



PACIFIC PREPARATORY

COURSE CATALOG

High School Courses

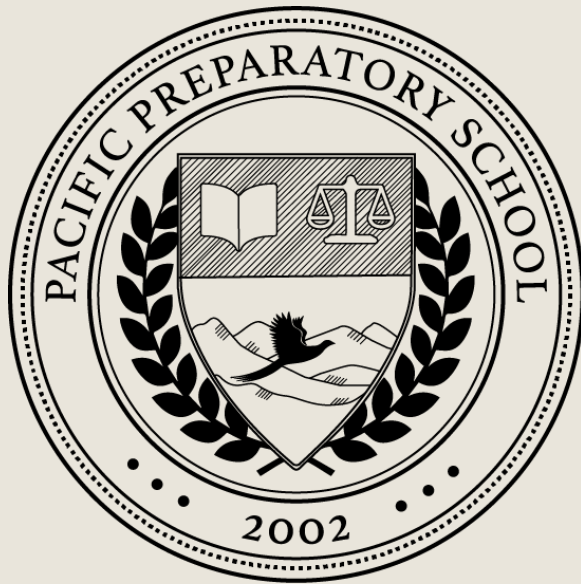
2021-2022

TABLE OF CONTENTS

Mission	3
High School Graduation Requirements	4
Assessment of Course Completion	6
Course Selection & Customization Process	6
Sample Customized Four Year Plan	7
Grades, GPA and Progress Reporting	8
Advising & Special Topics:	8
Standardized Testing	9
Academic Calendar	9
English	10
Mathematics	12
Science	14
Social Studies	17
Arts	19
Languages	20
Physical Education	21

MISSION

Our goal is to facilitate student success in a space where students and teachers can develop meaningful relationships and thrive. We value engaging curriculum, flexibility, and a holistic approach to support the individual needs of our students.



Our vision includes academic programming for our students that inspires:

- a love of learning
- confidence
- self-advocacy

We provide students with a combination of one-on-one, live teacher support and customized curriculum. This isn't the average way students learn, but then again, we're not an average school.

We have innovated on the tutorial model used at Oxford and Cambridge to help our students become independent and creative thinkers. Our one-on-one instruction, our exceptional teachers, and our visionary leadership support our students through every step of the learning process. When working with us, it's common for children to exceed grade level expectations. Through our one-on-one tutorials, K-12 students find deep learning and success.

HIGH SCHOOL GRADUATION REQUIREMENTS

Our baseline graduation requirements for full-time high school students enrolled at Pacific Preparatory follow the most conservative guidelines mandated by the state of California and A-G course requirements. Please see the chart below for details.

ENGLISH LANGUAGE ARTS	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>Four years English Language Arts</i>	<i>Four years of college-preparatory English composition and literature required, integrating extensive reading, frequent writing, and practice listening and speaking with different audiences.</i>
SOCIAL STUDIES	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>Three years social studies including one year of world history and one year of US history & geography, one semester of American government & civics and one semester of economics</i>	<p><i>A-G: Two years of college-preparatory history/social science required, including: one year of world history, cultures or historical geography, and one year of U.S. history; or one-half year of U.S. history and one-half year of civics or American government.</i></p> <p><i>CA State: Three years of history/social studies, including one year of U.S. history and geography; one year of world history, culture, and geography; one semester of American government and civics, and one semester of economics.</i></p>
LANGUAGES	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>Two years languages (other than English)</i>	<i>Two years of college-preparatory coursework required (or through the second level of high school instruction) of the same language other than English (three years are recommended). Language levels are defined by the number of years of high school instruction (e.g., LOTE 1= 1 year; LOTE 2 = 2 years, etc.).</i>

MATHEMATICS	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>Three years mathematics</i>	<i>Three years of college-preparatory mathematics required (four years are strongly recommended), including or integrating topics covered in: elementary algebra, advanced algebra, two-and three-dimensional geometry.</i>
LAB SCIENCE	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>Two years lab science, including chemistry and biology</i>	<i>Two years of college-preparatory science, including or integrating topics that provide fundamental knowledge in two of these three subjects: biology, chemistry, or physics. One year of approved interdisciplinary or earth and space sciences coursework can meet one year of the requirement. Computer Science, Engineering, Applied Science courses can be used in area D as an additional science (i.e., third year and beyond).</i>
ARTS	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>One year visual & performing arts</i>	<i>One year of college-preparatory visual & performing arts required, chosen from one of the following disciplines: dance, music, theater, visual arts (e.g., painting, web/graphic design, film/video, inter/multimedia arts), or interdisciplinary arts.</i>
ELECTIVES	
Pacific Preparatory Requirements	A-G Requirements/CA State Mandated
<i>One year Health and Body Four years completion of Innovation & Leadership projects</i>	<i>One year of college-preparatory coursework required, chosen from: courses approved specifically in the elective subject area, or courses approved in the A-F subject areas beyond those used to satisfy the requirements of the A-F subjects.</i>

