

# FOLSOM HIGH SCHOOL 2021 - 2022 CURRICULUM GUIDE



**IMPORTANT:** For the most up-to-date information about FHS classes and school activities, please visit [www.fcusd.org/fhs](http://www.fcusd.org/fhs)

**FCUSD Non-Discrimination Statement:** The Governing Board is committed to providing equal opportunity for all individuals in education. The Folsom Cordova Unified School District prohibits discrimination, intimidation, harassment (including sexual harassment) or bullying based on a person's actual or perceived ancestry, color, disability, race or ethnicity, religion, gender, gender identity or gender expression, immigration status, national origin, sex, sexual orientation, or association with a person or group with one or more of these actual or perceived characteristics. The Board shall promote programs which ensure that discriminatory practices are eliminated in all District activities.

Revised: 1/19/2021

# Folsom High School Class Offerings for the 2021-2022 School Year

Classes in bold are approved for the University of California and California State University systems.

▲ = NCAA Approved Course; PLTW = Project Lead The Way Classes; Δ = May earn college credit; ⚡ = UC/CSU Approval Pending; 📖 = Global Perspective Studies; E = Elective

## **a. Social Science** (All Social Science Classes =▲)

World Cultures  
GPS World Cultures 📖  
AP European History 📖  
U.S. History  
GPS U.S. History 📖  
AP U.S. History Δ📖  
Economics (meets UC 'g' requirement)  
Government  
AP U.S. Government and Politics  
AP Human Geography 📖 E

## **b. English** (All English Classes =▲)

English 1, 2, 3, 4  
GPS English 1 📖  
Honors English 1 (Pre-AP) 📖  
Honors English 2 (Pre-AP) 📖  
GPS English 4 📖  
AP English Language & Composition 📖  
AP English Literature & Composition 📖  
CSU Expository Reading and Writing (ERWC)  
AP Seminar 📖 E

## **c. Mathematics**

Integrated Math 1 ▲  
Integrated Math 2 ▲  
Integrated Math 3 ▲  
Advanced Algebra With Financial Applications ▲  
Statistics/Problem Solving ▲  
AP Statistics ▲  
Trigonometry ▲  
Pre-Calculus ▲  
Highlights of Calculus ▲  
AP Calculus AB ▲  
AP Calculus BC ▲  
AP Computer Science A E  
Non a-g  
Integrated Math 1 Foundations  
Integrated Math 2 Foundations  
Integrated Math 3 Foundations  
Personal and Business Finance

## **d. Science** (All Science Classes =▲)

**Biology: The Living Earth**  
**Chemistry in the Earth System**  
**Honors Chemistry in the Earth System**  
**Physics in the Universe**  
**Honors Physics in the Universe**  
Forensics  
**Human Anatomy and Physiology**  
AP Biology  
AP Chemistry  
AP Physics  
AP Environmental Science 📖  
PLTW 2 Honors Principles of Engineering E  
PLTW 3 Honors Civil Engineering E

## **e. World Language** (All World Language Classes =▲, 3,4,AP =📖)

French 1, 2, 3, AP Lang Δ  
German 1, 2, 3, AP Lang Δ  
Spanish 1, 2, 3, 4, AP Lang Δ

## **f. Visual and Performing Arts**

Beginning Chorus  
Chamber Choir  
Concert Band  
Concert Choir  
Jazz Band  
Jazz Choir

## **f. Visual and Performing Arts Cont.**

Orchestra  
Guitar  
Ceramics 1, 2, 3  
Drawing and Painting 1, 2, 3  
AP Drawing  
Digital Art 1, 2  
AP 2D Art and Design  
Drama 1, 2, 3, 4  
Introduction to Technical Theater  
Technical Theater in Production  
Video Production 1  
Film as Visual Literature  
Advanced Drafting and Architecture

## **g. College Preparatory Electives**

Psychology/Sociology ▲  
AP Psychology ▲  
AP Research 📖  
Speech and Debate 1, 2 ▲ Δ  
Humanities 1: Critical Thinking with a Global Perspective Δ📖  
Video Production 2  
Exploring Computer Science  
Computer Science and Programming  
Computer Animation & Game Design  
Enriched Health Education (yearlong)  
PLTW 1 Engineering Design  
Introduction to Product Innovation Design and Manufacturing  
Advanced Product Innovation, Design and Manufacturing

## **Health Education**

Health Education (semester)  
Enriched Health Education (yearlong)

## **Physical Education** (All PE classes may be repeated for credit except Fitness 1)

Fitness 1  
Fit 2-Aerobics  
Fit 2-Dance  
Fit 2- Team Activities  
Course 3- Weight Training  
Course 3- Sports Specific Training  
Course 4- Advanced Conditioning (Football)  
Course 4- Yoga

## **High School Electives**

Driver's Education  
Life Skills  
Yearbook  
ASB Government/Leadership  
English Language Development 1/2, 3/4  
GPS Intercultural Speech Communication 📖  
Teacher Assistant/Library/Office/Counseling Assistant  
Success 101

## **Career & Technical Education (CTE)**

Digital Art 1, 2  
AP 2D Art and Design  
Computer Applications Δ  
Computer Animation & Game Design  
Exploring Computer Science  
Computer Science and Programming Δ  
AP Computer Science A  
PLTW 1 Engineering Design Δ  
PLTW 2 Honors Principles of Engineering  
PLTW 3 Honors Civil Engineering  
Advanced Drafting and Architecture  
Video Production 1, 2  
TV Production Δ  
Introduction to Product Innovation Design and Manufacturing  
Advanced Product Innovation, Design and Manufacturing



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Howard Cadenhead, Principal  
Greg Crannell, Assistant Principal  
Eric Eklund, Assistant Principal  
Alana Morales, Assistant Principal  
Elizabeth Sisson, Assistant Principal

Dear Folsom High School Students,

The vision of Folsom High School is to “provide a high-quality learning environment in which all students develop the knowledge, skills, and personal attributes necessary to become responsible, productive, and contributing members of a democratic society.” In accordance with our vision, each year the Folsom High School administration and staff explore new programs and curricular options to ensure that we provide the educational opportunities necessary for your success in our rapidly changing, global society. You and your parents should review this guide and request courses based on your college and/or career goals. As always, if you need assistance with your course selection, please contact your academic counselor.

Folsom High School strongly recommends that all students meet UC/CSU a-g requirements as these requirements outline a rigorous curriculum and provides post-secondary advantages for all graduates, despite their educational interests.

Together, we welcome the 2021-2022 school year. Thank you for being a part of the Folsom High School learning community. I look forward to working with you during the new school year.

Sincerely,

Howard Cadenhead  
Principal

## FOLSOM HIGH SCHOOL PROGRAMS & COURSE POLICIES

The Governing Board is committed to equal opportunity for all individuals in education. District programs, activities, and practices shall be free from discrimination based on race, color, religion, ancestry, national origin, ethnic group identification, age, religion, marital or parental status, physical or mental disability, sex, sexual orientation, gender, gender identity or expression, or genetic information; the perception of one or more of such characteristics; or association with a person or group with one or more of these actual or perceived characteristics. The Board shall promote programs which ensure that discriminatory practices are eliminated in all district activities.

### ADVANCED PLACEMENT/HONORS COURSES

Folsom High School's programs for high-achieving students are intended to offer challenging, college-prep and college-level educational experiences. These programs are designed for highly-motivated students who choose to take a more demanding program to improve their critical thinking and writing skills. Therefore, it is highly recommended that a student have a minimum 3.0 college-prep GPA and "B" or better grades in prerequisite courses to apply to these programs. Students who pass an AP exam may earn college credits. Upon completion of an AP course, students will receive weighted grade points per district policy. This curriculum guide contains descriptions of all honors and Advanced Placement courses offered at Folsom High School.

### CHALLENGING COURSES BY EXAMINATION (FCUSD AR 6155)

Students may choose to take a course challenge examination when the course is part of a sequence of courses normally taken in a specific order or when the course is normally required for entry into another course. Courses previously taken where credit was received, remedial courses, and physical education courses are exempted from the course challenge program. The challenge examination given to students shall be a comprehensive examination which shall cover all of the objectives of the course being challenged. Successful completion of the examination shall be at a level which indicates mastery of the content and/or reasonable chance for success in the next higher course. Students must earn an A or B grade on the challenge examination in order to receive credit. Students may challenge a particular course only once and cannot later enroll in the same course to improve or replace a challenge grade. A challenge grade is permanent on the student's high school transcript. During their enrollment in high school, students may challenge no more than four courses which meet graduation requirements. Students may challenge only one course per semester. Students may not attempt credit for a course below their abilities or grade placements. No course may be challenged after three (3) weeks from the beginning of the semester/term.

**Course Challenge Petition:** At least one month prior to the end of the current semester, currently-enrolled students interested in challenging a course for the next semester shall file a Course Challenge Petition with their counselor. The counselor will then submit a copy of this petition to the appropriate department chair or designee. Entering ninth-grade students and new enrollees shall file a petition and take the challenge examination within two (2) weeks of the time of initial entry to high school classes; however, no course may be challenged after three (3) weeks from the beginning of the semester. Students who do not earn an A or B grade on the challenge examination must enroll in and successfully complete the named course if it is required for graduation.

### COURSE SUBSTITUTION

Students may receive high school credit for a course taken at another accredited school or college if a Course Substitution Contract has been submitted and approved by the counselor and principal in advance of enrolling in such a class. A course substitution may be requested to complete a required FCUSD course. Students requesting a course substitution must have a cumulative GPA of 2.7 or higher and have demonstrated academic preparation and ability. Students accept sole responsibility for completing approved substitute courses and understand that they are doing so at their own risk. All costs (including books and supplies, as required) of any substitute course – whether taken via enrollment in an online, distance learning, or college class – is the responsibility of the student's family to pay. If required by an independent study or online course, it is the student's responsibility to locate and pay for a proctor who is certified by the institution. Arrangements for a proctor should be made in advance of starting an independent study or online course. Students and parents understand that all final course grades will be posted to the student's high school transcript, and grades for courses taken at a college will also be posted to the student's permanent college transcript. Grades earned in college courses will be posted as unweighted credits to the student's high school transcript.

**Course Substitution Contract:** A Course Substitution Contract must be completed and approved prior to the start of the high school semester. Students should not enroll in an independent study, online, or college course until they have received notification that their Course Substitution Contract has been granted final approval by the counselor and principal. It is the student's responsibility to provide an official transcript once the course is completed in order for the credits to be posted to the high school transcript. If an official transcript is not received at the high school by the due date noted on the Course Substitution Contract, then the student's graduation status may be in jeopardy.

### FINAL EXAMS

Final examinations are mandatory at Folsom High School and will not be given early for any reason. Students who miss their final exams will be issued a grade of 'Incomplete' for the semester. Students are required to make up their missed final exams during the first two weeks of the following semester in order to replace the 'Incomplete' grade with a letter grade. Failure to do so may result in a semester grade of 'F' (Fail)

### RESOURCE SPECIALIST PROGRAM

Students with learning disabilities are provided an opportunity to work in small classes with a specially trained special education teacher. Students must be brought to a Student Study Team, evaluated for learning disabilities, and found eligible for these services.

### COURSE SELECTION AND SCHEDULE CHANGES

It is essential that all students put serious consideration into their course selections during the registration process because there may be limited opportunities to make changes in the future. Folsom High School classes are yearlong.

#### Schedule Change Process

1. If a parent or student believes that there is a compelling need to change a class/schedule, the student or parent should contact the counselor during the published schedule change window (before the first day of school).
2. The counselor will review the schedule change request and pass it on to administration.
3. Administration will determine final class placement.
4. Folsom High does not honor requests for specific teachers or lunches.

