

The Preuss School UCSD

Course Descriptions and Educational Planning

2017-2018



The Preuss School UCSD
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Name: _____

Class of: _____

University Prep Teacher: _____

**Course Selection Card
Due Date:** _____

Counselor: _____

Parent Signature _____

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My Personal Academic Plan

Directions for this page: Determine your grade 6-12 course plan by highlighting the titles of the courses you have completed and those you will take through grade 12. A line indicates that you write in the title of the course you choose to take in that area. (See the course descriptions that follow in this booklet.) Spanish, math and science courses could vary in grades 8-12, particularly if a student must repeat a course to be eligible for the University of California. *In the elective course sequence, all spaces that contain a (*) indicate an elective choice.*

Grades 6-12 Core Subjects

Grade Level	English	Math	Science	Social Studies
6	Language Arts 6	Advanced Math 6	Advanced Science 6	Social Studies 6
7	Advanced English 7	Advanced Math 7	Advanced Science 7	World History/Geog. 7
8	Advanced English 8	Integrated Mathematics I or _____	Advanced Science 8	U.S. History and Geography 8
9	Advanced English 9	Integrated Mathematics II or _____	Advanced Biology	Western Civilization and Culture
10	Advanced English 10	Integrated Mathematics III or _____	Advanced Chemistry or _____	AP European History
11	AP English Language and Composition	Pre-Calculus or _____	Physics or _____	AP U.S. History
12	AP English Literature and Composition	Calculus, AP Statistics or _____	AP: Biology, Chemistry, Environmental or _____	AP U.S. Government and Politics

Grade 6-12 Elective Courses

*Electives must include at least one full year of Visual and Performing Arts (see course descriptions on pg. 22). VAPA = Visual and Performing Art, satisfying the admission requirement for UC. Placement in Spanish is based on a proficiency test; literacy through AP Spanish Language is the goal; optional continuation is available in AP Spanish Literature; student may choose another elective once they have completed the AP Spanish Language requirement.

Grade Level	EHS/Physical Education	Spanish/Literacy Enrichment	Advisory	Elective
6	EHS 6	Literacy Enrichment	Preuss School University Prep	Elective "Wheel"
7	EHS 7	Spanish I or Spanish II	Preuss School University Prep	Elective "Wheel"
8	EHS 8	Spanish II or Spanish III	Preuss School University Prep	Elective "Wheel"
9	EHS 9 or Athletics	Spanish: _____ (until AP Language is completed)	Preuss School University Prep	*
10	EHS 10 or Athletics	Spanish: _____ or * _____	Preuss School University Prep	*
11	Athletics or * _____	Spanish: _____ or * _____	UCSD EAOP Junior Seminar	*
12	Athletics or * _____	Spanish: _____ or * _____	UCSD EAOP Senior Seminar	Internship/Research Project/ Service Learning

2017-2018 SCHEDULING

Welcome to the 2017-2018 course selection process for The Preuss School UCSD. As a grade 6-12 secondary institution, there are distinctive characteristics in both the middle school and high school programs.

- Sixth graders are challenged by rigorous courses that concentrate on skill development, study habits, and a deep understanding of subject content.
- Seventh and eighth grade students begin completing college admission requirements in such core subjects as mathematics and Spanish, while building academic background in core and elective subjects.
- Ninth and tenth graders take courses that not only meet, but exceed college admission requirements.
- Eleventh and twelfth graders take the highest level of high school courses in the five core subjects and electives that meet the a-g subject requirements of the University of California.
- Preuss twelfth graders experience internships that connect them with the professional and technical career opportunities throughout the university community and San Diego County.
- One hundred percent of Preuss graduates apply to four-year colleges and universities, with the primary goal being their admission to the University of California campuses and other prestigious institutions of higher learning throughout our nation.

The Preuss School UCSD High School Graduation Requirements

- A. Students must complete 270 credits in the following subject areas to qualify for **The Preuss School UCSD 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 EAOP Senior Seminar	10
Senior Exhibition/Wheel	10
Elective	70
Total Credits to Graduate	270

- B. In addition to meeting all The Preuss High School UCSD graduation requirements, all students are required to pass each component of the Senior Wheel and Exhibition in order to receive a diploma.

UNIVERSITY OF CALIFORNIA (UC)

Minimum Admission Requirements

How does UC determine eligibility?

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

1. Complete 15 UC required college-preparatory (“a-g”) courses, with 11 of those done prior to the start of 12th grade. Grades in these courses must **not** be lower than a C.
2. Maintain a GPA of 3.0 or better (weighted by honors/AP bonus points) in these “a-g” courses.
3. Take the ACT with Writing or SAT Reasoning Test no later than December of senior year, preferably earlier.

Required “a-g” Courses

a) History/Social Science- 2 YEARS REQUIRED

Two years of history/social science, including one year of world history, cultures and geography; and year of U.S. history or one-half year of U.S. history and one-half year of civics or American government.

b) English- 4 YEARS REQUIRED

Four years of college-preparatory English that include frequent and regular writing, and reading of classic and modern literature. No more than one year of ESL-type courses can be used to meet this requirement.