PHYSICAL EDUCATION	
Pacific Preparatory Requirements	CA State Mandated
<i>Two years of physical education (may include dance, yoga, etc.)</i>	<i>Two years of physical education</i>

ASSESSMENT OF COURSE COMPLETION

In order to pass their classes and move on to higher-level coursework, students must prove their mastery of subjects through a combination of participation in classes (60 hours of live instruction minimally per required course, 30 hours minimally per elective course), assessment via projects or testing, and teacher recommendation. If a teacher does not recommend a student for course completion, the student may need to complete summer remediation or retake the course to receive credit towards graduation.

COURSE SELECTION & CUSTOMIZATION PROCESS

Incoming students will create a customized four year course plan in collaboration with the Dean of Academics and Curriculum Specialist that takes into account graduation requirements, goals, interests and needs. The coursework is then modified according to student interests and goals. For example, an elective in novel-writing may be adjusted to “Young Adult Dystopian Fiction Novel-Writing” if a student expresses an interest in a specific genre.

We may also make recommendations around college counselors, test preparation, or other wrap-around support services. This plan may shift according to the changing needs of the student, but overall will aim to provide the student with a robust high school experience that prepares them for their next stage.

Our recommendation is students carefully pair required coursework with complementary electives in order to provide a robust, engaging & well-rounded high school experience. Students hoping to take accelerated (AP-level or higher-level math) coursework must prove their ability to keep up with the rigor of the academics via placement exams and previous coursework.

SAMPLE CUSTOMIZED FOUR YEAR PLAN

The following sample four year plan shows how we might customize coursework for a musician who eventually wants to attend the Juilliard School.

	9TH	10TH	11TH	12TH
ENGLISH	<i>English I:</i> Theme: Lyricism in Text Elective: Poetry	<i>English II:</i> Theme: How Artists Write About Art Elective: Songwriting & Lyrics	<i>English III:</i> Theme: Elective: Music Criticism	<i>English IV:</i> Theme: Musicians in Context (Biographies) Elective: Journalism & Blogging (about music)
MATH	Algebra I	Geometry	Algebra II	Pre-Calculus
SOCIAL STUDIES	Ancient Civilizations & the Origins of Music	Modern World History Elective: The Geography of Music	US History & Civics	AP Human Geography
SCIENCE	Biology & Biology Lab	Chemistry & Chemistry Lab	Physics	Science Elective: Sound & Acoustics
ARTS	(Independent: Band)	Website Design	(Independent: Band)	Podcast Creation
PHYSICAL ED	Hip hop dance	Hip hop dance	Hip hop dance	Hip hop dance
SPECIAL	Music in schools	Music in schools	Music in schools	Music in schools

PROJECTS	Volunteering & community service project	Volunteering & community service project	Volunteering & community service project	Volunteering & community service project
STANDARDIZED TEST PREPARATION	PSAT	PSAT	ACT or SAT AP Music Theory SAT II Math (L1) SAT II Lit	ACT or SAT AP Human Geography

GRADES, GPA AND PROGRESS REPORTING

Students in all program types will receive diagnostic assessments (ELA and math), syllabi, progress reports, and report cards according to our academic calendar. They will also receive a Summary of Work Completed or a transcript, depending on circumstances, when they have completed their work with Pacific Preparatory. All high school students will receive semester grades and their GPAs will be weighted if they have opted to take AP-level courses.

Students enrolled at Pacific Preparatory may earn credit for a course taken at another school. The course must be academically comparable to courses offered at Pacific Preparatory and the school offering the course must be accredited. Credit will be accepted at the discretion of Pacific Preparatory.

ADVISING & SPECIAL TOPICS

Full time students in grades 6-12 will be assigned an advisor each semester and will meet with their advisor bi-monthly to discuss the following:

- Goals
- Extracurriculars
- Volunteer & internship opportunities
- Leadership & entrepreneurship projects

Students in grades 9-12 will complete a self-directed project (independent study) each year under the supervision of their advisor.