## GLOBAL PERSPECTIVE STUDIES (GPS)

Folsom High School's Global Perspective Studies program connects global perspectives with global experiences through the infusion of an international studies curriculum. Students in GPS learn to approach local and global issues using the Design Thinking Approach (Human Centered Design) developed at Stanford University and followed in many business settings. The students will be engaged in coursework that will inspire them to think not only critically, but globally. FHS is committed to continuing the tradition of educational excellence with the expansion of its curricular focus into the global realm with the launch of the Global Perspective Studies program.

GPS was designed to be inclusive of traditional high school programs such as Fine Arts, Student Leadership, Music, Athletics, and Advanced Placement, while providing a specialized focus on international studies. Some of the benefits of participating in the GPS program include flexibility allowing for taking a wide variety of other class choices; exposure to a broad range of cultures and viewpoints through guest lectures, field trips, and project-based learning opportunities; and opportunity to earn a GPS Diploma that meets UC/CSU admission requirements.

### GLOBAL PERSPECTIVE STUDIES REQUIREMENTS:

#### I. GPS Diploma

Meet UC/CSU minimum requirements and complete the following:

GPS Seminars I-IV:

GPS Seminar I: Global Awareness and Design Thinking

GPS Seminar II: Global Current Issues

GPS Seminar III: Global Outreach

GPS Seminar IV: Global Issues Capstone Project

GPS Core Classes:

GPS English I or Honors English I

GPS World Cultures or AP European History

GPS U.S. History or AP U.S. History

GPS English IV or AP Literature

GPS Electives, minimum TWO, selected from the following:

Level III and/or Level IV World Language

Advanced or AP Visual and Performing Arts class with prior approval

GPS Intercultural Speech Communication

GPS Humanities (Academic Decathlon)

AP Human Geography

AP Environmental Science

AP Capstone (Seminar and Research)

NOTE: GPS Certificate students may count WL Level II as their elective by approval of coordinator

\*other electives may be counted with approval

#### II. GPS Certificate

Meet FHS graduation requirements and complete the following:

GPS Seminars I-IV as described above

GPS Core Classes as described above

GPS Electives, minimum of ONE, selected from list above

#### Service Requirement (Diploma and Certificate Tracks)

Minimum of 12 hours of globally focused community service

### AP INTERNATIONAL DIPLOMA (APID)

Today, we live in a global community that greatly impacts how we share information, communicate and do business. That's why the College Board is focused on helping students build the knowledge, skills and global perspectives to succeed in university and beyond. The AP International Diploma (APID) is a globally recognized award for students interested in international studies. It requires students to display mastery on AP Exams across several disciplines, and represents an exceptional level of achievement. For additional information go to: <http://international.collegeboard.org/programs/apid>

### *Folsom High School offers all courses necessary for a student to achieve the AP International Diploma.*

APID Criteria

1. Students must earn scores of 3 or higher on five or more total AP Exams, based on the exam criteria requirements listed within each of the following content area:

**Two AP Exams from two different world language & culture courses or two AP Exams from one world language & culture course and one English course, one AP Exam offering a global perspective (Human Geography or AP Environmental Science), one AP Exam from either the sciences, or math and computer science, and one additional AP Exam; cannot be English or a world language,**

Please see the following website for more information: <http://international.collegeboard.org/programs/apid>

2. Exams taken multiple times will only count once; the highest score will be used for award calculation. Students must score of 3 or higher on five AP Exams.
3. Each AP Exam may count towards only one content area below:  
To earn an APID, a student attending a school within the U.S. must at least send one AP score report to a university outside the U.S.

### AP CAPSTONE: CERTIFICATE AND DIPLOMA

AP Capstone is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions. AP Capstone is comprised of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the discipline-specific study in other AP courses. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of your choice will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research will receive the AP Seminar and Research Certificate.

## COLLEGE ENTRANCE REQUIREMENTS

**California Community Colleges (Two-Year Associate Degrees, Vocational/Certificate Programs, Transfer Opportunities)** [www.cccco.edu](http://www.cccco.edu) Admission requirements: 1. High school diploma, or 2. Eighteen years of age. Placement tests are required in Math and English.

**California State University System (Undergraduate and Graduate Degree Programs)** [www.csumentor.edu](http://www.csumentor.edu)

Admission requirements: 1. Complete the 15 unit "a-g" subject requirements with 'C' grades or higher (see chart on pg.7). 2. Attain a minimum 2.0 grade point average in the approved "a-g" subjects. 3. Meet the eligibility index, which includes SAT Reasoning or ACT exam scores.

**University of California System (Undergraduate and Graduate Degree Programs)** [www.universityofcalifornia.edu](http://www.universityofcalifornia.edu)

Admission requirements: 1. Complete the 15 unit "a-g" subject requirements with 'C' grades or higher (see chart on pg.7). 2. Attain a minimum 3.0 grade point average in the approved "a-g" subjects. 3. Meet the eligibility index, which includes SAT Reasoning or ACT plus Writing exam scores.

**Approved UC "a-g" High School Course List** [www.ucop.edu/agguide/](http://www.ucop.edu/agguide/) Folsom High School courses that fulfill the UC/CSU subject requirements can be found online by entering "Folsom High School" at the above website.

**Private Colleges and Universities** [www.aiccu.edu](http://www.aiccu.edu) [www.californiacolleges.edu](http://www.californiacolleges.edu)

Students meeting the UC/CSU admission requirements generally will meet the admission requirements of many California and out-of-state private colleges and universities. Refer to the specific institution's website and/or catalog for further details.

Folsom High School Graduation Requirements		
Subject	Years/Number of Credits Required	
World Cultures	1 year	10 credits
U.S. History	1 year	10 credits
Government	1 semester	5 credits
Economics	1 semester	5 credits
English	4 years	40 credits
Int. Math 1 & Int. Math 2 <b>OR</b> Geometry & Alg 2 <b>OR</b> Int. Math 2 & Int. Math 3	2 years	20 credits
Mathematics (one additional math course)	1 year	10 credits
Science (Life Science-Biology and Physical Science- Chemistry/Physics)	2 years	20 credits
Career Technical Education (CTE) <b>OR</b> 3 <sup>rd</sup> Year of Science	1 year	10 credits
Fine Art <b>OR</b> World Language <b>OR</b> Career Technical Education (CTE)	1 year	10 credits
Health Education	1 semester	5 credits
Physical Education	2 years	20 credits
Electives		55 credits
	<b>TOTAL</b>	<b>220 credits</b>

a-g CSU/UC College Entrance Requirements	
*must complete courses with a "C" or better	
Subject	Years
a. Social Science	2 years (World History & US History)
b. English	4 years
c. Math	3 years 4 years recommended (Algebra 2/Int. Math 3 or higher)
d. Laboratory Science	2 years 3 years recommended (Biology, Chemistry, Physics)
e. World Language	2 years/Level 2 3 years recommended
f. Visual and Performing Art	1 year
g. College Prep Elective	1 year

## EARNING CREDITS TOWARD GRADUATION

- Students who wish to take an online, distance learning, or college course to meet graduation requirements must submit a completed FCUSD Course Substitution Contract and obtain approval from the principal and counselor prior to enrolling in such a course.
- Students who have exhausted the course offerings at Folsom High School may apply through their counselor for concurrent enrollment at a college. Please see guidelines for concurrent enrollment later in this curriculum guide.

## MIDTERM GRADUATION REQUIREMENTS

Students who will have earned at least 190 credits by the start of their senior year may graduate after the first semester of the senior year if a Midterm Graduation Application has been submitted and approved through their counselor during the spring registration process of the junior year. Students may need to complete, at their own expense, second semester courses that are required for graduation (such as English 4B) via enrollment in an online, distance learning, or college class. Once a student has completed graduation requirements, he/she is no longer a student of Folsom High School and may not re-enroll as a high school student. Please be aware that students who take a college course after graduating midterm (but prior to enrolling in a four-year college) may be reclassified as a "transfer student" by the four-year college. This could negatively affect a student's enrollment status at the four-year college. Students should check with the four-year college prior to enrolling in any community college course after graduating from high school. Folsom High School midterm graduates may attend Senior Ball, Senior Breakfast, Sober Grad Night, and the FHS graduation ceremony with prior approval from administration.

# Folsom High School Courses

## FHS Graduation Requirements:

EL	= Elective
E	= English
FA	= Fine Arts
H	= Health Education
M	= Mathematics
PE	= Physical Education
S	= Science
SS	= Social Science
CTE	= Career & Technical Education
WL	= World Language

## COURSE KEY

## UC/CSU Requirements:

a	= History/Social Science
b	= English
c	= Mathematics
d	= Laboratory Science
e	= Language Other than English
f	= Visual & Performing Arts
g	= College Prep Elective

▲ = NCAA Approved Class  
△ = May earn college credit

## SOCIAL SCIENCE

UC/CSU Requirement "a": 2 years required

### WORLD CULTURES

Grade: 10

Students study major turning points and the rise of democratic ideas that shaped the modern world. Emphasis is placed on the history and changes that have taken place in Europe, Africa, Asia, and the Americas through revolution, industrialization, imperialism, world wars, and the Cold War, to develop an understanding of the historical roots of current world issues today.

Meets requirements: SS/a /▲

Prerequisite: None

### GPS – WORLD CULTURES

Grade: 10

Students in grade ten will develop a global perspective to pursue a deeper understanding of major turning points in the shaping of the modern world, from the advent of civilization through the present. In addition, students draw upon their studies of world cultures to examine current world issues and the growing interdependence of people and cultures throughout the world, especially as they pertain to international issues as well as themes and learning objectives of the GPS program. Students will use a variety of technological applications for both self-directed and cooperative assignments and projects. The GPS course (or AP European History) is a requirement for the GPS' specialized academic diploma.

Meets requirements: SS/a /▲

Prerequisite: None

### AP EUROPEAN HISTORY

Grades: 10-12

AP European History is a college-level course designed to prepare each student for the rigor of higher education, and introduce the student to the complex political, social, intellectual, diplomatic, economic, and cultural developments of Europe during the period of the 1350's to the present This course follows the current outline prepared by the College Board, and is designed to prepare students to take the Advanced Placement Exam. Students enrolled in AP European History are expected to take the exam.

Meets requirements: SS/EL/a/▲

Prerequisite: "B" in English and 3.0 overall GPA

### UNITED STATES HISTORY

Grade: 11

Students in grade eleven study the significant events, people, movements and ideas that have shaped America's past and present. This course will trace the expansion and development of American democracy. The primary emphasis will be placed on the 20th century and on connecting the past with the present.

Meets requirements: SS/a/▲

Prerequisite: None

### GPS UNITED STATES HISTORY

Grade: 11

Students in grade eleven study the significant events, people, movements and ideas that have shaped America's past and present. This course will trace the expansion and development of American democracy. The primary emphasis will be placed on the 20th century and on connecting the past with the present. Students will closely examine how the United States has been shaped by immigration and the effect of U.S. foreign policy on the global community in a manner consistent with the goals of the GPS program. Students will use a variety of technological applications for both self-directed and cooperative assignments and projects. The GPS course (or AP U.S. History) is a requirement for the GPS specialized academic diploma.

Meets requirements: SS/a /▲

Prerequisite: None

### AP UNITED STATES HISTORY

Grade: 11

This course is a comprehensive, in-depth analysis of American history from colonial times to the present. It is a college-level class and demands that students read and understand complex resources. This course prepares students to pass the AP U.S. History exam

Meets requirements: SS/a/▲/△

Prerequisite: "B" in Social Science and English; 3.0 college prep GPA

### ECONOMICS

Grade: 12

The major emphasis of this course is for students to gain an understanding of our economic system and to analyze the problems and issues that we and other economic systems face in a changing world.