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. 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 that your high school accepts as equivalent to its own math courses.

d) Laboratory Science- 2 YEARS REQUIRED, 3 YEARS RECOMMENDED

Two years of laboratory science providing fundamental knowledge in two of these three foundational subjects: biology, chemistry and physics. The final two years of an approved three-year integrated science program that provides rigorous coverage of at least two of the three foundational subjects may be used to fulfill this requirement.

e) Language Other than English- 2 YEARS REQUIRED, 3 YEARS RECOMMENDED

Two years of the same language other than English. 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.

f) Visual and Performing Arts (VAPA) - 1 YEAR REQUIRED

One year-long course of visual and performing arts chosen from the following: dance, drama/theater, music or visual art.

g) College Preparatory Electives- 1 YEAR REQUIRED

One year (two semesters), in addition to those required in “a-f” above, chosen from the following areas: visual and performing arts (non-introductory level courses), history, social science, English, advanced mathematics, laboratory science, engineering/technology and language other than English (a third year in the language used for the “e” requirement or two years of another language).

Qualifying for College Admission

a-g Pattern Worksheet for The Preuss School UCSD

Note: Using your transcript or final report cards, put the grade you earned in the appropriate space. You can self-evaluate how you are progressing toward meeting the a-g requirements for UC admission. College prep courses in grades 7, 8, and 12 are not included in this chart; however, they can be used to meet the a-g requirements. Some courses do not fit on this chart, such as physical education, athletics, and Advisory (until grade 12). Check the course descriptions to find the a-g status of elective courses.

Academic Subjects a-g Only	9 th Grade Course Title	1 st Sem.	2 nd Sem.	10 th Grade Course Title	UC Honors Course (AP)	1 st Sem.	2 nd Sem.	11 th Grade Course Title	UC Honors Course (AP)	1 st Sem.	2 nd Sem.
	GPA not used For admission										
A History/Social Science											
B English											
C Math											
D Lab Science											
E World Language											
F Visual and Performing Art											
G College Prep Electives											

Note: If you are completing your 11th grade year, you can calculate your a-g GPA using the above grades earned 10th and 11th grade.

Remember that A=4, B=3, C=2, D=1, and F=0. All AP courses use A=5, B=4, C=3, D=1, and F=0. However, Preuss uses only AP courses to calculate weighted GPA.

Calculate the point total for each course grade, add the points together, and divide by the total number of grades. For example, for one semester:

English = A = 4
 Math = B = 3
 Social Studies = A = 4
 Physics = B = 3
 AP Spanish = B = 4 (weighted grade)
 Drama = A = 4

Total = 22 points divided by 6 classes = 3.66 a-g pattern GPA

Clubs and Academic Organizations

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

- FANCY Club
- Botball
- Interact Club
- Model United Nations
- National Honor Society
- NOBCCHE
- FIRST Robotics
- Running Club
- Science Olympiad
- Youth at Law
- Chelsea's Light Peer Corps
- Gay Straight Alliance Club
- Anime Club
- Badminton Club
- Debate Club
- Therapeutic Writing Club
- INSPIRE Club
- International Student Association Club
- Dreamers 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 UCSD 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:

10 hours in Grade 9
10 hours in Grade 10
15 hours in Grade 11
25 hours in Grade 12

Planning Courses for 2017-2018

Planning an educational program for the next school year will require the collaboration of students, teachers, parents, and the guidance counselor. 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 "+" sign are weighted for The Preuss School UCSD 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 guidance counselor 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, Honor 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

Language Arts 6 / Literacy Enrichment (Grade 6)

Prerequisites: None

Full Year Course – two blocks

Students will meet the Common Core State Standards in English Language Arts in the following areas: reading books in different genres; using word relationships to determine meaning and context clues; responding to non-fiction, fiction, poetry, and drama using interpretive, critical and evaluative processes; reading informational materials to support opinion, extend ideas, and produce oral and written work to communicate information; identifying familiarity with a variety of public documents; demonstrating the rules of the English language including grammar, sentence structure, punctuation and spelling. Students will write works in specific genres such as a response to literature, narrative account, report, and a persuasive essay. Students will participate in speaking, listening, and viewing activities such as conferences with the teacher, group meetings, individual presentations, and media awareness activities. Beginning research skills are emphasized as well.

Advanced English 7 (Grade 7)

Prerequisites: Language Arts 6

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 history. 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 timed writings in preparation for the STAR Writing Assessment.

Advanced English 8 (Grade 8)

Prerequisites: Advanced English 7; Summer Reading requirement prior to Grade 8 English

Full Year Course

Eighth grade English focuses on a variety of narrative and informational writing and reading strategies and skills, in accordance with the language arts standards for the state of California and the Common Core State Standards. Students review reading and writing of biographical, autobiographical, and short story narratives. They expand their understanding of response to literature essays and persuasive essays including doing research, citing sources with in-text citations, and writing bibliographies. In addition, the curriculum examines different non-fiction business documents (business letters, resumes) and technical documents (by-laws, training manuals). Grammar instruction focuses especially on mastering sentence structure, parts of speech, and subject—verb agreement. Grammar study also introduces parallelism, coordination, subordination, and apposition.

