

# University Preparatory Academy 2023-2024 Course Catalog

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#### **UPA Mission**

The mission of University Preparatory Academy is to prepare a diverse population of 7<sup>th</sup>–12<sup>th</sup> grade students in Santa Clara County to enter and excel in the best colleges and universities in the nation.

## **Expectations for Students**

**UPA Students Will Be Expected to:** 

**Abide by UPA Common Dress Code** 

Complete Schoolwork to the Best of Your Ability

**Attend School Every day** 

Arrive Early to School and to All Classes

Be Safe and Use Common Sense

**Respect Property of All Persons** 

**Demonstrate Leadership and Intellect** 

# **UPA Middle School Promotion Requirements**

In order to ensure student success in high school, all 8th grade students will be required to complete the following requirements:

- Proficiency level on standardized exams
- End of course grade of C or higher in core courses
- Growth on NWEA or equivalent tests

In accordance with the law and as per UPA Board Policy, and the ultimate recommendation of the teacher, a student may be retained in 8<sup>th</sup> grade for failure to achieve proficiency on the CST in Language Arts and Mathematics, normal progress on Northwest Evaluation Association (or other comparable test) level tests (230 RIT level for Reading, Language Arts, and Mathematics), or satisfactory academic performance (i.e.; grading reports).

# **UPA High School Graduation Requirements**

Subject Area	UPA Requirement	UC Status
Social Studies	30 Units	All must be UC "a"
English	40 Units	All must be UC "b"
Mathematics	≥ 30 Units including Integrated Math 3	All must be UC "c"
Laboratory Science	≥ 30 Units	All must be UC "d", and must include Biology and Chemistry
Foreign Language	≥ 30 Units	All must be UC "e"
Visual and Performing Arts	≥ 20 Units	At least one must be UC "f"
AP US Government & Politics / Economics	10 Units (5 Units / 5 Units)	Must be UC "a" / "g", also required to meet CA high school graduation requirements
Physical Education	≥ 10 Units (or waiver to academic credits)	Not UC required
Seminar (Formerly Advisory)	≥ 15 Units (at 2.5 units/semester)	Not UC required
General Electives	≥ 35 Units	Prefer UC approved "a-g"
Total Units	≥ 250 Units	≥ 180 Units must be UC "a–g"
Advanced Placement	≥ 2 courses	Recommended
Community Service	$\geq$ 10 hours per year, $\geq$ 40 total hours	Not UC required

UPA's high school graduation requirements currently emphasize the traditional university preparatory courses of English, Mathematics, Science, Social Science, Foreign Language, and the Visual and Performing Arts. However, these courses will be taught in a real world context that challenges each student to think beyond the subject matter that is being presented and continually place new information in the context of their own knowledge base.

University Preparatory Academy's graduation requirements, subject to further revision and improvement, exceed the minimum California high school graduation requirements and meet or exceed the University of California "a–g" and California State University course content requirements.

#### Social Sciences Department, UC / CSU Content Area "a"

The Social Sciences Department course offerings are listed in Table 1 and the course descriptions following it.

 Table 1 Social Sciences Department Course Offerings (UC "a")

Course	Course Code	Grade Level
World Civilization	S2000xx	7
American History	S0800xx	8
World Geography "a"	S1000xx	9
World History "a"	S2000xx	10
AP World History "a"	S2050xx	11
United States History "a"	S3000xx	11
AP United States History "a"	S3050xx	11
AP United States Government & Politics "a"	S4050xx	12
Economics "a"	S4100xx	12
AP Psychology "a"	S5050xx	12
Sociology	S7000xx	10-12

Course Title:	Ancient Civilizations		
Course Code:	S0700xx	Grade Level(s):	7
Course INFO:	2 Semesters / 5 Units per Semester		
HS Graduation Credit:	N/A		
UC / CSU:	N/A Honors: No		

This is a course that will blend six historical themes of Geography, Culture, Economics, Government, Belief Systems plus Science and Technology to eight units of study. An interactive journey that introduces World History, the Growth of Islam, African Civilizations, Asian Civilizations, Medieval Europe, the Civilizations of the Americas, European Renaissance and Reformation plus Early Modern Europe.

Students will connect to four sections of learning throughout the course from reading and critical thinking skills, chronological and spatial thinking skills, research skills, evidence, and point of view skills to historical interpretation skills. Students will be writing about history using primary sources to examine comparisons across cultures.

Through the skill builder activities, students will look at stories and legends, maps and legends plus daily life to connect literature and geography. There will be a special section exploring strategies for taking tests that will cover multiple choice responses, charts and graphical information, maps, time lines, short answer, short essay and document-based questions. Students will identify pieces of history predominantly moving from 500 AD to 1800 AD.

Course Title:	American History		
Course Code:	S0800xx Grade Level(s): 8		
Course INFO:	2 Semesters / 5 Units per Semester		
HS Graduation Credit:	N/A		
UC / CSU:	N/A	Honors:	No

The purpose of this course is to provide an understanding of the political, economic, technological, and social development of the United States from Exploration to World War I. Students will examine the connections to the past, and prepare for a future as participating members of a democratic society. Emphasis is placed on technical writing, research, and technology. This course emphasizes critical thinking and application skills. Additionally, students will be expected to complete projects and demonstrations that are consistent with a rigorous, academically oriented course.

Course Title:	World Geography		
Course Code:	S1000Xxx Grade Level(s): 9		
Course INFO:	2 Semesters / 5 Units per Semester		
HS Graduation Credit:	Social Science / Elective		
UC / CSU:	a Honors: No		

Through study of the physical and human geographic elements of the world and a wide survey of the world's history, we will be developing and practicing three main skills; reading, writing, and historical thinking. These skills have essential value in furthering your education and use in a wide range of potential careers. Furthermore, the course will take a "Pre-AP" approach. This means that our learning strategies will almost always be geared towards preparing students to be ready to take the rigorous AP World History and AP US History courses as Sophomores and Juniors.

Course Title:	World History			
Course Code:	S2000xx	Grade Level(s):	10	
Prerequisite(s):	Successful complet	Successful completion of World Geography recommended		
Course INFO:	2 Semesters / 5 Units per Semester			
HS Graduation Credit:	Social Science / Elective			
UC / CSU:	a Honors: No			

The first purpose of the course is to teach history in a nontraditional way that looks at the common threads of humanity over time—trade, religion, politics, society, and technology—and investigate how these things have changed and continued over time in different places.

The second purpose of the course is to intensively practice historical reading and the practice of writing a historical research paper. Students will be instructed in the methods of how to read and interpret primary and secondary historical sources. Students will also practice the techniques and methods of how to write historical research papers.

Course Title:	AP World History		
Course Code:	S2050xx	Grade Level(s):	10
Prerequisite(s):	"B" or higher in World Geography OR teacher recommendation AND English 9 teacher recommendation		
Course INFO:	2 Semesters / 5 Units per Semester		
HS Graduation Credit:	Social Sciences / Elective		
UC / CSU:	a Honors: Yes (AP)		

The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies.

It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study.

Course Title:	United States History		
Course Code:	S3000xx	Grade Level(s):	11
Prerequisite(s):	"C-" or better in World History		
Course INFO:	2 Semesters / 5 Units per Semester		
HS Graduation Credit:	Social Science / Elective		
UC / CSU:	a Honors: No		

This is a one-year course in U.S. History with primary focus on events of the 20th century but connecting to past learning from Colonial times through Westward expansion.

Course Title:	AP United States History			
Course Code:	S3050xx	Grade Level(s):	11 recommended or 12	
Prerequisite(s):	"B" or higher in World History, OR "C" or higher in AP World History, OR teacher recommendation			
Course INFO:	2 Semesters / 5 Units per Semester			
HS Graduation Credit:	Social Science / Elective			
UC / CSU:	a Honors: Yes (AP)			

The main purpose of this course is to provide a clear understanding of the political, economic, technological, and social development of the United States from early exploration to the present. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Specific themes provide further organization to the course.

This course traces the theme of race over time by focusing on the development of slavery, slave culture and resistance, abolitionist movements, the effects and impact of Reconstruction on African Americans, the development of Jim Crow laws, the Great Migration, as well as the struggles for civil rights in the 19th and 20th centuries. Other themes emphasized in this course include progression of the American identity, the evolution of American culture, economic trends, issues on the environment, reform movements, and the issue of slavery and its impact in North America. The understanding and mastering of these themes is advanced through a combination of selective factual knowledge and appropriate analytical skills such as critical thinking and historical consciousness.

The secondary purpose is to prepare students to take an extremely challenging and comprehensive AP Exam at the end of the year. The pace and scope of the course will reflect our common goal of being expertly prepared to take the AP exam.