Meets requirements: SS/g/▲(1 semester)

Prerequisite: None

### GOVERNMENT

Grade: 12

This course is a study of the purposes, structures and problems of the federal, state and local governments in the United States. Citizenship responsibilities and constitutional rights are examined. Current political events are studied.

Meets requirements: SS/a/▲(1 semester)

Prerequisite: None

# **SOCIAL SCIENCE (Continued)**

UC/CSU Requirement “a”: 2 years required

## **AP U.S. GOVERNMENT AND POLITICS**

Grade: 12

Meets requirements: SS/a/▲

Prerequisite: ‘B’ in previous Social Science and English courses; 3.0 College Prep GPA

Economics and AP U.S. Government and Politics are taught as a year-long course of study. Economics is a course that combines a required curriculum in micro, macro and global economics with a more advanced level of study designed to prepare students for university level work and Advanced Placement. Students will deepen their understanding of the economic problems and institutions of the nation and the world in which they live. AP U.S. Government and Politics is an intensive study of the formal and informal structures of government and the processes of the American political system. The course is designed to introduce students to a college level government course while developing advanced skills in reading, writing, presenting verbal arguments, and reasoning and evaluating critically. This course prepares students to take the AP U.S. Government and Politics Exam.

## **AP HUMAN GEOGRAPHY**

Grade: 11-12

Meets requirements: EL/a/▲

Prerequisite: “B” in English and previous Social Science class

AP Human Geography is a yearlong course that focuses on the distribution, processes, and effects of human population on the planet. Students will employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. In addition to learning the methods and tools geographers use in their science and practice, students will take part in internet activities, actively collaborate with classmates, and express ideas and opinions through class discussion during exploration of course topics.

# ENGLISH

## UC/CSU Requirement “b” 4 Years required

### ENGLISH 1

Grade: 9

Meets requirements: E/b/▲

Prerequisite: none

This is the foundational course for high school English curriculum. A specific emphasis is placed upon the acquisition of grammar and usage skills, development of composition skills particularly related to the essay, and an introduction to literary analysis.

### GPS ENGLISH 1

Grade: 9

Meets requirements: E/b/▲

Prerequisite: Enrollment in GPS Program

This is the English course designated for ninth graders enrolled in the Global Perspective Studies program. A specific emphasis is placed on building global awareness through literature, developing reading, writing, listening and speaking skills through the critical interpretation of literature

### HONORS ENGLISH 1

Grade: 9

Meets requirements: E/b/▲

Prerequisite: “A” or “B” in previous English course, highly recommended 8th grade reading level

This course is an in-depth study of argumentative writing and literary analysis with an emphasis on critical thinking and speaking skills in order to prepare students for future AP English courses. Honors English builds on students’ foundational writing skills, focusing more specifically on in-depth analysis, as we explore a range of multi-cultural texts.

### ENGLISH 2

Grade: 10

Meets requirements: E/b/▲

Prerequisite: English 1

This course builds upon the foundation of English 1. Specific emphasis is placed on higher levels of student performance with more common-core based, complex assignments in composition, analytical reading of varying genres of fiction and nonfiction, and in-depth discussion.

### HONORS ENGLISH 2

Grade: 10

Meets requirements: E/b/▲

Prerequisite: “B” in previous English course, 3.0 GPA

This course is an in-depth study of expository writing and literary analysis with an emphasis on critical thinking in order to prepare students to enter the AP program. Honors English 2 differs from English 2 in terms of student expectancies by the breadth, pace, and complexity of material covered. This course requires summer reading and writing assignments.

### ENGLISH 3

Grade: 11

Meets requirements: E/b/▲

Prerequisite: English 2

This course provides students with the skills needed to express ideas orally and in writing, using clear and precise prose. The aim of English 3 is to develop knowledge of, and an appreciation for, American literature through analysis of the ideas embedded in works of both fiction and non-fiction.

### AP ENGLISH LANGUAGE & COMPOSITION

Grade: 11

Meets requirements: E/b/▲

Prerequisite: “B” in previous English course, 3.0 College Prep GPA

This junior-level course is designed to enhance students’ skills as readers of prose while analyzing language written in a variety of periods, disciplines, and rhetorical contexts, and to become skilled writers who can compose for a variety of purposes. The course differs from English 3 in terms of student expectancies by the breadth, pacing, and complexity of material. Students will be required to write extensively in preparation for the AP exam in May. This course may require summer reading and writing assignments, and students are expected to take the AP exam in May.

### ENGLISH 4

Grade: 12

Meets requirements: E/b/▲

Prerequisite: English 3

This senior-level English course focuses on preparing students for college and career reading, writing, speaking and listening with an extensive review of all modes of essay, professional, and research writing.. Through their study and critical analysis of literature, students also will develop a knowledge of, and an appreciation for, British, classical, and contemporary literature.

### CSU EXPOSITORY READING & WRITING (ERWC)

Grade: 12

Meets requirements: E/b/▲

Prerequisite: English 3

The goal of the Expository Reading and Writing Course is to prepare students for the literacy demands of higher education. Through a sequence of instructional modules, students in this yearlong, rhetoric-based course develop proficiency in expository, analytical, and argumentative reading and writing. Instruction focuses upon helping students read, comprehend, and respond to nonfiction and literary texts as well as understanding and applying research methods and documentation conventions. Written assessments and holistic scoring guides conclude each unit. Students who pass with a C or better are eligible for the first level of required English at all twenty-three CSUs and many Community Colleges.

### GPS ENGLISH 4

Grade: 12

Meets requirements: E/b/▲

Prerequisite: English 3, Enrollment in GPS Program, Completion of GPS Seminars I, II, and III

This is the English course designated for seniors enrolled in the Global Perspective Studies program. This course focuses on a variety of skill sets to prepare students for college, career, and beyond, including in-depth global study of literature representing a variety of genres, periods, and cultures. Through reading, writing, and verbal activities, seniors will be presented with a rigorous program designed to prepare them for global citizenship, college, and/or the workplace.

### AP ENGLISH LITERATURE & COMPOSITION

Grade: 12

Meets requirements: E/b/▲

Prerequisite: “B” in previous English course, 3.0 College Prep GPA

In AP Literature and Composition, students read major literary works—novels, plays, short stories, poetry—and write critical expository essays analyzing and examining them. Students will write multiple essays of varying scope per semester and will be expected to participate in the AP exam in May. This class differs from English 4 in terms of student expectancies by the breadth, pace, and complexity of material covered. This course requires summer reading and writing assignments.

### AP SEMINAR

Grades: 10-12

Meets requirements: EL/b

Prerequisite: 3.0 College Prep GPA

AP Seminar is the prerequisite to an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses, AP Seminar and AP Research, and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses.

In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. Students in pathways such as GPS and PLTW as well as all students taking AP courses will benefit from this skills, rather than content, driven course

# MATHEMATICS

UC/CSU Requirement “c” 3 Years Required / 4 Years Recommended (Including Integrated Math 1, Integrated Math 2, and Integrated Math 3)

## INTEGRATED MATH 1

(Replaced Algebra I)

Grades: 9-12

Math 1 is an integrated math course designed to formalize and extend the mathematics that students learned in the middle grades. The standards are based on the Common Core State Standards for Mathematics and include topics from the conceptual categories: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Instructional time will focus on six critical areas: (1) extend understanding of numerical manipulation to algebraic manipulation; (2) synthesize understanding of function; (3) deepen and extend understanding of linear relationships; (4) apply linear models to data that exhibit a linear trend; (5) establish criteria for congruence based on rigid motions; and (6) apply the Pythagorean Theorem to the coordinate plane.

Meets requirements: M/c/▲

Prerequisite: “C” previous course

## INTEGRATED MATH 2

(Replaced Geometry)

Grades: 9-12

Integrated Math 2 is designed to extend the mathematics that students learned in Integrated Math 1 to the family of quadratic expressions, equations, and functions. The standards are based on the Common Core State Standards for Mathematics and include topics from the conceptual categories: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Instructional time will focus on five critical areas: (1) extend the laws of exponents to rational exponents; (2) compare key characteristics of quadratic functions with those of linear and exponential functions; (3) create and solve equations and inequalities involving linear, exponential and quadratic expressions; (4) extend work with probability; and (5) establish criteria for similarity of triangles based on dilations and proportional reasoning.

Meets requirements: M/c/▲

Prerequisite: “C” in Integrated Math 1, ‘B’ recommended

## INTEGRATED MATH 3

(Replaced Algebra 2)

Grades: 9-12

Integrated Math 3 is designed to extend and apply the mathematics learned in previous math courses. The standards are based on the Common Core State Standards for Mathematics and include topics from the conceptual categories: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Instructional time will focus on four critical areas: (1) apply methods from probability and statistics to draw inferences and conclusions from data; (2) expand understanding of functions to include polynomial, rational, and radical functions; (3) expand right triangle trigonometry to include general triangles; and (4) consolidate functions and geometry to create models and solve contextual problems.

Meets requirements: M/c/▲

Prerequisite: “C” in Integrated Math 2, ‘B’ recommended

## ADVANCED ALGEBRA WITH FINANCIAL APPLICATIONS

Grades 11-12

Advanced Algebra with Financial Applications is a college-preparatory course that will use sophisticated mathematics to give you the tools to become a financially responsible young adult. The course employs algebra, pre-calculus, probability and statistics, calculus and geometry to solve financial problems that occur in everyday life. Real-world problems in investing, credit, banking, auto insurance, mortgages, employment, income taxes, budgeting and planning for retirement are solved by applying the relevant mathematics. Field projects, computer spreadsheets, and graphing calculators are key components of the course.

Meets requirements: M/c/▲

Prerequisite: “C” in Algebra 2 or Integrated Math 3

## STATISTICS / PROBABILITY & PROBLEM SOLVING

Grades: 11-12

This is an alternative math course for juniors and seniors who have taken Algebra 2/ Integrated Math 3 and who neither wish nor need to take pre-calculus, or who have taken pre-calculus and do not wish to take college-level calculus. While calculus is needed for the hard sciences, engineering and medical fields, statistics/probability and problem solving is an appropriate and needed course for many other fields of study such as business, biology, sociology, and health fields not requiring Calculus.

Meets requirements: M/EL/c/▲

Prerequisite: “C” in Algebra 2/Integrated Math 3

## AP STATISTICS

Grades: 11-12

The topics of AP Statistics are divided into four major themes: exploratory analysis, planning and conducting a study, probability, and statistical inference. Exploratory analysis of data makes use of graphical and numerical techniques to study patterns and departure from patterns. Probability is the tool used for anticipating what the distribution of data should look like under a given model. Statistical inference techniques include confidence intervals and a variety of hypothesis test techniques. Written and oral presentations of data and findings are an integral part of the course. Students are encouraged to take the Statistics Advanced Placement exam.

Meets requirements: M/EL/c

Prerequisite: “B” in Algebra 2/ Integrated Math 3 and English

## TRIGONOMETRY

Grades: 9-12

In this course students will expand on the basic trigonometry learned in Geometry in preparation for the study of calculus. Topics covered will include trigonometric functions and their graphs, inverse trigonometric functions, right and oblique triangles, identities, complex numbers and polar graphs. In addition, students will complete a unit on Probability and Statistics. At the end of the course students will have completed all the state standards for Trigonometry and Probability and Statistics.

Meets requirements: M/EL/c/▲

Prerequisite: “C” in Algebra 2/ Integrated Math 3

## PRE-CALCULUS

Grades: 10-12

Pre-calculus covers topics such as solving and graphing polynomial, rational, radical, exponential, and logarithmic functions. Additional topics include graphing, proving identities, solving equations, solving triangles, determining the area of a triangle, working with the polar form of complex numbers, and solving problems involving vectors. Students will become familiar with conic sections, permutation, combinations, parametric equations, systems of equations and their solutions by matrices and determinants, sequences and series, and some topics from probability and statistics.