Advanced English 9 (P) (Grade 9)

Prerequisites: Advanced English 8; Summer Reading requirement prior to Grade 9 English

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

Full Year Course

Students will meet the Common Core State Standards in English Language Arts for grade 9. The course consists of the interrelated study of literature, writing, and oral communication. The standard forms of American English, which include spelling, vocabulary, grammar, and usage, are taught through the study of literature. The literature may be taught by genres (short stories, drama, nonfiction, poetry, fable, myth, legend, novel), by theme, or in interdisciplinary units. A variety of writing types are emphasized in each unit, including a project using formal research techniques during the year.

Advanced English 10 (P) (Grade 10)

Prerequisites: Advanced English 9; Summer Reading requirement prior to Grade 10 English

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

Full Year Course

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, as well as the study of the short story, nonfiction, poetry, drama, and the 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 a broad exposure to English Literature. Activities will include personal response to the literature and small group discussion. Writing types include response to literature, biographical narrative, poetry, critical response essay, report, the reflective essay and business documents.

Advanced Placement (AP) English Language and Composition + (P) (Grade 11)

Prerequisites: Advanced English 10; Summer Reading requirement prior to AP English Language and Composition

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

Full Year Course

The Advanced Placement course in English Language and Composition is 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 literature. 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. Students are expected to take the College Board's AP English Language and Composition examination in May.

Advanced Placement (AP) English Literature and Composition + (P) (Grade 12)

Prerequisites: AP English Language and Composition; Summer Reading requirement prior to AP English Literature and Composition

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

Full Year Course

Students are involved in careful reading and critical analysis 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.

Social Studies

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, table, 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: Social Studies 6

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 Western Civilization and Culture course that students will have in the 9th grade.

United States History and Geography 8 (Grade 8)

Prerequisites: World History and Geography 7

Full Year Course

The course examines the sequence of historical and geographic development in the United States from the framing of the Constitution to the end of Reconstruction. It focuses on allowing students to examine important periods of our history in greater detail. The development of the eighth-grade curriculum incorporates the following units:

1. Forming of our nation
2. The Constitution of the United States
3. Understanding the beliefs and ideals of our nation's founders
4. The divergent paths of American people from 1800 to the mid-1800s
5. The causes and consequences of the Civil War
6. Industrialization of the United States.

Students study the literature, arts, and the political atmosphere for each unit. They research the issues, attitudes, points of view, and motives that helped shape the United States.

Western Civilization and Culture (P) (Grade 9)

Prerequisites: United States History and Geography 8

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

Full Year Course

The course examines the development of Western civilization from the Renaissance of the late 1600s to World War II. Students will trace the rise of democratic ideas and develop an understanding of the historical roots of world issues, especially as they pertain to international relations. Students will understand world issues from a variety of perspectives and relate them to their historical, geographic, political, economic, and cultural contexts in the following units of study:

1. The Renaissance and Reformation
2. Absolutism to Enlightenment
3. French Revolution and Napoleon
4. Industrial Revolution
5. New Imperialism
6. World War I
7. World War II

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 European History, taken in grade 10.

Advanced Placement (AP) European History + (P) (Grade 10)

Prerequisites: Western Civilization and Culture

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

Full Year Course

This course follows the syllabus of Advanced Placement European History, as specified by The College Board; it prepares students to satisfactorily complete the Advanced Placement Examination in European History in May and to earn college credit. The course is organized to help students develop understanding of some of the major themes of European history and an awareness of the consequence of the European contacts with other regions of the world, and to encourage their ability to analyze historical evidence. Heavy emphasis is placed on European history from 1450 to the present. Development and practice of high-order thinking and analysis play a major part in course instruction, and ongoing experience in writing essay examinations is provided. Students are expected to take the College Board's AP European History examination in May. Following the AP exam in May, the course will focus on human rights around the world.

Advanced Placement (AP) United States History + (P) (Grade 11)

Prerequisites: AP European History

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

Full Year Course

The Advanced Placement Course in the 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 (AP) United States Government and Politics + (P) (Grade 12)

Prerequisites: AP United States History

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

Full Year Course

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 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.

Mathematics

Advanced Mathematics 1

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 integers, fractions, decimals, percentages), proportions, linear functions, basic algebra, measurement and geometry, data analysis, probability, problem solving, 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.

Advanced Mathematics 2

Prerequisites: Satisfactory achievement (C or better) in Advanced Mathematics 6 and teacher recommendation.

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) (Primarily Grade 8)

Prerequisites: Satisfactory achievement (C or better) in Advanced Mathematics 1 and teacher recommendation.

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

Full Year Course

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) (Primarily Grade 9)

Prerequisites: Satisfactory achievement (C or better) in Integrated Mathematics I and teacher recommendation.

