

ST. FRANCIS HIGH SCHOOL

CAPUCHIN FRANCISCAN-COLLEGE PREPARATORY



COURSE CATALOG 2018-2019

Founded in 1946 by the Capuchin Franciscans
200 Foothill Boulevard, La Canada, CA 91011
(818) 790-0325 FAX (818) 790-5542 www.sfhs.net
A Catholic Tradition of Enriching the Mind and Heart

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La Canada, California 91011
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www.sfhs.net

*Accreditation: Western Association of Schools and Colleges
Western Catholic Education Association*

Faculty to Student Ratio: 1 to 12.6

President.....Fr. Antonio Marti, OFM Cap.
Principal.....Mr. Tom Moran
Dean of Faculty.....Mr. Gary Murphy
Dean of Students.....Mr. John Jordan
Dean of Studies.....Mrs. Tracy Traver
Dean of Curriculum.....Mr. Ted Carroll

Graduation Requirements

To receive a diploma from St. Francis High School, a student must successfully complete the following minimum requirements:

Religion	4 years / 40 credits
<i>plus</i> the Christian Service requirement for each year	
English	4 years / 40 credits
Social Studies.....	4 years / 40 credits
Foreign Language	2 years / 20 credits
Mathematics.....	3 years / 30 credits
Science	2 years / 20 credits
Physical Education.....	1 year / 10 credits
Health: Classes of 2016	5 credits
Technology Skills: Class of 2017, 2018, 2019	5 credits
Fine Arts.....	5 credits
Electives	50 credits
Including science, mathematics, foreign language, social studies	

Honors and Advanced Placement Courses Available

English	Grades 9 - 12
Mathematics	Grades 9 - 12
Foreign Language	Grades 11-12
Science	Grades 10 - 12
Social Studies.....	Grades 9 – 12

University of California Requirements

Social Studies	2 years
Must include one year of both U.S. History and World History or Cultures	
Mathematics	3 years; 4 is recommended
Foreign Language	2 years; 3 recommended
Must be in the same language	
Laboratory Science	2 years; 3 recommended
Must include one year of both physical and life science	
English	4 years
College Preparatory Elective	1 year
Visual and Performing Arts	1 year
Must be in one discipline	

* This elective is to be chosen from one of the following areas: History, English, Advanced Mathematics, Laboratory Science, Foreign Language, and Social Science.

HONORS DIPLOMA REQUIREMENTS

Honors diplomas are awarded to students who exceed the school's graduation requirements by taking four years of mathematics, and three years of the same foreign language, three years of laboratory science, one advanced placement course in senior year, complete and submit verification of required service hours by May 1, and who achieve a cumulative GPA of 3.60 or higher. (AP U.S. Government/AP Economics equals a 1 year course.) All qualifying courses must be taken within the St. Francis High School curriculum.

ABSENCE

Absences totaling 12 or more hours per course during a semester marking period may result in withheld credit for the semester's work in that course.

ADVANCED PLACEMENT

St. Francis High School offers Advanced Placement courses for college credit in Biology, Calculus, Chemistry, Computer Science, English Language and Composition, English Literature, European History, Human Geography, Latin, Micro Economics, Physics, Spanish Language, Statistics, United States Government, and United States History. Most colleges and universities grant credit and/or advanced standing to students who achieve passing scores on AP exams. A student must take the AP examination in any Advanced Placement course he is enrolled.

REPEATED COURSES

A summer school mark will appear on the transcript in addition to, not in lieu of, the previous mark. Students who take advanced courses in summer school must have the course(s) approved by the Dean of Studies in order to receive credit. Students must attend a regionally accredited summer school in order to obtain credit. Online courses may not be taken to remediate failing grades, or to make up a grade in any lab science. With the permission of the Dean of Studies, online courses may be taken to make up "D" grades.

TRANSFER CREDITS

Credits from courses (college, summer session or adult education classes) from an institution accredited by WASC will be accepted for make-up courses.

PROGRAMMING PROCEDURES

Students who do not complete their Campus Ministry requirements or financial obligation to the school will not be scheduled until these are fulfilled. There is a possibility that certain classes will be closed at that time. Students are assigned to courses based on the course selection requests, which are completed on Plus Portals in the spring. Classroom teachers make recommendations to the Academic Vice Principal who will send home a course selection form for parental signature, and a course catalog listing all courses and prerequisites. Teacher recommendations are also required for enrollment in Advanced Placement/Honors courses. Students who turn in forms after the listed deadline will not have a chance to transfer classes once the semester begins and will be programmed by the Dean of Studies. Students may not request a course based upon teacher preference.

