

**Course Descriptions
and Educational Planning
2026-2027**



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My Personal Academic Plan

Graduation Requirements

Students must complete 270 credits in the following subject areas to qualify for **The Preuss School UC San Diego High School** diploma:

Subject Area	Credits Required
History/Social Science	30
English	40
Mathematics	30
Laboratory Science	30
Foreign Language	20
Visual and Performing Arts	10
Physical Education/EHS	20
UCSD Junior/Senior Seminar	10
Senior Exhibition/Wheel	10
Electives	70
Total Credits to Graduate	270

In addition to meeting all The Preuss High School UC San Diego graduation requirements, all students are required to complete an internship and research paper within their Senior Wheel course, a service learning project within their junior year, and present all three at a Senior Exhibition in order to receive a diploma.

College Admissions Requirements

How does the University of California determine eligibility?

All California high school seniors who fulfill the following requirements will be entitled to a review of their application at each UC campus to which they apply. They must:

- Complete a minimum of 15 college-preparatory courses (a-g courses) with a letter grade of C or better, with at least 11 courses finished prior to the beginning of your last year of high school.
- **Maintain a GPA of 3.0 or better** (weighted by honors/AP bonus points) in the "a-g" courses taken after ninth grade. You may use [this tool](#) to calculate your UC/CSU Eligibility GPA.

How does the California State University determine eligibility?

All California high school seniors who fulfill the following requirements will be entitled to a review of their application at each CSU campus to which they apply. They must:

- Complete a minimum of 15 college-preparatory courses (a-g courses) with a letter grade of C or better
- **Maintain a GPA of 2.5 or better** (weighted by honors/AP bonus points) in the "a-g" courses taken after ninth grade. You may use [this tool](#) to calculate your UC/CSU Eligibility GPA.
- A student earning a GPA between 2.00 and 2.49 **may** be evaluated for admission based upon supplemental factors including: Number of courses exceeding minimum "a-g" requirements, GPA in math and or science courses, Household income, or Extracurricular and leadership involvement.

How do private schools and community colleges determine eligibility?

- Completion of the UC/CSU requirements (above) meets minimum course requirements of most private schools. Check with your specific colleges of interest for more information and for minimum GPA requirements.
- Successful graduation from Preuss will meet minimum eligibility requirements for community colleges.

UC/CSU A-G Courses

- A) **History/Social Science**- 2 Years Required
- One year of world history, cultures, or historical geography
 - One year of U.S. history or one semester of U.S. history and one semester of American government or civics
- B) **English** - 4 Years Required
- Four years of college preparatory English composition and literature
- C) **Mathematics** - 3 Years Required, 4 Years *Recommended*
- Three years of college-preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry.
 - A geometry course or an integrated math course with a sufficient amount of geometry content must be completed.
 - Approved integrated math courses may be used to fulfill part or all of this requirement, as may math courses taken in the seventh and eighth grades if the high school accepts them as equivalent to its own courses; also acceptable are courses that address the previously mentioned content areas and include or integrate probability, statistics or trigonometry.
 - Courses intended for 11th and/or 12th grade levels may satisfy the required third year or recommended fourth year of the subject requirement if approved as an advanced math course.
- D) **Laboratory Science** - 2 Years Required, 3 Years *Recommended*
- Two years of college preparatory science providing fundamental knowledge in two of these three foundational subjects: biology, chemistry and physics.
 - One year must be a biological science, and one year must be a physical science.
 - Computer Science and Engineering courses may be used in area D as an additional science (i.e., third year and beyond).
- E) **Language Other Than English** - 2 Years Required, 3 Years *Recommended*
- Two years of the same language other than English are required.
 - Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, composition and culture.
 - American Sign Language and classical languages, such as Latin and Greek, are acceptable, as are Native American languages.
 - Courses taken in the seventh and eighth grades may be used to fulfill part or all of this requirement if the high school accepts them as equivalent to its own courses.
- F) **Visual and Performing Arts** - 1 Year Required
- One yearlong course of visual and performing arts chosen from the following: dance, drama/theater, music or visual – or two one-semester courses from the same discipline.
- G) **College Preparatory Elective** - 1 Year Required
- One year (two semesters) chosen from courses specific to the elective (G) subject area or courses beyond those used to satisfy the requirements of the A-F subjects.

Sample 7-Year Course Plan

Grade	English	History	Math	Science	University Prep	World Language	Physical Education	Electives
6	Language Arts 6	Social Studies 6	Core Math 1	Advanced Science 6	University Prep 6	Literacy 6	EHS 6	Elective Wheel 6
7	Advanced English 7	World History & Geography 7	Core Math 2	Advanced Science 7	University Prep 7	Spanish or Enrichment	EHS 7	Elective Wheel 7
8	Advanced English 8	US History & Geography 8	Int Math 1 <i>(or repeat a course, if needed)</i>	Advanced Science 8	University Prep 8	Spanish <i>(until AP Spanish Lang is completed)</i>	Sports Academy	Elective Wheel 8, Orchestra, Tech, or ASB
9	Advanced English 9	Ethnic Studies	Int Math 2 <i>(or repeat a course, if needed)</i>	Advanced Biology	University Prep 9	Spanish <i>(until AP Spanish Lang is completed)</i>	EHS 9/10, JV Athletics, or Athletics	Elective
10	Advanced English 10	AP African American Studies <i>(or repeat Ethnic Studies, if needed)</i>	Int Math 3 <i>(or repeat a course, if needed)</i>	Advanced Chemistry <i>(or repeat Biology, if needed)</i>	University Prep 10	Spanish <i>(until AP Spanish Lang is completed)</i> or Elective	EHS 9/10, JV Athletics, or Athletics	Elective
11	AP English Lang/Comp	AP US History	PreCalc <i>(or repeat a course, if needed)</i>	Physics or Chemistry	UCSD Junior Seminar	Spanish <i>(until AP Spanish Lang is completed)</i> or Elective	JV/Athletics or Elective	Elective
12	AP Eng Lit/Comp	AP US Gov and Politics	Calc or Data Science <i>(or repeat a course, if needed)</i>	AP Science <i>(Bio, Chem, Env Sci, Physics)</i> OR AP Psychology <i>(or Physics)</i>	UCSD Senior Seminar	Spanish <i>(until AP Spanish Lang is completed)</i> or Elective	JV/Athletics or Elective	Senior Wheel

Notes

- Students must complete one year of visual and performing arts within their high school elective courses.
- If students earn a D/F grade in a core high school graduation course, students may need to repeat a course or attend summer school.
- Per the charter of The Preuss School, students must complete Spanish through AP Spanish Language.
- Students may be placed in literacy or math enrichment courses in lieu of electives, at the recommendation of teachers.
- In addition to meeting all The Preuss High School UC San Diego graduation requirements, **all students are required to complete an internship and research paper within their Senior Wheel course, a service learning project within their junior year, and present all three at a Senior Exhibition in order to receive a diploma.**

Clubs and Community Service

Clubs and Academic Organizations

Participation in clubs and extracurricular activities requires a minimum citizenship and academic G.P.A. requirement.

Art Club	Model United Nations
Asian Pacific Islander Association	Multicultural Empowerment Club
Badminton Club	Music Composition Club
Black Student Union	National Honor Society
Book Club	TSU-NAMI (National Alliance on Mental Illness)
Crochet Club	Peer Counseling
Culinary Club	Rho Kappa Social Studies Honor Society
Ecology Club	Robotics
Fashion Club	Rock Band
Film Club	Spanish National Honor Society
Finance Club	Speech and Debate Club
Gaming Club	Tri-M Music Honor Society
Gardening Club	Triton Alliance
Gender Sexuality Alliance	Undocumented Studies and Allies Club
Henna Club	Volleyball Club
Interact Club	

Community Service

Since 1998, our students have been accruing volunteer hours as part of the community service component of our school's charter. Community service is a method by which students learn "beyond the classroom" and actively participate in thoughtfully organized community experiences that:

- Meet actual community needs
- Are integrated into the advisory curriculum
- Foster a life-long commitment to service and the ability to work as a team member
- Develop academic and leadership skills and possible employment opportunities

The Preuss School takes an active role in developing a Community Service program for our campus. Students in grades 9, 10 and 11 will complete community service hours within their community and turn in community service verification slips to their advisory teacher. Students in grade 12 will fulfill the 25-hour requirement in the Service Learning portion of their Senior Wheel.

The hourly expectation will be:

Grade 9 – 10 Hours

Grade 10 – 10 Hours

Grade 11 – 15 Hours

Grade 12 – 25 Hours

Planning Courses for 2026-2027

Planning an educational program for the next school year will require the collaboration of students, advisory teachers, content, teachers, parents, and counselors. This booklet provides you the tools you will need to make well-informed choices.

Courses in academic or core subjects have been designed to meet and exceed the University of California's "a-g" pattern. Electives focus on technology, engineering, visual and performing arts, leadership development, and literacy support. The Preuss School University Prep (Advisory) course in Grades 6-12 concentrates on providing students with the skills to be a successful college student and lifelong learner. Courses with the (P+) sign are weighted for The Preuss School GPA and the UC application. Students must earn "C" or better to receive a weighted grade point in an AP course. College Prep courses are designated as (P). Colleges require a minimum "C" grade in all core courses to be eligible to apply. Core courses with a grade of "D" or "F" must be repeated.

