# CONCORD HIGH SCHOOL

# 2022-2023 11<sup>th</sup> Grade Course Catalog

We are a community that strives to inspire independent critical thinkers who are academically, emotionally, socially and physically prepared to become contributing members of a global society.



The Governing Board is committed to providing equal opportunity for all individuals in education. District programs, activities, facilities and practices shall be free from discrimination, harassment, intimidation, and bullying based on actual or perceived ancestry, age, color, disability, gender, gender identify, gender expression, nationality, race or ethnicity, religion, sex, sexual orientation, actual or potential parental, family, marital status, or association with a person or a group with one or more of these actual or perceived characteristics (Governing Board Policy 0410).

#### Contact Us / How to File a Complaint

For questions, concerns or complaints regarding student harassment, discrimination, intimidation and bullying, please contact Jennifer Sachs, Chief of Educational Services, at <u>sachsj@mdusd.org</u> or by phone at (925) 682-8000 x4016.

For questions, concerns, or complaints regarding compliance with Title IX employee issues, please contact Dr. John Rubio, Chief of Human Resources, at <u>rubioj@mdusd.org</u> or by phone at (925) 682-8000 x4136.

## INTRODUCTION

This course description catalog was developed by the Concord High School staff to help our students and parents understand our educational program and make informed choices. We are proud to offer this curriculum to you. Please consider carefully the course descriptions and related information contained in this catalog. Remember that educational growth and personal development will result from a process of informed decision making.

## Disclaimer: Courses in this catalog may not be offered due to budget cuts, teacher's credentials, or lack of student enrollment.

## A Student's Guide For Successful Educational Planning

- Read the information contained in this catalog and involve your parents. You will also need to talk to teachers, counselors, and administrators whom you trust and who know your capabilities and aspirations. Remember choices that are appropriate for your friends may not be the right ones for you.
- 2. This booklet was designed for YOU! Use it like a workbook.
- 3. Consider college entrance requirements when making your choices. Even if you are undecided about college now, the more challenging your educational experience in high school, the more options await you after graduation. When in doubt, always choose the more difficult course or sequence of courses. A recent College Board study disclosed that the more high school academic work students complete, the greater their SAT performance.
- 4. In any given area, take care to plan a sequence of courses that makes sense. For example, each course in math should logically follow the one before.
- 5. Refer to the graduation requirement worksheet on Page 4. Do you need to repeat a requirement because of a D or F? (D's must be made up in order for the courses to count for college entrance. F's must be made up for high school graduation. Remember, classes repeated to raise a D grade DO NOT earn additional credits.) The four-year educational plan that you choose must include all of the graduation requirements.
- 6. The business community has advised us that the best way to train our students for careers is to teach them to read, write and compute; be on time; and get along with others. Making thoughtful choices now will better prepare you for future careers.

## Parents as Partners in Planning

- 1. All student schedules must be approved by parents. Please plan carefully with your student.
- 2. Students are expected to complete BOTH semesters of a year long class.
- 3. A maximum of twenty (20) credits of teacher assistant or forty (40) credits of work experience can receive elective credit towards graduation during your four years at Concord High.
- 4. A course failed in any required area (Math, English, Social Studies, Science, Fine Arts and PE) must be repeated or replaced.
- The UC and CSU systems will not accept D grades to satisfy course entrance requirements. Classes may be repeated to raise a D grade; however, such repeated classes DO NOT earn additional credits toward graduation from Concord High School.
- 6. Homework is required by Board policy and should be monitored by parents. Parents are partners with the Concord High School staff. We encourage you to maintain ongoing contact with teachers and check Homelink/Parent Portal. We are excited to work together with you in planning your student's four-year program.