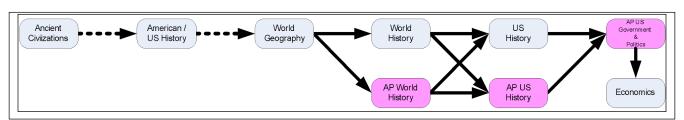
Course Title:	AP Psychology			
Course Code:	S5050XX	Grade Level(s):	12	
Prerequisite(s):	Biology, Chemistry	Biology, Chemistry		
HS Graduation Credit:	Social Science / Elective			
Course INFO:	Semester			
UC / CSU:	a/g Honors: No			

The purpose of the AP Psychology course is to teach students to critically analyze incoming information and to expose them to the history of the subject. In order to understand the different perspectives and approaches that are being used by psychologists today, this class will use activities and experiments that highlight the critical aspects of psychological theory and practice. The main objectives of this class are to instill students with a desire for knowledge, the drive to think for themselves, and the ability to influence social change.

Course Title:	Sociology			
Course Code:	S7000XX	Grade Level(s):	10-12	
Prerequisite(s):	Student must be on	Student must be on track for graduation		
HS Graduation Credit:	Social Science / Elective			
Course INFO:				
UC / CSU:	a/g	Honors:	No	

\*NOTE: This course is not yet approved or adopted by UPA. Student demand will determine next steps.\* Introduction to Sociology is a social science course designed to introduce students to the basic concepts of the intercultural discipline of sociology. Emphasis will be given to the following special areas: culture, socialization, social stratification and the five institutions, including family, politics, economics, religion, and education. Examples of other topics include: demography, deviance, technology, environment social issues, social change and social organization.

Figure 1 Social Sciences, UC "a" Typical Course Flow Chart



#### English Language Department, UC / CSU Content Area "b"

The English Department course offerings are listed in Table 2 with the course descriptions following it.

<b>Table 2</b> English	Language Department	Course Offerings	(UC "b")

Course	Course Code	Grade Level
English 7	E0700xx	7
English 8	E0800xx	8
English 9 "b"	E1000xx	9
English 10 "b"	E2000xx	10
English 11 "b"	E3000xx	11
AP English Literature and Composition "b"	E3050xx	11 / 12
English 12 "b"	E4000xx	12
AP English Language and Composition "b"	E4050xx	12 / 11
Journalism "g"	E6000xx	9-12

Course Title:	English 7		
Course Code:	E0700xx	Grade Level(s):	7
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A Honors: No		

7th Grade English is a yearlong course designed to develop and support students into becoming lifelong readers and writers. To accomplish this goal, all students will focus their learning and skill development reading, writing, listening, and speaking. Writing portfolios, journals, response to literature applications and daily language are focuses in the area of writing.

By the end of 7th grade, students should be able to write in complete sentences, list the parts of the paragraph format that will be used throughout different grade levels, and write a well-developed full paragraph. Independent reading will also be required from 7th grade students at UPA, and the teacher will strive to provide students with the opportunity to read books on their individual reading level and to respond to them appropriately.

Course Title: English 8	
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Course Code:	E0800xx	Grade Level(s):	8
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A	Honors:	No

One of the main goals in 8th grade English is to build skills in reading comprehension through reading a variety of novels and conducting discussions in class. Later in the year, students will be required to read non-fiction writing, which they will tie into developing their speech and listening skills.

Writing is also a huge part of the class and will be included in their daily activity. By the end of 8th grade, students should be able write two well-developed full paragraphs that use text to support ideas and statements.

Course Title:	English 9		
Course Code:	E1000xx	Grade Level(s):	9
Prerequisite(s):	None		
HS Graduation Credit:	Language Arts		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	b Honors: No		

English 9 is a combined program involving the study of literature, composition, grammar, mechanics, and vocabulary. Emphasis is placed on building skills in both reading and writing with college preparation driving instruction. Core works of literature are identified in key genres, such as drama, novels, short stories, poetry, and non-fiction so that students may experience reading and interpreting varied styles of literature.

The writing domain of response to literature (interpretive essay) is emphasized with the intent that students will show understanding, provide textual support, and address the abstractions, nuances, and complexities in a work of literature.

Course Title:	English 10		
Course Code:	E2000xx	Grade Level(s):	10
Prerequisite(s):	Successful completion of 9th grade English.		
HS Graduation Credit:	Language Arts		

Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	b	Honors:	No

English 10 is a high school sophomore level course that is designed to prepare students for the rigor of preparation for college. Students will read and analyze poetry, short stories, novels, drama, and nonfiction. Students will be asked to analyze and compare works in relation to theme, character, historical influence, and literary devices.

Students will develop expository essays that fully support a clear thesis statement using facts, examples, or quotes from literature. Viewing and mimicking various writing styles will be explored and developed. Employing a more precise academic writing vocabulary will be expected of all students. The development of speaking and listening skills to express ideas, to support an argument, and to clarify information will be essential to the full education of the student. Students will concentrate on writing domains of interpretation and persuasion with an emphasis on editing skills.

Course Title:	English 11			
Course Code:	E3000xx	Grade Level(s):	11	
Prerequisite(s):	Successful completion of 10th grade English.			
HS Graduation Credit:	Language Arts			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	b Honors: No			

English 11 is a review of American literature from oral tradition through contemporary. The student will study the characteristics of the different eras and genres including non-fiction, short stories, poetry, novels and drama from various American authors. Vocabulary will be developed through the study of words from assigned literature to an outside vocabulary text. The writing process will be integral in this course. Students will continue to develop proficiency in persuasive, narrative, and response to literature essays. The students will write a research paper integrating the time period evident in a novel written by an American author.

Course Title:	AP Literature and Composition		
Course Code:	E3050xx	Grade Level(s):	11 recommended or 12
Prerequisite(s):	Grade of "B" or higher with completion of 10th grade English OR teacher recommendation.		
HS Graduation Credit:	Language Arts		
Course INFO:	2 Semesters / 5 Uni	its per Semester	

UC / CSU:	ь	Honors:	Yes (AP)
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Students who take this course will read a variety of literature from poetry, short stories, novels, and drama. It is expected that students will enter the class having had exposure to all of these genres before but students will be expected to hone their skills in close reading as well as writing for analysis while understanding diction, style, symbols, tone, and voice to name a few. Students will be responding to questions in the form of timed writing, creative writing assignments in which vocabulary development will be explored, a research paper requiring synthesis of various sources, personal statement for the college application, and interpretation and analysis of various genres. Students will be expected to learn to revise, edit, and proofread their work as well as serve as a peer editor.

This course is designed to be a college-level course on a high school campus and will prepare the student for the rigors of a college English class. There will be plenty of writing, reading, questioning, and arguing with the hopes that the students will learn to think for themselves rather than be told the answers.

Course Title:	English 12 – Film Analysis			
Course Code:	E4000xx	Grade Level(s):	12	
Prerequisite(s):	Successful complet	Successful completion of 11th grade English.		
HS Graduation Credit:	Language Arts			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	b Honors: No			

Students who take this course will read a variety of literature from poetry, short stories, novels, and drama. It is expected that students will enter the class having had exposure to all of these genres before but students will be expected to hone their skills in close reading as well as writing for analysis while understanding diction, style, symbols, tone, and voice to name a few. Students will be responding to questions in the form of timed writing, creative writing assignments in which vocabulary development will be explored, a research paper requiring synthesis of various sources, personal statement for the college application, and interpretation and analysis of various genres. Students will be expected to learn to revise, edit, and proofread their work as well as serve as a peer editor.

This course is designed to teach a wide range of literacy skills through viewing film as a text. The context of the course teaches both the history and cultural significance of cinema in the United states, a range of film genres including: documentary film, animated film, foreign film, and experimental film. The course is also designed to teach the technical aspects of filmmaking and critical approaches to film analysis. Students are then asked to apply these viewing "lenses" to the films watched in class. Technical aspects of filmmaking will include: characterization,

lighting, art direction and visual design, cinematography, sound, color, and visual effects. Critical approaches to film will include: symbolism, Auteur theory, multiculturalism in film, gender representations in film, and a psychoanalytical approach to film. In accordance with Common Core States Standards, this course asks students to analyze the purpose of a film, how the film achieves that purpose, why that purpose is significant to the canon of film history, and what further meaning can be extracted from viewing the film. In addition, the students will have the opportunity to apply this knowledge to the writing, storyboarding, filming, and editing of a film they produce themselves. The course will also include ongoing vocabulary work college-level course on a high school campus and will prepare the student for the rigors of a college English class. There will be plenty of writing, reading, questioning, and arguing with the hopes that the students will learn to think for themselves rather than be told the answers.

Course Title:	AP Language and Composition		
Course Code:	E4050xx Grade Level(s): 12 recommended or 11		
Prerequisite(s):	Grade of "B" or higher with completion of 11th grade English OR teacher recommendation.		
HS Graduation Credit:	Language Arts		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	b	Honors:	Yes (AP)

Following the suggested format of AP Central, students who take this course will look at the structure and message of all writing concentrating more on the non-fiction aspect of message. Students will practice these structures specifically in relation to tone, voice, vocabulary usage to name a few. Students will practice synthesizing information in practice for continued work with research-based essays using multiple sources to support their writing. Students will also practice and apply their personal statements for college and scholarship writing.