Consider your course selections carefully, since changes to your schedule may not be possible in August. Listen to the advice of your parents, present teachers, and your counselors in selecting appropriate courses. Make thoughtful choices and be sure to have the student and the parent or guardian review courses selected on Aeries parent portal. Some "selective" electives such as ASB, Honors Choir, Intermediate Orchestra, Journalism, and Yearbook may require an election, audition or application. You may select these electives, but you must also complete the process described in the course description. Our grade 6-12 curriculum plan has been formulated with future university admission eligibility in mind. If you have any questions, please call your child's University Prep Teacher or Guidance Counselor.

Common Core State Standards

The Common Core State Standards (CCSS), developed from a national initiative and consistent across the United States, were implemented in California, beginning in the 2014-2015 school year. The goal of the CCSS is to make sure that all students are well prepared for college, technical education, or the workplace after high school graduation. **The CCSS address content areas in Reading/Language Arts and Mathematics, and they include standards related to content area reading in History/Social Studies, Science, and Technical Subjects for Grades 6-12.** The CCSS are important because they help ensure that all students, no matter where they live, are prepared for success in college and the workforce. The CCSS provide a clear roadmap for learning for teachers, parents, and students. Having clearly defined goals helps families and teachers work together to ensure that students succeed. They also help students develop critical thinking skills in language arts, mathematics, and literacy across subject areas that will prepare them for college and career. In each course, the teacher explains how students are expected to master the Common Core State Standards for that subject area and grade level.

A complete set and information about the CCSS can be found at the following website: www.corestandards.org

Additional detailed information about the CCSS also can be found at this website: www.capta.org/sections/programs/e-standards.cfm

Course Descriptions by Department

English

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Language Arts 6

Grade: 6 | Prerequisites: None | *Full Year Course*

Students will develop their academic and creative writing skills by meeting the Common Core State Standards in English Language Arts in the following areas: apply the steps of the writing process to produce a variety of informative, persuasive, creative, and poetic pieces demonstrating the rules of the English language including grammar, sentence structure, punctuation, and spelling. Beginning research skills are emphasized as well.

Literacy 6

Grade: 6 | Prerequisites: None | *Full Year Course*

Students will meet the Common Core State Standards in English Language Arts in the following areas: reading novels and short stories in different genres; using word relationships and context clues to determine the meaning of words and phrases in a text; responding to non-fiction, fiction, poetry, and drama using interpretive, critical and evaluative processes; reading informational materials to support opinion with text evidence, extend ideas, and produce oral and written work to communicate information. Students will participate in whole class and small group discussions and will give individual and group presentations.

Advanced English 7

Grade: 7 | Prerequisites: None | *Full Year Course*

Students will meet the Common Core State Standards in English Language Arts for grade 7. The course consists of the interrelated study of literature, writing, and oral communication. Students read and respond to historically or culturally significant works of literature that reflect and enhance their studies of language, and the understanding of historical transformations of language and writing. This includes informational materials. Students write autobiographical narratives; responses to literature; persuasive essays, and a research paper. Systematic vocabulary development includes the study of Greek, Latin, and Anglo-Saxon roots. English language conventions consist of sentence structure, grammar, punctuation, capitalization, and spelling. Students deliver several oral presentations throughout the year and focus on personal and argumentative writing to maximize the improvement and development of language and writing skills.

Advanced English 8

Grade: 8 | Prerequisites: Summer reading requirement | *Full Year Course*

Students will meet the Common Core Standards in English Language Arts for grade 8. The course focuses on a variety of narrative and informational reading strategies, analytical writing techniques and communication skills. Students read, interpret and respond to: narratives, short stories, non-fiction, historical fiction and dramatic plays. They expand their understanding of literary and argumentative writing including doing research, citing strong sources with in-text citations, and citing works. Students learn to evaluate, analyze and synthesize information around common themes found in a variety of texts, print and digital media, and learning experiences. Grammar instruction focuses on standard forms of American English, which include: spelling, vocabulary, grammar and usage; as well as mastering sentence structure, active—passive voice, and subject—verb agreement. All student writing is expected to demonstrate proficiency in adhering to the conventions of American English.

Advanced English 9 (P)*

Grade: 9 | Prerequisites: Summer reading requirement | *Full Year Course*

**This course meets the English requirement for admission to UC and CSU.*

Students will meet the Common Core State Standards in English Language Arts for grade 9, with an emphasis on building reading stamina and reading strength to adequately prepare for AP-level English classes. The course consists of the interrelated study of literature, writing, and oral communication, with a frequent expectation of oral communication in groups and individually. The standard forms of American English, which include spelling, vocabulary, grammar, and usage, are taught through the study of literature and nonfiction texts, and all student writing is expected to demonstrate proficiency in adhering to the conventions of American English. Units of study may focus on genres, themes, or interdisciplinary elements. A variety of writing types are emphasized in each unit, ranging from short responses to personal narratives or full essays.

Advanced English 10 (P)*

Grade: 10 | Prerequisites: Summer reading requirement | *Full Year Course*

**This course meets the English requirement for admission to UC and CSU.*

Students will meet the Common Core State Standards in English Language Arts for grade 10. The course emphasizes an in-depth study of different themes and modes of communication and the study of vocabulary, short stories, nonfiction, poetry, drama, and novel. The curriculum integrates reading, writing, speaking, listening, and viewing skills. Increased use of multicultural literature and works by writers of color and women is encouraged. Preuss students will also experience broad exposure to English Literature. Activities will include personal responses to the literature and small group discussions. Writing types include response to literature, biographical narrative, poetry, critical response essay, report, annotative journaling, and reflective essay.

Advanced Placement English Language and Composition (P+)*

Grade: 11 | Prerequisites: Summer reading requirement | *Full Year Course*

**This course meets the English requirement for admission to UC and CSU.*

The Advanced Placement course in English Language and Composition is a full year course designed to advance students' abilities in becoming skilled readers of prose in a variety of periods, disciplines, and rhetorical contexts with an emphasis on students' interpretive skill in reading challenging texts. Students are given numerous opportunities to improve their writing and stylistic development in composing for a variety of purposes, audiences, and contexts. Students write on a variety of subjects and in a range of discourse modes, including expository and argumentative writing, applying and integrating appropriate rhetorical strategies. Overall, the purpose of the AP English Language and Composition course is to enable students to read complex texts with understanding—with an emphasis on American literature in all genres—and to write prose of sufficient richness and complexity to communicate effectively with advanced readers. This course prepares students for the AP Language and Composition exam, for which they may earn college credit upon receiving a passing score. Students are expected to take the College Board's AP English Language and Composition examination in May.

Advanced Placement English Literature and Composition (P+)*

Grade: 12 | Prerequisites: Summer reading requirement | *Full Year Course*

**This course meets the English requirement for admission to UC and CSU.*

Students read and perform critical analyses of imaginative literature. A close reading of texts gives students the opportunity for the experience of literature, the interpretation of literature, and the evaluation of literature. Through the study and practice of writing, students use various modes of discourse emphasizing analysis and interpretation. Such writing which requires students' honesty and precision in the use of language reinforces their reading. Through speaking, listening, reading, and writing, students become more aware of the range and resources of language. Students read a few selected works originally written in English, with a few works in translation, from the sixteenth century to contemporary times. This course prepares students for the AP Literature and Composition exam, for which they may earn college credit upon receiving a passing score. Students are expected to take the College Board's AP English Literature and Composition examination in May.

History/Social Studies

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Social Studies 6

Grade: 6 | Prerequisites: None | *Full Year Course*

This course examines the development of civilization from early man to ancient Rome. Students will focus on the politics, economics, geography, religion, and social structure for each of the civilizations and make connections to the present day. Information will be acquired by listening, observing and using community resources, and reading various forms of literature and primary and secondary source materials. They will retrieve and analyze information by using computers and other electronic media. They will read and interpret maps, globes, models, diagrams, graphs, charts, tables, and pictures. While organizing information from written sources such as books, periodicals, government documents, encyclopedias, and bibliographies, they will organize and express ideas clearly in writing and speaking.

World History and Geography 7

Grade: 7 | Prerequisites: None | *Full Year Course*

The course examines the Middle Ages and Early Modern History. Students will learn about civilizations in 5 different continents throughout the world. Students will learn the politics, economics, geography, belief systems, and cultural norms of each of these civilizations. The study of each civilization will involve the use of textbooks, other reading materials, computers, and creation of projects related to the particular civilization. There will be an emphasis on critical thinking, incorporating, "compare and contrast" and "similarities and differences". This course is a precursor to the Ethnic Studies course that students will have in the 9th grade.

United States History and Geography 8

Grade: 8 | Prerequisites: None | *Full Year Course*

The eighth-grade curriculum encompasses units on the formation of the United States, the creation of the Constitution and the early republic, the nation's expansion and division in the 19th century, the causes and consequences of the Civil War, and the development of the United States into an industrial power. Students study the literature, arts, and the political atmosphere in each unit. They research the issues, attitudes, points of view, and motives that helped shape the United States.

