, contextualization, persuasive argumentation, and historical interpretation. The ultimate goal of this course is to prepare students for the Advanced Placement Exam with the expectation that students study United States History as amateur historians.

European History

1 credit | Prerequisites: World History 1 and World History 2/AP World History

This course is designed to impart a sound understanding of the major events and movements which have shaped Europe since 1300. The major themes of the class include the changing role of religion within society, the development of the nation-state, the expansion of European civilization on a global scale, and the evolution of technology, economics, and politics. Traditional history of “great” men and events is considered alongside the history of “every person,” including the experiences of women, children, the peasantry and the urban lower classes. Finally, this course will provide an understanding of history in a global perspective, focusing on how influences such as disease, agricultural resources, and technological advancements shape the cultures and peoples of the world. Students will frequently analyze primary sources and interpret historical evidence in order to assess issues such as reliability, point of view, and bias in order to develop their own critical thinking skills. Students will also be assigned a variety of assignments to encompass a wide range of study skills determined by the AP Exam including: writing, researching, analysis, and oratory skills. At the end of the course, students can opt to take the AP European History exam.

AP Psychology

1 credit | Prerequisites: B+ or higher in Social Sciences coursework or department approval

The purpose of AP Psychology is to introduce students to the systematic and scientific study of human behavior and mental processes. Course topics include Research, States of Consciousness, Personality, Abnormal Psychology, Development, Memory, Learning, Understanding the Brain and Testing/Intelligence. A variety of teaching methods

including projects, demonstrations, media use, lectures, writing opportunities and class activities will be employed. Students will be expected to take the AP Psychology exam in the Spring. This course is open to Juniors and Seniors.

Microeconomics

0.5 credit | Prerequisites: Sophomore standing or higher

Economics is the study of choices that people make to attain their goals, given their scarce resources. Throughout the class study of microeconomics, we will examine both theoretical and real world applications of economic behaviors and systems. Specifically, microeconomics will study basic microeconomic concepts like the supply and demand model, elasticity, production and cost analysis, and market structures.

Macroeconomics

0.5 credit | Prerequisites: Sophomore standing or higher

Economics is the study of choices that people make to attain their goals, given their scarce resources. Throughout the class study of macroeconomics, we will examine both theoretical and real world applications of economic behaviors and systems. Specifically, macroeconomics will study basic economics concepts, GDP, unemployment, inflation, economic growth, the business cycle, the financial system and the aggregate demand model.

Government

0.5 credit | Prerequisites: Sophomore standing or higher

Government is a one semester, comprehensive course designed to give students a solid understanding of the constitutional foundations as well as the fundamentals of democracy and governance. The course will analyze the importance of checks and balances, court decisions, executive power, legislative processes, and the all-important fourth pillar, the media. Students will weigh and measure these concepts against the Constitution, most notably in the context of the original intent of the Founding Fathers, watershed court cases, and our current situation as a society in the second millennium. Students will participate in class discussions centered around controversial Supreme Court decisions. It is imperative that students come to class prepared to discuss assigned readings and exercises. Through class discussion and analysis, students will develop problem-solving and conflict management skills, as well as the self-control needed to engage in respectful and meaningful dialogue with fellow classmates. Controversy will be encouraged to promote an environment similar to that of the Founders at the Constitutional Convention, where compromise and mutual respect was critical to drafting a Constitutional government. This course relies heavily on primary sources, mostly majority and dissenting court decisions as well as the Constitution and its major Amendments.

AP US Government

1 credit | Prerequisites: B+ or higher in AP World History or World History 2 or approval department approval

This course seeks to foster an understanding and a love of the American political process in preparation for the AP United States Government & Politics Exam. The course is equivalent to a college level political science course, which means that the students will be expected to be active learners. Students will be expected to complete a thorough amount of required readings and research current political topics. The goal and focus of this course is to provide an introduction to an active political life. Students will be exploring the constitutional foundations of American politics, the nature of the American political process, the institutions of governance, and the policy choices made created by the American political process. Needless to say, the course will be rigorous.

AP Comparative Government

1 credit | Prerequisites: B+ or higher in AP World History or World History 2 or department approval

This course is designed to familiarize students with the concepts and methods necessary to develop an understanding of some of the world's diverse political structures. We will examine six countries in detail: China, Great Britain, Russia, Mexico, Nigeria, and Iran. These states represent a vast breadth of cultural complexity and governance, allowing us to uncover similarities and differences across a wide ranging ideological spectrum. The three world approach to categorization will be used to place governments in the proper context. Empirical and normative methods of comparison will be implemented consistently to analyze and assess nations historically and currently. This will equip students with the ability to identify political behaviors and patterns that lead to economic and political changes. Regular journal submissions based on readings from current events will help students stay on top of the ever-changing political landscape.

Theology & Philosophy

The Theology department is dedicated to introducing students to and cultivating them in the intellectual and practical aspects of religious belief and philosophical reflection. This is accomplished by training them to engage critically and charitably with a wide array of religious and philosophical views on reality, ethics, God, and human nature.