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

Full Year Course

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) (Primarily Grade 10)

Prerequisites: Satisfactory achievement (C or better) in Integrated Mathematics II and teacher recommendation.

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

Full Year Course

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, logarithms and exponents, conic sections, complex numbers, polynomials, trigonometry, and probability and statistics. Success in this course will be a primary consideration in establishing readiness for Pre-Calculus.

Pre-Calculus (P) (Primarily Grade 11)

Prerequisites: Satisfactory achievement (C or better) in Integrated Mathematics III and teacher recommendation.

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

Full Year Course

Students will meet the California Common Core State Standards for Pre-calculus focusing on trigonometry and functional analysis. Pre-calculus extends the study of functions (trigonometric, logarithmic, rational) and delves more deeply into topics such as conic sections and 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) (Primarily Grade 12)

Prerequisites: Satisfactory achievement (C or better) in Pre-Calculus and teacher recommendation.

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

Full Year Course

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 will be prepared 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.

Advanced Placement (AP) Statistics + (P) (Primarily Grades 11-12)

Prerequisites: Successful completion of Pre-calculus and teacher recommendation.

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

Full Year Course

This course covers exploratory data analysis, data collection, probability, and statistical inference and parallels a college level statistics course. The course draws connections between all aspects of the statistical process, including design, analysis, and conclusions. The student will be prepared to take the advanced placement exam in the spring. Successful completion of the exam will give the student one semester of college credit for introductory statistics at most colleges and universities. Students are expected to take the College Board's AP Statistics examination in May.

Science

Advanced Science 6 (Grade 6)

Full Year Course

The primary emphasis in science will be earth science, and physical science. The students will be engaged in a variety of activities, projects, and experiments designed to enhance the student's scientific understanding of plate tectonics, volcanoes, earthquakes, and the Earth's structure. In addition, the students will learn about heat transfer, properties of matter. Students will work on collaborative research project to present at the school Science Festival.

Advanced Science 7 (Grade 7)

Prerequisites: Satisfactory achievement in Advanced Science 6

Full Year Course

Students will explore life science topics such as cell biology, genetics, evolution, history of life on earth, anatomy and physiology, physical principles in living systems, and investigation and experimentation. Students will learn how to investigate by using the Preuss Science Cycle through the development of a Science Festival project.

Advanced Science 8 (Grade 8)

Prerequisites: Satisfactory achievement in Advanced Science 7.

Full Year Course

Constructing Ideas in Physical Science is a full year physical science course, which is inquiry based, designed to engage students in building an understanding of basic concepts and skills. Students perform hands-on, minds-on activities, which follow a learning cycle of several phases including: 1.) finding out students' initial ideas about a topic, 2.) development of new or changed ideas, 3.) confirmation of students' ideas by comparing them with formal science ideas, 4.) application of ideas to new situations, and 5.) learning about additional science ideas. Students learn how to investigate by using the Preuss Science Cycle through the development of a Science Festival project.

Advanced Biology (P) (Grade 9)

Prerequisites: Concurrent Enrollment in Honors Algebra

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

Full Year Course

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 environment. Students will learn about the similarities of living systems, including but not limited to cells, genetics, biochemistry and evolution. Students will participate in experimental lab activities with clearly defined goals and safety procedures. Teacher demonstrations, text readings and homework will be used to introduce and reinforce concepts. All students are required to complete a Science Festival project. This course is designed to meet the State of California science standards.

Advanced Chemistry (P) (Grade 10)

Prerequisites: C or better in Advanced Biology and successful completion of Honors Algebra.

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

Full Year Course

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. All students are required to complete a Science Festival project. This course is designed to meet the State of California science standards.

Physics (P) (Grade 11)

Prerequisites: Concurrent enrollment in Advanced Intermediate Algebra or higher.

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

Full Year Course

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. All students will be required to complete a Science Festival project of their own design. This course is designed to meet the State of California science standards.

Advanced Placement (AP) Biology + (P) (Grade 12)

Prerequisites: Satisfactory achievement in Adv. Biology and completion of Honors Algebra.

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

Full Year Course

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 (AP) Chemistry + (P) (Grade 12)

Prerequisites: Satisfactory achievement in Physics, Advanced Chemistry and completion of Advanced Intermediate Algebra.

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

Full Year Course

The AP Chemistry course is designed to 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 (AP) Environmental Science + (P) (Grade 12)

Prerequisites: Students should have two years of laboratory-based science classes, ideally one in a physical science (Chemistry or Physics) and one in Biology.

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

Full Year Course

The AP Environmental Science 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.

Marine Science (Grade 10-12)

Elective Science Course

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

Full Year Course

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.

Astronomy (Grade 10-12)

Prerequisites: Completion of Integrated Math 2 with a grade of C or better.

Elective Science Course

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

Full Year Course

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. Prerequisites: Completion of Integrated Math 2 with a C or better.