Meets requirements: M/EL/c/▲

Prerequisite: “C” in Algebra 2/ Integrated Math 3, “B” recommended

## HIGHLIGHTS OF CALCULUS

Grade: 11-12

This course will cover the basic concepts of calculus while maintaining a continual emphasis on algebra and trigonometry. The standards are based on Common Core Standards for Mathematics and include concepts from the conceptual categories: Algebra, Functions, Geometry. Instructional time will focus on four critical areas: (1) expand understanding of functions to include polynomial, rational, radical, trigonometric, exponential, and logarithmic; (2) a comprehensive, detailed review of concepts from Algebra One and Algebra Two; (3) a comprehensive, detailed review of trigonometric concepts; (4) application of algebraic and trigonometric skills to the solution of calculus-based problems involving derivatives and antiderivatives.

Meets requirements: M/EL/c/Υ

Prerequisite: “C” in Pre-Calculus

# MATHEMATICS (continued)

UC/CSU Requirement “c” 3 Years Required / 4 Years Recommended (Including Integrated Math 1, Integrated Math 2, and Integrated Math 3)

## AP CALCULUS AB

Grades: 11-12

Meets requirements: M/EL/c/▲

Prerequisite: “B” in Pre-Calculus

The course is divided into differential and integral calculus. Students study instantaneous rates of change, with specific applications in problems of motion, growth, and optimization. The student learns how to determine limits and derivatives of functions. Students acquire skills in the use of graphic calculators, and demonstrate familiarity with various theorems, including the Mean Value Theorem. In integral calculus, the student learns techniques for finding areas, volumes, and center of mass. The course includes units on integration techniques, infinite series, and polar integration. Students are encouraged to take the Calculus AB Advanced Placement exam.

## AP CALCULUS BC

Grade: 12

Meets requirements: M/EL/c/▲

Prerequisite: “B” in AP Calculus AB

This course is a continuation of the Advanced Placement (AP) Calculus AB course and is comparable to a second semester calculus course in colleges and universities. Each student will complete a simulated AP exam in early May, which will be counted as approximately 25% of the final exam for the course. The course will include: techniques of integration, improper integrals, indeterminate forms, multiple integration, applications of integration, infinite series, parametric equations, polar integration, differential equations, and applications of hyperbolic functions.

## AP COMPUTER SCIENCE A

Grades: 11-12

Meets requirements: CTE/EL/c

Prerequisite: Exploring Computer Science and Computer Science and Programming OR Teacher Approved

AP Computer Science A focuses on further developing computational thinking skills through the medium of Android™ App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java™ programming language, XML, and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases. This is a Project Lead the Way Course. (PLTW)

## MEETS HIGH SCHOOL MATH GRADUATION REQUIREMENTS (does not meet “a-g” requirements)

### INTEGRATED MATH 1 FOUNDATIONS

Grade: 9

Meets requirements: M

Prerequisites: “D” or lower in middle school math

This is a non-college prep course designed to build the concepts and skills not mastered in middle school. Instructional time focus on the following topics from the Common Core State Standards for Mathematics: ratios and proportional reasoning, operations with rational numbers, linear expressions and equations, linear systems, functions, geometric transformations, and the Pythagorean Theorem. After successful completion of this course, students can enroll in Integrated Math 1.

### INTEGRATED MATH 2 FOUNDATIONS

Grade: 10

Meets Requirements M/EL

Prerequisites: “D” or better in Integrated Math 1

This is a non-college prep course designed for students who have passed Integrated Math 1, but may not be ready for the rigor of Integrated Math 2. The course is structured around problems and investigations that build spatial visualization skills, conceptual understanding of geometry topics, and an awareness of connections between different ideas. Students are encouraged to investigate and conjecture to develop their reasoning skills. Lessons are structured for students to collaborate actively by working collaboratively with peers. The course will focus on the foundational geometry standards that students will learn in Integrated Math 2, without engaging in formal proofs. The big ideas of the course are presented in an integrated algebra/geometry context. ([www.cpm.org](http://www.cpm.org))

### INTEGRATED MATH 3 FOUNDATIONS

Grades: 10-12

Meets requirements: M/EL

Prerequisite: Integrated Math 1 and Integrated Math 2

This course is a non-college prep option for students who want to strengthen their Algebra and Geometry skills prior to taking more advanced math classes such as Integrated Math 3 and Pre-Calculus. One of the goals of this course is to train students to think mathematically. This course surveys a variety of math topics of interest to students including statistics, formal logic, set theory, historical number systems, and topics from consumer math – in addition to a number of state algebra, geometry, and statistics and probability standards.

### PERSONAL AND BUSINESS FINANCE

Grades: 11-12

Meets requirements: M/EL

Prerequisite: Pass Integrated 1 and Integrated 2 with “D” or better

This course is designed to help students develop business and mathematical reasoning skills necessary for personal finance, consumer, and career situations. Emphasis is on using mathematical methodologies to influence financial decision making both on the job and in everyday life. This course will draw upon student experience bridging real-world relevance with mathematic and business concepts.

# SCIENCE

UC/CSU Requirement “d” 2 Years Required / 3 Years Recommended (Chosen from Biology, Chemistry, and Physics)

## BIOLOGY: THE LIVING EARTH

Grades: 9

Biology is the first course in the California Next Generation Science Standards (CA NGSS) Three Course Model, and includes the Disciplinary Core Ideas related to Life Science and integrates a selection of the Earth and Space Science concepts. This course also incorporates the eight Science and Engineering Practices and seven Crosscutting Concepts related to the NGSS. In this course, students will explore concepts related to the interactions within ecosystems, energy dynamics, photosynthesis and cellular respiration, history of the earth’s atmosphere, natural selection, inheritance of traits, structure and function of organisms, system stability and response to change. Students should learn an appreciation for all living things and the critical importance of maintaining the delicate balance required for all living things to interact and live successfully. This course meets the UC, Subject d Biology Lab Science requirement and the FCUSD graduation requirement for Life Science.

Meets requirements: S/ d/▲

Prerequisite: Concurrently enrolled in Integrated Math Foundations 1 or Integrated Math 1

## CHEMISTRY IN THE EARTH SYSTEM

Grades: 10-12

Chemistry in the Earth System is a course in the California Next Generation Science Standards (CA NGSS) Three Course Model and includes Disciplinary Core Ideas related to Physical Science and integrates a selection of the Earth and Space Science concepts. This course also incorporates the eight Science and Engineering Practices and seven Crosscutting Concepts related to the NGSS. In this course, students will explore the structure and properties of matter, conservation and transfer of energy, chemical reactions and processes in everyday life, nuclear processes and chemical changes in Earth systems. Engineering Core Ideas are used to explore applications of chemistry concepts. Students apply algebraic processes to describe and predict phenomena.

Meets requirements: S/EL/d/▲

Prerequisite: Biology and enrolled in Integrated Math Foundations 1 or Integrated Math 1

## HONORS CHEMISTRY IN THE EARTH SYSTEM

Grades: 10-12

Honors Chemistry is one of three courses in the CA NGSS Three Course Model and integrates the Science and Engineering Practices, Crosscutting Concepts, and Disciplinary Core Ideas. Core ideas include structure and properties of matter, conservation and transfer of energy, chemical reactions and processes in everyday life, nuclear processes and chemical changes in Earth systems. Engineering Core Ideas are used to explore applications of chemistry concepts. Students apply advanced algebraic processes to describe and predict phenomena. This course meets the UC, Subject d Chemistry Lab Science requirement and the FCUSD graduation requirement for Physical Science. This course is recommended for college-bound students that plan to major in science.

Meets requirements: S/EL/d/▲

Prerequisite: Biology and Integrated Math 2 with B or better, 3.0 College prep GPA

## PHYSICS IN THE UNIVERSE

Grades: 10-12

Physics in the Universe is a course in the California Next Generation Science Standards (CA NGSS) Three Course Model and includes the Disciplinary Core Ideas related to Physical Science and integrates a selection of the Earth and Space Science concepts. This course also incorporates the eight Science and Engineering Practices and seven Crosscutting Concepts related to the NGSS. In this course students will explore the following core ideas: forces and motion, energy transfers and conservation, the properties of waves, and the electromagnetic spectrum, and use these ideas to understand the processes that shape earth and space systems. Engineering Core Ideas are used to explore applications of Physics concepts.

Meets requirements: S/EL/d/▲

Prerequisite: Biology and enrolled in Integrated Math Foundations 1 or Integrated Math 1

## HONORS PHYSICS IN THE UNIVERSE

Grades: 10-12

Honors Physics in the Universe is a course in the California Next Generation Science Standards (CA NGSS) Three Course Model and includes the Disciplinary Core Ideas related to Physical Science and integrates a selection of the Earth and Space Science concepts. This course also incorporates the eight Science and Engineering Practices and seven Crosscutting Concepts related to the NGSS. In this course students will apply advanced algebraic processes to describe and predict phenomena. The following core ideas will be explored in this course: forces and motion, energy transfers and conservation, the properties of waves, and the electromagnetic spectrum, and uses these ideas to understand the processes that shape earth and space systems. In addition, Engineering Core Ideas will be used to explore applications of Physics concepts.

Meets requirements: S/EL/d/▲

Prerequisite: “B” or better in Biology and Integrated Math 2; Enrollment in Integrated Math 3 is strongly recommended

## FORENSICS

Grades: 11-12

Forensics is a third year of college-prep laboratory science for students that are college bound and/or interested in the field of forensics. This class will introduce students to the fields of forensic science and provide a general overview of the forensic sciences. Students will participate in many qualitative hands-on labs and simulations that develop the practical and theoretical aspects of forensics. This class will integrate previous science courses and demonstrate to the student the relevance of science education for practical use. This course is interdisciplinary and thus meets the UC Subject d Physics, Biology or Chemistry Lab Science requirement. This course does not fulfill either of the first two years of science required to graduate from FCUSD

Meets requirements: S/EL/d/▲

Prerequisite: Completion of 2 years of science and Integrated Math 1 with “C” or better

## HUMAN ANATOMY AND PHYSIOLOGY

Grades: 10-12

Human Anatomy and Physiology is a third year of college-prep laboratory science for students interested in pursuing a career in either the medical, health or fitness related field. The course will focus on the integration of structure and function of the body systems needed to maintain homeostasis. It will integrate topics related to health and fitness such as nutrition, exercise, and kinesiology. It will also integrate specific topics related to the medical field. The course will require microscopy work as well as laboratory work involving dissections. Students will gain experience with a variety of clinical practices. Computers will be used to supplement laboratory work. This course meets the UC Subject d Biology Lab Science requirement but does not fulfill either of the first two years of science required to graduate

Meets requirements: S/EL/d/▲

Prerequisite: Integrated Math 1, Biology with “C” or better, and concurrently enrolled in or completion of Chemistry or Physics

## AP BIOLOGY

Grades: 11-12

This course is equivalent to a college introductory biology course usually taken by biology majors. Essential concepts include a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. Topics include molecules and cells, energy and metabolism, heredity and evolution and organisms and populations. This course prepares students for the AP Biology exam and meets the UC Subject d Biology Lab Science requirement.

Meets requirements: S/EL/d/▲

Prerequisite: “B” in Biology, Chemistry, and Integrated Math 2, 3.0 College prep GPA

## SCIENCE (continued)

UC/CSU Requirement “d” 2 Years Required / 3 Years Recommended (Chosen from Biology, Chemistry, and Physics)

### AP CHEMISTRY

Meets requirements: S/EL/d/▲

Grades: 11-12

Prerequisite: “B” in the completion of Honors Chemistry (or Chemistry with teacher’s recommendation) and Integrated Math 3, 3.0 College prep GPA

AP Chemistry is equivalent to a college Chemistry 1A course. It is designed strictly for advanced or gifted students who wish the opportunity to gain college credit for courses while in high school. The course applies advanced algebra to chemical principles. The course not only stresses the theoretical aspects of qualitative and quantitative chemistry but also emphasizes laboratory practices applying the theory. This course prepares students for the AP Chemistry exam and meets the UC Subject d Chemistry Lab Science requirement.