ENGLISH 9

2 Semesters; Mandatory for all Freshmen

Objectives

Vocabulary development using root words; language skills/library usage skills; literary analysis skills; composition skills for developing sentences to paragraphs to themes.

Novels and Plays

The Count of Monte Cristo (Dumas)
Fahrenheit 451 (Bradbury)
Black Like Me (Griffin)
Much Ado About Nothing (Shakespeare)

HONORS ENGLISH 9

Prerequisites: available to select Freshmen Honor Students based on scores on the entrance exam.

Novels and Plays

Cyrano de Bergerac
(Rostand) *Of Mice and Men*
(Steinbeck) *The Chosen*
(Potok)
The Count of Monte Cristo (Dumas)
Great Expectations (Dickens)
Much Ado About Nothing (Shakespeare)

AMERICAN LITERATURE

2 Semesters; Mandatory for all Sophomores

Objectives

Vocabulary development for the SAT and ACT exams; language skills, especially sentence structure and development; literary analysis of American authors, thematically and historically; composition skills, especially exposition, critical analysis and thesis development.

Novels

The Adventures of Huckleberry Finn (Twain)
To Kill a Mockingbird (Lee)
The Great Gatsby (Fitzgerald)
The Catcher in the Rye (Salinger)

HONORS AMERICAN LITERATURE

2 Semesters ; Honors Course for Sophomore

Prerequisites: A grade of "B" or higher in Honors English 9 both semesters and instructor approval. Outstanding students ("A" both semesters) from English 9 may be enrolled if space permits.

Novels

The Adventures of Huckleberry Finn (Twain)
To Kill a Mockingbird (Lee)
The Killer Angels (Shaara)
The Great Gatsby
(Fitzgerald)
The Catcher in the Rye (Salinger)
The Grapes of Wrath (Steinbeck)
The Old Man and the Sea (Hemingway)
Rain of Gold (Villaseñor)

BRITISH LITERATURE

2 Semesters; Mandatory for all Juniors

Objectives

Vocabulary development for the SAT and ACT exams; language skills, study of semantics, fallacies, rhetorical strategies, critical thinking; literary skills and analysis of British/continental authors, thematically and historically; composition skills, especially descriptive, creative, persuasive and narrative writing.

Novels and Plays

Hamlet (Shakespeare)
Brave New World
(Huxley) *Frankenstein*
(Shelley)
The Importance of Being Earnest (Wilde)
MacBeth (Shakespeare)
A Christmas Carol (Dickens)

WORLD LITERATURE

2 Semesters; Mandatory for all Seniors

Objectives

Language skills and vocabulary enrichment; study of rhetoric, literary terminologies, with an emphasis on critical thinking; analysis of world literature across the globe as well as an historic overview of works and study of authors; composition skills and creative, autobiographical, and narrative writing will be covered.

Novels and Plays

The Essential Homer: Selections from the Iliad and the Odyssey
Macbeth (Shakespeare)
Don Quixote-abridged (Cervantes)
The Little Prince (de Saint-Exupery) *The Stranger* (Camús)
Steppenwolf (Hesse)

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

2 Semesters; Honors Course for Juniors

Prerequisites: A grade of "B" or higher in Honors American Literature both semesters and instructor approval. Outstanding students ("A" both semesters) from American Literature may be enrolled if space permits.

Objectives: Language skills; analysis of the use of language and style; analysis of various genres of writing; vocabulary development with emphasis on rhetorical and literary terminology; focus on composition skills, synthesis essays, and timed writings. Students must earn a "B" or better on the summer reading test.

Novels and Plays

Catch-22 (Heller)
The Outliers (Gladwell)
A Prayer for Owen Meany (Irving)
The Shadow of the Wind (Zafon)
The Importance of Being Earnest (Wilde)
Macbeth (Shakespeare)
Rosencrantz and Guildenstern are Dead (Stoppard)

English Department

ADVANCED PLACEMENT ENGLISH LITERATURE

2 Semesters; Honors Course for Seniors

Prerequisites: A grade of “B” or higher in Honors American Literature both semesters and instructor approval. Outstanding students from American Literature (“A” both semesters) may be enrolled if space permits.

Objectives

Language skills, especially as they relate to composition; literary skills and analysis of world literature and development of genres; composition skills; poetry analysis; style analysis; timed writings. Students must earn a “B” or better on the summer reading test.