World Language

Spanish I (P) (Grade 7-10)

This course fulfills the first year of the minimum requirement for UC and CSU eligibility

Full Year Course

Emphasis is on listening, speaking, reading, and writing. An awareness of world cultures, understanding dialogues and questions, accurate pronunciation and intonation, reading comprehension, and composition will be integrated with vocabulary development, grammar and sentence structure, and verb tense.

Spanish II (P) (Grade 7-11)

Prerequisite: Grade of C or better in Spanish I; current teacher recommendation.

Completion of this second year meets the minimum requirements for UC and CSU eligibility.

Full Year Course

Spanish II continues to build on and to expand the students' skills in listening, speaking, reading and writing learned in Spanish I. Adding to their foundation of knowledge in grammar and using communicative-based strategies, students will express their own feelings and opinions along with compare and contrast their world with the Spanish speaking world. Aligned with the Spanish II curriculum are the Foreign Language Standards (the 5 C's).

Spanish III (P) (Grade 7-12)

Prerequisite: Grade of C or better in Spanish II; current teacher recommendation.

This course can be used to fulfill the foreign language or "g" requirement for admission to UC and CSU.

Full Year Course

Emphasis on fluency with accurate pronunciation and intonation continues, as well as emphasis on cultural awareness and appreciation. Analysis of Spanish literature, writing answers to questions, and creating dialogues will be important components of a literacy-based curriculum. Receptive vocabulary should consist of about 2,000 words. Students should reflect an understanding and ability to use all verb tenses in more sophisticated oral and written work.

Spanish IV (P) (Grade 8-12)

Prerequisite: Grade of C or better in Spanish III; current teacher recommendation

This course can be used to fulfill the foreign language or “g” requirement for admission to UC and CSU.
Full Year Course

In this course students will increase oral and written fluency in Spanish through a more intense study of grammar, literature, culture, and history. The class will be conducted in the language and many of the grammatical concepts studied will be tested on the AP exam. Students will participate in frequent conversation groups, write compositions, read literary works, and be able to discuss and/or summarize in the language. At the intermediate level, a greater understanding of grammar concepts previously presented is emphasized. In addition, reading assignments are now an integral part of class work. Reading is an excellent way to see language modeled authentically. Classroom discussion of the readings will allow students to practice the grammar and vocabulary in a meaningful but guided setting as well as provide a deeper understanding of the diverse cultures represented by the Spanish language.

Advanced Placement (AP) Spanish Language + (P) (Grade 9-12)

Prerequisite: Grade of C or better in Spanish IV; current teacher recommendation.

This course can be used to fulfill the foreign language or “g” requirement for admission to UC and CSU.
Full Year Course

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). Preparation for the SAT II Subject Test in Spanish and the Advanced Placement Exam in Spanish Language will be a major emphasis. Students are expected to take the College Board's AP Spanish Language examination in May.

Advanced Placement (AP) Spanish Literature and Culture + (P) (Elective Course for Grades 10-12)

Prerequisite: Grade of B or better in Advanced Placement (AP) Spanish Language; current teacher recommendation.

This course can be used to fulfill the foreign language or “g” requirement for admission to UC and CSU.
Full Year Course

This course is designed for students who wish to pursue the equivalent of a third-year college-level course in literature. It is available as an elective, once students have proven their literacy in Spanish language, by passing the AP Spanish Language test. Proficiency in language skills and the analysis of selected literary works in Spanish will be stressed. Students will read representative works from a variety of genres, historical periods, and geographical areas. Students will learn to formulate and express critical opinions and judgments orally and in writing. The interrelationship between literature and culture is developed. The major outcomes of the course are based on guidelines from the College Board. Students are expected to take the College Board's AP Spanish Literature examination in May.

Exercise and Health Science Department

(Grades 6-8)

The Exercise and Health Science Department (EHS) formerly known as The Physical Education Department has a responsibility to our students at Preuss to expose them to a broad spectrum of activities and coursework so that they will earn the value of maintaining an active healthy lifestyle. Our curriculum currently includes:

- **Physical Activities (team, individual and lifetime sports)**
- **Personal Fitness**
- **Standardized and State mandated fitness testing**
- **Nutritional and dietary information**

- **Positive Prevention Plus – A comprehensive Sexual Education for middle and high school students**

Grade 6: Cooperative Learning: The program focuses on cooperative games and small group performance to build their confidence through improved skill development. They also learn how to work with others in small group settings while building their team leadership skills. A student folder is required for all students to set and maintain goals, do their reflective writing, keep accurate notes from each lesson and display any projects that are done throughout the year. Nutrition and dietary information help students learn the importance of eating healthy and making good decisions when it comes to their health. Students are assessed in all five areas of fitness (strength, endurance, flexibility, cardiovascular endurance and body composition) by participating in statewide Fitnessgram testing.