Ethnic Studies (P)*

Grade: 9-10 | Prerequisites: None | *Full Year Course*

**This course meets the World History requirement for admission to UC and CSU.*

Ethnic Studies Foundations will emphasize essential ethnic studies concepts, such as race, class, identity, gender, and sexuality. Students will first gain an understanding of "ethnic studies" by studying the history of ethnic studies as well as a brief history of historically marginalized groups in the United States. Within each unit, students will sharpen their critical thinking skills as they analyze different literature, media, and art pieces that connect to the core ethnic studies concepts and to their identity. They will then compare how different movements in the United States, Mexico, and South Africa sought to reform their economic, political, and cultural systems. This two semester course will culminate with students comparing how national and international forces have shaped three large urban centers throughout history: the binational San Diego-Tijuana region, Mexico City, and Johannesburg; as well as how their families' histories fit within the context of the course content. Constructing essay responses for the document based questions on the AP exam will be a major focus of the course. The content of this year's curriculum will provide a foundation for success in AP African American Studies, taken in grade 10.

Advanced Placement African American Studies (P+)*

Grade: 10 (11-12, with permission of instructor and if space permits)

Prerequisites: Passing grade in Ethnic Studies | Full Year Course

**Per the University of California, this course is expected to count as a History requirement upon full adoption in 2023-2024.*

AP African American Studies is a multidisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. The course focuses on four thematic units that move across the instructional year chronologically, providing students opportunities to delve into key topics that extend from the medieval kingdoms of West Africa to the ongoing challenges and achievements of the contemporary moment. Given the multidisciplinary character of African American studies, students in the AP course will develop skills across multiple disciplines, with an emphasis on historical, literary, visual, and data analysis skills. This new course foregrounds a study of the diversity of Black communities in the United States while considering the broader context of Africa and the African diaspora.

Advanced Placement United States History (P+)*

Grade: 11 | Prerequisites: None | Full Year Course

**This course meets the US History requirement for admission to UC and CSU.*

The Advanced Placement Course in United States History is a full year course designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history from its beginnings through the start of the twenty-first century. Students read, take notes, and learn to assess a wide variety of historical materials, especially primary sources such as documentary material, maps, statistical tables, pictorial and graphic evidence of historical events. Additionally, students evaluate the reading to determine its relevance to a given interpretive problem, its reliability, and its importance. Students also are asked to weigh the evidence and interpretations in historical scholarship, thus developing the skills necessary to arrive at conclusions on the basis of an informed judgment. Students demonstrate these skills by persuasively and clearly presenting reasons and evidence in analytical essays and research papers. Students are expected to take the College Board's AP US History examination in May.

Advanced Placement United States Government and Politics (P+)*

Grade: 12 | Prerequisites: None | Full Year Course

**This course meets the Civics/American Government requirement for admission to UC and CSU.*

Students gain an analytical perspective on government and politics in the United States through the study of general concepts used to interpret U.S. politics and the analysis of specific examples. Students become acquainted with a variety of theoretical perspectives and explanations for topics that include the constitutional underpinnings of government, beliefs and behaviors, institutions of government, public policy, civil liberties, and the mechanisms, such as political parties, that allow citizens to organize and communicate their interests and concerns. Students are required to interpret and analyze data relevant to the government, to evaluate general propositions about government, as well as to analyze political relationships between people and institutions. During May and June, students focus upon a concentrated economics curriculum, which meets the California economics requirement. Students are expected to take the College Board's AP U.S. Government and Politics examination in May.

Advanced Placement Psychology (P+)*

Grade: 12 | Prerequisites: None | Full Year Course

**This course meets the college prep elective requirement for admission to UC and CSU.*

Explore the ideas, theories, and methods of the scientific study of behavior and mental processes. You'll examine the concepts of psychology through reading and discussion and you'll analyze data from psychological research studies. Topics include biological bases of behavior, sensation and perception, learning, cognitive psychology, developmental psychology, motivation, emotion, personality, clinical psychology, and social psychology. Students in this course are expected to take the AP test in May.

Mathematics

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Core Math I

Grade: 6 | Prerequisites: None | *Full Year Course*

Students will meet the California Common Core State Standards for grade 6. The following mathematics strands will be emphasized: number sense, operations (with fractions, decimals, percentages), integers and number lines, coordinate planes, ratios and rates, basic equations, measurement and geometry, and data analysis. Skills and concepts are learned through problem solving, mathematical reasoning, and applications to real-world contexts. Students will also begin to develop the Mathematical Practices outlined in the Common Core State Standards in preparation for higher-level mathematics.

Core Math II

Grade: 7 | Prerequisites: None | *Full Year Course*

Students will meet the California Common Core State Standards for grade 7. The following mathematics strands will be emphasized: number sense, operations (with integers, fractions, decimals, percentages), proportions, linear functions (including graphing), algebra (expressions, solving equations and inequalities), measurement and geometry, exponents and square roots, data analysis, probability, mathematical reasoning and communication in real-world contexts. Students will also begin to develop the Mathematical Practices outlined in the Common Core State Standards in preparation for higher-level mathematics.

Integrated Mathematics I (P)*

Grade: 8 (7, with instructor approval & performance on math diagnostic, or 9-10, if repeating)

Prerequisites: Satisfactory achievement (C- or better) in CM2 or instructor recommendation | *Full Year Course*

**This course meets the Mathematics requirement for admission to UC and CSU.*

Students will meet the California Common Core State Standards for Integrated Mathematics I. The math strands that will be explored and enriched include: Number and Quantity, Algebra, Functions, and Geometry. Emphasis will be placed on an introduction to functions through analysis of linear and exponential functions and an introduction to geometry through transformations. Specific topics will include: solving linear and absolute value equations algebraically; systems of equations and inequalities; understanding the different conceptual uses of symbols; operations with polynomials; graphing; inequalities. Other topics will include sequences; coordinate and transformational geometry, and theorems involving congruent triangles. Students will communicate their thinking both orally and in writing and will explore how algebra and geometry are used in a variety of real-life scenarios.

Integrated Mathematics II (P)*

Grade: 9 (8, with instructor approval & performance on math diagnostic, or 10-11, if repeating)

Prerequisites: Satisfactory achievement (C- or better) in IM1 or instructor recommendation | *Full Year Course*

**This course meets the Mathematics requirement for admission to UC and CSU.*

Students will meet the California Common Core State Standards for integrated Mathematics II. The math strands that will be explored and enriched include: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Emphasis will be placed on principles of logical reasoning and proof to understand properties of congruence and similarity and the deepening of understanding of a variety of functions (quadratic, absolute value, and cubic). Specific topics will include: theorems involving angles, lines, and planes, similar and congruent triangles, parallelograms. Circles are studied and used to develop deductive reasoning skills. Other topics will include perimeter, area and volume, coordinate transformational geometry, trigonometry, and an introduction to statistics and probability through compound events. Students will communicate their thinking both orally and in writing and will explore how algebra, geometry, probability, and statistics are used in a variety of real-life scenarios.

Integrated Mathematics II (P)*

Grade: 9 (8, with instructor approval & performance on math diagnostic, or 10-11, if repeating)

Prerequisites: Satisfactory achievement (C- or better) in IM1 or instructor recommendation | *Full Year Course*

**This course meets the Mathematics requirement for admission to UC and CSU.*

Students will meet the California Common Core State Standards for Integrated Mathematics II. The math strands that will be explored and enriched include: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Emphasis will be placed on principles of logical reasoning and proof to understand properties of congruence and similarity and the deepening of understanding of a variety of functions (quadratic, absolute value, and cubic). Specific topics will include: theorems involving angles, lines, and planes, similar and congruent triangles, parallelograms. Circles are studied and used to develop deductive reasoning skills. Other topics will include perimeter, area and volume, coordinate transformational geometry, trigonometry, and an introduction to statistics and probability through compound events. Students will communicate their thinking both orally and in writing and will explore how algebra, geometry, probability, and statistics are used in a variety of real-life scenarios.

Integrated Mathematics III (P)*

Grade: 10 (9, with instructor approval & performance on math diagnostic, or 11-12, if repeating)

Prerequisites: Satisfactory achievement (C- or better) in IM2 or instructor recommendation | *Full Year Course*

**This course meets the Mathematics requirement for admission to UC and CSU.*

Students will meet the California Common Core State Standards for Integrated Mathematics III. The math strands that will be explored and enriched include: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Emphasis will be placed on making inferences and conclusions from data, exploring polynomial, rational, and radical relationships, going in depth into the trigonometry of triangles and trigonometric functions, and gaining experience using mathematics to model real-life situations. The course reviews and considerably extends concepts developed in the Integrated Mathematics I and Integrated Mathematics II courses while also preparing students for Pre-Calculus. Topics include: quadratic functions, exponents, complex numbers, polynomials, trigonometry, and probability and statistics. Success in this course will be a primary consideration in establishing readiness for Pre-Calculus.

Precalculus (P)*

Grade: 11 or 12 (10, with instructor approval & performance on math diagnostic)

Prerequisites: Satisfactory achievement (C- or better) in IM3 or instructor recommendation | *Full Year Course*

**This course meets the Mathematics requirement for admission to UC and CSU.*

Students will meet the California Common Core State Standards for Precalculus focusing on trigonometry and functional analysis. Precalculus extends the study of functions (trigonometric, logarithmic, rational) and delves more deeply into topics such as conic sections, with a focus on how mathematics can be applied to solve real-world problems. Success in this course will be a primary consideration in establishing readiness for Calculus.

Calculus (P)*

Grade: 11 or 12 | *Full Year Course*

Prerequisites: Satisfactory achievement (C- or better) in Precalculus or instructor recommendation

**This course meets the Mathematics requirement for admission to UC and CSU.*

This is an introductory calculus course that broadly follows the Common Core Standards for Calculus, addressing limits, differentiation and integration with an emphasis on application of concepts to problems. Students interested in a career in STEM (incl. engineering) and business should take calculus. This course will prepare students to enroll in calculus at the university level as freshman. Students who select to prepare independently may take the AP Calculus AB or BC examination, with the recommendation of the teacher.