Novels

Hamlet (Shakespeare)

The Lord of the Flies (Golding)

Les Miserables (Hugo)

Rosencrantz and Guildenstern Are Dead

(Stoppard)

The Power of One (Courtenay)

Frankenstein (Shelley)

The Importance of Being Earnest (Wilde)

World Languages Department

SPANISH 1

2 Semesters

This is an introductory Spanish course that is designed to develop a strong foundation of the communicative skills required for mastery of a second language. This course will focus on form as well as performance. Students will be exposed to a variety of learning strategies and assessments with the ultimate goal of inspiring an appreciation and desire for future years of study. Students will be exposed to real life authentic resources and will be spoken to in the target language. The intention of the course is *not* to teach grammar rules and lists of vocabulary, but rather effective communication in the target language.

SPANISH 2

2 Semesters

The goal is to reinforce and expand upon the fundamental topics of the first year course. The course exposes the student to more challenging, intermediate grammar as well as continued vocabulary building and cultural knowledge. Multimedia resources are utilized and the student is challenged to advance his language fluency via the four modes of communication. Longer writing and speaking assignments are offered and short literary pieces are introduced. The course also includes opportunities for group presentations and there is a continued focus on effective communication in the target language.

HONORS SPANISH 2

2 Semesters

Prerequisites: “A” in Spanish 1 and a recommendation from teacher; Exceptional placement exam score for incoming freshman.

This course is an accelerated version of the Spanish 2-level class. All instruction is given in Spanish. Lessons are supplemented with outside readers, online periodicals, and other internet-based activities. Developing proficiency and integrating language skills using authentic materials and sources are integral parts of this class.

SPANISH 3

2 Semesters

Prerequisites: A minimum of 75% in Spanish 2 and approval of the department faculty.

The course furthers the study of grammar and stresses the development of reading, aural and oral skills for continued study of the language at higher levels. A multimedia strategy is used for many activities and the student has opportunities to prepare audio-visual group presentations, read short stories, and compose short passages and essays on topics of current interest. Classes are conducted primarily in Spanish with occasional English used for clarification of grammar concepts or test instructions.

HONORS SPANISH 3

2 Semesters

Requirement: A Minimum of 92% in Spanish 2 or 85% in Spanish II Honors and a teacher recommendation is required.

This is an upper level *Pre AP* Spanish course that has been designed to further develop the communicative skills required for mastery of a second language and high performance on the AP Spanish Language exam. This course will focus on form as well as performance. Students will be exposed to a variety of learning strategies and assessments with the ultimate goal of generating proficiency and inspiring an appreciation and desire for the Spanish language and culture. Students will be exposed to real life authentic resources and will be spoken to in the target language. The intention of the course is *not* to teach grammar rules and lists of vocabulary, but rather effective communication in the target language.

SPANISH 4

2 Semesters

Prerequisites: B or higher in Spanish 3 or C or higher in Spanish 3 Honors or department approval.

Spanish 4 is an upper level Spanish course that provides an opportunity to develop advanced communicative skills in the target language. This course is dedicated to the acquisition of communicative proficiency by exposure to and discussion of authentic written, auditory and visual sources. All instruction and materials are in Spanish.

ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE

2 Semesters

Prerequisites: An 85% or higher in both semesters of Spanish 3 Honors or in Spanish 4 and approval of the Department.

Course topics and activities are designed to fulfill the College Board's description for AP Spanish Language. The goal is to provide the student with opportunities to develop and express complex thought in conversation and composition with a near native degree of fluency. The student is exposed to contemporary literature, cultural and historical information, and current events through a variety of media, including short stories, online resources and film.

LATIN 1

2 Semesters

This course familiarizes students with the major conjugational and declensional systems of Latin verbs, nouns, and adjectives. Students are shown the linguistic similarities and dissimilarities between Latin and English. This course requires students to develop vocabulary usage, translation, and memorization skills.

LATIN 2

2 Semesters

This course begins with a thorough review of first year Latin. The course teaches form and syntax essential for the reading of the Latin literature, which consists of simple but interesting excerpts selected from a wide range of Latin authors. The aim of this course is to deepen and to widen the student's knowledge of the life, language, and literature of the Romans.

LATIN 3

2 Semesters

Prerequisites: "C" or higher in Latin 2

This course is a survey of Latin literature where students will develop the ability to comprehend and translate Latin at an advanced level. The primary focus of the course is the study of genuine, unmodified passages from standard Roman authors of prose and poetry, including Catullus, Caesar, Horace, Livy, Ovid, Pliny, and Vergil. This course will review all the major grammar and forms from the first two years of Latin, and introduce advanced grammar, poetry scansion, and rhetorical devices.