### AP PHYSICS

Grades: 11-12

Meets requirements: S/EL/d/▲

Prerequisite: “B” in Integrated Math 3 and Chemistry; concurrently enrolled Pre-Calculus; 3.0 College prep GPA

AP Physics 1 is equivalent to an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. This course prepares students for the AP Physics exam and meets the UC Subject d Physics Lab Science requirement.

### AP ENVIRONMENTAL SCIENCE

Grades: 11-12

Meets requirements: S/EL/d/▲

Prerequisite: “B” in 2 years of College Prep Science and Integrated Math 1, 3.0 College prep GPA; concurrent enrollment in Integrated Math 2 or higher recommended

The goal of the AP Environmental Science 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 and/or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study, and thus meets the UC Subject d Physics, Biology or Chemistry Lab Science requirement. This course prepares students to pass the AP Environmental Science exam.

### HONORS PRINCIPLES OF ENGINEERING (PLTW 2)

Grades: 10-12

Meets requirements: CTE/EL/d

Prerequisites: “C” in Engineering Design, and concurrent enrollment in Integrated Math 2 or higher

This course helps students understand the field of engineering or engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. Students will use the hands-on and cooperative approach to learning. Scientific principles, mathematical concepts and communication skills are taught through the activity-oriented approach. Students will explore robotics, electronics, hydraulics, pneumatics and computer design technologies. Students will work in problem solving groups that will research, design and build projects for practical applications and competitions.

### HONORS CIVIL ENGINEERING AND ARCHITECTURE (PLTW 3)

Grades 10-12

Meets requirements: T/EL/d

Prerequisites: “C” in Principles of Engineering, previously taken or currently enrolled in a college prep math course.

This course is designed to provide an overview of the fields of Civil Engineering and Architecture. Students will work in teams, exploring hands-on projects and activities to learn the characteristics of civil engineering and architecture. They will use the Auto Cad and Revit Architecture software to document their designs. Students will develop a design for a piece of local property site, plan out public and private facilities, meet with industry professionals, and build models to enhance in-class learning.

# WORLD LANGUAGE

UC/CSU Requirement “e” 2 Years Required / 3 Years Recommended

## FRENCH 1

Grades: 9-12

This course provides an introduction to the French language and culture using the immersion method of instruction. Students learn basic grammar and vocabulary application through listening, speaking, reading, and writing.

Meets requirements: WL/e/▲

Prerequisite: “C” in English required, “B” in previous grade of English recommended

## FRENCH 2

Grades: 9-12

This course offers continued study of the French language and culture using the immersion method of instruction. Students continue to develop their skills in grammar and vocabulary application through listening, speaking, reading and writing. Students will be held accountable for increased self-directed learning.

Meets requirements: WL/e/▲

Prerequisite: “C” in French 1

## FRENCH 3

Grades: 10-12

This course is designed to give students advanced level instruction in the French language using the immersion method of instruction. Emphasis is on oral and written proficiency. Students will be held accountable for increased self-directed learning. Taking a third year of language may exempt you from the language requirement at some of the CSU campuses. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in French 2

## AP FRENCH LANGUAGE

Grades: 11-12

This course follows the curriculum adopted by the Advanced Placement Program. The course is a rigorous study of advanced French in order to prepare students to take the AP French Language examination in May. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in French 3

## GERMAN 1

Grades: 9-12

This course provides an introduction to the German language and culture using the total immersion method of instruction. Students learn basic grammar and vocabulary application through listening, speaking, reading and writing.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in English required, “B” in previous grade of English recommended

## GERMAN 2

Grades: 9-12

This course offers continued study of the German language and culture using the immersion method of instruction. Students continue to develop their skills in grammar and vocabulary application through listening, speaking, reading and writing. Students will be held accountable for increased self-directed learning.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in German 1

## GERMAN 3

Grades: 10-12

This course is designed to give students advanced level instruction in the German language using the immersion method of instruction. Emphasis is on oral and written proficiency. Students will be held accountable for increased self-directed learning. Taking a third year of language may exempt you from the language requirement at some of the CSU campuses. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in German 2

## AP GERMAN LANGUAGE

Grades: 11-12

This course follows the curriculum adopted by the Advanced Placement Program. The course is a rigorous study of advanced German in order to prepare students to take the AP German Language examination in May. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in German 3

## SPANISH 1

Grades: 9-12

This course provides an introduction to the Spanish language and culture using the immersion method of instruction. Students learn basic grammar and vocabulary application through listening, speaking, reading and writing.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in English required, “B” in previous grade of English recommended

## SPANISH 2

Grades: 9-12

This course offers continued study of the Spanish language and culture using the immersion method of instruction. Students continue to develop their skills in grammar and vocabulary application through listening, speaking, reading and writing. Students will be held accountable for increased self-directed learning.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in Spanish 1

## SPANISH 3

Grades: 9-12

This course is designed to give students advanced level instruction in the Spanish language using the immersion method of instruction. Emphasis is on oral and written proficiency. Students will be held accountable for increased self-directed learning. Taking a third year of language may exempt you from the language requirement at some of the CSU campuses. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer to other colleges or universities.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in Spanish 2

## SPANISH 4

Grades: 9-12

This course is designed strengthen student’s skills and better prepare them for the rigors of the Spanish AP course. This course will enable students to continue with their interpersonal communicative skills in Spanish through the continued development of vocabulary and grammar as related to the six thematic units according to the College Board’s AP themes. (Las familias y las comunidades/la ciencia y la tecnologia, la belleza y la estetica/la vida contemporanea, los desafios mundiales, las identidades personales y publicas.) This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

Meets requirements: WL/e/▲/△

Prerequisite: “C” in Spanish 3

## **WORLD LANGUAGE (continued)**

**UC/CSU Requirement “e” 2 Years Required / 3 Years Recommended**

**AP SPANISH LANGUAGE**

Meets requirements: WL/e/Δ/Δ

Grades: 11-12

Prerequisite: “C” in Spanish 3

This course follows the curriculum adopted by the Advanced Placement Program. The course is a rigorous study of advanced Spanish in order to prepare students to take the AP Spanish Language examination in Math. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

# VISUAL AND PERFORMING ARTS

## UC/CSU Requirement “F” 1 Year Required

### BEGINNING CHORUS

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: None

This course is designed to provide beginning vocal instruction and general musicianship skills for all choral students. Instruction will include beginning music literacy and music theory, and will emphasize differences in musical styles as they relate to the history of music and the interpretation of specific pieces. This class has some after-school performances and students may be required to attend performances during the year as audience members.

### CHAMBER CHOIR

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: Audition by director

This course is designed to provide continuing vocal instruction and musicianship skills for advanced choral students. Emphasis is on ensemble singing of primarily a cappella literature. Concurrent enrollment in Concert Choir or another music class is highly recommended. Course requirements include many performances outside of the regular school day.

### CONCERT BAND

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: 4 years of school music program experience or instructor approval

This class is devoted primarily to concert style music and general broadening of the student's musical interests and abilities. Evening performances are required. The first semester of this course is devoted primarily to the preparation and performance of football Half Time shows, which include march-style music and actual marching experience. Up to 5 Saturday events and Monday evening rehearsals from 5:30 – 9:00 p.m. in the fall are required.

### CONCERT CHOIR

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: Audition by director

This course provides continuing instruction in choral singing and musicianship skills for students with prior experience. Preparation of literature will include some music history and music theory. Course requirements include performances outside of the school day.

### JAZZ BAND

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: Audition by director; students enrolled in Jazz Band must either be enrolled in Concert Band or have completed three years of Concert Band or Orchestra at the high school level only at director's discretion

This class is a performance-oriented ensemble that performs jazz instrumental literature. The members of this band will also learn the background of various styles of music being presented. Some theory and notation will be involved in the preparation of the music. Evening and Saturday performances are required. There are three jazz bands offered, based on level.

### JAZZ CHOIR

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: Audition by director; students enrolled in Jazz Choir must be enrolled in a large performing group at the high school level for two years at director's discretion.

This class provides the highly qualified music student with an opportunity to gain experience through the study, rehearsal, and performance of advanced choral literature, with emphasis on contemporary music, especially jazz literature of the 1930's through the present. At the director's discretion, the group can number between 6 and 24 members. Evening and Saturday performances are required.

### ORCHESTRA

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: 3 years music experience - private or in public education

This is a string ensemble that plays classical to contemporary music. It is a high-level performance class that requires outside time for performances.

### GUITAR

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: None

This course will focus on learning to play the guitar. Students will study a variety of styles and basic techniques used in guitar playing. Students will learn to read music, guitar tablature and chord charts, and to improvise and compose music. The class will include solo and small ensemble playing, with emphasis on acoustic and classical styles. This course may include performances outside of the school day.

### CERAMICS 1

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: None

Students will develop an understanding of the basic techniques of the use of clay as an art form. They will learn to form pinch, slab, coil, sculpture, and wheel-throw pottery. They will develop and expand aesthetic perceptions in order to form a base for making informed aesthetic judgments. Students will also acquire knowledge of the historical and cultural development in Ceramics. A digital portfolio of images of student work will be required for each semester.

### CERAMICS 2

Grades: 10-12

Meets requirements: FA/EL/f

Prerequisite: “C” in 3D Art or Ceramics 1

Students further their technique on the potter's wheel both as a tool for functional pottery and sculptural forms. Students explore advanced hand building techniques to build lightweight functional wares and artwork. Students will explore areas of decoration, design, form, glazing, and related technical problems. Students work more independently and informed artistic decisions. Students learn how to compose glazes using basic chemistry. Students will also gain the ability to analyze and respond to ceramic as an art form. Students will continue to be introduced to numerous cultural and historical styles and motifs.

### CERAMICS 3

Grades: 11-12

Meets requirements: FA/EL

Prerequisite: “C” in 3D Art 2 or Ceramics 2

Ceramics 3 covers special problems in wheel throwing, and hand building techniques, with an emphasis on size, mass and form. Students will explore individual style in decoration, furthering their work with oxides, stains, and glaze. Through an inquiry base lab, students explore the world of chemistry and apply it to formulate new glaze for use on artwork. Students work more independently and make decisions as to areas of preference. Students will continue to gain the ability to analyze, and respond to various ceramic pieces, including their own. Students will be introduced to numerous cultural, historical styles, and motifs, and will explore areas leading to originality, and good workmanship in his/her work. Students will compile a digital portfolio of work to demonstrate their abilities to a studio learning setting which can be used for college entrance, or employment in a visual art field.

# VISUAL AND PERFORMING ARTS (continued)

## UC/CSU Requirement “f” 1 Year Required

### DRAWING & PAINTING 1

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: None

Students will develop an understanding of the basic elements of art and the principles of design and will experiment with various techniques of drawing and painting with a variety of media. They will develop and expand aesthetic perceptions and develop a base for making informed aesthetic judgments. Students will also acquire knowledge of historical and cultural development in the visual arts. *A World of Images* by L. Chapman and *Discovering Art History* by G. Brommer are classroom textbooks. This course offers the fundamentals necessary to pursue an advanced level of study. A sketchbook and notebook are required.

### DRAWING & PAINTING 2

Grades: 10-12

Meets requirements: FA/EL/f

Prerequisite: “C” in Drawing & Painting 1

Students will further develop knowledge and skills through completion of advanced projects in drawing, painting, and printmaking. This is required course work prior to applying for Advanced Placement Studio Art. A sketchbook and notebook are required.