This course is designed to be a college-level course on a high school campus and will prepare the students for the rigors of English post high school. There will be plenty of writing, reading, debating, and questioning.

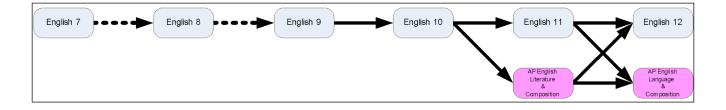
Course Title:	Journalism			
Course Code:	E6000xx Grade Level(s): 9-12			
Prerequisite(s):	None			
HS Graduation Credit:	Language Arts/Elective			
Course INFO:	2 Semesters / 5 Uni	2 Semesters / 5 Units per Semester		

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Students will demonstrate a clear understanding of the legal and ethical issues surrounding journalism and news media in society and at the high school level. Additionally, they will learn how to write in a variety of styles used in newspapers and magazines, including feature writing, news writing, opinion writing, and specialty writing (entertainment, sports, etc.). Students will learn how to generate questions, interview and evaluate sources, and gather reliable information. Students will synthesize information from research and interviews, as well as first-hand observations, and write clear, compelling articles in appropriate formats depending on the objectives.

Students will read case laws surrounding student press freedoms, as well as theory surrounding journalism's role in a democratic society. They will also read a variety of journalistic styles, including standard news and feature articles, profiles, and editorials. Reading the articles will serve as a teaching tool for students discern the characteristics of each type, and then attempt to replicate those characteristics in their own writing. Articles about the current state of press freedoms both in America and around the world will be addressed and used as foundations for discussions.

Figure 2 English, UC "b" Typical Course Flow Chart



#### Mathematics Department, UC / CSU Content Area "c"

The Mathematics Department course offerings are listed in Table 3 course descriptions following it.

 Table 3 Mathematics Department Course Offerings (UC "c")

Course	Course Code	Grade Level
Math 7	M0750XX	7
Math 8	M0850XX	7-8
Integrated Math 1 "c"	M1050XX	9
Integrated Math 2 "c"	M2050XX	10
Integrated Math 3 "c"	M3050XX	9–12
Integrated Math 3+ with Trigonometry "c"	M3050XX	9-12
Pre-Calculus "c"	M4000XX	11-12
Statistics "c"	M4050xx	11–12
AP Calculus AB "c"	M5050xx	11–12
AP Calculus BC "c"	M5060xx	11-12
Introduction to Computer Science "g"	M6000xx	9-12
AP Computer Science "c / g"	M6050xx	11-12

Course Title:	Math 7			
Course Code:	M0750XX	Grade Level(s):	7	
HS Graduation Credit:	N/A			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	N/A Honors: No			

Students will perform operations on rational numbers and proportional equations. They will manipulate simple algebraic expressions for solve one variable equations. In an introduction to geometric reasoning, they will create 2 and 3 dimensional figures to help determine surface area and volume. And they will begin an exploration of statistical analysis on population data using measures of central tendency and variability.

Course Title:	Math 8			
Course Code:	M0850XX Grade Level(s): 8			
HS Graduation Credit:	N/A			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	N/A Honors: No			

Students will begin exploration of irrational numbers, including comparing operations on rational/irrational numbers. They will be exposed to a thorough understanding of linear functions, analyzing these functions algebraically, graphically, numerically and verbally. Students will gain a beginning understanding of transformational isometries by rotating, reflecting and translating polygons, which will ultimately lead to an understanding of congruence and similarity, particularly of triangles. The Pythagorean Theorem of right triangles is presented and used to solve right triangle segment lengths. Using scatter plot of bivariate data, students will make assumptions of patterns of association between data sets.

Course Title:	Integrated Math 1			
Course Code:	M1050XX Grade Level(s): 9			
HS Graduation Credit:	Mathematics			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	c Honors: No			

In this first high school math class, students will extend their understanding of functions to include function notation, an initial understanding of domain/range and an elementary exploration of linear and non-linear functions, algebraically, graphically, numerically and verbally. Linear equations and inequalities in one and two variables will be used to solve real world situations. Understanding of transformational geometry will lead to the beginning of the deductive proofs of theorems involving lines, angles, triangles and parallelograms. Students in the course will continue explorations in statistical data, incorporating analyses of correlation to the bivariate data presented.

Course Title:	Integrated Math 2		
Course Code:	M1060XX	Grade Level(s):	9 or 10
Prerequisite(s):	Successful completion of Integrated Math 1 with a C- or higher (For rising 9th graders): Pass Math 8 with 87% both semesters, 80th percentile on NWEA, and score 4 or higher on 3 of 5 MAC tasks.		
HS Graduation Credit:	Mathematics		

Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	С	Honors:	No

Integrated Math 2 is the second of a three year integrated math sequence that will help students see the relationships between algebra, geometry, and statistics. In this course students are introduced to exponential and quadratic functions and learn to compare them to linear functions that were studied in Integrated Math 1. Students see that quadratics can be used to represent conics, like circles and parabolas. Students will understand that writing functions and expressions in different forms can reveal key features that can be used to guide the solving of problems.

Students use the distance formula and the Pythagorean Theorem from Integrated Math 1 to aide in modeling them. Students will be introduced to the complex number system and explore the relationships between the real and complex systems.

Students continue to work with data and probability in this course. They will see the connection between the two by studying conditional probability and use probability models to make informed decisions.

Students will build on prior work with dilations and proportionality to build a formal understanding of similarity. Students will use similar triangles to understand right triangle trigonometry. Students will learn and understand how to construct a formal geometric proof and use the learned techniques to prove many geometric theorems. Students will establish formulas to solve problems involving circles and the volume of cylinders, pyramids, and cones.

Course Title:	Integrated Math 3			
Course Code:	M3050xx Grade Level(s): 10 <sup>th</sup> or 11 <sup>th</sup>			
Prerequisite(s):	Successful completion of Integrated Math 1 and 2			
HS Graduation Credit:	Mathematics			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	c Honors: No			

In this third high school math class, students will focus on a deeper understanding of functions, including linear equations and inequalities, quadratic equations and how these relate to conic sections, polynomial equations in real and complex solutions and rational expressions and equations. Students will be introduced to exponential and logarithmic equations, including the properties of each. Students will continue their exploration of data analysis, particularly as it applies to understanding and evaluating random processes underlying statistical experiments. Geometric principles of similarity in right triangles will extend to an early exploration of trigonometry.

Course Title:	Integrated Math 3+ with Trigonometry		
Course Code:	M3055xx	Grade Level(s):	10 <sup>th</sup> or 11 <sup>th</sup>

Prerequisite(s):	Math teacher recommendation and pass IM2 with B+ or higher for both semesters			
HS Graduation Credit:	Mathematics			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	c Honors: No			

In this third high school math class, students will focus on a deeper understanding of functions, including linear equations and inequalities, quadratic equations and applications, polynomial equations in real and complex solutions, and rational expressions, equations and functions. Students will be able to explore elementary statistical modeling and will be introduced to exponential and logarithmic equations, including the properties of each as well as applications for these functions in chemistry and physics.

Students will have an in-depth exposure to trigonometry including knowing function values of special angles on the unit circle, solving equations using right triangle trigonometry and Law of Sines/Cosines. Students will be able to graph periodic functions and state the amplitude, period and phase shift of the function based upon the equation or the graph. Students will understand the fundamental trigonometric identities, including the reciprocal, Pythagorean, even-odd, double angle, half angle, co-functional, and addition/subtraction identities and use each to solve equations.

Course Title:	Pre-Calculus		
Course Code:	M4000XX	Grade Level(s):	11 or 12
Prerequisite(s):	"C" or higher in Integrated Math 3 or 3+		
HS Graduation Credit:	Mathematics		
Course INFO:	2 Semesters / 5 Units per Semester		
UC/CSU:	С	Honors:	No

Pre-calculus is a preparatory course for AP Calculus. This course is offered to students who demonstrate depth of understanding of functions, trigonometry, logarithms, polynomials, rational notation, and probability concepts. The intent of the course is to develop skill and understanding of the language of functions, analytic geometry, sequences and series, complex numbers, vectors, and limits.

Through the study and use of Pre-calculus, the learner develops an understanding of the symbolic language of mathematics and the sciences. Pre-calculus develops the skills and concepts to help solve a wide variety of real-life applications in the sciences.