Graduation Requirements

- ❑ 0.5 credit of either Biblical Literacy or World Religions
- ❑ Students must take Ethics during their senior year

COURSES

Biblical Literacy

0.5 credit | Prerequisites: None

In this class we will be studying the Old Testament (OT) and the New Testament (NT). It will enable you to recognize allusions to the OT and NT in literature, art, and Western culture. This class will focus on OT tradition and NT application, in order to encourage faith formation. During this term, a familiarization will be developed with the major characters, vocabulary and stories in the Bible. Students will also be exposed to introductory Theological material.

World Religions

0.5 credit | Prerequisites: None

This class begins and ends with humanity's big questions: 1)What is the meaning of life?; 2)Is there a God?; 3)What happens after you die?; 4)Is the Universe moral & just?; 5)What does it mean to be human? During the course of this semester we will explore together how different world religions & cultures have answered these questions. Major philosophies explored will be Hinduism, Buddhism, Confucianism, Taoism, Native American Spirituality, Goddess Spirituality, Judaism, Christianity & Islam. A major theme of this class is to also explore if there are different "ways of knowing" the answers to these big questions through the use of different faculties: reason, emotion, faith, imagination, intuition, language, memory, and experience. The goal of this course is to assist students in the exploration of these questions by looking at how different religions, cultures, and ways of knowing have approached them. As such, we will not only read about religious

ideas but also experience them through doing yoga, meditation, mandala-making, tai-chi, calligraphy, and field trips

Ethics

1 credit | Prerequisites: Senior Standing

As a formative senior course, Ethics challenges students to navigate questions of right and wrong. This course requires students to develop critical thinking, research and synthesize information from many perspectives, and articulate one's own perspective. Ethics class is dedicated to developing these skills by means of class dialogue, establishing an introduction to logical principles, acquiring a familiarity with ethical theories through the close examination of the ideas of seminal philosophers, and learning the basics of the ethical issues in contemporary society.

World Languages

The World Language department is committed to developing proficiency in our target languages and to cultivating interest in their respective cultures. The skills of listening, reading, writing, and speaking are consistently practiced in our language courses.

Graduation Requirements

- ❑ Students must reach and complete the third level of a non-native language

COURSES

French 1

1 credit | Prerequisites: None

In French 1 students are introduced to the sounds of the French language as they develop the four basic skills: understanding, speaking, reading and writing. The emphasis during this first year will be on building a working vocabulary while learning basic grammatical concepts. Students are also introduced to aspects of French culture. From the first day of class students are encouraged to use the language as they participate in class discussions, review homework assignments and perform oral presentations.

French 2

1 credit | Prerequisites: C- or higher in French 1 or department approval

French 2 is designed to further develop the basic skills acquired in French 1. Basic concepts will be reviewed and more complex grammatical structures will be introduced. Students will be expected to communicate in French both orally and in writing. Additional readings and research will deepen students' knowledge of French culture. The majority of the class will be conducted in French.

French 3

1 credit | Prerequisites: C- or higher in French 2 or department approval

French 3 will continue to develop the skills acquired in French 1 and 2. The course will review and reinforce the grammar and vocabulary already learned as well as introduce additional new material. The goal is to integrate the grammar and vocabulary into useful, authentic spoken and written language. Literary excerpts and film may be used as a basis for this integration. The majority of the class will be conducted in French.

French 4

1 credit | Prerequisites: B+ or higher in French 3 or department approval

This course will include a complete review of all previously taught grammar and will integrate it in all four skills with a goal of authentic usage regardless of subject matter. Literary selections and films will be used as the basis for this integration. Students will be expected to demonstrate the ability to communicate with reasonable fluency and accuracy in both spoken and written French.

AP French Language and Culture

1 credit | Prerequisites: Placement in this class requires approval from the French teacher

AP French is a college preparatory course where all language skills are practiced. Students who enroll in AP French must have taken either French 4 or Advanced French. Listening, speaking, reading and writing are continuously enforced while simultaneously acquiring new vocabulary. A thorough review of previous grammatical structures is reinforced for proficiency. We will also explore the cultures of francophone countries around the world. Our reading and audio materials are taken from the AP French Language and Culture 5 steps to a 5 online text. Upon completion, students are expected to take the AP French exam in May.

Latin 1

1 credit | Prerequisites: None

Latin 1 is designed to give students a solid foundation in the basic grammar and vocabulary of the Latin language, as well as introduce the civilization and literature of the ancient Romans. The primary emphasis of the course is to develop reading and translation skills in Latin while learning the first three declensions of nouns and adjectives, personal and relative pronouns, all four conjugations of verbs in the present system, both active and passive, as well as indirect statement. Culture topics include Roman houses, weddings, clothing, and literature.