STANDARDIZED TESTING

We recommend college-bound students consider preparations for taking standardized tests as part of their coursework.

Tests include:

- PSAT or PreACT
- SAT or ACT
- SAT II
- AP exams

We recommend students begin considering these preparations at least a year prior to their first real test date. We conduct all of our standardized test preparation through Tutor Corps.

ACADEMIC CALENDAR

In general, the schedule for Pacific Preparatory follows that of a traditional academic school year, with federal holidays and longer breaks in the winter and spring. Students may choose to continue coursework over the summer or not. Check on our website for our most up-to-date academic calendar.

HIGH SCHOOL-LEVEL COURSE LISTINGS

The coursework described below acts as a baseline for academic planning purposes. Through our customization process, we adjust the content of our syllabi for each student according to that student's goals, interests and needs.

Please note that elective courses require 30 hours minimally of live instruction and core coursework require 60 hours minimally of live instruction.

ENGLISH

English I: Students will read a range of genres in English Language Arts including novels, drama, poetry, creative nonfiction, journalism and fiction, exploring techniques authors employ using language and structure to tell their stories. Students will also practice organizing their responses and ideas in the form of essays, reports and creative writing, developing their voices as writers.

English II: In this continuation of English I, students will hone their analytical reading, writing and thinking skills through a variety of texts in a variety of genres according to a customized theme. Themes could include (but are not limited to): The American Dream, Dystopias & Apocalypses, Nature & Technology, Ethical Dilemmas.

English III: In this continuation of English II, students will hone their analytical reading, writing and thinking skills through a variety of texts in a variety of genres according to a customized theme. Themes could include (but are not limited to): The American Dream, Dystopias & Apocalypses, Nature & Technology, Ethical Dilemmas.

English IV: In this continuation of English III, students will hone their analytical reading, writing and thinking skills through a variety of texts in a variety of genres according to a customized theme. Themes could include (but are not limited to): The American Dream, Dystopias & Apocalypses, Nature & Technology, Ethical Dilemmas.

AP-Level Topics

**All AP-level courses follow the curriculum outlined by the CollegeBoard.*

- English Language & Composition
- English Literature & Composition

Elective Topics

The Art of the Novel: Students will learn the fundamentals of novel-writing and begin laying the groundwork for completion of their own novel.

The Art of the Short Story: Students will learn the fundamentals of short story-writing and practice writing their own short stories.

Creative Nonfiction: Students will learn the craft of creative nonfiction through reading and writing practice.

Blogging & Journalism: Students will learn the fundamentals of blog writing & content promotion and in addition will receive an introduction to journalistic standards and best practices.

Screenwriting: Students will learn the fundamentals of screenwriting and practice writing their own screenplay.

Film Studies: Students will get an introduction to film analysis and criticism and learn about the history of film.

Lyrics & Songwriting: Students will study the art of writing lyrics for their own songs through studying the lyrics and album narratives of other songwriters.

Introduction to Poetry: Students will learn the fundamentals of poetry through reading and writing practice.

Speech Writing & Public Speaking: Students will learn the fundamentals of speech writing and practice delivering presentations with the goal of reducing anxieties around public speaking.

MATHEMATICS

Algebra I: Students will learn the basics of algebra I, including foundational concepts, solving equations & inequalities, units of measurement, linear equations & graphs, inequalities, functions, sequences, exponents & radicals, quadratics & quadratic functions, and irrational numbers.

Geometry: Students will learn the basics of geometry, including foundational concepts, transformations, congruence, similarity, triangles, solid geometry, analytic geometry, and circles.

Algebra II: Students will learn the basics of algebra II, including interpreting and transforming functions (linear, absolute value, quadratic, polynomial), complex numbers, matrices, inequalities, factoring polynomials, and more.

Pre-Calculus: Students will learn the basis of calculus, studying the properties and graphs of trigonometric, rational, inverse, exponential, polynomial and logarithmic functions. In addition, students will study inequalities, polar coordinates, vectors, sequences, series and limits in preparation for calculus.

Calculus AB: Students will learn a variety of topics in calculus, such as limits, differentiation and integration of functions. Students will find derivatives and evaluate finite and infinite limits graphically, numerically and analytically.

Calculus BC: Students will learn a variety of topics in calculus, such as functions and graphs, limits, continuity, derivatives and differentiation, composite, implicit and inverse functions, contextual applications, analytical applications, integration and accumulation of change, parametric equations and polar coordinates.