Course Title:	Statistics and Problem Solving
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Course Code:	M4050xx	Grade Level(s):	11 or 12
Prerequisite(s):	Successful completion of Integrated Math 3 or higher		
HS Graduation Credit:	Mathematics		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	С	Honors:	No

Statistics and Problem Solving is offered to students who are pursuing non-math/non-science college majors. It is designed to develop problem-solving skills and to introduce students to the basic concepts of Statistics and Probability. This course emphasizes developing understanding of statistical concepts and the ability to analyze real data, integrating technology to help achieve both of these goals. Through the study and use of Statistics and Probability, the learner develops an understanding of the symbolic language of mathematics and the sciences. Statistics and Problem Solving develops the skills and concepts to help solve a wide variety of problems.

Course Title:	AP Calculus (AB)		
Course Code:	M5050xx Grade Level(s): 11 or 12 recommended		
Prerequisite(s):	"C-" or higher in Pre-Calculus or B- or higher Integrated Math 3+ OR Math teacher recommendation		
HS Graduation Credit:	Mathematics		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	С	Honors:	Yes (AP)

(All students should download the AP Calculus course description booklet from URL <a href="http://www.collegeboard.com">http://www.collegeboard.com</a>). This course provides a comprehensive introduction to calculus comparable to one or more semesters at the college level. The material is challenging and corresponds with the syllabus of the College Board Advanced Placement Program. Calculus is considered a fundamental tool in many fields of study including science, business, and engineering. This course emphasizes the concepts of differential and integral calculus and provides experience in the methods and applications of these concepts. All concepts will be studied graphically, numerically, analytically and verbally. Graphing calculators are used extensively. A detailed list of course topics can be found in the official AP Calculus course.

Course Title:	AP Calculus (BC)		
Course Code:	M5060xx	Grade Level(s):	11 or 12 recommended

Prerequisite(s):	Pass AP Calculus AB (or passage of Precalculus with an "A") OR Math teacher recommendation			
HS Graduation Credit:	Mathematics			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	С	c Honors: Yes (AP)		

This course covers every topic in the College Board's AP Calculus BC course description. All AP Calculus AB material is covered and more--all of which is approximately equivalent to one full year of college level calculus. This includes many beginning calculus topics; from the basics of limits, to extensive investigations of differentiation and integration. Additional topics, unique to the BC course, include: calculus of parametric, polar, and vector functions; Euler's Method; integration by parts and partial fractions; improper integrals; logistic differential equations; and an extensive study of infinite series. Special emphasis is given to explorations of topics through four key lenses (the "Rule of Four"): analytic, numerical, graphical and verbal or written.

Course Title:	Introduction to Computer Science		
Course Code:	M6000XX	Grade Levels:	9-12
Prerequisite(s):	Passage of Integrated Math 1		
HS Graduation Credit:	Mathematics		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	"g"	Honors:	No

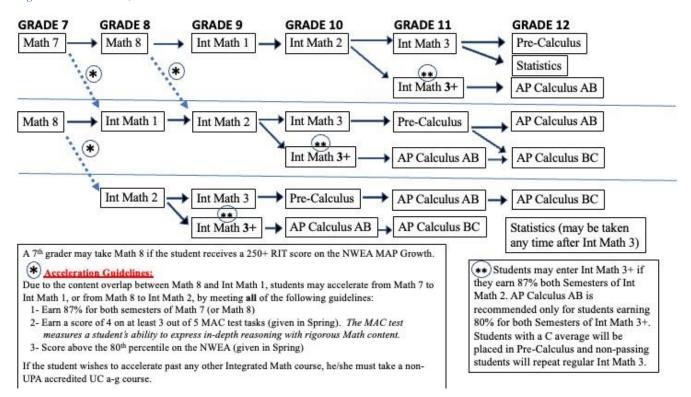
This course will introduce students to computer science, with a focus on building algorithms through computer programming. Students will also read and write about issues surrounding the implications of data and information in society. The objectives of this course are that students will a) develop computer programming skills such as abstraction, logic, and algorithmic thinking. b) become prepared for the Computer Programming AP course and c) increase their awareness of computer science as a career and life skill. Students will work with a drag-and-drop visual programming language called SNAP (derived from SCRATCH). This course is modeled after the course CS10: The Beauty and Joy of Computing at UC Berkeley.

Course Title:	AP Computer Science A		
Course Code:	M6050XX	Grade Levels:	10-12
Prerequisite(s):	Pass Intro to Comp Sci OR Math teacher Recommendation		
HS Graduation Credit:	Mathematics		

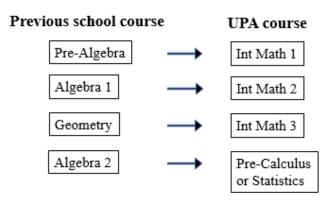
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	"c / g"	Honors:	Yes

Computer science embraces problem solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. As the study of computer science is evolving, the careful design of the AP Computer Science A course and exam continues to strive to engage a diverse student population, including female and underrepresented students, with the rigorous and rewarding concepts of computer science. Students who take the AP Computer Science A course and exam are well prepared to continue their study of computer science and its integration into a wide array of computing and STEM-related fields.

Figure 3 Mathematics, UC "c" Course Flow Chart



# Default placements for students transferring from a traditional Math sequence.\*



<sup>\*</sup> If a student has struggled with his/her previous Math courses, we may recommend taking a lower Math course at UPA.

For example, if a student received a C in Algebra 1, we would recommend the student take Int Math 1 upon entering UPA.

#### Science Department, UC / CSU Content Area "d"

The Science Department course offerings are listed in Table 4 with course descriptions following it.

Table 4 Science Department Course Offerings (UC "d")

Туре	Course	Course Code	Grade Level
Integrated Sciences	Integrated Science 7	Q0760XX	7
Integrated Sciences	Integrated Science 8	Q0860XX	8
	Biology "d"		9–10
Life Sciences	AP Biology "d"	Q1050XX	11–12
Marine Biology "d"		Q6000XX	11–12
	Chemistry "d"	Q2000XX	10–11
Physical Sciences	AP Chemistry "d"	Q2020XX	11-12
	Physics "d"	Q3000XX	11–12

<sup>\*</sup>PLTW sequence follows Science course descriptions.\*

#### **Integrated Sciences**

Course Title:	Integrated Science 7		
Course Code:	Q0760xx	Grade Level(s):	7
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters		
UC / CSU:	N/A	Honors:	N/A

UPA's Science 7 class follows the Next Generation Science Standards preferred integrated model in which students learn about the important connections of earth, physical, and life sciences throughout the year. Depth over breadth is emphasized in a thematic-based curriculum. Designed to build on students' curiosity and natural tendencies for exploration and collaboration, students participate in a variety of laboratory activities and engineering design challenges. They also continue their development of effective written and verbal communication, critical thinking, problem solving, and evidence-based argumentation skills.

The guiding concept of the Science 7 class is "Natural processes and human activities cause energy to flow and matter to cycle through Earth's systems" (California Science Frameworks.) Topics covered in the first half include the state of matter, plants, and genetics. These essential

subjects are studied at the molecular level in order to build deeper understanding of their effects at the macroscopic scale, especially in the context of organisms and rocks. As the year progresses, students learn about the nervous system, newtons law of motion, ecosystem dynamics, distribution of Earth's resources, and geoscience processes.

At the end of the year, emphasis is placed on the effects of human activities on Earth's systems, natural services, and the related challenges they pose to sustaining biodiversity. In partnership with their English class, students complete a culminating cross-disciplinary research project, in which they learn about the threats to the survival of a particular species, discover its vital connection with its unique ecosystem, and propose positive actions in a persuasive, evidence-based essay.

Course Title:	Integrated Science 8		
Course Code:	Q0860XX Grade Level(s): 8		
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters		
UC / CSU:	N/A	Honors:	No

UPA's 8th grade science class follows the Next Generation Science Standards (CA NGSS) Preferred Integrated Model. This Model integrates all four disciplines of science: physical science, life science, Earth and space science, and engineering. This course lets students focus on the content they need to understand real – world phenomena by presenting lessons on the proven 5E lesson model: Engage, Explore, Explain, Elaborate, Evaluate.

Students address what are forces and how do they affect the motions of objects in balanced and unbalanced forces. We then investigate how mass is related to kinetic energy, potential energy and the speed of an object. Science 8 uses phenomena from space to help students develop models of noncontact forces (gravity, magnetism, and electric fields). Noncontact forces can be difficult to visualize, so we complement hands – on investigations with physical and computational models. Students investigate one mass extinction event in detail by reading fossil evidence in layers of rock like pages of a history. To explain why different species exist during each time period, students transition to interpreting data about natural selection and evolution in modern-day organisms. Finally, We look at what human activities harm Earth's biodiversity vs which human activities help sustain local and global biodiversity? We then look at what are the characteristics, properties, and behaviors of waves. The unit ends with a look at how does communication technology encode information and how can digital technologies be used to sustain biodiversity? Integrated grade eight ends with a capstone project in which students investigate an environmental challenge. They must explain how humans influence the environment and design specific and detailed solutions that help solve or mitigate the problem.