HONORS LATIN 3

2 Semesters

Prerequisite: "A" in Latin 2 and recommendation from teacher.

This is an upper level *Pre AP* Latin course that has been designed to develop mastery of the Latin language and Roman culture. The rigor of this course is ultimately designed to prepare students for the AP Latin Exam. This course is a survey of Latin literature where students will develop the ability to comprehend and translate Latin at an advanced level. The primary focus of the course is the study of genuine, unmodified passage from standard Roman authors of prose and poetry, including Catullus, Caesar, Horace Livy, Ovid, Pliny, and Vergil. The course will review all the major grammar and forms from the first two years of Latin, and introduce advanced grammar, poetry scansion, and rhetorical devices. Honors students will be expected to complete longer reading assignments, to memorize more vocabulary words, and write analytical essays (in English) on the Latin texts.

ADVANCED PLACEMENT LATIN

2 Semesters

This course is designed to give the student experience with Latin literature at the advanced level. Selections of authentic Latin literature by Julius Caesar and Vergil will be read and critically analyzed. In addition to practicing translation, students will examine the authors' grammar, style, and cultural contexts in preparation for the AP exam.

ALGEBRA 1 / HONORS ALGEBRA 1

2 Semesters; Required for graduation

This course includes material on the following major topics: Language of algebra; adding and multiplying real numbers; transforming and solving equations and problems; addition and multiplication of polynomials; factoring; fractions and mixed expressions; radical expressions; inequalities; graphing functions; relations; linear and quadratic equations; simultaneous equations; rational and irrational numbers; basic introduction into Geometry and Trigonometry. Students having completed Algebra 1 prior to entering St. Francis may take geometry or honors geometry in their freshman year, subject to their passing a placement test.

GEOMETRY / HONORS GEOMETRY

2 Semesters; Required for graduation

Prerequisite: Algebra 1

Requirement: For Honors Geometry a grade of B or higher in both semesters of Honors Algebra 1 and teacher recommendation.

This course includes proofs and material on the following major topics; points, lines and planes; angles and their measures; inductive and deductive reasoning; perpendicular and parallel lines; congruent triangles and their applications; similar polygons; quadrilaterals; inequalities; right triangles; Pythagorean Theorem; trigonometry; circles, tangents, arcs and chords; area and volumes of polygons, prisms, pyramids, cylinders and cones; construction and loci; coordinate geometry, distance, slope and midpoint; transformations.

ALGEBRA 2

2 Semesters; Required for graduation

Prerequisites: Algebra 1 and Geometry

This course includes the following topics: vocabulary and operations of algebra; properties of real numbers; linear open sentences; solving inequalities, graphing inequalities and systems of inequalities; polynomials; rational expressions; irrational and complex numbers; quadratic and higher order equations; direct and inverse variations; coordinate and analytic geometry; determinants and matrices; exponential and logarithmic functions; trigonometry.

HONORS ALGEBRA 2 / TRIGONOMETRY

2 Semesters; Offered to Honors Students

Prerequisites: Algebra 1 and a grade of "B" or higher in Honors Geometry

This accelerated course is designed to prepare the honors student for AP Calculus. It includes the topics described in the California Mathematics Content Standards for a course in Algebra 2, Trigonometry, and Mathematical Analysis. Students will gain experience with mathematical modeling and problem solving in various content areas, including systems of equations, linear programming, polynomial, rational, logarithmic, exponential and trigonometric functions. Students will also be introduced to more abstract topics the Fundamental Theorem of Algebra, the Binomial Theorem, DeMoivre's Theorem, Dantzig's simplex method, conics, parametric curves, sequences and mathematical induction.

TRIGONOMETRY / PRE-CALCULUS

2 Semester Elective

Prerequisites: Algebra 1, Geometry, and a grade of “B” or higher in Algebra 2.

The major topics are functions: their graphs and properties; proving identities involving trigonometric functions; periodic motion, inverses of functions; inverse trigonometric functions; solving right angles; law of cosines; law of sines; vectors and dot product; trigonometric form of a complex number, De Moivre’s Theorem. Pre-Calculus topics also include the algebra of functions and their inverses; polynomial functions; parent functions and their transformations; limits and continuity; logarithmic and exponential functions; matrices, inverse of a square matrix, Gaussian elimination, determinants and Cramer’s rule, linear programming; arithmetic, geometric and recursive sequences and series and their sums; and basic probabilities.