Grade 7: Taking Control: Students will look beyond themselves and be challenged through individual, team and lifetime sports as well as fitness activities. Students will learn how to chart their own fitness, create their own games and dances. They will learn how to apply “training” principles to their own skill movements and understand specific muscle groups and their functions. Students are assessed in all five areas of fitness (strength, endurance, flexibility, cardiovascular endurance and body composition) by participating in statewide Fitnessgram testing. Nutrition and dietary information is an integral part of their curriculum. Students will design their own personal dietary food pyramid based on their gender, age and activity level. Students are required to maintain a journal where they record notes, reflective writing, goal setting and special projects. As part of the 7th grade wheel, students may also have the opportunity to take the Life skills and Health class. This project-based course will focus on the prevention of unhealthy behaviors and promote attitudes and behaviors that can lead to lifelong health practices.

Grade 8: Team Building. Emphasis is placed on “team sports” challenging the body and the intellect. The students will learn rules of the game, offensive and defensive strategies and refine previously learned physical skills. Students set and obtain goals relative to their role on a team sport. They are responsible for establishing the game setting and regulating the outcome; this creates an interest in lifelong sport and conditioning. Students are assessed in all five areas of fitness (strength, endurance, flexibility, cardiovascular endurance and body composition) by participating in statewide Fitnessgram testing. Nutrition and dietary information is an integral part of their curriculum. Students will design their own personal dietary food pyramid based on their gender, age and activity level. Students are required to maintain a journal where they record notes, reflective writing, goal setting and special projects. Students may also have the opportunity to enroll in 8th grade Health Class that is part of their wheel. This class begins where their 7th grade life skills/health class ends, with lessons that focus on the four aspects of health; mental, emotional, social and physical. Students will also have the opportunity to learn Growth and Development through our Sexuality Education Curriculum.

Soccer Academy- Part of the 8th grade Exercise and Health Science curriculum and based on the California Physical Education Middle School Standards. The class is opened to any student who wishes to focus on soccer. It is based on interest and flexibility within the student’s course schedule. An interview may be necessary to determine the class roster. Students should see Coach Fulchiron or their Exercise and Health Science teacher for further information.

EHS/Personal Fitness (Grades 9-12) This class is designed to help the student choose the best lifelong activity for them. Students learn to be their own “coach.” Major projects help the student to analyze their own physical condition and learn the benefits of optimal health and its affect on the body. Students will create a 5 month fitness plan using current training methods to increase their strength, flexibility and cardio-endurance and decrease their percentage of body fat. They explore and teach a team sport, individual sport or dance to others. The class also explores nutrition while students seek the optimal personal diet. The curriculum includes sexuality and life skills education in 10th grade. Based upon availability and teacher approval, this class will now be opened to 11th and 12th grade students.

Athletics (Grades 9-12 – becomes an elective in Grade 11-12)

Prerequisite: active interest in participating on one of more Preuss School UCSD athletic teams or Preuss Spirit Squad; recommendation of the student’s Exercise and Health Science teacher and/or coach based on skill and potential; the adherence to the Preuss athletic code of conduct and training rules; competitive tryouts in all sports; sports physical indicating sound health and academic eligibility in both scholarship and citizenship. Academic eligibility is defined as maintaining a 2.5 grade point average (GPA). In the event the student-athlete’s scholarship and citizenship GPA falls between a 2.0 and 2.5, the following will occur:

Student-athlete will meet with their coach to satisfy the coach’s academic requirements. These requirements may include, but not limited to the following:

1. Setting up individual contracts

2. Setting academic goals for success
3. Participation in after school tutoring and Saturday Enrichment Academy (SEA)

If a student-athletes GPA for either scholarship and citizenship fall below the CIF required 2.0, they will not be eligible for participation, however student-athlete will still be able to practice during the Athletic Block. This will be in effect until the most recent progress notice, where the student's progress will be reassessed.

FITNESSGRAM®

The Preuss School UCSD Exercise and Health Science Department administers the *FITNESSGRAM®* test in all grades. It provides the fitness assessment components for physical education programs that include comprehensive health-related fitness education. Students are tested in the following areas:

- **Aerobic Capacity-Choose One**
 - PACER test
 - one-mile run
 - walk test
- **Muscle Strength, Endurance, and Flexibility**
 - abdominal strength and endurance (curl-up)
 - trunk extensor strength and flexibility (trunk lift)
 - upper body strength (push-up)
 - flexibility (choose back-saver sit and reach or shoulder stretch)
- **Body Composition**
 - body mass index

Students strive to stay within the Healthy Fitness Zones (HFZs) to evaluate fitness performance. These zones are standards established by The Cooper Institute of Dallas, Texas, and represent minimum levels of fitness that offer protection against the diseases that result from sedentary living. Students are required to pass the 5 out of the 6 standard tests of the *FITNESSGRAM®* in order to be exempt from physical education in 11th and 12th grade.

Electives

Middle School Elective “Wheels”

Grade 6 Elective “Wheel”

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 as part of the “wheel.” 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.

Grade 7 Elective “Wheel”

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.

Grade 8 Elective “Wheel”

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 Development and English Graduation Requirement Electives

Writers Workshop (P) (Grade 7-11)

This course can be used to fulfill the “g” requirement for admission to UC and CSU.