### DRAWING & PAINTING 3

Grades: 11-12

Meets requirements: FA/EL/f

Prerequisite: “C” in Drawing & Painting 2

This course offers an opportunity for students to do another year of studio artwork prior to the submission of an AP portfolio in year four. For the third year art student, it could also function as an advanced class without the intense level of production required by the AP DRAWING class. An artwork is due approximately every four weeks and will be critiqued and graded based on the Advanced Placement rubric.

### AP DRAWING

Grades: 11-12

Meets requirements: FA/EL/f

Prerequisite: “B” in Drawing and Painting 2, 3

This course is designed for the highly-motivated art student with the willingness to work both inside and outside of class time. An artwork is due approximately every week and will be critiqued and graded based on the Advanced Placement rubric. Students will prepare artwork for a portfolio to be submitted to the College Board in May.

### DIGITAL ART 1

Grades: 9-12

Meets requirements: CTE/FA/EL/f

Prerequisite: None

An introduction into photography and digital manipulation, this one-year course focuses on learning creative and artistic expression. Students will use a combination of traditional art elements, photography skills and Photoshop tools to create artwork. This class also briefly explores the history of art and photography.

### DIGITAL ART 2

Grades: 10-12

Meets requirements: FA/EL/f

Prerequisite: “C” in Digital Art 1

This advanced course is to further explore the manipulation of Photoshop and photography skills from Digital Art 1. The class emphasizes effective communication of ideas through the use of art elements and principles. Students will also analyze and critique their own art works for further enhancement. Students from this course are able and expected to complete artwork that is ready to submit to contests and art shows.

### AP 2D ART AND DESIGN

Grades: 11-12

Meets requirements: FA/EL/f

Prerequisite: “B” in Digital Art 2

This AP digital arts course is for self-directed art students looking to experience a college-level art class in high school. This year-long course emphasizes mastery of photography skills and creating advanced artistic expressions. Students are required to submit a 24-image portfolio as their AP test. The AP exam consists of three parts, breadth (12), concentration (12) and quality (5 best pieces printed from breadth and concentration). College Board formally evaluates portfolios with a score from 0-5, 3 and above is a passing score.

### DRAMA 1

Grades: 9-12

Meets requirements: FA/EL/f

Prerequisite: None

An introduction to the dramatic experience, this course introduces students to basic acting technique including stage presence, stage movement, pantomime, character development, voice, script and character analysis, script writing, and audition techniques. This course also covers the historical and cultural roots of western theater as well as early theatre traditions. Students will have the opportunity to learn and demonstrate basic skills in acting, through in-class presentation of monologues, scenes and plays.

### DRAMA 2

Grades: 10-12

Meets requirements: FA/EL/f

Prerequisite: “C” in Drama 1, “B” strongly recommended

Students will build upon basic acting technique covered in Drama 1. Students will read and analyze plays, develop skills in performance critique, and present a variety of monologues and scenes from scripted and self-written work. A strong focus and commitment to performance and collaboration are expected. Students will have the opportunity to participate in theatre festivals. An evening showcase performance will be required.

### DRAMA 3

Grades: 11-12

Meets requirements: FA/EL/f

Prerequisite: “B” strongly recommended in Drama 2

Students will continue to build upon basic acting technique covered in Drama 2. Students will read and analyze plays, develop skills in performance critique, and present a variety of monologues and scenes from scripted and self-written work. A strong focus and commitment to performance and collaboration are expected, along with leadership skills. Students will have the opportunity to participate in theatre festivals. An evening showcase performance will be required.

### DRAMA 4

Grades: 11-12

Meets requirements: FA/EL/f

Prerequisite: “B” strongly recommended in Drama 3

Students will continue to build upon basic acting technique covered in Drama 2 and 3. Students will read and analyze plays, develop skills in performance critique, and present a variety of monologues and scenes from scripted and self-written work. Students will have opportunities to hone leadership skills through student directing. Students will have the opportunity to participate in theatre festivals. An evening showcase performance will be required.

### INTRODUCTION TO TECHNICAL THEATRE

Grades 9-12

Meets requirements: FA/EL/f

Prerequisite: none

This course is designed to introduce students to technical and design elements in the field of theatre. Students will learn the skills and concepts associated with the technical elements of theatre including: jobs in theatre, set design, stagecraft, costuming, scenic painting, and stage make-up. Students will experience all aspects in each design area including script analysis, research, design and implementation. Students will create design projects which include sketches, annotated research and practical projects.

# **VISUAL AND PERFORMING ARTS (continued)**

**UC/CSU Requirement “f” 1 Year Required**

## **TECHNICAL THEATER IN PRODUCTION**

Meets requirements: FA/EL/f

Grades: 10-12

Prerequisite: “B” recommended in Introduction to Technical Theater

This course is designed to build on and develop technical and design elements covered in Introduction to Technical Theater and expand knowledge in the areas of lighting, sound and Production Management. Students will apply foundational knowledge to both theoretical and realized design projects. Students will spend class time building and producing department theatrical productions. Opportunities are available for leadership and project management. Students are also given opportunities to volunteer for additional community productions in order to gain knowledge and experience for resume building. This course can be repeated up to three times.

## **VIDEO PRODUCTION 1**

Meets requirements: CTE/FA/EL/f

Grades: 9-12

Prerequisite: None

Students will study the applied art and science of film, television, and other mass media platforms. The emphasis is on individual creative thinking implemented through group collaboration in the phases of preproduction, production, and postproduction phases. Students will produce videos using digital cameras and computer editing software for air on campus television and submission to film festivals. This course is a pre requisite for Television Production and can also serve as a prerequisite for Computer Game Design. Video Production 1 (Video) is a UC/CSU approved visual arts elective and an art or career and technical education elective for graduation requirements.

## **FILM AS VISUAL LITERATURE**

Meets requirements: FA/EL/f

Grades: 11-12

Prerequisite: 2.5 College Prep GPA

This course promotes an understanding of how film communicates ideas, or “cineliteracy,” by analyzing and reviewing narrative, dramatic, and cinematic elements. The class investigates the use of film as both a form of literature and art, as well as a way to transfer culture. Students view a wide variety of full-length feature films in class, watch films of their choice outside of class, critique films, compare and contrast novels with their corresponding film adaptations, explore a variety of film genres, and participate in visual and/or performing arts projects.

## **ADVANCED DRAFTING AND ARCHITECTURE**

Meets requirements: CTE/EL/f

Grades: 11-12

Prerequisite: Civil Engineering and Architecture or teacher recommendation

This is an advanced course in which students will continue to develop both the hands on application of engineering and artistic appreciation of architecture. Students will expand their knowledge and experience in Civil Engineering and Architecture, especially involving drafting and building design. This course allows for practical visual and performing arts applications for career technical education pathway students. Students taking this course are preparing for higher education in architecture and building design.

# COLLEGE PREPARATORY ELECTIVES

UC/CSU Requirement “g” 1 Year Required

## HUMANITIES 1: CRITICAL THINKING WITH A GLOBAL PERSPECTIVE

Grades: 9-12

Meets requirements: FA/EL/Δ

Prerequisite: None

This course was formally simply called Academic Decathlon. This course is designed to teach students how to see context and make connections across the humanities. Students will piece together the cultural history of the world by studying and critically analyzing various sections of art, music, history and literature. The course will encourage students to focus and think critically about the cultural artifacts of the past and the importance on today’s society. Students in this class will use this material to prepare for the local Academic Decathlon competition. The purpose of the United States Academic Decathlon is to develop academic competitions, curriculum, and assessment to promote learning and academic excellence through teamwork among students of all achievement levels. The goal of this class is to enhance students’ critical thinking and reasoning skills by using selected reading pieces from the humanities and having students respond in writing, through discussions and with prepared speeches. Although each year the topic changes as detailed by USAD, United States Academic Decathlon, the basic humanities’ components remain the same. Each area of study will have a component related to the assigned theme.

Although anyone in the class may compete at the county level in February, only nine students will be selected to represent the school and potentially advance to state. Competitors are selected based on knowledge acquired in the class. This course is now an ACE (Accelerated College Entrance) approved course. Upon completing the second semester of Academic Decathlon, students will earn 3 units from the California State University system for their course titled EDS 099: Independent Studies, and can transfer this credit other colleges or universities.

## SPEECH & DEBATE 1

Grades: 9-12

Meets requirements: FA/EL/g/Δ

Prerequisite: None

Speech and Debate is an activity-oriented course designed to give students experience in a variety of speaking situations. Students present demonstrative, informative, and persuasive speeches in addition to participating in group discussion, debate, and oral interpretation of literature. A unit on special occasion speeches is also included, along with a section on Mock Trials and Job Interviewing. Emphasis is placed on preparing (research and organizational skills), delivering speeches and on studying what lies behind the act of public speaking. The class provides a non-threatening atmosphere and a feeling of success for class members. This class is recommended for college-bound students and those wanting to improve their communication skills. Please note that this course counts as a UC/CSU “g” (college-prep elective) course but does not fulfill the UC/CSU “F” (visual and performing arts) course requirement.

## SPEECH & DEBATE 2

Grades: 10-12

Meets requirements: FA/EL/g/Δ/Δ

Prerequisite: “C” in Speech and Debate 1

Students will further develop their rhetorical knowledge in the areas of personal and professional communication. Units of study include voice overs, marketing, argumentation/persuasion and Mock Trials. Members of the class may have the opportunity to participate in speech contests, field demonstrations and to hear from guest speakers. Please note that this course counts as a UC/CSU “g” (college-prep elective) course but does not fulfill the UC/CSU “F” (visual and performing arts) course requirement. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

## AP RESEARCH

Grade: 11-12

Meets Requirement: EL/g

Prerequisite: Passing grade in AP Seminar, 3.0 College Prep GPA

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a year-long investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and assessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000 to 5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

AP Seminar is a prerequisite for AP Research. Completing AP Seminar and all its required assessment components is necessary for students to develop the skills to be successful in AP Research. Students in pathways such as GPS and PLTW as well as all students taking AP courses will benefit from this skills, rather than content, driven course.

## AP PSYCHOLOGY

Grades: 11-12

Meets requirement: EL/g/Δ

Prerequisite: 3.0 College Prep GPA

The purpose of AP Psychology is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields and perspectives within psychology. The course is designed to introduce students to a college level psychology course while developing advanced skills in reading, writing, reasoning, evaluating critically, and scientific inquiry.

## PSYCHOLOGY/SOCIOLOGY

Grades: 11-12

Meets requirements: FA/EL/g/Δ

Prerequisite: 2.5 College Prep GPA

This course is a college-level prep class designed as an overview of the fields of psychology and sociology. Students will be introduced to the history of psychology, different schools of thought, methods of research and therapy, personality, learning, memory, perception, intelligence, and psychological disorders. Students also will be introduced to sociological concepts, theories, and procedures in the areas of collective behavior, crime, politics, race, ethnicity, education, health, gender, culture, and societal controversies.

## EXPLORING COMPUTER SCIENCE

Grades: 9-12

Meets requirements: CTE/EL/g

Prerequisite: None

Exploring Computer Science focuses on the creative, collaborative, interdisciplinary, and problem-solving nature of computing featuring an inquiry-based approach to learning and teaching. As part of this curriculum, students will delve into real world computing problems that are culturally relevant and address social and ethical issues while developing foundational computer science knowledge. Students will engage in several in-depth projects to demonstrate the real-world application of computing. Units of instruction will include human computer interaction, problem solving, web design, introduction to programming, computing and data analysis, and robotics.