Statistics: Students will learn the fundamentals of exploratory analysis, data collection, probability, sampling distributions, inference for quantitative data and more.

AP-Level Topics

**All AP-level courses follow the curriculum outlined by the CollegeBoard.*

- Statistics
- Calculus (AB or BC)

Elective Topics

Interdisciplinary Projects (Applied Math): Students will apply the fundamentals of their required coursework to real world situations.

Logic & Math Games: Students will explore math through logic and math games, solving new puzzles every week.

History of Math: Students will learn more about the historical foundations of math through articles, literature and discussion.

SCIENCE

Biology & Biology Lab: Students will study the basics of biology, including foundational concepts, cells and cell processes, DNA, genetics, evolution, viruses & bacteria, classification & taxonomy, and the science of plants & animals. This course includes a lab component.

AP Biology: Students will complete an accelerated biology course with the goal of learning all of the material tested on the AP biology exam, culminating in the student completing the exam as a final.

Chemistry & Chemistry Lab: Students will learn the fundamentals of chemistry including the periodic system, atoms, molecules and ions, stoichiometry, atomic structure and bonding, gases, liquids and solids, properties of solutions, energy, acids and bases, and organic chemistry. This course also includes a lab component. This course also includes a lab component.

Physics & Physics Lab: Students will learn the fundamentals of physics including the study of motion, energy, heat, radioactivity, sound, light, electricity, magnetism, relativity and cosmology. This course includes a lab component.

Neuroscience & Psychology: Students will explore how the brain works on a neurological level, including the structure and function of the nervous system, and how changes in the brain's systems can cause neurological conditions and disorders. This course will include some readings into the history of psychology as well.

Physiology: Students will explore the science behind how different animals have adapted on a physiological level to survive in their environment. This course will focus mainly on vertebrate physiology and includes a lab component.

Health & Body (*required elective - 30 hours*): Students will learn about sexual reproduction, sexual development, sexual identity, gender identity, sexual decision-making, sexually transmitted diseases, contraception, consent, and healthy relationships.

AP-Level Topics

**All AP-level courses follow the curriculum outlined by the CollegeBoard.*

- Chemistry
- Biology
- Psychology
- Computer Science
- Environmental Science

Elective Topics

History of Science: Students will explore the foundations of science starting from ancient times through the enlightenment. This course may focus on a primary scientific topic, such as chemistry, biology or physics, in order to pair with the core science class the student is taking.

Introduction to Computer Science: Students will learn the fundamentals of computer science through designing their own games, art and digital stories. This course focuses primarily on Python.

Environmental Studies: Students will learn the fundamentals of environmental studies through readings and case studies covering topics such as resource management, clean energy, and climate change.

Nutrition: Students will dive deeper into subjects in biology as they relate to topics in human health and nutrition. This course will include a combination of anatomy and physiology to explore why humans are what we eat, and how we can eat to maximize what we are.

The Chemistry of Food: Students will explore how chemistry applies to the worlds of baking, fermenting, smell and taste. In this course, students will learn the answers to the questions: why does bacon smell so good? What's the chemistry behind barbeque? How does marinating work, chemically speaking?

Botany: Students will dive deeper into subjects in biology as they relate to topics in botany, including the anatomy and ecology of plants. This course will also incorporate relevant historical readings for students to learn about the geographical and historical components of botany, in addition to the scientific.

Biotechnology: Students will dive deeper into subjects in biology as they relate to topics in biotechnology, including micropipetting techniques, DNA analysis, gel electrophoresis and more. This course will also include readings and discussions of ethical considerations as they relate to biotechnology.

Sound & Acoustics: Students will dive deeper into the science of sound and acoustics, exploring the physics behind music through reading, discussion and hands-on projects. This course is best paired with physics as it incorporates the science behind sound waves, decibels, harmonics, and the doppler effect.

Introduction to Robotics: Students will learn the fundamentals of robotics through designing and programming their own robot. This course may also include associated

readings about the scope of robotic applications, the ethics surrounding robots, and the significance of robots in culture.

Engineering & Technology: Students will explore topics in engineering and technology, and learn the process of combining science and technical skills to seek solutions to the world's problems. In addition to completing hands-on projects, students will also develop important foundational literacy skills in the systems and histories of invention and innovation.

Astronomy: Students will explore topics in astronomy, including the solar system, black holes, the big bang theory and the universe.