Full Year Course

Through various assessments, including performance on the California Standards Test in English Language Arts, students who need additional support may be scheduled into this course. Students complete writing and reading assignments that allow them to meet the California Standards in English Language Arts in reading and writing. A variety of nonfiction and fiction texts provide models for the range of discourse types that students write in this course. Students work through the various stages of the writing process including prewriting, drafting, revising, editing and publishing. Students maintain a portfolio of their work as evidence of their progress and remaining areas of growth as writers. The primary goals of the course include improving students’ writing proficiency in response to reading a range of texts and offering corollary support to students’ writing in their core classes. Students who are English Language Learners also benefit from this intensive attention to literacy improvement.

Readers and Writers Workshop UP (P) (Grade 9-12)

This course can be used to fulfill the “g” requirement for admission to UC and CSU.

Full Year Course

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.

Middle School Math Enrichment 1, 2, 3 (Grade 6-8)

Full Year Course

Middle School Math Enrichment 1, 2, 3 provides additional support for students in their core mathematics classes (Advanced Math 1, Advanced 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 9-10)

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 and students will receive direct instruction and tutorial support in math content that will appear on standardized tests related to college admission, such as PSAT, SAT I, SAT II and ACT. This course is for the serious student who wants to master the material and progress to higher levels of mathematics.

Leadership and Publications Electives

Journalism 1, 2 (P) (Grades 9-12)

Prerequisites: By application only; English grade of B or better

Full Year Course

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) (Grades 9-12)

Prerequisites: By application only; English grade of B or better.

Full Year Course

The primary emphasis of this yearbook course is to create historical documentation for The Preuss School UCSD. 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.

Middle School Student Government (Grade 8)

Prerequisites: By election or interview; meets the qualifications to hold office (see above)

Full Year Course

This course for student leaders in grades 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.

High School Student Government (Grades 9-12)

Prerequisites: By election or by interview; meets the qualifications to hold office according to The Preuss School ASB Constitution and By-Laws (a copy can be obtained from the ASB Advisor)

Full Year Course

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 some weekends, as student body officers assist with student orientation and tours, parent activities, Saturday Enrichment Academy, outreach events with UCSD, events such as the Martin Luther King Parade, and Open House. Students must maintain initial academic and citizenship eligibility to remain in ASB the full year.

World Language and Athletics Electives

Athletics (Grade 11-12 Elective)

See description under Exercise and Health Science course offerings. Eligibility is based upon selection and academic eligibility according to CIF policies. (2.0 in scholarship and citizenship) Physical exam required for participation.

Advanced Placement (AP) Spanish Literature + (P) (Grade 10-12 Elective)

See description under World Language course offerings.

Visual and Performing Arts Electives

Advanced Middle School Orchestra (8th Grade only)

Full Year Course

Prerequisites: Ability to play the string instruments; selected by the teacher and counselor, based upon invitation and application; prior experience in Beginning Instrumental Music (grade 6) or Intermediate Orchestra (grade 7)

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 the musical knowledge. This course is part of the feeder/satellite program of the San Diego Youth Symphony. Orchestra students will present public performances.

Preuss Honors Orchestra (P) (Grade 9-12)

Course meets the Visual and Performing Arts requirements for UC and CSU Admission.

This course is pending Honors approval for UC and CSU Admission.

Prerequisites: completion of the 8th grade orchestra is recommended.

Full Year Course

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 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 the 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.

Preuss Honors Choir (P) (Grade 9-12)

Course meets the Visual and Performing Arts requirements for UC and CSU Admission.

Prerequisites: Audition, and the ability to sing on pitch and enjoy singing and dancing

Full Year Course

This course emphasizes performance skills, voice training, music literacy, and understanding of the 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 also cover the curriculum for the Certificate of merit voice category level 5-7. The Certificate of Merit program is sponsored by the Music Teacher Association of /California.

Preuss Instrumental Ensembles (P) (Grades 9-12)

Course meets the Visual and Performing Arts requirements for UC and CSU Admission.

This course is pending Honors approval for UC and CSU Admission.

Prerequisites: Preuss Honors Orchestra

Full Year Course

This course will continue to develop the performance skills of the Preuss Honors 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 the 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.

Introduction to Piano and Musical Composition (P) (Grades 9-12)

Prerequisites: None; *can be repeated as a second year course with teacher approval.**

Course meets the Visual and Performing Arts requirements for UC and CSU Admission.

Full Year Course

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.

Introduction to Guitar Class (Grades 10-12)

Prerequisites: None

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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 non the D string, notes on the A string, Notes on the E string, the right had 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, music of the masters, and folk songs. 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.

Advanced Placement (AP) Music Theory (Grades 10-12)

Prerequisites: Advanced Middle School Orchestra, High School Orchestra, Choir, Introduction to Piano or Guitar.

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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 student 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.

Studio Art I (P) (Grades 9-12)

Prerequisites: Teacher recommendation based upon evidence of talent.

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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 and perspective and 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) (Grades 10-12)/Studio Art II Honors (P) (grades 10-12)

Prerequisite: Grade of B or better in Studio Art 1; current teacher recommendation.

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Honors approved for UC and CSU Admission.