## Schedule Change Requests

The Mt. Diablo Unified School District requires all students to enroll in six classes each semester. Seniors may request a five period day if specific criteria is met. <u>Students wishing to **DROP** a class</u> <u>must do so during the first three weeks of the semester with parental and counselor/administrative</u> <u>approval</u>. Students dropping a class while maintaining a passing grade will receive a "No Credit" or "Withdrawal" on their records. A student/parent/teacher/counselor/administrator conference may be required prior to allowing a student to drop a class. Students dropping a class while maintaining an "F" will receive an "F" on their records. Teachers may recommend a "No Credit" or "Withdrawal" for students in special cases. Students who DROP a class after the third week of the semester will receive a grade of **WF**.

THE ONLY ACCEPTABLE REASONS FOR A SCHEDULE CHANGE ARE:

- Schedule does not include the required six periods
- Student has passed a course shown on the schedule in an approved program (summer intervention, adult school, etc.)
- Academic misplacement or computer error

## **Academic Preparation**

The following discussion will introduce the types of classes offered, their abbreviations, and the grading policy.

## **Elective Courses**

These are the subjects not required for graduation that students may elect to take because of interest, need, or preparation for goals after high school.

## **College Preparatory Courses**

These are courses designed for the college-bound students and certified by the University of California as meeting their high school "a-g" subject requirements. The California State Universities and private colleges also accept these courses.

## **Honors Courses**

These courses are based on the criteria established by the University of California and California State Universities. They are open to a select number of  $10^{th}$ ,  $11^{th}$ , and  $12^{th}$  grade students according to high ability, motivation and achievement. Students will earn an additional grade point: an A=5 grade points instead of 4, a B=4, and a C=3.

## **Advanced Placement**

Advanced Placement courses offer our students the opportunity to do college level work while still in high school. The courses are available to qualified, academically talented students in the tenth, eleventh, and twelfth grades. According to their AP examination performance, students **MAY** receive college credit for each examination taken. Based upon the number of AP courses taken, it is possible for a student who is successful on the exams to enter college at or near the sophomore level. Parent, teacher and administrator approval is required **BEFORE** enrolling. Enrollment is limited. Once accepted into an AP course, students are expected to make a commitment to complete both semesters.



## **GRADUATION REQUIREMENTS and COLLEGE INFORMATION**

REQUIRED COURSES	CONCORD	CAL STATE UNIVERSITIES	UNIVERSITY OF CALIFORNIA
English	4 years (40 credits)	4 years	4 years
Math	3 years (30 credits) Including: Algebra 1	3 years Including: Algebra 1 Geometry Algebra 2	3 years Including: Algebra 1 Geometry Algebra 2 4th year recommended
Social Studies	3 years (30 credits) World History US History US Gov/Econ.	2 years	2 years
Science	2 years (20 credits) 1 year life science 1 year physical science	2 years	2 years Both lab science 3rd year recommended (Biology, Chemistry, Physics preferred)
World Language		2 years same language 3rd year recommended	2 years same language 3rd year recommended
Career Technical Education	Complete a course in 2 of 3 of the areas (20 credits)	NA	NA
Visual Performing Arts		1 year college prep performing or visual art	1 year college prep performing or visual art
Physical Education	2 years (20 credits)	N/A	N/A
Electives	60 credits	1 year college prep elective or additional year of above subjects	1 year college prep elective or additional year of above subjects
TOTAL	220	Minimum of 15 college prep classes	Minimum of 15 college prep classes

## PLANNING SECTION

## Model Four-Year Program for Graduation

Freshman

- ✓ English I
- ✓ Algebra I
- ✓ Living Earth
- ✓ PE 9
- ✓ 2 Electives\*

Sophomore

- ✓ English II
- ✓ Geometry✓ World History
- ✓ Physical Education
- ✓ Chem in the Earth System
- ✓ 1 Elective\*

## Junior

- ✓ English III
- ✓ US History
- ✓ Algebra II
- ✓ 3 Electives\*

## Senior

- ✓ English IV
- ✓ Govt./Economics
- ✓ 4 Electives\*

\*20 elective credits must be taken at any grade level from 2 out of the 3 categories: VAPA OR World Language OR CTE