Zoology: Students will explore topics in zoology, including a deep dive into the subjects of morphology and systematics both in vertebrates and invertebrates.

SOCIAL STUDIES

Ancient Civilizations: Students will explore the beginnings of human civilization and the major formative events in history that have shaped the world since ancient times all the way to the middle ages. Historical explorations in this course include readings about the geographic, environmental and biological changes that have contributed to distributions of power worldwide.

Modern World History: Students will explore the major formative events in history that have shaped the world since the middle ages, including intellectual trends, revolutionary movements, social interactions, political ideologies, economic theories and geographical impacts.

US History & Civics: Students will learn the history of America starting from pre-colonial times through the 1980s. This course also provides an overview of the political systems of American government and its history.

Economics: Students will learn the fundamental concepts of economics, from micro to macro. By the end of the course they will better understand how the market functions and see the world through the perspective of an economist.

AP-Level Topics

**All AP-level courses follow the curriculum outlined by the CollegeBoard.*

- Comparative Government & Politics
- US Government & Politics
- European History
- Human Geography
- Macro or Micro Economics

Elective Topics

Topics in Current Events: Students will examine current events as they relate to history through reading, writing and discussion.

History of Science or Math: Students will explore the history of science or math (or a particular topic in either of those subject-areas) through reading, writing and discussion.

Introduction to Philosophy: This course provides students with an overview of philosophy and the nature of philosophical inquiry. Students may choose to customize this course in order to focus on a particular subject under the heading of philosophy, including the philosophy of science, religion, bioethics or ethics.

Projects in Citizenship: Students will work with an advisor on an independent project involving community service.

World Geography: Students will learn the fundamentals of geography, cartography and dive deeper into the ways geography has impacted historical events.

Ethnic Studies: Students will study the social, political, economic and historical perspectives of America's diverse racial and ethnic groups. This course may be customized to focus on one particular racial or ethnic group (i.e. black history, Chicano history, etc.) or provide a more broad overview.

ARTS

Full-time high school students at Pacific Preparatory must complete 2 years of arts courses minimally in order to graduate, which can be completed during any of their four years at the school. Please note some courses may require additional fees for software & other materials.

Art Foundations: Students will learn the fundamentals of aesthetics, art criticism, art history and studio production through readings, hands-on projects in a variety of mediums and discussion. This course culminates in a portfolio evaluation and final project in the medium of the student's choosing.

Website Design & Branding: Students will learn the basics of web design (HTML and CSS) and branding through creating their own live homepages. This course requires students to put what they're learning into practice by creating a simple website for themselves based on their interests and hobbies.

Film Studies and Filmmaking: Students will learn the basics of filmmaking through studying films, readings, discussions, and filmmaking practice. This course combines a high-level approach to film theory with a hands-on approach to necessary software.

Introduction to Graphic Design: Students will explore the principles of design, color theory, typography, logo design and page layout through readings, discussion and practice. This course combines a high-level approach to design theory with a hands-on introduction to necessary software.

Podcast Creation: This course will help students turn their idea for a podcast into a reality, providing support in the areas of both storytelling and technical assistance around how to best record and edit for sound quality.

Digital Photography: Students will learn the fundamentals of digital photography, including composition, lighting and image editing. This course culminates in a portfolio evaluation based on the student's chosen interest, whether they aim to pursue commercial, architectural, fine art, editorial or documentary photography.

AP-level Topics

**All AP-level courses follow the curriculum outlined by the CollegeBoard.*

- Art History
- Art & Design & Drawing
- Music Theory

LANGUAGES

High School students at Pacific Preparatory must complete 2 years of language courses minimally in order to graduate, which can be completed during any of their four years at the school.

Course options include:

- French I, II, III
- Spanish I, II, III
- Chinese I, II, III
- Japanese I, II, III
- Latin I, II, III
- Italian I, II, III
- German I, II, III
- American Sign Language

AP-Level Topics

**All AP-level courses follow the curriculum outlined by the CollegeBoard.*

- French
- Spanish
- Chinese
- Japanese
- Latin
- Italian
- German

PHYSICAL EDUCATION

Note: Pacific Preparatory requires two years of physical education. We accept credits for evidence of weekly dedication to the following options:

- Dance (any kind)
- Movement (pilates, yoga, stretching, etc.)
- Weight lifting/training
- Team sports (any)

- Aerobics/gym workouts
- Cycling
- Swimming
- Jogging, walking or hiking