## COMPUTER SCIENCE AND PROGRAMMING

Grades: 10-12

Meets requirements: CTE/EL/g/Δ

Prerequisite: “C” in Math 1, “C” in Exploring Computer Science

Computer Science and Programming is a second year computer science course with an emphasis on programming concepts and methodology. Students will learn algorithmic thinking and expression and be able to understand basic principles of programming logic. They will learn to communicate complex ideas simply and solve problems logically. Topics include computer hardware, troubleshooting, computer security, networking, and program development. Students will engage in several in-depth projects to demonstrate the real-world application of computing and programming. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and Seniors may earn college credit from the CSU system and may transfer credit to other colleges and universities.

# COLLEGE PREPARATORY ELECTIVES (continued)

UC/CSU Requirement “g” 1 Year Required

## COMPUTER ANIMATION AND GAME DESIGN

Grades: 10-12

Meets requirements: CTE/EL/g

Prerequisite: None

This is a survey course which explores the art, science, and programming behind computer animation and digital games. Students will design computer animations from “scratch” learning to program motion, lighting, shadow, and background elements. Students will employ these skills in developing the look and feel of digital games. Game design includes individual and group development of gaming projects from game concept and mapping, through basic programming, the iterative design process, and proof of concept.

## ENGINEERING DESIGN (PLTW 1)

Grades: 9-12

Meets requirements: CTE/EL/g/ Δ

Prerequisite: Concurrent enrollment in Integrated Math 1 or higher

Engineering Design is an introductory course in which students will develop problem-solving skills, with an emphasis placed on three-dimensional solid models. The techniques learned and equipment used is the basis for a sequence of engineering courses offered at Folsom High School. Students will work from sketching simple geometric shapes to applying a solid modeling computer package. They will learn a problem-solving design process and how it is used in industry to manufacture a product. The Computer Aided Design system (CAD) will also be used to analyze and evaluate the product design. All students will benefit from this course regardless of their respective learning styles, learning rates, or gender. College credit may be earned based on portfolio review and A or B grades in both semester through articulation with American River College.

## INTRODUCTION TO PRODUCT INNOVATION DESIGN AND MANUFACTURING

Grades: 9-12

Meets requirements: EL/CTE/g

Prerequisite: Concurrent enrollment in Integrated Math 1 or higher

In this course students will receive introductory level exploratory instruction regarding product design using woods, metals, plastics and composites. Students will learn to design, draw and model products that they will build through the proper use of hand tools, machinery tools, 3D printers and CNC machines. Students will demonstrate a thorough understanding of industry safety standards and will receive instruction regarding related career paths. Students who successfully complete Introduction to Product Innovation and Design will have the opportunity to take a level two course the advances the student’s ability to design and build products using a variety of materials.

## ADVANCED PRODUCT INNOVATION DESIGN AND MANUFACTURING

Grades: 10-12

Meets requirements: EL/CTE/g

Prerequisite: Complete Intro. Product Innovation and Design with a “C” or better; Concurrent enrollment in Integrated Math 1 or higher; or teacher approval

The course Advanced Product Innovation Design and Manufacturing builds upon skills and knowledge learned in Product Innovation Design and Manufacturing. This course will offer Sophomores, Juniors, and Seniors the opportunity to further advance their skill proficiencies in the areas of graphic design, machine tooling and forming, engineering design, project planning, tool fitting, and product innovation and design. Comprehensive understanding and application of current safety standards and procedures will be a component of each study unit. Career planning, project innovation, and entrepreneurship will be an integral part of the course.

# ADDITIONAL GRADUATION REQUIREMENTS:

## PHYSICAL EDUCATION

### **FITNESS 1**

Grade: 9

Meets requirements: PE

Prerequisite: None

Fitness 1 will provide the foundation for high school instruction in Physical Education. Students will develop proficient movement skills in each area of physical education; they will expand their capabilities for independent learning; and they will examine practices that allow for sound decision making to enhance successful participation in movement activities. California Fitness gram Testing will be administered and is required of all 9th grade students.

### **FITNESS 2 – AEROBICS**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1

Aerobics is designed to provide students the opportunity to explore a variety of aerobic activities in search of one they can enjoy and participate in for a lifetime. Students will participate in a variety of activities including yoga, cardio-kickboxing, step aerobics, circuit training, jump rope, running, power walking, zumba, muscle toning and stretching. The content articulates the knowledge, skills, and confidence students need to maintain meaningful physical activity throughout their lifetime. The course sequence provides a blueprint for delivering the content in a manner that equips students to make a successful transition from the physical education instructional program to participation in physical activity during adulthood. Aerobics may be repeated for elective credit.

### **FITNESS 2 – DANCE**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1

Dance is designed to improve flexibility, increase muscular strength and improve cardiovascular endurance. The instructor will teach dance combinations and terminology. The students will learn to choreograph a variety of group dances. The curriculum will include a variety of dance styles representative of many cultures. The content articulates the knowledge, skills, and confidence students need to maintain meaningful physical activity throughout their lifetime. The course sequence provides a blueprint for delivering the content in a manner that equips students to make a successful transition from the physical education instructional program to participation in physical activity during adulthood. Dance may be repeated for elective credit.

### **FITNESS 2 – TEAM ACTIVITIES**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1

Fitness 2 will continue to build the foundation for high school instruction in Physical Education. Students will develop proficient movement skills in the areas of combativeness, team activities and tumbling. They will expand their capabilities for independent learning; and they will examine practices that allow for sound decision making to enhance successful participation in those movement activities. Team Activities may be repeated for credit.

### **COURSE 3 – WEIGHT TRAINING**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1

Fitness 2 – Weight Training content articulates the knowledge, skills, and confidence students need to maintain meaningful physical activity throughout their lifetime. The course will emphasize training in the areas of strength, speed, agility, and aerobic development as it relates to lifelong fitness. The strength component is based on weight programs designed to develop overall muscular strength and endurance as well as flexibility, quickness, agility and speed. The speed phase will focus on agility development, speed, increasing cardiovascular fitness and muscular endurance Weight Training may be repeated for elective credit.

### **COURSE 3- SPORTS SPECIFIC TRAINING**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1 and plays a sport

This course is a combination of strength, speed, agility, aerobic development, and sports psychology. It is for the intermediate, to the advanced weight lifter, emphasizing Olympic style lifts. It will also be used for the varsity high school athlete emphasizing conditioning specific for their sport. The strength training component involves a program designed to improve strength, quickness, power and speed. The speed development phase will include plyometric training and agility training. The aerobic development component will include activities that will increase cardiovascular fitness and muscular endurance. The sports psychology component will focus on teaching mental skills to enhance athletic performance. Sports Specific Training may be repeated for elective credit.

### **COURSE 4-ADVANCED CONDITIONING (Football)**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1 and coach's approval

Advanced Conditioning is an elective course that is a combination of speed, strength, agility, and athletic skill development. It will be developed for the intermediate to advanced athlete. Advanced Conditioning may be repeated for elective credit.

### **COURSE 4 – YOGA**

Grades: 10-12

Meets requirements: PE/EL

Prerequisite: Fitness 1

Yoga practice is a system for integrating the body and the mind using the breath as the link. It is appropriate for all levels of fitness. Students learn a series of physical postures as well as practical methods for relaxation, proper breathing, and concentration that promote health, alleviate stress, improve skeletal alignment, and increase muscular strength and flexibility. The course also provides an introduction to basic principles of anatomy and physiology as they relate to yoga practice.

# HEALTH EDUCATION

## HEALTH EDUCATION

Grade: 9-12

Meets requirements: H

Prerequisite: None

This semester course will study all six areas of health education. This course includes the following topics: wellness; nutrition and fitness; mental and emotional health including depression and suicide prevention; technology awareness; substance abuse including alcohol, tobacco, and other drugs; and compressions only CPR. The Family Life units include pregnancy prevention including abstinence and contraceptives; pregnancy options; gender identity; STI/HIV education; and safe dating practices.

## ENRICHED HEALTH EDUCATION

Grade: 9-12

Meets requirements: H/g

Prerequisite: None

A year-long study of health education provides time for students to study all six areas of health education, *in depth*. This course includes the following topics: wellness; goal setting, character development and refusal skills; nutrition and fitness; mental and emotional health including depression and suicide prevention; media safety; technology awareness; substance abuse including alcohol, tobacco, and other drugs, including the stages and risk factors of addiction; chronic and disabling diseases; first aid; CPR; and emergency preparedness. The Family Life units include pregnancy prevention including abstinence and contraceptives; pregnancy options; prenatal growth development; gender identity; STI/HIV education; safe dating practices and healthy relationships. The State Board of Education advises that “good health and academic success go hand in hand. Healthy children make better students, and better students become healthy, successful adults who are productive members of their communities. Comprehensive health education that addresses the physical, mental, emotional, and social aspects of health teaches students how to maintain and improve their health; prevent disease; reduce health-related risk behaviors; and develop health knowledge, attitudes, and skills that foster academic achievement, increase attendance rates, and improve behavior at school.”

# ELECTIVES

## ASB GOVERNMENT / LEADERSHIP

Grades: 9-12

Meets requirements: EL

Prerequisite: Elected or appointed

This is a required course for all elected or appointed student body or class officers. The course is designed to teach the basic concepts of democratic government, leadership skills, group process, team-building, time management, and project planning. It affords students the opportunity for personal development in self-esteem and stress management. From team-building to the personal development section of the curriculum, students will have opportunities to grow in preparation for the future.

## DRIVER'S EDUCATION / SAFETY

Grade: 9-12

Meets requirements: EL (1 semester)

Prerequisite: None

All students will learn the basic elements of the highway transportation system, and safety issues. Students will also learn the rudiments of primary first aid. Career guidance tests are administered to assist students in planning for future career opportunities.

## LIFE SKILLS

Grades: 11-12

Meets requirements: EL

Prerequisite: None

This class is designed to help students learn about themselves with a lot of class discussions and student interaction. Family issues, substance abuse, peer relationships, teen pregnancy, suicide prevention, racism and violence are issues that will be explored in this class. The student's interaction with others will become more effective because self-esteem, communication, assertiveness, decision-making, value-clarification, and goal-setting skills will be enhanced through this class.

## YEARBOOK

Grades: 9-12

Meets requirements: EL

Prerequisite: None

Production of the annual El Oro is both a class and a business. Students are responsible for developing layouts, interviewing, writing, desktop publishing, photography, proofreading, yearbook sales, and ad sales in the community. Yearbook staff may earn substantial discounts on the purchase of their own yearbooks through ad sales. Many school related events for yearbook coverage take place outside of class time. To ensure a quality publication a serious time commitment is required. Students must be willing to put in extra time during lunch, after school, at night, and occasionally weekends and holidays as deadlines require.

## GPS INTERCULTURAL SPEECH COMMUNICATION

Grades: 9-12

Meets requirements: FA/EL

Prerequisites: None

This 9-12 grade GPS class will bring to life the spoken word across cultures. Students will learn how people from various backgrounds negotiate, dine, and form traditions. We will analyze gestures, clothing, posture, and a host of other nonverbal means of communication. In addition, students will participate in games, demonstrations, and simulations to better understand our community and the world around us. We will have a chance to hear from former students and members of our global society. Culminating activities include constructing and presenting a variety of speeches, interviews, and presentations. This course is designed to introduce students to a college level communication class while developing advanced skills in reading, writing, reasoning, and evaluation.

## TEACHER/STAFF ASSISTANT -LIBRARY/OFFICE/COUNSELING ASSISTANT

Grades: 11-12

Meets requirements: EL

Prerequisite: GPA 2.0, good citizenship, and attendance

Students assist the teacher, library, office or counseling department in duties as determined by the department.

## SUCCESS 101

Grades 9-12

Meets requirements: EL

Prerequisite: none

Success 101 will enable high school students to envision a future that is productive, achievable, and stimulating. They will understand how to project into the future to understand the consequences of today's choices and actions. Students will be exposed to potential stumbling blocks that could impede their success. They will learn the skills, aptitudes, and attitudes needed to successfully transition into high school, post-secondary education and/or training, the workforce, and adulthood.