Statistics (P)*

Grade: 11 or 12 | *Full Year Course*

Prerequisites: Satisfactory achievement (C- or better) in Precalculus or instructor recommendation.

**This course meets the Mathematics requirement for admission to UC and CSU.*

This course provides an introduction to statistics and probability that will prepare students for a college-level statistics course and life in a world filled with data. This course will strengthen the conceptual understanding and mathematical reasoning needed when solving problems. Major topics include: analyzing distributions of univariate data; analyzing relationships in bivariate data; collecting data using sampling and experimentation; probability and random variables; sampling distributions; confidence intervals and significance tests for means and proportions from one or two samples; and the use/misuse of statistics. Use of technology, including the graphing calculator, will be prominent in the course.

Data Science (P)* – *Not offered 26-27 SY*

Grade: 11 or 12 | *Full Year Course*

Prerequisites: Satisfactory achievement (C- or better) in Precalculus or instructor recommendation.

**This course meets the Mathematics requirement for admission to UC and CSU.*

Have you ever wondered what happens to the data that gets collected from websites, internet searches and surveys? How does it get collected and by whom? The study of these topics is what we call "data science" and it is a field of study that is experiencing tremendous growth. In this course, students learn to be data explorers. In project-based units, they will develop their understanding of data analysis, sampling, correlation/causation, privacy, bias and uncertainty. This course is an a-g approved math class that will combine theory with real-world applications. You may never look at data (or those terms and conditions for apps) the same way again!

Science

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Advanced Science 6

Grade: 6 | Prerequisites: None | *Full Year Course*

Using the Next Generation Science Standards, students in this integrated science class will engage in a variety of activities, projects, and experiments designed to enhance the student's scientific understanding of Earth Science, Physical Science, and Life Science. Students will explore human activity as it relates to scientific discovery and apply engineering problem solving in creating models that help explain scientific phenomena. Subjects covered will include Earth's structure, the cycling of matter and energy, and biodiversity and ecosystems.

Advanced Science 7

Grade: 7 | Prerequisites: None | *Full Year Course*

Using the Next Generation Science Standards, students in this integrated science class will engage in a variety of activities, projects and experiments that support student learning in such topics as matter and energy, natural hazards and minimizing human impact, animal and plant reproduction, and patterns of inheritance. Students will apply engineering practices in response to design challenges that promote deeper learning and understanding of life's phenomenon.

Advanced Science 8

Grade: 8 | Prerequisites: None | *Full Year Course*

Using the Next Generation Science Standards, students in this integrated science class will engage in a variety of activities, projects and experiments that support student learning in such topics as Chemical reactions and physical forces, solar systems and the relationships between the sun, the moon, and the earth, and discover evolutionary relationships as they seek answers using fossil records and molecular comparisons. Students will apply engineering practices in response to design challenges that promote deeper learning and understanding of life's phenomenon.

Advanced Biology (P)*

Grade: 9 (10, if repeating) | Prerequisites: None | *Full Year Course*

**This course meets the Biological Science requirement for admission to UC and CSU.*

Using Next Generation Science Standards, students will explore the nature of living things, the interaction of living things with themselves and the environment, and the impact of human society and technology on the world around them. Students will learn about life at the cellular level, evaluate evidence related to evolution, and gain an understanding of how energy is used in all living things. Students will engage in lab investigations of their own design. This course is designed to meet the State of California Biological Science requirement for graduation.

Advanced Chemistry (P)*

Grade: 10 (11, if repeated Biology) | Prerequisites: C or better in Advanced Biology | *Full Year Course*

**This course meets the Physical Science requirement for admission to UC and CSU.*

Using Next Generation Science Standards, students will explore how chemists solve problems, how the chemical aspects of the environment interact and how chemistry can be used to benefit their daily lives. Students will participate in lectures, discussions, laboratory activities and individual problem solving. Lab activities will illustrate and emphasize chemical concepts learned in class. All labs have clearly identified goals, safety precautions and hazardous waste disposal instructions. Teacher demonstrations, text reading and homework will be used to introduce and reinforce concepts. This course is designed to meet the State of California Physical Science requirement for graduation.

Physics (P)*

Grade: 11 (12, if repeated Biology) | Prerequisites: None | *Full Year Course*

**This course meets the Physical Science requirement for admission to UC and CSU.*

Using Next Generation Science Standards, students will explore the properties of matter and energy and how the two interact. Through laboratory activities, classroom discussion, and independent research, students will demonstrate knowledge and understanding about the natural laws of the universe. This course will cover Newtonian mechanics, wave behavior, electricity and magnetism, and the transfer of thermal energy. Teacher demonstrations, direct instruction, text readings, and homework will be used to introduce and reinforce concepts.

Advanced Placement Environmental Science (P+)*

Grade: 12 | Prerequisites: Successful completion of Biology and either Chemistry or Physics | *Full Year Course*

**This course meets the Physical Science requirement for admission to UC and CSU.*

The AP Environmental Science course is designed to be the equivalent of a one-semester college course in environmental science. It is an interdisciplinary science touching on a variety of topics. The goal of the course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students are expected to take the College Board's AP Environmental examination in May.

Advanced Placement Biology (P+)* – Not offered 26-27 SY

Grade: 12 | Prerequisites: Successful completion of Biology, Chemistry, and Physics | *Full Year Course*

**This course meets the Biological Science requirement for admission to UC and CSU.*

This course is designed for students who wish to pursue the equivalent of a first-year college introductory level course in biology. Students will explore topics in the areas of molecules and cells, heredity and evolution, and organisms and populations. Students will participate in experimental lab activities, which will consist largely of class presentations with clearly defined goals and safety procedures. Teacher demonstrations, lab activities and homework will be used to introduce and reinforce concepts. The major outcomes of the course are based on guidelines from the College Board. Students are expected to take the College Board's AP Biology examination in May.

Advanced Placement Chemistry (P+)* – Not offered 26-27 SY

Grade: 12 | Prerequisites: Successful completion of Chemistry and Physics | *Full Year Course*

**This course meets the Physical Science requirement for admission to UC and CSU.*

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. Students will attain a depth of understanding of chemical fundamentals and a reasonable competence in dealing with chemical problems. This course takes full advantage of students' first year chemistry course in high school, building on some of the same concepts but with more emphasis on chemical calculations, mathematical formulation of principles, and laboratory work done by students. Students are expected to take the College Board's AP Chemistry examination in May.

Advanced Placement Physics 1 (P+)* – Not offered 26-27 SY

Grade: 12 | Prerequisites: Successful completion of Physics | *Full Year Course*

**This course meets the Physical Science requirement for admission to UC and CSU.*

The AP Physics course is designed to be the equivalent of the general algebra based physics course usually taken during the first year of college. Learn about the foundational principles of physics as you explore Newtonian mechanics; work, energy, and power; mechanical waves and sound; and introductory, simple circuits. You'll do hands-on laboratory work to investigate phenomena. Students are expected to take the College Board's AP Physics 1 examination in May.

Marine Biology (P)* – Not offered 26-27 SY

Grade: 10-12 | Prerequisites: None | *Semester Course*; Offered In Conjunction with Human Anatomy & Physiology
**This course will count as an elective for admission to UC and CSU.*

This course provides a basic introduction to the patterns and processes found in marine systems and the relationships between living things and their marine environment. Topics emphasized are basic oceanography, the history of marine sciences, structure and function of marine ecosystems, identification and classification of marine organisms, anatomical and physiological adaptations of marine organisms, and a survey of the human impact on the marine environment at local and global levels. Students will be encouraged to learn about how the ocean system operates, the life that lives in the marine realm, the dynamics of the various marine biomes, and the interactions humans have with the seas.

Human Anatomy and Physiology (P)* – Not offered 26-27 SY

Grade: 10-12 | Prerequisites: None | *Semester Course*; Offered In Conjunction with Marine Biology
**This course will count as an elective for admission to UC and CSU.*

This course explores the structure and function of the organs and organ systems of the human body. Two conceptual themes are emphasized: the complementary nature of structure and function, and homeostasis. The forms of the specific cells, tissues and organs within the body allow them to perform specific functions effectively, while the maintenance of an internal environment within a narrow range of values is necessary for survival. The human body continually evaluates the environment and makes homeostatic adjustments. Topics covered include major organ systems such as the integumentary (skin), skeletal, muscular, cardiovascular, respiratory, nervous, endocrine, digestive. Human health issues are also addressed.

Astronomy (P)* – Not offered 26-27 SY

Grade: 10-12 | Prerequisites: Successful completion of IM2 | *Full Year Course*
**This course meets the elective requirement for admission to UC and CSU.*

Astronomy is a year-long laboratory course that will give students an overview of basic astronomy topics, experience with technology associated with viewing stars and planets, and practice analyzing data collected from national and international astronomy sites. Topics addressed will include our own solar system, other galaxies and stars, space exploration, and our continuing knowledge of the universe.

Marine Science (P)* – Not offered 26-27 SY

Grade: 10-12 | Prerequisites: None | *Full Year Course*
**This course meets the elective requirement for admission to UC and CSU.*

This course is designed as a general introduction to the physical, chemical and biological aspects of marine ecosystems. Students will explore the chemical and molecular basis of life in the seas, the physical and geologic properties that support life in the oceans, and the interactions between humans and the ocean ecosystems. Conservation of ocean resources will be a prominent theme throughout this lab-based course.