ADVANCED PLACEMENT CALCULUS (AB)

2 Semester Elective

Prerequisite: Grade of “A” or “B” in
Honors Algebra II/Trigonometry or Trigonometry/Pre-Calculus

This course covers the topics described in the College Board syllabus for the Calculus AB Advanced Placement Examination in Mathematics. It is a course in single-variable calculus that includes techniques and applications of the derivative, techniques and applications of the integral and definite integral. The students will cover derivatives and integrals of polynomials, logarithmic and exponential functions, trigonometric and inverse trigonometric functions, and combinations of these functions using the product, quotient, and chain rules. The applications include related rate, graph analysis, optimization, growth and decay, area between curves and volume of revolution problems.

HIGH SCHOOL STATISTICS

2 Semester Elective; Open to Seniors

Prerequisite: “C” or better in Algebra 2, “C” or better in Honors Algebra 2/Trig, “C” or better in Trig/Precalculus

This course uses statistical methods to investigate real-world topics in probability and statistics. Students will be introduced to various methods of collecting, analyzing, and interpreting data. Graphing on histograms, bar graphs, and stem-and-leaf will be used as means to present data. Statistical concepts such as averages, variations, standard deviation, normal distribution, and sampling will be utilized as means to analyze data deviation, normal distribution, and sampling will be utilized as means to analyze data and graphs. Calculator, iPads, will be used for both individual and group projects

**ADVANCED PLACEMENT
CALCULUS (BC)**
2 Semester Elective

Prerequisite: AP Calculus (AB)

Explores the key concepts, methods, and applications of single-variable calculus including all topics covered in AP Calculus AB (functions graphs, and limits, derivatives, integrals, and the Fundamental Theorem of Calculus) as well as additional topics in differential and integral calculus, such as parametric, polar and vector functions, Euler's Method, arch length, area of a revolution of a function MacLauren & Taylor series. Test of convergence and divergence.

All courses require the use of a graphing calculator to help give the students a visual understanding of many of the topics covered and to avoid tedious arithmetic calculation. As the students progress in the levels of mathematics they will increase their ability to use the calculators and be able to apply their use to many more

Physical Education Department

PHYSICAL EDUCATION

1 Semester; Freshmen and Sophomores

Designed to encourage participation in physical activities and offer students an opportunity to pursue a lifelong program of fitness.

Religious Studies Department

THE BIBLE

1 Semester; Mandatory for all Freshmen

The Living Word of God guides students in exploring Sacred Scripture. They will grow in their understanding of Revelation and inspiration and encounter Jesus Christ as the path for salvation. Students will also come to know the people of salvation history from Creation to the early Church. Through this course students will deepen their understanding of Sacred Scripture that will deepen their understanding and appreciation of our Catholic faith.

JESUS CHRIST

1 Semester; Mandatory for all Freshman

God's Love Made Visible guides students' understanding of who Jesus Christ is, who God is, and the true meaning of love. Students will also explore how Jesus makes God's love visible and how we are called to follow Jesus as witnesses to his love.

PASCHAL MYSTERY

1 Semester; Mandatory for all Sophomores

The purpose of this course is to help students understand all that God has done for us through his Son, Jesus Christ. Through this course of study, students will learn that for all eternity, God has planned for us to share eternal happiness with him which is accomplished through the Redemption Christ won for us. Students will learn that they share in this Redemption only in and through Jesus Christ. They will also be introduced to what it means to be a disciple of Christ and what life as a disciple entails.

THE CHURCH

1 Semester; Mandatory for all Sophomores

The purpose of this course is to help the students understand that in and through the Church they encounter the Living Jesus Christ. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today. This Body has both Divine and human elements. In this course, students will learn not so much about events in the life of the Church but about the sacred nature of the Church.

SACRAMENTS

1 Semester; Mandatory for all Juniors

The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the Sacraments, and especially through the Eucharist. Students will examine each of the Sacraments in detail so as to learn how they may encounter Christ throughout life.

CHRISTIAN MORALITY

1 Semester; Mandatory for all Juniors

Students face countless choices and challenges in their daily lives. This course addresses how a relationship with Christ and the Church can lead to choices that are in accord with God's plan. The students learn what it means to live as a disciple of Christ and how the Church strengthens this discipleship.