## ENGLISH LANGUAGE DEVELOPMENT 1/2/3/4

Grades: 9 - 12

Meets requirements: EL

Prerequisite: CELDT exam for English learners

ELD 1/2 is an English language development course designed to assist students who are learning English as a second language and are seeking to acquire basic English skills. Students enrolled in this class possess English language skills from beginning to early intermediate levels of proficiency as demonstrated by the results of the CELDT exam. The class emphasizes and facilitates acquisition of basic English communication skills, vocabulary, grammar, phonics, reading, and writing. This class augments but does not replace grade-level English classes. It is not a graduation requirement.

# CAREER & TECHNICAL EDUCATION (CTE) COURSES

Folsom High School's Career and Technical Education programs offer students exposure to careers and essential workplace skills, technical skill training, and reinforcement of academic skills, by preparing students for both postsecondary education and careers in industry sectors.

The Folsom High School pathways and courses are as follows:

Design, Visual and Media Arts	Computer Software and Systems Development/ Game Design and Integration
Digital Art 1	Exploring Computer Science
Digital Art 2	Computer Animation and Game Design
AP 2D Art and Design	Computer Science and Programming
	AP Computer Science A
Engineering Design (Project Lead the Way Program)	Design, Visual and Media Arts
Intro. to Engineering Design (PLTW1)	Video Production 1
Honors Principles of Engineering (PLTW2)	Video Production 2
Honors Civil Engineering (PLTW2)	TV Production
Advanced Drafting & Architecture (PLTW3)	CTE Course Not in a Pathway
	Computer Applications
Manufacturing and Product Development	FHS CTE Department aligns courses to the California State Model Curriculum Standards and Career Industry Sectors which can be found at: <a href="http://www.cde.ca.gov/ci/ct/sf/ctemcstandards.asp/">http://www.cde.ca.gov/ci/ct/sf/ctemcstandards.asp/</a>
Intro to Product Innovation Design and Manufacturing	
Advanced Product Innovation Design and Manufacturing	

## DIGITAL ART 1

Grades: 9-12

Meets requirements: CTE/FA/EL/f

Prerequisite: None

This course is a one-year introduction to create art through the use of photography and computer manipulation. Students use a combination of traditional art, photography, and Photoshop tools to create their artwork. Students will become adept at understanding art to give depth to their own creative expressions.

## DIGITAL ART 2

Grades: 10-12

Meets requirements: FA/EL/f

Prerequisite: "C" in Digital Art 1

This advanced course is to further explore the manipulation of Photoshop and photography skills from Digital Art 1. The class emphasizes effective communication of ideas through the use of art elements and principles. Students will also analyze and critique their own art works for further enhancement. Students from this course are able and expected to complete artwork that is ready to submit to contests and art shows.

## AP 2D ART AND DESIGN

Grades: 11-12

Meets requirements: FA/EL/f

Prerequisite: "B" in Digital Art 2

This AP digital arts course is for self-directed art students looking to experience a college-level art class in high school. This year-long course emphasizes mastery of photography skills and creating advanced artistic expressions. Students are required to submit a 24-image portfolio as their AP test. The AP exam consists of three parts, breadth (12), concentration (12) and quality (5 best pieces printed from breadth and concentration). College Board formally evaluates portfolios with a score from 0-5, 3 and above is a passing score.

## COMPUTER APPLICATIONS

Grades: 9-12

Meets requirements: CTE/EL/Δ

Prerequisite: None

Computer applications is designed to introduce and/or enhance students' skills in word processing, desktop publishing, spreadsheets, power point presentations, and keyboarding skills using proper technique. The emphasis is placed on participation, accuracy, problem solving, computer literacy, and document preparation using various media. Students who demonstrate typing proficiency and maintain an A or B in the class may earn up to seven units of college credit. Credits are issued from Folsom Lake College and can be transferred to most California State Universities and community colleges.

## COMPUTER ANIMATION AND GAME DESIGN

Grades: 10-12

Meets requirements: CTE/EL/g

Prerequisite: None

This is a survey course which explores the art, science, and programming behind computer animation and digital games. Students will design computer animations from "scratch" learning to program motion, lighting, shadow, and background elements. Students will employ these skills in developing the look and feel of digital games. Game design includes individual and group development of gaming projects from game concept and mapping, through basic programming, the iterative design process, and proof of concept.

## EXPLORING COMPUTER SCIENCE

Grades: 9-12

Meets requirements: CTE/EL/g

Prerequisite: None

Exploring Computer Science focuses on the creative, collaborative, interdisciplinary, and problem-solving nature of computing featuring an inquiry-based approach to learning and teaching. As part of this curriculum, students will delve into real world computing problems that are culturally relevant and address social and ethical issues while developing foundational computer science knowledge. Students will engage in several in-depth projects to demonstrate the real-world application of computing. Units of instruction will include human computer interaction, problem solving, web design, introduction to programming, computing and data analysis, and robotics.

## CAREER & TECHNICAL EDUCATION (CTE) COURSES (continued)

### COMPUTER SCIENCE AND PROGRAMMING

Grades: 10-12

Meets requirements: CTE/EL/g

Prerequisite: "C" in Integrated Math 1 and Exploring Computer Science

Computer Science and Programming is a second year computer science course with an emphasis on programming concepts and methodology. Students will learn algorithmic thinking and expression and be able to understand basic principles of programming logic. They will learn to communicate complex ideas simply and solve problems logically. Topics include computer hardware, troubleshooting, computer security, networking, and program development. Students will engage in several in-depth projects to demonstrate the real-world application of computing and programming. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and Seniors may earn college credit from the CSU system and may transfer credit to other colleges and universities.

### AP COMPUTER SCIENCE A

Grades: 11-12

Meets requirements: CTE/EL/c/g

Prerequisite: Exploring Computer Science and Computer Science and Programming OR Teacher Approved

AP Computer Science A focuses on further developing computational thinking skills through the medium of Android™ App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java™ programming language, XML, and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases. This is a Project Lead the Way Course. (PLTW)

### ENGINEERING DESIGN (PLTW 1)

Grades: 9-12

Meets requirements: CTE/EL/g /Δ

Prerequisite: Concurrent enrollment in Integrated Math 1 or higher

Engineering Design is an introductory course in which students will develop problem-solving skills, with an emphasis placed on three-dimensional solid models. The techniques learned and equipment used is the basis for a sequence of engineering courses offered at Folsom High School. Students will work from sketching simple geometric shapes to applying a solid modeling computer package. They will learn a problem-solving design process and how it is used in industry to manufacture a product. The Computer Aided Design system (CAD) will also be used to analyze and evaluate the product design. All students will benefit from this course regardless of their respective learning styles, learning rates, or gender. College credit may be earned based on portfolio review and A or B grades in both semesters through articulation with American River College.

### HONORS PRINCIPLES OF ENGINEERING (PLTW 2)

Grades: 10-12

Meets requirements: CTE/EL/d

Prerequisites: "C" in Engineering Design, and concurrent enrollment in Integrated Math 2

This course helps students understand the field of engineering and engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. Students will use the hands-on and cooperative approach to learning. Scientific principles, mathematical concepts and communication skills are taught through the activity-oriented approach. Students will explore robotics, electronics, and hydraulics, pneumatics and computer design technologies. Students will work in problem solving groups that will research, design and build projects for practical applications and competitions.

### HONORS CIVIL ENGINEERING AND ARCHITECTURE (PLTW 3)

Grades 10-12

Meets requirements: CTE/EL/d

Prerequisites: "C" in Principles of Engineering, previously taken or currently enrolled in a college prep math course.

This course is designed to provide an overview of the fields of Civil Engineering and Architecture. Students will work in teams, exploring hands-on projects and activities to learn the characteristics of civil engineering and architecture. They will use the Auto Cad and Revit Architecture software to document their designs. Students will develop a design for a piece of local property site, plan out public and private facilities, meet with industry professionals, and build models to enhance in-class learning.

### ADVANCED DRAFTING AND ARCHITECTURE

Grades: 11-12

Meets requirements: CTE/EL/FA/f

Prerequisite: Civil Engineering and Architecture or teacher recommendation

This is an advanced course in which students will continue to develop both the hands on application of engineering and artistic appreciation of architecture. Students will expand their knowledge and experience in Civil Engineering and Architecture, especially involving drafting and building design. This course allows for practical visual and performing arts applications for career technical education pathway students. Students taking this course are preparing for higher education in architecture and building design.

### VIDEO PRODUCTION 1

Grades: 9-12

Meets requirements: CTE/FA/EL/f

Prerequisite: None

Students will study the applied art and science of film, television, and other mass media platforms. The emphasis is on individual creative thinking implemented through group collaboration in the phases of preproduction, production, and postproduction phases. Students will produce videos using digital cameras and computer editing software for air on campus television and submission to film festivals. This course is a prerequisite for Television Occupations and can also serve as a prerequisite for Computer and Game Design. Video Production 1 is a UC/CSU approved visual arts elective and a Career and Technical Education elective for graduation requirements.

### VIDEO PRODUCTION 2

Grades 10-12

Meets requirements: CTE/EL/g

Prerequisite: "C" in Video Production 1

In this intermediate course students will develop a deeper understanding and appreciation of film and television. Students will focus on documentary and news program production and further their production technique using the campus studio facilities. A variety of videos will be produced for the school, district, or community representing "Doghouse Productions" of Folsom High School. Some films may be selected for entry into film festivals. This course is a stepping-stone to a collegiate program in the film and media industry. Students are required to log 6 hours per semester of production time outside of class hours documenting campus and community events such as plays, concerts, and sports events.

### TELEVISION OCCUPATIONS

Grades: 11-12

Meets requirements: CTE/EL Δ

Prerequisites: "C" in Video Production 2

Students will produce the Bulldog Bulletin broadcast, seen on campus channel 8 daily. Students will produce short films, documentaries and news stories for broadcast on the campus television network and for submission to film festivals. Students may have opportunities to participate in community workshops and trainings, job shadows, and internships in the local television and film industry. All students are required to log six hours per semester of production time outside of class hours documenting campus and community events such as plays, concerts, and sports events. This course is a CSUS ACE (Accelerated College Entrance) approved course. Juniors and seniors may earn college credit from the California State University system and may transfer credits to other colleges or universities.

## **CAREER & TECHNICAL EDUCATION (CTE) COURSES (continued)**

### **INTRODUCTION TO PRODUCT INNOVATION DESIGN AND MANUFACTURING**

Meets requirements: EL/CTE/g

Grades: 9-12

Prerequisite: Concurrent enrollment in Integrated Math 1 or higher

In this course students will receive introductory level exploratory instruction regarding product design using woods, metals, plastics and composites. Students will learn to design, draw and model products that they will build through the proper use of hand tools, machinery tools, 3D printers and CNC machines. Students will demonstrate a thorough understanding of industry safety standards and will receive instruction regarding related career paths. Students who successfully complete Introduction to Product Innovation and Design will have the opportunity to take a level two course that advances the student's ability to design and build products using a variety of materials.

### **ADVANCED PRODUCT INNOVATION DESIGN AND MANUFACTURING**

Meets requirements: EL/CTE/g

Grades: 10-12

Prerequisite: Complete Intro. Product Innovation and Design with a "C" or better; Concurrent enrollment in Integrated Math 1 or higher; or teacher approval

The course Advanced Product Innovation Design and Manufacturing builds upon skills and knowledge learned in Product Innovation Design and Manufacturing. This course will offer Sophomores, Juniors, and Seniors the opportunity to further advance their skill proficiencies in the areas of graphic design, machine tooling and forming, engineering design, project planning, tool fitting, and product innovation and design. Comprehensive understanding and application of current safety standards and procedures will be a component of each study unit. Career planning, project innovation, and entrepreneurship will be an integral part of the course.