World Language

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Spanish I (P)*

Grade: 7-10 | Prerequisites: None | *Full Year Course*

**This course meets the language other than English requirement for admission to UC and CSU.*

For Novice Learners. This course is designed for novice learners of the Spanish language and culture. The class implements the principles of the Universal Design for Learning in order for all students to have equitable opportunities to learn, using flexible approaches that can be customized for individual student needs. This course develops the four language skills of level I Spanish: listening, speaking, reading and writing. To acquire proficiency in communication and build foundations for future language study, instruction is guided by the World Language Standards for California Public Schools. This course adopts a variety of approaches to language learning: communication and intercultural proficiency are integrated through performance-based tasks. Differentiated instruction is used to meet the needs of all in a student-centered environment, to support all in achieving the learning outcomes. Authentic listening and reading materials from the Spanish-speaking world are integrated into instruction, such as: online sources, newspapers, magazines, music, film, and various realia. Spanish I is aligned with ACTFL performance descriptors that focus on interpretive, interpersonal and presentational communication. In addition, instruction will integrate the five goal areas of the (ACTFL) National World-Readiness Standards for Learning Languages, as follows: Communication, Cultures, Connections, Comparisons and Communities. Students' proficiency and performance are evaluated by a combination of thematic exams, performance-based assessments (IPA's), oral presentations and compositions.

Spanish II (P)*

Grade: 7-11 | *Full Year Course*

Prerequisites: Successful completion of Spanish 1 or Spanish diagnostic administered in 6th Grade

**This course meets the language other than English requirement for admission to UC and CSU.*

For Novice-High to Intermediate-Low Learners. This course is designed for novice-high to intermediate-low level learners of the Spanish language and culture. This is the second course in the traditional 3-year sequence of Spanish. The class implements the principles of the Universal Design for Learning in order for all students to have equitable opportunities to learn, using flexible approaches that can be customized for individual student needs. To acquire proficiency in communication, instruction is guided by the World Language Standards for California Public Schools. Differentiated instruction is used to meet the needs of all in a student-centered environment, and to support students in achieving the learning outcomes. Authentic listening and reading materials from the Spanish-speaking world are integrated into instruction, such as: online sources, newspapers, magazines, music, film, and various realia. Students will engage in conversations, ask and answer questions, describe objects, give directions, and convey feelings and opinions to express personal interests and meet social needs in the target language. At this level, students continue to develop the four skills: listening, speaking, reading and writing, while expanding their knowledge of vocabulary and syntax in a variety of personal and academic contexts. This course is aligned with ACTFL performance descriptors that focus on interpretive, interpersonal and presentational communication in Spanish. In every unit of study students will continue to acquire new vocabulary, improve critical thinking and make intercultural connections in the target language. In addition, instruction will integrate the five goal areas of the ACTFL National World-Readiness Standards for Learning Languages, as follows: Communication, Cultures, Connections, Comparisons and Communities. Students' proficiency and performance are evaluated by a combination of thematic exams, performance-based assessments (IPA), oral presentations and compositions (output tasks).

Spanish III (P)*

Grade: 7-12 | *Full Year Course*

Prerequisites: Successful completion of Spanish 2 or Spanish diagnostic administered in 6th Grade

**This course meets the language other than English requirement for admission to UC and CSU.*

For Intermediate Low/Mid to Intermediate High Learners. This course is designed for intermediate-level learners of the Spanish language and culture. This is the third course in the traditional 3-year sequence of Spanish and it builds upon the language skills learned in levels I and II. The class implements the principles of the Universal Design for Learning in order for all students to have equitable opportunities to learn, using flexible approaches that can be customized for individual student needs. To acquire proficiency in communication and mastery of form, instruction is guided by the World Language Standards for California Public Schools. This course continues to develop the four language skills of Spanish levels I and II. Differentiated instruction is used to meet the needs of all in a student-centered environment, and to support in achieving the learning outcomes. Authentic listening and reading materials from the Spanish-speaking world are integrated into instruction, such as: online sources, newspapers, magazines, music, film, and various realia. In addition to the further development and mastery of the Spanish language, students will continue to make deeper intercultural and interdisciplinary connections to the multifaceted and diverse Spanish-speaking world. Students will discover and appreciate various cultures, cuisines, literature, arts and customs. At this level, students refine the four skills: listening, speaking, reading and writing through interpretive, interpersonal and presentational communication. This course is aligned with ACTFL performance descriptors for Spanish at the intermediate level. In every unit of study students will continue to acquire new vocabulary, improve critical thinking and make intercultural connections in the target language. In addition, instruction will integrate the five goal areas of the (ACTFL) National World-Readiness Standards for Learning Languages, as follows: Communication, Cultures, Connections, Comparisons and Communities. Students' proficiency and performance are evaluated by a combination of thematic exams, performance-based assessments (IPA), oral presentations and compositions (output tasks).

Spanish IV (P)*

Grade: 8-12 | Prerequisites: Successful completion of Spanish 3 | *Full Year Course*

**This course meets the language other than English requirement for admission to UC and CSU.*

For Intermediate Mid to Advanced Low Learners. This course is designed for all students who will continue the study of the Spanish language after Spanish 3 but are not yet ready for AP Spanish. Spanish IV fulfills the requirement for the California State Seal of Biliteracy endorsement on the diploma and transcript upon graduation. Students will be placed in Spanish IV by teacher recommendation and by individual assessment. By the end of the course, students will develop: the ability to communicate at an **intermediate mid-high** level of Spanish, Intermediate mid-high proficiency in reading, listening, writing and speaking the language, the ability to interpret and discuss literature and film at an intermediate mid-high level, knowledge of significant cultural and historical events, and the ability to research select topics in Spanish. The class implements the principles of the Universal Design for Learning in order for all students to have equitable opportunities to learn, using flexible approaches that can be customized for individual student needs.

Advanced Placement Spanish Language (P+)*

Grade: 9-12 | Prerequisites: Successful completion of Spanish 4 | Full Year Course

**This course meets the language other than English requirement for admission to UC and CSU.*

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). The AP Spanish Language and Culture course is structured around six themes: Beauty and Aesthetics, Contemporary Life, Families and Communities, Global Challenges, Personal and Public Identities, and Science and Technology. Themes facilitate the integration of language, content, and culture and promote the use of the language in a variety of contexts. The themes may be combined, as they are interrelated. The AP Spanish Language and Culture Course is equivalent to an upper intermediate college or university course in Spanish language and culture. Students are placed by teacher recommendation or placement assessment.

Advanced Placement Spanish Literature and Culture (P+)* – *Not offered 26-27 SY*

Grade: 10-12 | Full Year Course

Prerequisites: Grade of B or better in AP Spanish Language; current instructor recommendation

**This course meets the language other than English requirement for admission to UC and CSU.*

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, plays, and essays) from Peninsular Spanish, Latin American, and US Hispanic literature. Students develop proficiencies across the three modes of communication (interpretive, interpersonal, and presentational) in the range of Intermediate High to Advanced Mid of the American Council on the Teaching of Foreign Languages' (ACTFL) Proficiency Guidelines. Through careful examination of the required readings and other texts, students work to hone their critical reading and analytical writing skills. Literature is explored within the contexts of its time and place and students gain insights on the many voices, historical periods, and cultures represented in the required readings and other texts. The course also includes a strong focus on cultural, artistic, and linguistic connections and comparisons, which is supported by the exploration of various media (art, music, film, articles, and literary criticism). The AP Spanish Literature and Culture course is structured around six themes: Societies in Contact, The Construction of Gender, Time and Space, Literary Creation, Interpersonal Relationships, and The Dual Nature of Being. Themes promote the exploration of literature in a variety of contexts and develop students' abilities to make cross-textual and cross-cultural connections. The themes may be combined, as they are interrelated. The content is grounded in 38 required texts. The required readings for this course and its exam sometimes present difficult human issues and situations. AP Spanish Literature and Culture is equivalent to a college or university survey course of literature written in Spanish at the first level counted towards a major in this subject area.

Exercise and Health Science

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Exercise and Health Science 6

Grade: 6 | Prerequisites: None | *Full Year Course*

The Exercise and Health Science Department (EHS) has a responsibility to expose all middle schoolers to many activities and coursework giving them opportunities to build motor skills and movement patterns, learn movement concepts, principles, and strategies to apply to game play, and not only improve their fitness but learn fitness concepts, principles and strategies that will help improve their health and performance. The program focuses on cooperative games and small group games to build their confidence through improved skill development. Students will also gain nutrition and dietary information to help them learn the importance of eating healthy and making good decisions when it comes to their health. Students will maintain and improve their physical fitness and learn concepts through a variety of activities focusing on both health-related and skill-related fitness components.

Exercise and Health Science 7

Grade: 7 | Prerequisites: None | *Full Year Course*

The Exercise and Health Science Department (EHS) has a responsibility to expose all middle schoolers to many activities and coursework giving them opportunities to build motor skills and movement patterns, learn movement concepts, principles, and strategies to apply to game play, and not only improve their fitness but learn fitness concepts, principles and strategies that will help improve their health and performance. Students will be challenged through individual, team and lifetime sports as well as fitness activities. They will create their own games and dances, design and implement an individualized workout program, and build problem-solving skills. Students will assess and maintain a level of physical fitness to improve their health and performance through the state-mandated fitness test (FitnessGram).