ECUMENISM

1 Semester; Mandatory for all Seniors

The purpose of this course is to help the students understand the manner in which the Catholic Church relates to non-Catholic Christians as well as to other religions of the world. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course is intended to help students to recognize the ways in which important spiritual truths can also be found in non-Christian religions. It is also intended to help them to recognize the ways in which other systems of belief and practice differ from the Catholic faith.

VOCATIONS

1 Semester; Mandatory for all Seniors

The purpose of this course is to help students understand the vocations of life: how Christ calls us to live. In this course students will learn how all vocations are similar and how they differ. The course is structured around married life, single life, priestly life, and consecrated life. Students will learn what it means to live life for the benefit of others and the value in considering a vocation in service to the Christian community.

PRINCIPLES OF SCIENCE

2 Semesters; For Freshmen

The interrelationships among life, earth and physical sciences are emphasized in this UC accredited course. The general aims and objectives of this course are:

- to meet the requirements of the high school Health curriculum
- to create a sound foundation in basic scientific principles; preparing each student for his upper division Biology, Chemistry and Physics courses.
- to experience a variety of “hands-on” lab activities in the classroom.
- to stress cooperative learning in a multitude of classroom activities; allowing each student to verbalize their ideas within their group and find a viable solution to each problem as a team.
- to emphasize problem solving skills via the scientific method; strengthening critical thinking and analytical skills using inquiry based labs.

BIOLOGY

2 Semesters

Biology is a Laboratory Science that introduces students to the question: “What is Life?” and investigates “How We Can Study the Living World.” The course is built on concepts of living processes and the techniques used in making scientific investigations. A survey of the living world is made with emphasis on cells, evolution, flow of energy, molecular biology, plants, some invertebrates and all five classes of vertebrates. Investigations are made through experiments, dissections and observations. The Science Fair is mandatory for all Biology classes.

Special projects such as model-making, research papers, and the Science Fair project, help to hone scientific skills. The Science Fair is mandatory for all Biology classes.

HONORS BIOLOGY

2 Semesters

Prerequisites: A grade of “A” both semesters in Principles of Science and a cumulative GPA of 3.60 or higher or pass the math and entrance exam, is required for enrollment in the class. Integrated through process, analysis and synthesis is emphasized in honors.

Participation in the Science Fair is mandatory.

ADVANCED PLACEMENT BIOLOGY

2 Semester Elective; Juniors and Seniors

Prerequisites: Completion of Biology and Chemistry; a grade of “A” both semesters in Biology and approval of Advanced Placement Biology instructor.

The course content includes: all requirements of the new, 2013, AP Bio mandated by the College Board, genetics, cytology, histology, embryology, photosynthesis, respiration, human anatomy and physiology, and ecology. The Science Fair is mandatory. The general aims and objectives for AP Biology are:

- to provide the opportunity for in-depth study in areas of biology which provides a sound background for the first year biology course at college level;
- to provide a second year of study in areas in which the students have expressed interest;
- to develop an awareness of the impact of the most recent discoveries in the areas of biology and medical research on society and the future of society;
- to provide an opportunity to become familiar with science literature to develop a facility for its use in doing research;
- to further develop the techniques of scientific observation and interpretation of data through given problems and labs; and
- to assist the student in preparation for the Advanced Placement Biology test he will be required to take a summer course.

CHEMISTRY

2 Semester Elective; Sophomores, Juniors, and Seniors

Prerequisites: Completion of Biology and a cumulative GPA of 2.40 or higher.

This course is designed as introduction to Chemistry content in the context of a hands-on and inquiry-based curriculum. Chemistry and its practical applications are a special emphasis of this course. Participation in the science fair is mandatory.

Some of the specific goals include:

- development of scientific attitudes;
- understanding of scientific principles;
- development of problem-solving skills;
- acquisition of basic instrumental skills in laboratory experiments;
- acquisition of basic techniques in the handling and measuring of chemical materials;
- development of an appreciation of chemistry in our everyday life; and
- development of interests in science

Participation in the Science fair is mandatory.

ADVANCED PLACEMENT CHEMISTRY

2 Semesters

Requirement: Students must have previously taken Chemistry during the summer or regular school year prior to enrollment in the course. Approval for enrollment in the course is based on a student's grades in his math and science classes, as well as the recommendation of his Biology teacher. This course follows the College Board curriculum with focus on preparation for the AP exam. As such, all students are required to take the AP Exam in Chemistry.

Participation in the Science Fair is mandatory

PHYSICS

2 Semester Elective; Seniors

Prerequisites: Completion of Biology and Chemistry with a G.P.A. of 3.0 or higher.