Full Year Course

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.

AP Studio Art (P) (Grades 11-12)

Prerequisite: Grade of B or better in Studio Art 1 & 2; current teacher recommendation.

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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. Once their portfolios are identified, students pursuing these courses may work concurrently with students and the instructor in Studio Art Studio 1,2. This class requires that students complete 24 works over the school year. Students will have summer assignments prior to the school year.

Drama I (P) (Grade 9-12)

Prerequisites: None

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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 II (P) (Grade 9-12)

Prerequisites: Drama I

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

This course is pending Honors approval for UC and CSU Admission.

Full Year Course

This course will continue to develop the skills acquired in Drama I. Students will prepare for monologues, auditions, and competitions. 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.

Musical Theatre (P) (Grade 10-12)

Prerequisite: One year of Drama or choir. Motivation to perform and create.

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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.

Advanced Placement (AP) Art History + (P) (Grade 11-12)

Prerequisites: Demonstration of strong reading comprehension and writing skills; highly motivated student; recommended successful completion of AP European History.

This course meets the Visual and Performing Arts requirement for UC and CSU Admission.

Full Year Course

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.

Technology and Engineering Electives

Computer Science (P) (Grade 9-12)

Elective Course

This course can be used as an "elective" or "g" requirement for admission to UC and CSU.

Full Year Course

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.

Pre-Engineering and Design (P) (Grade 9-12)

Prerequisites: Motivation to progress to a higher level of technological knowledge.

This course can be used as an “elective” or “g” requirement for admission to UC and CSU.

Full Year Course

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) (Grade 10-12)

Prerequisites: Motivation to progress to a higher level of technological knowledge; previous coursework in Pre-Engineering and Design or recommendation of teacher.

This course can be used as an “elective” or “g” requirement for admission to UC and CSU.

Full Year Course

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 engineering background.

Robotics (P) (Grades 9-12)

Prerequisites: Participation or intent to participate in the after school robotics program.

This course can be used as an “elective” or “g” requirement for admission to UC and CSU.

Full Year Course

This course is intended to support the robotics program by providing time to learn robotics related skills. These skills include project management, sketching, mechanical design, and computer programming. In the fall this course focuses on organizing a local "Lego League" tournament and training middle school students to program small robots. In the Winter we design and build a large robot to compete in "FIRST" robotics events around the country. Students are expected to participate in after school robotic events.

Advisory and Senior Electives

Preuss School UCSD University Prep: Advisory (Grades 6-10)

Full Year Course

All students are enrolled in Preuss School UCSD University Prep Advisory, which is comprised 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 life style, 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 group with peers, UCSD Teacher Education Program tutor-led, Advisory teacher-led, and individual one-on-one.

Preuss School UCSD University Prep: EAOP Junior/Senior Seminar (P) (Grades 11-12)

This course meets the “g” requirement for UC and CSU Admission.

Full Year Course

This course for all seniors qualifies as an “a-g” college prep elective on the UC and CSU applications. The curriculum is aligned with completing college admission tasks and deadlines, the quest for scholarships and financial aid, and the transition to college. Students must meet minimal benchmarks with the active support of Preuss School UCSD University Prep Advisory teachers, college advisor, counselors, and parents. Successful completion of this course is required for graduation. Curriculum content expands to include the following:

September/October/November

Final SAT and ACT preparation and completion (including re-takes). Attend Senior Countdown to College Parent Meeting. Resume polishing, application essays, begin CSU and UC applications, begin CSU EOP application, begin Common App for private colleges.

November

Submit UC application to four or more UC campuses (UCSD required). It’s recommended to apply to multiple CSU campuses and one or more private colleges.

December/January/March/April/May

Scholarship research and application to multiple scholarship competitions, including the San Diego County Ford Dealers Salute to Education and San Diego Foundation Scholarships, as a minimal expectation.

January/February/March

Attend Senior Financial Aid Workshop. Completion of the FAFSA (Free Application for Federal Student Aid) by Cal Grant deadline of March 2.

April/May/June

Completion of college “intent to register,” placement testing, orientation, and other college-specific obligations. Study for AP tests, work on Senior Exhibition presentation. Learn about personal finance skills for a successful transition to college.

Senior Research and Exhibition / Internship / Service Learning Elective (Grade 12)

Prerequisites: None

Full Year Course

This elective captures the three components of The Preuss School UCSD graduation requirements: Senior Research Project and Exhibition, an Internship, and a Service Learning contribution to the community. Ideally, these three 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 in order to earn a Preuss diploma.*

In three, twelve-week segments, seniors will complete the following:

- 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 research paper, using academic databases and print resources. 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. Seniors need to plan to attend internship on Friday mornings 8am-9:30am and are responsible for their own transportation.
- Orchestrate and implement a community service project in an area that serves an identified need in the surrounding community or the student's neighborhood. Students also provide weekly classroom service at Preuss under the guidance of their supervising teacher. Students are required to complete a minimum of 20 hours field work and 5 hours classroom service to fulfill a 25-hour total requirement.