## Model Four-Year Program College Prep

## Freshman

- ✓ English I
- ✓ Algebra I or Geometry
- ✓ Living Earth
- ✓ World Language
- ✓ PE 9
- ✓ 1 Elective \*

## Sophomore

- ✓ English II or English II Pre-Honors
- Geometry, Algebra II, or Alg II/Trig
  World History or AP World History
- ✓ World Language
- ✓ Chem in the Earth System
- ✓ Physical Education

## Junior

- ✓ English III or AP Language
- ✓ Algebra II, Algebra II/Trig, Pre-Calculus, or Pre-Calculus Honors
- ✓ Physics or AP Physics, Biotechnology, Chemistry or AP/H Chemistry, Zoology, or Physiology or Physiology Honors
- ✓ US History or AP US History
- ✓ World Language

## Senior

- ✓ English IV or AP Literature
- ✓ Pre-Calculus, Pre-Calculus Honors or AP Calculus
- ✓ AP Chemistry, Physics or AP Physics, or AP Biology
- ✓ Gov/Economics or AP Econ/AP Gov
- ✓ 2 Electives\*

\*At least 2 years of the same Foreign Language AND 1 year of a Fine Art must be taken.

## AVID Advancement Via Individual Determination

#### What is AVID?

AVID is a program for students who are college-bound and have the individual determination to be successful, but who many need some support along the way. The AVID curriculum focuses on writing, inquiry, collaboration and reading (WICR) through the AVID High School curriculum in both teacher and tutor-led activities. While concurrently enrolled in a college-prep course of study, students learn strategies to enhance success. Note-taking, outlining, writing, speaking, reading, test-taking strategies, and self-awareness are stressed. In addition, the course includes college motivational activities and intensive preparation for ACT, SAT I and SAT II. The AVID Seminar for the junior and senior years prepares students for entrance into four-year colleges by emphasizing analytical writing, preparation for college entrance and placement exams, college study skills, oral language development, note taking, and research. Seminar students are expected to participate in, and eventually act as moderators for, Socratic Seminars. In addition, students are required to make oral presentations to the class on topics related to career searches, contemporary issues, and social concerns, all the while focusing on a culminating senior paper, portfolio, and/or project. Students must complete both junior and senior years for one year of UC admission credit.

#### Who is Eligible to Join?

- Students in grades 9 11
- Students striving for a 3.0 4.0+ cumulative GPA
- Students who are motivated and individually determined to attend a 2 or 4 year college
- Any and all Concord High students are encouraged to apply to be in AVID. Interested students may pick up an application in Room 304

#### Classes

Freshman Juniors English I English III or AP Lang Algebra I or Geometry US History or AP US Hist AVID 9 AVID 11 Living Earth Chemistry World Language World Language PE Elective Seniors Sophomores English II or Pre AP English II English IV or AP Lit World History or AP World Hist Govt/Econ or AP Gov/AP Econ AVID 10 AVID 12 Algebra II or higher Geometry or Algebra II Elective World Language ΡE Elective

Students are encouraged to take the most challenging courses, such as Honors and Advanced Placement classes.

## **CHS** Pathways

Concord High has the following CTE (Career Technical Education Pathways) for students to enter.

- Engineering
- Building and Trades
- Automotive Engineering
- Computer Applications
- Visual and Performing Arts

## Human Services Academy A California Partnership Academy

## What is the CHS Academy?

The Academy is a "school-within-a-school," funded by the state of California. Our focus is on health and human services. Our goal is to assist students with building fundamental academic knowledge and strong skills necessary for future college and career success.

#### We are:

- A California Partnership Academy in its 28th year at Concord High School.
- A college and career program incorporating regular college and career exploration field trips.
- A career-focused program that offers mentoring and internship programs.
- A close-knit community of learners that offers smaller class size as well as strong academic, parental, and peer support.

## Who is Eligible to Join?

- Students in grades 10, 11 & 12
- Students striving for a 2.0 4.0 cumulative Grade Point Average
- Students who want to be motivated and involved in their school and community.
- Student's interested in exploring careers in the health or human services careers.
- Any and all Concord High students are encouraged to apply to be in the Academy. Interested students may pick up an application at the Academy office or speak with an Academy Coordinator.