Sports Academy

Grade: 8 | Prerequisites: None | *Full Year Course*

Sports Academy will support the development of all varsity sports offered at the high school level. Students will be exposed to and trained in five sports including cross country, volleyball, soccer, basketball, and lacrosse. Cheer will be offered, in this class, as an option at the end of the school year. Students will be exposed to the rules of each sport, field layout and dimensions, and scoring standards. Students will be trained in the four pillars of sport including technique, tactics, physical fitness, and sport psychology.

Exercise and Health Science 9/10

Grade: 9-10 (Repeatable for Credit) | Prerequisites: None | *Full Year Course*

Students will gain the knowledge, skills, and confidence they need to maintain meaningful physical activity throughout their lifetime. The course equips students to make a successful transition from the physical education instructional program to participation in physical activity beyond high school. Students will design and implement their own fitness program, focusing on health-related fitness. Students will learn to make healthy decisions regarding their nutrition to become informed consumers as they transition to adulthood.

JV Athletics/Athletics

Grade: 9-12 (Repeatable for Credit) | *Full Year Course*

Prerequisites: Requires tryouts and approval from the Athletics Director

Junior Varsity and Varsity Athletics is considered a physical education course for ninth and tenth graders for graduation requirements. In eleventh and twelfth grade, these courses are electives. Students wishing to participate in Junior Varsity or Varsity Athletics will need to have spoken to the Athletics Director and/or sport-specific coach. Students cannot self-select into Junior Varsity or Varsity Athletics. A list will be generated by the Athletics Director and coaching staff and given to the Counseling Department for placement. Eleventh and twelfth graders will only be considered for Junior Varsity or Varsity block, not 9/10 EHS. If selected, student-athletes will be run through sport-specific training in preparation for seasons of sport. The varsity sports currently offered are volleyball, cross country, soccer, basketball, lacrosse, beach volleyball for girls, track and field, and cheer for girls. Preuss also offers an ESports team, competing against other high schools across California on certain video game platforms. Selection for Junior Varsity or Varsity Athletics block is not a guarantee for team selection. Student-athletes will need to perform on a consistent basis in a selected sport, in the classroom, and embody *The Preuss Way of Kindness-Respect-Excellence* to earn and keep a place in the block.

Middle School Electives

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Wheel 6

Grade: 6 | Prerequisites: None | *Full Year Course*

This class provides an opportunity for 6th grade students to explore future elective options, personal strengths, and career possibilities. Throughout the year each student will “rotate” through the various electives. Through various assessments students needing additional support may be scheduled into a Mathematics Enrichment class in lieu of the “Wheel” class. These electives may include: Drawing and Painting, Beginning Instrumental Music, Computer Literacy/Technology, Math Quest and Music Theory. None of these courses require prior experience in the targeted field.

Wheel 7

Grade: 7 | Prerequisites: None | *Full Year Course*

This class provides an opportunity for 7th grade students to further explore future elective options, personal strengths, and career possibilities. Throughout the year each student will “rotate” through the various electives. Through various assessments students needing additional support may be scheduled into a Mathematics Enrichment class as part of the “wheel.” These electives may include: Leadership, Music, and Technology. None of these courses require prior experience in the targeted field.

Wheel 8

Grade: 8 | Prerequisites: None | *Full Year Course*

This class provides an opportunity for 8th grade students to further explore future elective options, personal strengths, and career possibilities. Throughout the year each student will “rotate” through the various electives. Through various assessments students needing additional support may be scheduled into a Mathematics Enrichment class as part of the “wheel.” These electives may include: Technology, and Health and Life Skills. None of these courses require prior experience in the targeted field.

Skill Building Electives

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Literacy Enrichment 6-8

Grade: 6-8 (Repeatable for Credit) | Prerequisites: Instructor Recommendation | *Full Year Course*

Middle School Literacy Enrichment provides additional support for students in their core English classes (Language Arts 6, Literacy 6, Advanced English 7 and Advanced English 8). Students will focus on and/or revisit: reading short stories in different genres; using word relationships and context clues to determine meaning;; responding to non-fiction, fiction, poetry, and drama using interpretive, critical and evaluative processes; reading informational materials to support opinion and extend ideas, produce oral and written work to communicate information, and demonstrate the rules of the English language including grammar, sentence structure, punctuation and spelling. Students are placed in a Middle School Literacy Enrichment class based on reading assessment data and with a teacher/reading specialist's recommendation and may be enrolled in lieu of an elective class.

Math Enrichment 6, 7, 8

Grade: 6-8 (Repeatable for Credit) | Prerequisites: Instructor Recommendation | *Full Year Course*

Middle School Math Enrichment 6, 7, 8 provides additional support for students in their core mathematics classes (Core Math 1, Core Math 2, or Integrated Mathematics 1). Students will focus on and/or revisit: formulating and reasoning about expressions and equations; operations and algebraic thinking; number and operations in base ten; number and operations in fractions; ratios and proportional relationships; the number system; solving linear equations and systems of linear equations; using functions to describe quantitative relationships; geometry including measurement and data; analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence; understanding the Pythagorean theorem; and statistics and probability including modeling an association in bivariate data with a linear equation. Students will be placed in a Middle School Mathematics Enrichment class with a teacher's recommendation and may be enrolled in lieu of an elective class.

High School Math Enrichment

Grade: 9-12 (Repeatable for Credit) | Prerequisites: Instructor Recommendation | *Full Year Course*

Students who are recommended for placement by their previous math teacher will be placed in this class. Data used to make decisions will include diagnostic tests, final exam scores and prior course performance. The course will reinforce key concepts from math classes from 6th grade through Integrated Math 1. This course is for the serious student who wants to master the material and progress to higher levels of mathematics.

Readers and Writers Workshop – **Not offered 26-27 SY**

Grade: 9-12 (Repeatable for Credit) | Prerequisites: Instructor Recommendation | *Full Year Course*

**This course can be used to fulfill the college prep elective requirement for admission to UC and CSU.*

The purpose of this course is to develop, refine and teach students how to apply the skills that are necessary for becoming a strong college applicant and to be successful at the university-level. This course is specifically designed as a college-preparatory elective for those who have been identified to be in need of further skill development to prepare for college in consideration of individual learning needs. The goal is to help students develop skills related to analytical reading; expository writing; and academic behaviors/study skills (such as planning, prioritizing, using technology, and accessing resources) as well as gain exposure to resources available on college campuses.

Leadership and Publications Electives

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Journalism (P)*

Grade: 9-12 (Repeatable for Credit) | *Full Year Course*

Prerequisites: Application required; English grade of B or better

**This course can be used to fulfill the college prep elective requirement for admission to UC and CSU.*

The primary emphasis of this journalism course is the art of writing for a wider audience. Serious attention is given to genres of writing, journalistic style, personal interviews, ethics of journalism, and literacy. Students will write and produce our monthly student newspaper, The Preuss Insider. Applicants should possess the following qualities: self motivation, organizational skills, good writing skills, interest in school events, ability to conduct interviews, ability to meet deadlines and carry through individual commitments, capability of working in teams. There are leadership positions within the class, based upon application and interview. Repeat credits can be earned for this course in sequential years with Journalism 3, 4; 5, 6; and 7, 8 course titles.

Yearbook (P)*

Grade: 9-12 (Repeatable for Credit) | *Full Year Course*

Prerequisites: Application required; English grade of B or better

**This course can be used to fulfill the college prep elective requirement for admission to UC and CSU.*

The primary emphasis of this yearbook course is to create historical documentation for The Preuss School UC San Diego. Students will produce our annual Preuss Yearbook. This will involve writing for a wider audience, practicing the art of computer generated layout and graphics, research, developing market plans, and learning basic photography. Applicants should possess the following qualities: self motivation, organizational skills, good writing skills, interest in school events, ability to conduct interviews, ability to meet deadlines and carry through individual commitments, capability of working in teams. There are leadership positions within the class, based upon application and interview.

Broadcast Journalism (P)*

Grade: 10-12 (Repeatable for Credit) | *Full Year Course*

Prerequisites: Approval Required; English grade of B or better

**This course can be used to fulfill the college prep elective requirement for admission to UC and CSU.*

This course provides students with a comprehensive understanding of broadcast journalism, from the basics of reporting and writing to more advanced skills in video production and live broadcasting. It also emphasizes ethical considerations and the responsibilities of journalists in society. This course introduces students to the fundamentals of broadcast journalism, focusing on writing for broadcast, camera operation, video editing, and production techniques. Through hands-on experience and theoretical knowledge, students will develop the skills necessary to write compelling news stories and develop packages for television & online platforms.

High School – Foundations of Student Government/ASB (P)*

Grade: 9-12 (Repeatable for Credit) | *Full Year Course*

Prerequisites: Application & interview required; meets qualifications to hold office according to The Preuss School ASB Constitution and By-Laws

**This course can be used to fulfill the college prep elective requirement for admission to UC and CSU.*

This course affords student body officers guidance, in-service training, and practical experience in student government and democratic leadership. Students plan and implement school activities, including the operation of the "Snack Shack" at lunchtime. This class occasionally requires participation after school and few weekends, as student body officers assist with some major schoolwide events such as Socials, Homecoming, Prom, and more. Students may also participate in outreach events with UC San Diego. Students **must** maintain initial academic and citizen eligibility to remain in ASB for the full school year.