#### Life Sciences

Course Title:	Biology			
Course Code:	Q1000xx Grade Level(s): 9 recommended or 10			
Prerequisite(s):	Recommended "C-" or higher in Integrated Math 1			
HS Graduation Credit:	Science			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	d	Honors:	No	

Biology is an entry-level course to teaches students about life sciences. The course develops an appreciation of life from the beginnings of cells through the human body. Students will learn about experimental design, characteristics of life, biochemistry, cells, DNA, protein synthesis, genetics, biotechnology, ecology, evolution, human body systems, and health education. All lessons are designed and implemented around the adopted Next-Generation Science Standards and include various labs to support learning. This is a class that focuses on inquiry and collaboration and helps students develop critical thinking to help them make informed decisions about the world around them.

Course Title:	Advanced Placement Biology			
Course Code:	Q1050xx Grade Level(s): 11 or 12			
Prerequisite(s):	"B" in Chemistry or "B—" in Chemistry Honors and "B" in Biology and concurrent standing in Integrated Math 3.			
HS Graduation Credit:	Science			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	d	Honors:	Yes (AP)	

AP Biology is the equivalent of an introductory level college biology course. The emphasis of this curriculum is to prepare students for the AP Biology exam. Students will be engaged in materials that will prepare them for the rigor and material load of a college level course. The ability to cover material and make overarching connections is a critical skill at the college level. Students will be required to manage their time and focus of study to apply the material to problem solving and understanding the connections of functionality of biological concepts. The student will need to practice communicative skills through free-response questions that will show their understanding of complex problems in Biology. Along with written practice students will need to be able to answer high-level inquiry-based multiple choice questions based on the concepts of the major biological themes. Students will perform required labs that will allow them to practice the use and technique, of applicable inquiry-based technology. Students will be required to critically think about the setup and function of the equipment and materials as to best obtain a meaningful result from their

application.

\*Requires a zero period lab.

#### **Physical Sciences**

Course Title:	Chemistry			
Course Code:	Q2000xx Grade Level(s): 10 recommended or 11			
Prerequisite(s):	Successful completion of Biology			
HS Graduation Credit:	Science			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	d	Honors:	No	

In this course students learn and apply the fundamental concepts and principles of chemistry. Areas of study include: changes in matter and energy, atomic theory and molecular structure, chemical bonding, chemical reactions, conservation of matter and stoichiometry, states of matter, gases and their properties, solutions, acids and bases, reaction rates and chemical equilibrium, organic chemistry and nuclear processes. The course utilizes a guided inquiry approach where students ask questions, predict outcomes, develop experiments and develop evidence-based conclusions. Students develop skills for using scientific tools, techniques and the investigative processes of science.

Course Title:	Marine Biology				
Course Code:	Q6000xx	Q6000xx Grade Level(s): 11 or 12			
Prerequisite(s):	Successful completion of Biology, Chemistry, and Integrated Math 1 or by teacher recommendation				
HS Graduation Credit:	Science	Science			
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	d	Honors:	No		

This is an in depth study of marine life, physical oceanography, and the impact of human activity on the oceans. This course is designed for students with an interest in marine biology and oceanography. This course provides an excellent background for students who are interested in further study of the oceans and the organisms that inhabit it. Major concepts include the study of: the interrelationship of marine and terrestrial environments, the geology of the oceans, marine organisms, and the ecology of coral reefs. Laboratory activities, including the examination of marine specimens are utilized throughout this course to build upon student knowledge. The course text is Marine Biology by Castro and Huber. The Marine Biology Coloring Book is also used as a course text. Both textbooks are written for introductory level college courses. Outside reading and independent fieldwork are REQUIRED parts of the class. Science communication work using readings, writing, computer presentation, labs, and scientific illustrations is also required. Field work at the Monterey Bay Aquarium and/or Año Nuevo State Park is a required part of the curriculum. Students will have additional opportunities such as the Inter-tidal Monitoring Project, and Sand Crab Monitoring. Students are expected to be self- motivated and interested in learning about marine environments. This course satisfies a life science lab class requirement for entrance into the University of California.

Course Title:	AP Chemistry			
Course Code:	Q2010xx Grade Level(s): 10 recommended or 11			
Prerequisite(s):	Pass Chemistry with B or higher AND Pass or Concurrent enrollment in IM3			
HS Graduation Credit:	Science			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	d	Honors:	Yes	

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year.

\*May require a zero period lab

Course Title:	Physics		
Course Code:	Q3000xx	Grade Level(s):	11 or 12
Prerequisite(s):	Pass Biology and Chemistry AND concurrent IM 3 request OR Pass IM3		

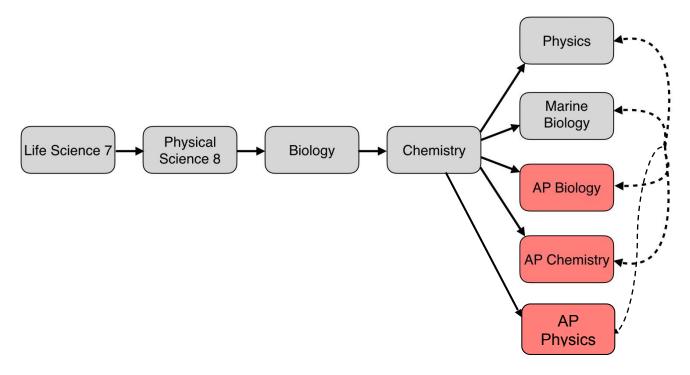
HS Graduation Credit:	Science		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	d	Honors:	No

The purpose of the Physics class is to: engage students in the practice of inquiry and discourse we call science; to promote a better understanding of the nature of science; to cultivate habits of mind that promote effective problem solving and critical thinking; and to equip students with a deep understanding of physics concepts in a way that is relevant and meaningful. Students should walk away from this course able to independently design and conduct their own experiments, and see science as more than just a body of knowledge, but a way of engaging with the world.

Course Title:	AP Physics 1		
Course Code:	Q3050xx	Grade Level(s):	11 or 12
Prerequisite(s):	Passage of Biology, Chemistry AND Integrated Math 3		
HS Graduation Credit:	Science		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	d	Honors:	No

AP Physics 1 is the equivalent of an algebra-based, introductory college-level physics course. Students will develop their understandings of physics and science through the key scientific practices of developing and using models, formulating scientific questions, designing experiments, analyzing data, and using mathematics to solve science problems. Students will develop problem solving skills and perform hands-on laboratory work to investigate physical phenomena centered on 7 key physics topics: Newtonian mechanics, gravitation, energy, momentum, mechanical waves and sound, and rotational motion. AP Physics 1 is open to students who have completed chemistry and Integrated Mathematics 3 with a "B" grade or better, and who are ready and desiring to take part in a rigorous exploration of physics.

Figure 4 Sciences, UC "d" Typical Course Flow Chart



#### Project Lead the Way Curriculum - Science, Technology, Engineering and Math (STEM)

Pathway	Course	Course Code	Grade Level
Gateway	Gateway to Technology 1	Y1000X7	7–8
	Gateway to Technology 2	Y1000X8	8
Engineering	Introduction to Engineering Design "d" / "g"	Y1000XX	9-12
Engineering	Principles of Engineering "d" / "g"	Y1200XX	10-12
	Principles of Biomedical Sciences "d"/"g"		10–12
Biomedical Sciences	Human Body Systems "d" / "g"	Q1170XX	10-12
	Medical Interventions "d" / "g"	Q5400XX	11-12

Course Title:	Principles of Biomedical Sciences			
Course Code:	Q5000XX Grade Level(s): 9 through 12			
Prerequisite(s):	N/A			
HS Graduation Credit:	Laboratory Science / Elective			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	"d" / "g"	Honors:	No	

Students explore the overlapping facets of biomedical science as they delve into increasingly complex real-life scenarios revolving around topics such as forensics, body systems, clinical care, disease outbreak and biomedical innovations such as 3D modeling, regenerative medicine and drug design. This project based curriculum encourages students to collaborate with peers to investigate real world problems as they develop analytical problem-solving skills to apply to novel situations. Students are engaged in hands-on activities and take on the roles of various professionals in the biomedical field. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses. This course is designed for 9th or 10th grade students

Course Title:	Human Body Systems		
Course Code:	Q5200XX	Grade Level(s):	10 through 12

Prerequisite(s):	Completion of Principles of Biomedical Sciences			
HS Graduation Credit:	Laboratory Science / Elective			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	"d" / "g"	Honors:	No	

In this second course of the PLTW Biomedical Sciences tract, Human Body Systems explores the anatomy and physiology of the human body. Units are broken into categories that include identity, communication, power, movement, protection, and homeostasis. This collaborative lab class has students designing experiments, investigating structures and anatomy, and exploring the physiology of how the body functions. Students also create their own "body" using digital and online resources to enhance their learning. This course helps students learn about various aspects of the medical field and potential job opportunities in and around medicine and biotechnology.