This course is open to senior who have completed Honors Algebra 2/Trigonometry and to seniors who concurrently enrolled in or have completed the fourth year math course: Trigonometry/Pre-Calculus

Students explore principles of Newtonian mechanics; work, energy, and power; simple harmonic motion; mechanical waves and sound; electrostatic and simple DC circuits. Students will learn to use the scientific method and develop their problem solving.

Students will complete a Science Fair Research paper in the first semester and compete in the Science Fair in the second Semester.

Participation in the Science Fair is mandatory.

Science Department

AP PHYSICS B

2 Semester Elective; Seniors

Prerequisites: Completion of Biology and Chemistry with a GPA of 3.5 or higher. This course is open to seniors who have completed Honors Algebra 2/Trigonometry and to seniors who concurrently enrolled in or have completed the fourth year math course: Trigonometry/Pre-Calculus.

Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way to thinking about the physical world.

The course follows the curriculum set forth by the College Board and does not require calculus, but the student's algebra and trigonometry skills must be superior.

The Science Fair is mandatory

KINESIOLOGY AND REHABILITATION

2 Semester Elective; Juniors and Seniors

Requirements: The student must have completed both Principles of Science and Biology with a "C" or higher. This course is a Lecture and Laboratory course designed for the student oriented towards science and interested in the healthcare field. Upon completion of this course, students will possess an understanding of the following areas: human anatomy, human physiology, Kinesiology, exercise physiology, biomechanics, rehabilitation, bracing/taping techniques, and nutrition. Students will also become certified in First Aid and CPR

Social Studies Department

GEOGRAPHY

2 Semesters; Mandatory for all Freshmen

This course is designed to develop the student's knowledge of the world and its people. It will focus on events, the distribution of resources, the basic needs and role of the environment, cultural perceptions, and global decision-making. Please see Technology Basic Skills 1.

WORLD HISTORY

2 Semesters; Mandatory for all Sophomores

This course is a survey of Eastern and Western civilizations from the Enlightenment period to modern times. It offers the student a vantage point of knowledge into the past so that he may understand the present.

**ADVANCED PLACEMENT
WORLD HISTORY**

2 Semesters; Designed for Sophomore Honor Students

Prerequisites: a grade of “B” or higher both semesters in Honors English 9 or an “A” in English 9 both semesters. A cumulative GPA of 3.60 or higher, A grade of “A” in Geography is recommended but not required. Approval of the department is required.

This in-depth study of World History from 1200 to the present is designed to challenge the student to analyze the important issues of this time critically by looking into the past. Special attention is given to sophisticated research and writing skills.

UNITED STATES HISTORY

2 Semesters; Mandatory for all Juniors

This course is a complete survey of the history of our country from earliest times to the present. A main goal is the understanding of American history which is essential to understanding our present day and the future.

**ADVANCED PLACEMENT
UNITED STATES HISTORY**

2 Semesters; Designed for Junior Honor Students

Prerequisites: A cumulative GPA 3.6 or higher. A grade “B” or higher both semesters of AP European History and Honors English 10 or an “A” in both semesters of World History and English 10. Approval of department is required.

Upon passing the Advanced Placement exam, students may receive college credit at most universities.

This in-depth study of American history from pre-discovery to the present is designed to challenge the student to critically analyze the important issues of this time by looking into the past. Special attention is given to sophisticated research and writing skills.

UNITED STATES GOVERNMENT

1 Semester; Mandatory for all Seniors

This course offers the student insight into the mechanisms of government and citizenship. Current affairs and the inquiry approach are utilized.

**ADVANCED PLACEMENT
UNITED STATES GOVERNMENT**

1 Semester; Designed of Senior Honor Students

Prerequisites: A cumulative GPA of 3.6 or higher. A grade “B” or higher both semesters of AP American History or a “B” in American History. Approval of the Department Required.

This in-depth study of American Government from the founding to the present is designed to challenge the student to analyze the structure and practice of U.S. Government critically.

ECONOMICS

1 Semester; Mandatory for all Seniors

This course includes analysis of significant problems of the day and their application to the American economy.

**ADVANCED PLACEMENT
MICRO ECONOMICS**

1 Semester; Designed for Senior Honor Students

Prerequisites: A cumulative GPA of 3.6 or higher. A grade of “B” or higher both semesters in Advanced Placement American History or a B in American History. Approval of the department is required.

This in-depth study of Micro Economics. Special attention is given to sophisticated economic fundamentals as well as research and writing skills.