Middle School – Foundations of Student Government/ASB – *Not offered 26-27 SY*

Grade: 8 | Prerequisites: Application and interview required | *Full Year Course*

This course for student leaders in grade 8 is the middle school counterpart to high school ASB. Curriculum will include what it takes to be an organized, fair, and capable student leader. Students will examine various leadership models, implement projects and activities for their middle school constituents, and assist in operating the student store during middle school lunch.

Visual and Performing Arts Electives

- Courses labeled with a (P) count towards your A-G requirements.
- Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

———— MUSIC ————

Preuss Middle School Orchestra

Grade: 8 | *Full Year Course*

Prerequisites: Ability to play a string instrument; selected by the instructor and counselor, based upon invitation and application; prior experience in Beginning Instrumental Music (Grade 6 Wheel) or Intermediate Orchestra (Grade 7 Wheel)

The course is offered to students who have completed the seventh grade Intermediate Orchestra or by audition. Students will further their expertise on their chosen instruments in an ensemble setting, learning more complex musical notation, rhythm and terminology. This course emphasizes performance skills, music literacy, and understanding of musical knowledge. This course is part of the feeder/satellite program of the San Diego Youth Symphony. Orchestra students will present public performances.

Preuss High School Orchestra (P)*

Grade: 9-12 | Prerequisites: Successful completion of Middle School Orchestra | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course is for students who successfully completed Middle School Orchestra. The course emphasizes large group performances and music performance, music reading/sight singing, and music theory. Students will participate in public performances, will learn to read music of their instruments, will sight sing simple music, and will learn the concepts in music theory. The course will cover the Music Theory lessons level 1.

Preuss Choir (P)*

Grade: 9-12 (Repeatable for Course Credit) | Prerequisites: Audition | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course emphasizes performance skills, voice training, music literacy, and understanding of musical knowledge. Students will learn choir repertoire from various historical periods, cultures, and genres. The Preuss School showcase concerts, festivals and other performances will be some of the opportunities for students to perform. Talented choir students will have the opportunity to audition for the San Diego County Honors Choir. The course will cover the Music Theory lessons level 1.

Introduction to Piano and Musical Composition (P)*

Grade: 9-12 (Repeatable for Course Credit) | Prerequisites: None | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This is a beginning piano course for high school students. Lessons will include hand position and technique, staff and keyboard note names, performing major and minor scales in two octaves, melodic and harmonic voicing, basic chords, intervals and rhythmic expressions. Students will be able to read and transpose simple two hand works for piano. Students will progress from the beginner level to the intermediate level. The textbook series to be used is "Alfred's Basic Adult Piano Course." Class will be conducted in the media lab using midi controller keyboards. The course will cover the Music Theory lessons level 1. Students will have the opportunity to apply for the Tri-M Music Honors Society Membership if repeated the class as a second year course.

Introduction to Guitar (P)*

Grade: 9-12 (Repeatable for Course Credit) Prerequisites: None | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

The Introduction to Guitar class is a beginning guitar course for high school students. The content of course include: the open 1st, 2nd, and 3rd strings, movement of the right hand thumb, the open 4th , 5th , and 6th strings, the dotted half note, combining thumb and fingers, alternation, notes on the E string, notes on the B string, the tie, notes on the G string, half steps and whole steps, the eighth note, free stroke with the fingers, half steps on the G string, arpeggios, notes on the D string, tremolo, half steps on the D string, notes on the A string, Notes on the E string, the right hand in long scales, two notes played together, half steps on the A string and E strings, three notes played together, pivot fingers and guide fingers, four notes played together, using rest stroke and free stroke to emphasize melody. Students are encouraged to perform material from various genres. This course is designed to increase the skills and performance levels of each student. The development of aesthetic and cultural values through critical listening is emphasized in this course.

Preuss Instrumental Ensembles (P)* – Not offered 26-27 SY

Grade: 10-12 | Prerequisites: Successful completion of High School Orchestra | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course is for students who successfully completed the Preuss High School Orchestra.. In addition to the large group performances, this course will provide students with the opportunity to play in trios, quartets, and quintets. The course emphasizes three areas of music study: music performance, music reading/sight singing, and music theory. Students will participate in public performances, will learn to read music of their instruments, will sight sing simple music, and will learn the concepts in music theory, which provide the prior knowledge of the AP Music Theory Examination. This class will also provide students with leadership opportunities. All members of the orchestra will be part of the San Diego Youth Symphony. The purpose of the club is to promote the attendance of the San Diego Youth Symphony concerts. Students who are talented will have the opportunity to compete for the following leadership positions through audition: Concertmaster/Concertmistress, Associate concertmaster, Assistant concertmaster, principal viola, and principal cello. The course will cover the Music Theory lessons level 2. Students will have the opportunity to apply for the Tri-M Music Honors Society Membership.

Preuss Honors Orchestra (P)* – Not offered 26-27 SY

Grade: 11-12 | Prerequisites: Successful completion of Instrumental Ensembles | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

Note: This course earns a weighted point on the UC/CSU application. This will not reflect on the student's Preuss transcript.

The Preuss Honors Orchestra is a comprehensive instrumental music program. The course emphasizes three areas of music study: music performance, music reading/sight singing, and musical knowledge. Students will participate in public performances, will learn to read music of their instruments and sight sing simple music, and will learn the concepts in music theory, which provide the prior knowledge of the AP Music Theory Examination. This class will also provide students with leadership opportunities. All members of the orchestra will be part of the San Diego Youth Symphony Audience Development Booster Club. The purpose of the club is to promote the attendance of the San Diego Youth Symphony concerts. Students who are talented will also have the opportunity to compete for the following leadership positions within the orchestra through audition: Concertmaster/Concertmistress, Associate concertmaster, Assistant concertmaster, principal viola, and principal cello. The course will cover the Music Theory lesson level 3. Students will have the opportunity to apply for the Tri-M Music Honors Society Membership.

Preuss Honors Choir (P)* – Not offered 26-27 SY

Grade: 9-12 (Repeatable for Course Credit) Prerequisites: Successful completion of Choir | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

Note: This course earns a weighted point on the UC/CSU application. This will not reflect on the student's Preuss transcript.

This course emphasizes performance skills, voice training, music literacy, and understanding of musical knowledge. Students will learn choir repertoire from various historical periods, cultures, and genres. The Preuss School showcase concerts, festivals and other performances will be some of the opportunities for students to perform. Talented choir students will have the opportunity to audition for the San Diego County Honors Choir. The course will cover the Music Theory lessons level 3. Students will have the opportunity to apply for the Tri-M Music Honors Society Membership.

Advanced Placement Music Theory (P+)* – Not offered 26-27 SY

Grade: 11 and 12 | Full Year Course

Prerequisites: Completion of Honors Orchestra, Honors Choir, OR three years of music coursework

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

AP Music theory course covers the curriculum of AP Music Theory by the College Board. This course is designed for students in 10th to 12th grade. The goal of an AP music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and procedures of written music and music presented aurally. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony are important part of the course. It is recommended that students will have acquired at least basic performance skills in voice or on an instrument. This course will prepare students for the AP Music Theory Examination.

ART

Studio Art I (P)*

Grade: 9-12 | Prerequisites: None | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course will emphasize the practice of art making while exploring a large array of media and processes. Students will be exposed to numerous artworks, varying in nature, cultural context, movement and period. Students will acquire an in-depth knowledge of primary principles in design, including color-mixing, composition, perspective as well as an introduction to 3-D artmaking. These practical and theoretical tools will allow for further development of personal style and promote innovative expression. Students should be aware that there will be some outside work needed on projects.

Studio Art II (P)*

Grade: 10-12 | *Full Year Course*

Prerequisites: Grade of B or better in Studio Art 1; instructor recommendation

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course is designed for students who have already completed the basic high school drawing and painting course at The Preuss School. Projects will be designed to incorporate elements of literacy enrichment, social studies, science and mathematics. Students who take this course will be expected to keep a sketchbook as a day to day part of this course. This course is an important extension of basic drawing and painting, in that student portfolios will be developed to a level which is presentable to a university.

Advanced Placement Art History (P+)*

Grade: 11-12 | Prerequisites: None | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course is designed to prepare students for the AP Art History examination. Slide-illustrated lectures are an essential tool for studying various Western and non-Western cultures. The course focuses on the historical context of the pieces, as well as an analytical reading of formal vocabulary related to art. Students will learn to write coherent essays and must participate in daily discussions. Time commitment outside of class is approximately 3 hours per week on average. Students are expected to take the College Board's AP Art History examination in May.

Advanced Placement Drawing (P+)*

Grade: 11-12 | *Full Year Course*

Prerequisites: Successful completion of 2-3 years of visual art; instructor recommendation

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course provides instruction for highly skilled, exceptional students in drawing. The course assists students in the preparation of a portfolio for the Advanced Placement program in AP Drawing. Students will use the works of various artists and art historical references as a point of inspiration to create work that reflects their spirit and vision. By exploring visual concepts in drawing and mark-making, including both fine art and digital media, they will develop a body of work that reflects a broad range of problem solving and ideation, demonstrating their versatility of techniques. As they work, students will conduct research, explore ideas and continue their drawing practice in their art journals/ sketchbooks. Students will participate in class discussions at the onset and completion of a project as well as participate in individual and peer reviews of works in progress. These dialogues will be used to inform their work and inspire their creative efforts. Portfolio development is ongoing, using the process of informed and critical decision making to assemble a body of work. Projects will have requirements; however, they will be open ended enough to allow for the development of personal styles and modes of expression.