Course Title:	Medical Interventions		
Course Code:	Q5400XX	Grade Level(s):	11 through 12
Prerequisite(s):	Completion of Principle of Biomedical Sciences		
HS Graduation Credit:	Laboratory Science / Elective		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	"d" / "g"	Honors:	No

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

Course Title:	Introduction to Engineering Design		
Course Code:	Y1000XX Grade Level(s): 9 through 12		
Prerequisite(s):	Concurrent IM 2 request OR Pass IM2		
HS Graduation Credit:	Elective		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	"d" / "g"	Honors:	No

This survey course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work and communicate solutions.

Course Title:	Principles of Engineering		
Course Code:	Y1200XX	Grade Level(s):	10 through 12
Prerequisite(s):	Concurrent IM 2 request OR Pass IM2		
HS Graduation Credit:	Elective		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	"d" / "g"	Honors:	No

POE is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high tech careers. POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills,

creative abilities, and problem solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

#### World Language Department, UC / CSU Content Area "e"

The Foreign Language Department course offerings are listed in Table 5 with the course descriptions following it.

<b>Table 5</b> World Language Department Course Offerings (UC "e")	<b>Table 5</b> World	l Language Department	Course Offerings	(UC "e")
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Course	Course Code	Grade Level
Spanish 1 "e"	F1000xx	8–10
Spanish 2 "e"	F2000xx	8–11
Spanish 3 "e"	F3000xx	9–12
Spanish for Heritage Speakers "UC status pending"	F4100xx	10–12
AP Spanish Language and Culture "e"	F4060XX	11-12

Course Title:	Spanish 1		
Course Code:	F1000xx	Grade Level(s):	8 through 10
Prerequisite(s):	None		
HS Graduation Credit:	Foreign Language		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	e	Honors:	No

This course is designed for beginning language students and students who have had less than one year of prior language study. It provides the basis for continuing study and use of Spanish throughout high school and college. With emphasis on conversation and practical application, the student is taught to understand, speak, read, and write the language. A working vocabulary is developed in context, as are the basic grammatical structures of the language. In addition to listening and oral drills, there are readings, written grammatical exercises, creative writing opportunities, and original dialogue performances. Students are introduced to culture and customs through skits, music, videos, food, and magazines.

Course Title:	Spanish 2		
Course Code:	F2000xx	Grade Level(s):	8 through 11
Prerequisite(s):	Spanish I		
HS Graduation Credit:	Foreign Language		

Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	e	Honors:	No

This course continues the work of the first year in all four-language skills: speaking, comprehending, reading, and writing. The goal of the second year is to give students a working knowledge of Spanish. Contemporary topics, vocabulary, and culture are stressed. A variety of activities, including skits, food days, and videos, are included to enhance students' understanding of life in foreign countries and their use of the language.

Course Title:	Spanish 3		
Course Code:	E3000xx	Grade Level(s):	9 through 12
Prerequisite(s):	Spanish II		
HS Graduation Credit:	Foreign Language		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	e	Honors:	No

At this level, students use more sophisticated language structure than in the first two years. Class work is conducted mostly in Spanish. Students are exposed to a wider range of vocabulary, to conversation, and to more in-depth original expression (impromptu and prepared) in both oral and written form. They continue their study of culture reinforced by reading original works, seeing films and videos, creating skits, and interacting with native speakers.

Course Title:	Spanish for Heritage Speakers		
Course INFO:	2 Semesters / 5 Units per Semester		
Course Code:	F4100xx Grade Level(s): 9 through 12		
Prerequisite(s):	Completion of Spanish 3 and teacher recommendation. In some cases a Placement Test is required.		
HS Graduation Credit:	Foreign Language		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	е	Honors:	No

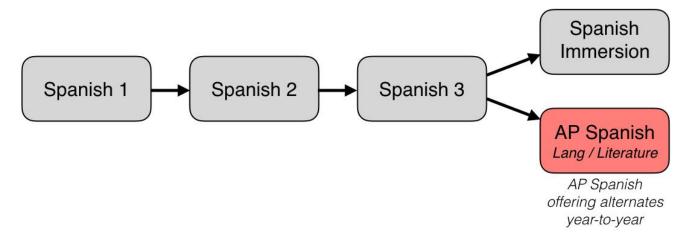
The purpose of this course is to enable students to experience the rich Latino language and culture. Students will be introduced to the academic Spanish language by a variety of fun and challenging material. Highlights include readings of well-known Latino authors, analyzing educational cultural

movies, culture and geography, family and community, rich academic vocabulary, and conversational Spanish. Students will refine both oral and written language skills. All of this acquired knowledge will be assessed by project presentations, speaking, and writing.

Course Title:	AP Spanish Liter	AP Spanish Literature and Culture					
Course Code:	F4060XX	F4060XX Grade Level(s): 11-12					
Prerequisite(s):	Passage of Spanish 3 with an 85% or above AND teacher recommendation						
HS Graduation Credit:	Foreign Language	Foreign Language					
Course INFO:	2 Semesters / 5 Units per Semester						
UC / CSU:	e Honors: Yes (AP)						

The AP Spanish Literature and Culture course is designed to provide students with a learning experience equivalent to that of an introductory college course in literature written in Spanish. The course introduces students to the formal study of a representative body of texts from Peninsular Spanish, Latin American, and U.S. Hispanic literature. The course provides opportunities for students to demonstrate their proficiency in Spanish across the three modes of communication (interpersonal, interpretive, and presentational) and the five goal areas (communication, cultures, connections, comparisons, and communities) outlined in the Standards for Foreign Language Learning in the 21st Century. The overarching aims of the course are to provide students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills — with special attention to critical reading and analytical writing — and to encourage them to reflect on the many voices and cultures included in a rich and diverse body of literature written in Spanish.

Figure 5 World Language, UC "e" Course Flow Chart



# Visual and Performing Arts Department, UC / CSU Content Area "f"

The nation's arts standards specify "an education in the arts is for ALL students, regardless of their background, talent, or disabilities." UPA believes in the importance of the arts not only as a means to enrich a student's understanding of the past and present, but also as an advanced form of communication and expression, and an academic tool to broaden a student's ability to approach a problem or situation. Indeed, Leonardo da Vinci, perhaps the greatest inventor of modern times, used the blending of art and science in his works to communicate his learning and discoveries in a manner that would be commonly understandable. Scientists and physicians today are just now realizing the tangible benefits of da Vinci's scientific works that he conveyed originally as art forms. Arts learning requires students to observe, analyze, synthesize, create, and evaluate. It also draws on a variety of intelligences and provides students with experience in higher order thinking.

The Visual and Performing Arts Department (Visual and Performing Arts) course offerings are listed in Table 6 with course descriptions following it.

Course Type	Course	<b>Course Code</b>	Grade Level
	Art 7/8	A1050XX	7–8
	Art 1 "f"	A1000xx	9–10
	Drawing and Painting (I & II) "f" / "g"	A2000xx	10–11
Visual Arts	3–Dimensional Design "f" / "g"	A3000xx	11–12
	AP 2D Art and Design	A4050xx	11-12
	Multi Media Arts 7/8	A9000x7	7-8
	Multi Media Arts (Digital Arts)	A9050xx	9-12
	Drama 7/8	T5000x7 / T5000x8	7–8
	Acting 1-4 "f" / "g"	T5050xx	9–12
	Dance 7/8	T6000x7 / T6000x8	7–8
Performing	Dance 1-4 "f"	T6000xx	9–12
Arts	Beginning Band	T1200x7 / T1200x8	7–12
	Band 1 (1–4) "f"	T1250x8	9–12
	Intermediate Band (7-9) "f"	T1210xx	7-9
	Advanced Band "f" / "g"	T1250xx	9-12

### Visual Arts

Course Title:	Art 7/8			
Course INFO:	2 Semesters / 5 Units per Semester			
Course Code:	A1050XX Grade Level(s): 7 or 8			
HS Graduation Credit:	N/A			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	N/A Honors: N/A			

Students in this course will study many two and three-dimensional art forms such as drawing, painting, perspective, sculpture and clay relief. Emphasis will be placed on the elements and principles of art and design throughout this course. A variety of materials and processes are explored together with the appropriate reading, writing and vocabulary.

Course Title:	Art 1				
Course INFO:	2 Semesters / 5 Uni	2 Semesters / 5 Units per Semester			
Course Code:	A1000xx Grade Level(s): 9 or 10				
Prerequisite(s):	None	None			
HS Graduation Credit:	VPA / Elective				
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	f Honors: No				

Students are offered the opportunity to explore various visual art forms and techniques in an introductory level course through the elements and principles of art and design. Students will be introduced to a variety of media through two-dimensional and three-dimensional approaches to creating and responding to visual arts.