All AP United States Micro Economics students are required to sit for the AP Exam in May.

**ADVANCED PLACEMENT
HUMAN GEOGRAPHY**

2 Semesters

Prerequisites: available to select Freshmen Honor Students based on scores on the entrance exam.

PSYCHOLOGY

1 Semester Elective; Juniors and Seniors

This course gives the student a survey of the general aspects of the science of psychology. The course encourages the appreciation of the scientific method and readiness to apply it to problems in human behavior.

SOCIOLOGY

1 Semester Elective; Juniors and Seniors

This course examines the ways in which groups of people interact with one another. It involves learning how intergroup and intragroup relationships take place. The course will also examine current social issues using the inquiry approach.

AP PSYCHOLOGY

2 semesters; Juniors and Seniors

Prerequisite: A GPA of 3.6 or higher

This is a rigorous course that discusses in-depth information about personal and others’ behavior. This series will prepare student to pass the AP Psychology exam for college credit.

University of California Requirement

Technology Department

TECHNOLOGY SKILLS

1 Semester, mandatory for Freshmen

This course is designed to bring students to a basic level of proficiency in applying technology in educational settings and real life. Students learn to use the school network, cloud storage and computer terminologies. Digital Citizenship with emphasis on legal issues, copyright law and internet safety form an integral part of the curriculum. With the integration of iPads in our classrooms, apps such as iWork suite, Notability, Showbie have also been included. Students learn Adobe Photoshop skills for image editing. They use Google Drive and Prezi to communicate and collaborate in real time.

Technology Department

ADVANCED PLACEMENT COMPUTER SCIENCE A

2 Semesters: Juniors and Seniors

Prerequisite: Knowledge of Mathematics at the Algebra 2 level (some programming)

This course is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. It is not a substitute for the college preparatory mathematics course. Prospective students should complete an online summer assignment to be with the basics of Java (not Javascript).

Visual and Performing Arts

INTRODUCTION TO VISUAL AND PERFORMING ARTS

1 Semester; Mandatory for Sophomores

This course introduces students to the history of drama. Students will be introduced to the skills of improvisation, stage movement, and character analysis.

CHORUS*

Elective; 1 evening per week

This course offers thorough vocal experience through class instruction. Voice development and part-singing are promoted. Sight reading and musicianship are developed through the performance of choral selections. The chorus performs at their annual Christmas Concert, the

Visual and Performing Arts

MASS MEDIA PRODUCTION*

2 Semester Elective; Juniors and Seniors

A student's aesthetic abilities are developed with the analysis of mass media, specifically, television and film in various genres. Thematic and practical approaches are used. Creative and visual skills are enhanced through original writing and actual production (pre-production and post-production included). Students are introduced to photography, cinematography, editing, directing, acting, and producing. Hands on digital editing for post production are included. First semester covers American television situation comedy, drama and news broadcasting. Second semester tackles the film form-elements of film production and genre study including, writing for film. The top productions are screened and adjudicated at the Festival of the Arts Digital Film Festival.

ART*

2 Semester Elective; Juniors and Seniors

To offer instruction in basic skills and techniques that is required in a fundamental exploration of the studio arts. There are four basic areas we will focus on: drawing skills, pen and ink, color and fundamentals of painting and exploring painting techniques and design elements.

THEATER ARTS*

2 Semester Elective; Juniors and Seniors

The organization of drama emphasizes the development of acting and theater techniques through the student's participation in acting projects. The course is primarily a creative activity; much emphasis is put on each individual's participation in solo or group activities. The course stresses the potential use of theater skills, as well as the history of the theater in relation to the religious morality, mystery, and miracle plays.

DRUMLINE / PIT ENSEMBLE*

2 Semester Elective; Two after school sessions per week plus athletic event appearances

This course exposes students to more of the more different aspects of a drumline and pit ensemble. Instruments are provided. Reading notes and musicianship are developed through exercises, cadence and performance pieces. The drumline and pit ensemble performs in athletic events, local parades, the Festival of the Arts and other community and school events. Students in drumline are members of the varsity team.

GRAPHIC DESIGN

2 Semester Elective; Juniors and Seniors

This course introduces students to graphic design as a form of visual communication through the use of type, image, form and color. While gaining insight into foundational design processes, students will create projects that explore two and three dimensional forms, visual identity and communication, thematic structure and hierarchy, creative problem solving and basic design practice of critiques and discussion.

***Note:**

This course fulfills the UC Visual and Performing Arts requirement.