Advanced Placement 2-D Art and Design (P+)*

Grade: 11-12 | *Full Year Course*

Prerequisites: Grade of B or better in Studio Art 1 and 2; instructor recommendation

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

These courses provide instruction for highly skilled, exceptional students in drawing and two-dimensional design. The courses assist these students in the preparation of a portfolio for the Advanced Placement program in studio art. This class requires that students complete 24 works over the school year. Students will have summer assignments prior to the school year. Students must work on their portfolio pieces both in and out of class.

Studio Art II Honors (P)*

Grade: 10-12 | *Full Year Course*

Prerequisites: Grade of B or better in Studio Art 1 and 2; instructor recommendation

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

Note: This course earns a weighted point on the UC/CSU application. This will not reflect on the student's Preuss transcript.

The class concentrates on refining art skills and techniques while exploring a wide variety of media and developing personal artistic voice. Students will examine art history and contemporary art, as well as social and political history to inform their work. Students will also participate in critiques, as well as visit museums and galleries in order to connect with the art world beyond the classroom. Students will research and present one art topic each semester. The first semester will delve into a genre or specific technique the student is passionate to explore. The second semester, the student will research an artist whose work correlates with the student's program of concentration. Through these explorations, students will have a strong academic background as a foundation for their own voice as well as an opportunity to share their knowledge and make connections with their peers and the larger artist community.

———— PERFORMANCE ————

Drama 1 (P)*

Grade: 9-12 | Prerequisites: None | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course is an in-depth study of the historical, societal, and cultural contributions of drama and theater. Many aspects of theater will be addressed: acting techniques, script review and analysis, technical theater, role-playing, improvisation, technical theater, theater critique, directing and production skills, and analysis of dramatic literature. The students will be studying the works of the first playwrights up to contemporary and modern literature. An emphasis on performance is reflected in three different levels: role-playing, monologues, and troupe production pieces.

Drama 2 (P)*

Grade: 9-12 | Prerequisites: Successful completion of Drama 1 | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This course will continue to develop the skills acquired in Drama I. Students will prepare for monologues, auditions, and school performances. Emphasis is placed on reading, preparing, directing and staging classical and contemporary works. Students will write their own plays and screenplays and perform in them.

Honors Drama/Film (P+)*

Grade: 11-12 | Prerequisites: Successful completion of Drama 1 and Drama 2 | *Full Year Course*

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

Note: This course earns a weighted point on the UC/CSU application. This will not reflect on the student's Preuss transcript.

This course expands upon the aspects learned in Drama II such as dramatic performance across various mediums (onstage and onscreen), visual literacy, and technical craft of filmmaking. Students will expand the scope of comprehension on these subjects by actively engaging in the writing, acting, cinematography, and editing of productions which are graded using college and film industry standards as rubrics. A deeper comprehension of theatre and cinema history, as well as the utilization of cameras and editing software, will be at the core of this course.

Musical Theatre (P)*

Grade: 10-12 (Repeatable for Credit) | *Full Year Course*

Prerequisites: Successful completion of one year of Drama or Choir.

**This course meets the visual and performing arts requirement for UC and CSU Admission.*

This year-long course extends the skills learned in previous fine arts courses such as Drama I, Drama II, or Choir by introducing the students to the genre of Musical Theatre. Students will participate in activities that hone their talents in acting, voice, movement, and improvisation. Students will also study the history of musical theatre in America, and examine the ways that musicals reflect the cultural context in which they were developed. They are also introduced to the famous performers, composers, lyricists, and choreographers who created Broadway's most popular musicals. Students will learn to apply the various styles they have become familiar with to develop their own performances using music, dance, song, story and design.

Technology and Engineering Electives

Courses labeled with a (P) count towards your A-G requirements.

Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

Computer Science (P)* – Not offered 26-27 SY

Grade: 9-12 (Repeatable for Credit) | Prerequisites: None | Full Year Course

**This course meets the college prep elective requirement for UC and CSU Admission.*

Introduction to computer science emphasizes the teaching of logic and design and developing an understanding of basic programming. Students will learn about writing programs to perform simple tasks, learn basic animation and application development, and will cover such topics as JAVA, HTML and the use of graphical interfaces. There are no prerequisites for this course and no coding or programming experience is required.

AP Computer Science Principles (P+)*

Grade: 9-12 | Prerequisites: None | Full Year Course

**This course meets the college prep elective requirement for UC and CSU Admission.*

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. Students are expected to take the AP test in May.

AP Computer Science A (P+)*

Grade: 10-12 | Full Year Course

Prerequisites: Successful completion of Integrated Math 1; Summer Assignment

**This course meets the college prep elective requirement for UC and CSU Admission.*

AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. Students are expected to take the AP test in May.

Pre-Engineering and Design (P)* – Not offered 26-27 SY

Grade: 9-12 | Prerequisites: None | Full Year Course

**This course meets the college prep elective requirement for UC and CSU Admission.*

This is the first engineering course in a series of five engineering courses. It will emphasize the development process of a product, but the techniques learned are equally applicable to areas such as robotics, garment design, archeological or accident reconstructions, simulated surgery, advertising, or animated films. This project-oriented course starts from the concept of developing a 3-D model of an object. Once the model is created, the object can then be viewed from many different viewpoints; animated, textured, highlighted, or re-proportioned.

Principles of Engineering (P)* – Not offered 26-27 SY

Grade: 10-12 | *Full Year Course*

Prerequisites: Successful completion of Pre-Engineering and Design or instructor recommendation

**This course meets the college prep elective requirement for UC and CSU Admission.*

This is a course that helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes helps students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The course is taught by an instructor with an engineering background.

University Prep and Senior Electives

Courses labeled with a (P) count towards your A-G requirements.

Courses labeled with a (P+) count towards your A-G requirements and earn an extra GPA point on a passing grade (weighted).

University Prep (Advisory)

Grade: 6-10 | Prerequisites: None | Full Year Course

All students are enrolled in University Prep, which is composed of **three components** with appropriate, grade-level emphasis for academic and social development. All activities are geared toward personal development, college preparation and exploration, literacy and mathematical skill reinforcement, preparation for standardized testing, and college application and admission.

The three components are:

- **KBAR** (Kick Back and Read) and **KBAC** (Kick Back and Calculate) for 30 minutes each at least twice weekly. These basic, skills- enhancing activities prepare Preuss students for literacy needed at the university. Students are also encouraged to write for a wider audience by entering writing contests.
- **Values-based, age appropriate curriculum** dealing with decision making, the development of ethics and character, time management, notebook organization, career exploration, college research, maintaining a healthy lifestyle, developing leadership, and contributing back to the community through service learning. For example, sixth graders learn the negative impact of bullying and gossip among peers. Eighth graders research potential careers and college majors. Eleventh graders focus on SAT and ACT preparation.
- **Academic Guided Tutorials** using the "I CLEAR" model. (Inquiry, Collaboration, Linking, Evidence, Application, and Research). Tutorials are provided for all students using various models of collaboration: small groups with peers, tutor-led, teacher-led, and individual one-on-one.

UCSD Junior/Senior Seminar (P)*

Grade: 11-12 | Prerequisites: None | Full Year Course

**This course meets the college prep elective requirement for UC and CSU Admission.*

This course for all seniors qualifies as a college prep elective on the UC and CSU applications. The curriculum is aligned with completing college admission tasks and deadlines, scholarships and financial aid, and the transition to college. Students must meet minimal benchmarks with the active support of University Prep teachers, the college advisor, counselors, and parents. Successful completion of this course is required for graduation. Curriculum content expands to include the following: Resume polishing, application essays, CSU and UC applications, CSU EOP application, scholarship research and application, FAFSA/CADAA completion, Senior Exhibition presentation, and personal finance. In Junior year, students will additionally orchestrate and implement a community service project in an area that serves an identified need.

Senior Wheel

Grade: 12 | Prerequisites: None | Full Year Course

This elective captures the two components of The Preuss School graduation requirements: Senior Research and Internship. Ideally, these two strands should be interrelated, so that the senior has a newly gained level of expertise, which reflects depth and understanding. Students must pass each component of the Senior Wheel and pass the Senior Exhibition in order to earn a Preuss diploma. The wheel includes the following two steps:

- Identify a topic of interest that is anchored in one of the five academic strands and is approved by the Research Committee. Complete a formal argumentative research paper, using academic databases, print resources and applying research principles. Students also gain an introduction to composition and exposure to the rigors of college writing.
- Complete a 10-12 week internship within a department of interest in the UC San Diego community. Prepare for entry into a professional or research setting and reflect on workplace skills developed over the course of the internship.

Credit Recovery

Edgenuity

Grade: 9-12 | Full Year Course/Non-Credit Bearing Section

- *(Students will receive credit for completion of Edgenuity coursework and the original course name will be listed on their transcript)*

Prerequisites: Counselor discretion based on credit recovery needs

This course is designed to help high school students that are deficient in graduation credits or that need to retake a course to meet A-G/4-year college eligibility. The course recovery is done through the Edgenuity/Imagine Learning curriculum, which offers online courses for History, English, Mathematics, and Spanish that students have originally earned a D or F in. Students in grades 9-12 take courses online for credit recovery toward high school graduation.