<b>Course Title:</b>	Drawing and I	Drawing and Painting (I & II)				
Course INFO:	2 Semesters / 5	2 Semesters / 5 Units per Semester				
Course Code:	A2000xx	A2000xx Grade Level(s): 10 or 11 recommended, or 9–12				
Prerequisite(s):	Art 1A/1B	Art 1A/1B				
HS Graduation Credit:	VPA / Elective	VPA / Elective				
Course INFO:	2 Semesters / 5	2 Semesters / 5 Units per Semester				

UC / CSU:	f/g	Honors:	No
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Students will explore different approaches to drawing and painting while applying the elements and principles of design to develop skills with an emphasis on line, shape, color, value, texture and composition. A variety of mixed media will be explored. Students will be expected to develop technical skills and their own personal styles of drawing and painting. A variety of subject matter will be explored.

Course Title:	3-Dimensional Design				
Course INFO:	2 Semesters / 5 Units per Semester				
Course Code:	A3000xx Grade Level(s): 11 or 12 recommended, 10–12				
Prerequisite(s):	Art 1A/B and Drawing and Painting I&II				
HS Graduation Credit:	VPA / Elective				
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	f/g	Honors: No			

This course will introduce techniques of three-dimensional form through the exploration of line, plane and volume. Student work will include sculpture, found object art, relief sculpture, environmental / earth art. A variety of materials and techniques will help students create three-dimensional projects through the use of creative problem solving. The technical use and application of materials and tools will be stressed.

Course Title:	AP 2 D Art and Design					
Course INFO:	2 Semesters / 5 Uni	2 Semesters / 5 Units per Semester				
Course Code:	A4050xx	A4050xx Grade Level(s): 11 or 12 recommended, 10–12				
Prerequisite(s):	Art 1A/B and Drawing and Painting I&II					
HS Graduation Credit:	VPA / Elective					
Course INFO:	2 Semesters / 5 Units per Semester					
UC / CSU:	f/g Honors: Yes					

This is a course for students interested in college level work in Art and 2 Dimensional Design. This includes a variety of mediums, photography, graphic design, multimedia and drawing. With teacher guidance, students investigate and gain essential knowledge and skills. Through classroom practice, students will develop and apply these skills in a variety of contexts and themes.

There are three big ideas:

- 1. Investigate materials and processes,
- 2. Make art and design
- 3. Present Art and Design.

The exam is **The Portfolio** and the culmination of the investigated ideas and Selected Works presented to the AP committee at the end of the year. See Teacher for more information.

Course Title:	Multi Media Arts 7/8				
Course INFO:	2 Semesters / 5 Un	2 Semesters / 5 Units per Semester			
Course Code:	A9000X7 Grade Level(s): 7-8				
Prerequisite(s):	N/A				
HS Graduation Credit:	N/A				
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	N/A Honors: No				

Multimedia is a class where we combine art and tech. We will use the latest Adobe software to revitalize age-old art techniques. This class is great for anyone who wants to learn about, and use the newest tech for photography, video, animation, graphic design, and audio. We will spend time exploring different Adobe Creative Suite software such as Photoshop, Illustrator, After Effects and Premiere Pro.

Course Title:	Multi Media Arts (Digital Arts)				
Course INFO:	2 Semesters / 5 Uni	2 Semesters / 5 Units per Semester			
Course Code:	A9050xx Grade Level(s): 9–12				
Prerequisite(s):	N/A				
HS Graduation Credit:	VPA / Elective	VPA / Elective			
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	f/g Honors: No				

Multimedia is an introductory course that will introduce students to cutting edge digital media techniques, emerging technology, and the environment of a creative professional. Film, video and digital media productions will be researched and critiqued, examining the historical, cultural and technological interactions that make for compelling media. Ambitious students will pitch their ideas for major projects, and guide their teams through concept to final product. We will explore creative career paths such as videography, photography, animation and design. Programs used: Photoshop, Premiere Pro, After Effects, Illustrator, Animate and Audition. This foundation will prepare them for entry into the video production class.

#### **Performing Arts**

Course Title:	Drama 7/8				
Course INFO:	2 Semesters / 5 Units per Semester				
Course Code:	T5000x7 / Grade Level(s): 7 or 8 T5000x8				
HS Graduation Credit:	N/A	N/A			
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	N/A Honors: No				

Drama 7/8 introduces students to the world of improvisation and theater. Students learn how to audition, create an acting resume, develop a character, and perform in scenes from plays, melodramas, musicals, and other genres. We begin the fundamentals of improvisation, with exercises designed to increase confidence and creativity. On the technical side, students get to write their own scripts and begin directing. Students have the opportunity to watch and review live performances, and perform in-class scenes and a class-produced one-act play. No experience necessary.

<b>Course Title:</b>	Acting 1-4				
Course Code:	T5000xx	Grade Level	(s):	9 through 12	
Prerequisite(s):	N/A				
HS Graduation Credit:	VPA				
Course INFO:	2 Semesters / 5 Units per Semester				
UC / CSU:	f	Honor	s:	No	

Acting focuses on the study of building a character, improvisation, and performing and script writing for onstage and film performances. Students build upon improvisational skills and use them in improvised scene work. Actors deepen their understanding of character development (voice, posture, mentality) in performance scenes for live theater and create/film their own scenes. No experience necessary, Drama 7/8 recommended.

Course Title:	Dance 7/8		
Course Code:	T6000x7 / Grade Level(s): 7–8 T6000x8		
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A Honors: N/A		

This course provides an introduction to a variety of dance styles, including Contemporary, Lyrical, Jazz, Hip-Hop, Swing/Partner, Musical Theater, Tap, and Dance Fitness. Dancers develop fundamental Ballet-Jazz technique through extended daily warm-up routine. Dancers receive an introduction to choreographic elements and techniques. Students perform in a Dance Department Showcase at the end of the year. No experience necessary.

Course Title:	Dance			
Course Code:	T6000xx Grade Level(s): 9 through 12			
Prerequisite(s):	None			
HS Graduation Credit:	Fine Arts AND Physical Education (PE) / Elective			
Course INFO:	2 Semesters / 5 Units per Semester			
UC / CSU:	f Honors: No			

This course builds upon the styles and technique training from Dance 7/8. Students receive individualized technique corrections for improvement. Students study dance styles in more depth and learn how to clean dances as a Dance Captain, create dances as a Choreographer, and create and perform a flash mob as a class. Strength building and flexibility training are provided, and students perform outside of class in end of the year Dance Department Showcase.

Course Title:	<b>Beginning Band</b>		
Course Code:	T1201X7 T1201X8	Grade Level(s):	7
	T1200XX		9-12

Prerequisite(s):	None		
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A	Honors:	N/A

Beginning Band will work on basic music fundamentals. It is a class geared toward expanding the student's musical ability and knowledge.

Course Title:	Intermediate Band		
Course Code:	T1230x7 / T1230x8 / T1230xx	Grade Level(s):	7 through 9
Prerequisite(s):	None		
HS Graduation Credit:	VPA / Elective		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	f Honors: No		

Intermediate Band presents second and third year instrumental players the opportunity to continue to build on a first year of instrumental music development that is crucial for continued musical achievement.

Course Title:	Advanced Band		
Course Code:	T1250xx	Grade Level(s):	9 through 12
Prerequisite(s):	Band 1 or teacher recommendation		
HS Graduation Credit:	VPA / Elective		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	f/g Honors: No		

The advanced band is a main focus of the music program at University Preparatory Academy. This class is composed of 9th–12th grade students. This ensemble will work on high quality concert band literature, and will perform at festivals and concerts. It is highly recommended that students in advanced band consider studying privately. The director can make recommendations for private study.

Course Title:	Honors Band			
Course Code:	T1250xx	T1250xx Grade Level(s): 12		
Prerequisite(s):	Audition or Teacher Recommendation Completion of Advanced Band with an A or higher			
HS Graduation Credit:	VPA / Elective	VPA / Elective		
Course INFO:	2 Semesters / 5 Un	2 Semesters / 5 Units per Semester		
UC / CSU:	f/g Honors: Yes			
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## General Elective "g"

UPA currently offers limited specific UC general college preparatory elective category "g" offering. However, many of the courses in the "a–f" categories can be utilized to meet the "g" category requirement. UC Doorways lists the "a–f" courses offered at UPA that can be utilized for "g" credits. However, many such courses are available for "g" credit only after a minimum number of credits for the course's primary category have been fulfilled. The courses, categories, and minimum category credits are detailed in this table.