Latin 2

1 credit | Prerequisites: C- or higher in Latin 1 or department approval

Latin 2 is designed to increase students' knowledge of Latin grammar and vocabulary, to continue their introduction to the culture and writings of the ancient Romans, and to strengthen the skills they learned in Latin 1. The primary emphasis of the course is to improve reading and translation skills in Latin while learning the perfect system of verbs, 4th and 5th declension nouns, demonstrative pronouns, more infinitives, participles, comparison of adjectives and adverbs, deponents, as well as some of the forms and uses of the subjunctive mood. Culture topics include a unit on Pompeii, Roman education, Greek heroes and monsters, among others.

Latin 3

1 credit | Prerequisites: C- or higher in Latin 2 or department approval

This course is designed to complete students' study of Latin grammar, and to introduce them to the conventions of Roman poetry. Students will transition to a reading/translation-focused course after the first semester. During the second semester, students will begin to read real Latin in the form of selections from Ovid's *Metamorphoses*. They will continue to develop and strengthen their knowledge of vocabulary and grammar, while expanding that knowledge to include features specific to poetry, such as scansion. In addition, students will begin to gain an understanding of the cultural and historical background behind the works they read, and learn to think critically about, and to analyze, Roman literature on thematic and poetic bases.

Latin 4 - Latin Literature

1 credit | Prerequisites: B+ or higher in Latin 3 or department approval

In Latin 4 - Literature, students will continue to develop and improve skills in reading and translating through a year-long examination of Virgil's epic poem, the *Aeneid*. In addition, students will gain an understanding of the cultural and historical background behind the work, and will learn to further analyze Roman literature on a thematic and poetic basis. Skills in grammar and vocabulary will be reviewed throughout the year through homework assignments and daily quizzes, as well as in-class review.

Independent Study in Latin

1 credit | Prerequisites: Instructor's approval

Upon successful completion of Latin 4, students interested in taking the Latin AP Exam can opt to take an independent study in Latin. The AP exam covers selections from Vergil's *Aeneid*, which is taught in Latin 4, and Caesar's *De Bello Gallico*. It contains translation passages, multiple choice questions, and short-response questions, both for syllabus-based passages and sight passages, in addition to an essay. The independent course is a full-year study of the necessary selections from the *De Bello Gallico*, and a review of the material covered last year for Vergil's *Aeneid*. Along the way, students will learn about the cultural and historical background behind the work, further analyze Roman literature on a thematic and linguistic basis, and review skills in grammar, literary devices, and vocabulary through homework assignments, discussion, and weekly quizzes.

Spanish 1

1 credit | Prerequisites: None

In Spanish 1 students are introduced to the sounds of the Spanish language as they develop the four basic skills: understanding, speaking, reading and writing. The emphasis during this first year will be on building a working vocabulary while learning basic grammatical concepts. Students are also introduced to aspects of Spanish culture. From

the first day of class students are encouraged to use the language as they participate in class discussions, review homework assignments and perform oral presentations.

Spanish 2

1 credit | Prerequisites: C- or higher in Spanish 1 or department approval

Spanish 2 is designed to further develop the basic skills acquired in Spanish 1. Basic concepts will be reviewed and more complex grammatical structures will be introduced. Students will be expected to communicate in Spanish both orally and in writing. Additional readings and research will deepen students' knowledge of Spanish culture. The majority of the class will be conducted in Spanish.

Spanish 3

1 credit | Prerequisites: C- or higher in Spanish 2 or department approval

Spanish 3 will continue to develop the skills acquired in Spanish 1 and 2. The course will review and reinforce the grammar and vocabulary already learned as well as introduce additional new material. The goal is to integrate the grammar and vocabulary into useful, authentic spoken and written language. Literary excerpts and film may be used as a basis for this integration. The majority of the class will be conducted in Spanish.

Spanish 4

1 credit | Prerequisites: C- or higher in Spanish 2 or department approval

This course will include a complete review of all previously taught grammar and will integrate it in all four skills with a goal of authentic usage regardless of subject matter. Literary selections and films will be used as the basis for this integration. Students will be expected to demonstrate the ability to communicate with reasonable fluency and accuracy in both spoken and written Spanish. Upon completion of this course students may be recommended to take AP Spanish Language and Culture.

AP Spanish Language and Culture

1 credit | Prerequisites: Placement in this class requires approval from the Spanish teacher

This is a college preparatory course where all language skills are practiced. We continuously practice listening, speaking, reading and writing while simultaneously acquiring new vocabulary. All of the grammar that was previously learned is reinforced for proficiency. This course also emphasizes the cultures of the Spanish speaking countries by comparing to our own communities. Students are expected to take the AP Spanish Language and Culture exam upon completion of the course.

Advanced Spanish Literature: Independent Study

0.5 credit | Prerequisites: AP Spanish Language and Culture and instructor's approval

In this advanced course, students read classic novels from Spain. The readings range from as early as the Middle Ages to present day. Our most notable piece is Don Quijote de La Mancha by Miguel de Cervantes. Students may take this course who have previously taken the AP Spanish Language and Culture course. Seniors may choose to enroll in the AP Spanish Language course and the Advanced Spanish Literature course in the same year. Students may choose to continue in the second semester for additional readings and an additional half credit.