<b>UPA Approved Course</b>	Normal Category	When Available for "g" Use
World Geography	"a"	> 2 "a" courses
World History	"a"	> 2 "a" courses
AP World History	"a"	> 2 "a" courses
AP United States History	"a"	> 2 "a" courses and US History
AP United States Government and Politics (semester)	"a" / "g"	always "g"
Economics (semester)	"a"/"g"	always "g"
AP Literature and Composition	"b"	> 4 "b" courses
AP Language and Composition	"b"	> 4 "b" courses
Statistics	"c"	> 3 "c" courses
Pre-Calculus	"c"	> 3 "c" courses
AP Calculus (AB)	"c"	> 3 "c" courses
AP Calculus (BC)	"c"	> 3 "c" courses
Introduction to Computer Science	"c"	a-g approval pending
Chemistry	"d"	> 2 "d" courses and Biology and Physics
Physics	"d"	> 2 "d" courses and Biology and Chemistry
Biology	"d"	> 2 "d" courses and Biology and Chemistry
Marine Biology	"d"	> 2 "d" courses and Biology and Chemistry

AP Biology	"d"	> 2 "d" courses
AP Chemistry	"d:	> 2 "d" courses
AP Physics	"d"	> 2 "d" courses
AP Psychology	"a"	> 2 "a" courses

Spanish 3	"e"	> 2 "e" courses
Spanish For Heritage Speakers	"e"	> 2 "e" courses
AP Spanish Literature and Culture	"e"	> 2 "e" courses
Drawing and Painting I&II	" <del>ç</del> "	> 1 "f" course
AP 2D Art and Design	"f"	> 1 "f" course
Advanced Band	"f"	> 1 "f" course
Advanced Dance	"f"	> 1 "f" course
Journalism	"b"/"g"	> 4 "b" courses
Principles of Engineering	"g"	always "g"
Introduction to Engineering Design	"g"	always "g"
Principles of Biomedical Engineering	"d"/"g"	> 2 "d" lab courses
Human Body Systems	"d"/"g"	> 2 "d" lab courses
Medical Interventions	"d"/"g"	> 2 "d" lab courses
AVID 9	"g"	always "g"
AVID 10	"g"	always "g"

Course Title:	AVID 9, AVID 10		
Course Code:	Y1730XX - 9 Y1740XX - 10	Grade Level(s):	9, 10
Prerequisite:	Application process		
HS Graduation Credit:	Elective / Replaces PE		

Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	ʻg'	Honors:	No

The AVID course is an elective class for students who are college-bound. The AVID curriculum focuses on writing, inquiry, collaboration and reading (WICR) through the AVID High School curriculum in both teacher and tutor-led activities. While concurrently enrolled in a college-prep course of study, students learn strategies to enhance success. Note-taking, outlining, writing, speaking, reading, test-taking strategies, and self-awareness are stressed. In addition, the course includes college motivational activities. AVID is designed to be a program of study that students may follow for the entirety of their schooling and each grade level is distinct and builds upon the skills learned in the previous year. Students must apply to be a part of the AVID program and maintain a 2.5 or higher to remain in the program.

## Non Departmental Other Elective (non UC / CSU)

**Table 4** Non-Departmental Elective Course Offerings

Course	Course Code	Grade Level
Seminar (7–8)	Y1100xx	7–8
Seminar (1–4)	Y1130xx	7–12
AVID 7	Y1710XX	7
AVID 8	Y1720XX	8
Gateway to Technology	Y1000x7/8	7-8

Course Title:	Seminar 7–8		
Course Code:	Y1100xx Grade Level(s): 7–8		
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters / 2.5 Units per Semester		
UC / CSU:	N/A	Honors:	N/A

Seminar is designed to foster each student's personal best at UPA. It is meant to help students better understand their personal learning styles and challenges, be proactive about their studies, and extend their knowledge of college and career options. All support UPA's mission to prepare students to enter and excel in universities after high school. The class provides a safe space for students to connect with their classmates on a regular basis and build camaraderie within the UPA family as they explore ways to give back to the community together. During class, students participate in lessons related to college and career readiness and social-emotional health and life skills, as outlined by school counselors and Seminar teachers. Lessons are developed through Naviance and College Board, and differ by grade level. In order to take an active part in improving and maintaining good mental health, strong character and a positive team environment, students participate in stress relief exercises and learn various strategies to evaluate and manage their mental health. In addition, students participate in class bonding activities. Students are also provided opportunities to identify and resolve academic areas of concern in any of their courses. Time is provided for students to complete assignments, study for a quiz/test, receive extra help from a teacher, or collaborate on a group project.

Course Title:	Seminar (1–4)
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Course Code:	Y1130xx - 1 Y1140xx - 2 Y1150xx - 3 Y1160xx - 4	Grade Level(s):	9-12
HS Graduation Credit:	Advisory		
Course INFO:	2 Semesters / 2.5 Units per Semester		
UC / CSU:	N/A	Honors:	N/A

Seminar is designed to foster each student's personal best at UPA. It is meant to help students better understand their personal learning styles and challenges, be proactive about their studies, and extend their knowledge of college and career options. All support UPA's mission to prepare students to enter and excel in universities after high school. The class provides a safe space for students to connect with their classmates on a regular basis and build camaraderie within the UPA family as they explore ways to give back to the community together. During class, students participate in lessons related to college and career readiness and social-emotional health and life skills, as outlined by school counselors and Seminar teachers. Lessons are developed through Naviance and College Board, and differ by grade level. In order to take an active part in improving and maintaining good mental health, strong character and a positive team environment, students participate in stress relief exercises and learn various strategies to evaluate and manage their mental health. In addition, students participate in class bonding activities. Students are also provided opportunities to identify and resolve academic areas of concern in any of their courses. Time is provided for students to complete assignments, study for a quiz/test, receive extra help from a teacher, or collaborate on a group project.

Course Title:	AVID 7, AVID 8		
Course Code:	Y1710XX - 7 Y1720XX - 8	Grade Level(s):	7, 8
Prerequisite:	Application process		
HS Graduation Credit:	Elective		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A Honors: No		

The AVID course is an elective class for students who are college-bound. The AVID curriculum focuses on writing, inquiry, collaboration and reading (WICR) through the AVID High School curriculum in both teacher and tutor-led activities. While concurrently enrolled in a college-prep course of study, students learn strategies to enhance success. Note-taking, outlining, writing, speaking, reading, test-taking strategies, and self-awareness are stressed. In addition, the course includes college motivational activities. AVID is designed to be a program of study that students may

follow for the entirety of their schooling and each grade level is distinct and builds upon the skills learned in the previous year. Students must apply to be a part of the AVID program and maintain a 2.5 or higher to remain in the program.

Course Title:	Gateway to Technology 1, 2 (PLTW)			
Course Code:	Y1000X7, Y1000X8 Grade Level(s): 7-8, 8			
Prerequisite(s):	None	None		
HS Graduation Credit:	N/A			
Course INFO:	2 Semesters Middle School			
UC / CSU:	N/A Honors: No			

The PLTW Gateway To Technology (GTT) program features a project-based curriculum designed to challenge and engage the natural curiosity and imagination of middle school students. They envision, design and test their ideas with the same advanced modeling software used by companies like Lockheed Martin, Intel and Sprint. They study mechanical and computer control systems; think robotics and animation. Students also explore the importance of energy, including innovative ways to reduce, conserve and produce it using solar, thermal and wind power. The knowledge that students gain and the skills they build from GTT create a strong foundation for further STEM learning in high school and beyond.

Throughout GTT, students acquire knowledge and skills in problem solving, teamwork and innovation as well as explore STEM careers. Taught in conjunction with a rigorous academic curriculum, the program is divided into six, nine-week independent units, assuming a 45-minute class period. Schools implement both foundation units and may add any combination of the specialization units.

GTT 2 continues the learnings of GTT 1 with different and more complex units and projects. Depending on enrollment and demand, GTT 2 may be taught as a combination class with GTT 1.

### Physical Education (non UC / CSU)

**Table 5** Physical Education Department Course Offerings (UC "f")

Course	Course Code	Grade Level
Physical Education (7–8)	PO700x7/8	7–8
Physical Education (1–4)	P1000xx	9–12

Course Title:	Physical Education (7–8)		
Course Code:	P1000xx Grade Level(s): 7 and 8		
HS Graduation Credit:	N/A		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A Honors: N/A		

Physical Education at UPA offers a wide variety of experiences related to athletics, fitness, nutrition, and anatomy. Students will learn that individual skill development and personalized statistical analysis can parallel self improvement strategies related to timing, strength, and endurance. Group project development and teamwork settings will also be used as a means to develop confidence and instill a desire for lifelong physical fitness.

Course Title:	Physical Education (1–4)		
Course Code:	P1000xx Grade Level(s): 9 recommended, 10–12, 1 year required, 2 years recommended		
HS Graduation Credit:	Physical Education		
Course INFO:	2 Semesters / 5 Units per Semester		
UC / CSU:	N/A Honors: N/A		

The major emphasis of study for this course will be to guide students through a wide variety of movement patterns associated with sport. As a parallel to this absorption of knowledge, concepts such as nutrition, health, anatomy, and physiology will be implemented as a means to further student awareness and lifelong commitment to being physically active. Students will perform a wide variety of movement patterns as a means to develop and maintain a level of fitness appropriate for their individual grade level. Through such aspects as plyometric training, static and active stretching, endurance running, and active recording, each student will be able to biomechanically improve motor function and record efficient data to support this development.