## What are some things we do?

- Work closely with our students to get into college
- Prepare students for careers in human services fields
- College campus visits to UC, CSU, and Community College
- Take a dual enrollment course at DVC
- Run the CHS food pantry
- Educate CHS about issues such as Domestic Violence, Mental Health, and Homelessness
- Participate in job shadow and career exploration field trips
- Provide a supportive environment for all students
- Organize a "Healthy Habits fair" at a local elementary school
- Organize the campus wide Diversity Conference
- Run Concord High's recycling program
- Organize Concord High's Annual Blood Drives

## Classes

Sophomores English II World History PE or Elective Career Transition/School to Job Math\* Foreign Language\* Juniors English III US History Academy Psychology Physiology Math\* Foreign Language\* Seniors ERWC Academy Sociology Government/Economics\* Chemistry Elective\* Elective\*

\*Classes outside the Academy

Students are encouraged to take the most challenging courses, such as Honors and Advanced Placement classes. While in those challenging classes, they will receive support and guidance in their other Academy elective classes.





## ACADEMIC SUPPORT ELECTIVES FOR 11<sup>TH</sup> GRADE STUDENTS

The following classes are support classes that could be recommended by a teacher for students in need.

## AIMS III (ACADEMIC INTERVENTION FOR MATH SUCCESS IN GEOMETRY) (1305)

## Grades 9 - 12

Prerequisite: Teacher recommendation. This is an elective course to be taken concurrently with Geometry

This course provides the student with the mathematical skills and knowledge required for success in the study of Geometry. It is designed to be paired with the Geometry core course and it is recommended that this course is taught by the same teacher. It will strengthen the student's understanding and mastery of geometric concepts and vocabulary, continue to build and maintain Algebra I skills, while helping them to be successful in Geometry. This course will use a variety of materials, presentation styles, and activities in order to engage students who may require additional support to learn mathematics.



## **ENGLISH LANGUAGE DEVELOPMENT 3 (0273)**

Grades 9 - 12

Prerequisite: Placement by ELD/CELDT Assessment

This course fulfills the UC/CSU "b" requirement (students may only use 1 year toward this requirement)

This course is designed for English Learners at CELDT level 4. The direct English instruction contained in this course will move students from Early Advanced (CELDT level 4) to Advanced (CELDT level 5). The course objectives include communication skills in listening, speaking, reading, and writing through lessons and activities that promote and allow students to demonstrate mastery of early advanced grammar,

vocabulary, and other language elements in various receptive and productive contexts. Students will gain an awareness of a variety of career opportunities as they learn the English Language.

## **ENGLISH LANGUAGE DEVELOPMENT 4 (0274)**

Grades 9 - 12

Prerequisite: Placement by ELD/CELDT Assessment

This course fulfills the UC/CSU "b" requirement (students may only use 1 year to count toward this requirement)

This course is designed for English Learners at CELDT level 5 (Advanced). The direct English instruction contained in this course will prepare students to exit the English Language Development Program. The course objectives include advanced communication skills in listening, speaking, reading, and writing through lessons and activities that promote and allow students to demonstrate mastery of grammar, vocabulary, and other language elements in various receptive and productive contexts. Students will develop an understanding of a variety of career opportunities as they learn the English Language.

## **EL ACADEMIC LANGUAGE DEVELOPMENT A (0690)**

Grades 9-12 Prerequisite: None

EL Academic Language Development (ALD) Course A is designed to teach Long-term English Learners the academic language necessary for the academic success that leads to reclassification. The course uses EL Achieve's Constructing Meaning instructional units, Determining an Identity and Recognizing Acts of Heroism, to teach portable academic language and to guide reflection on academic identity. Students in this class also read and discuss culturally relevant novels and work with their teacher to set personal academic goals and monitor their progress toward them.

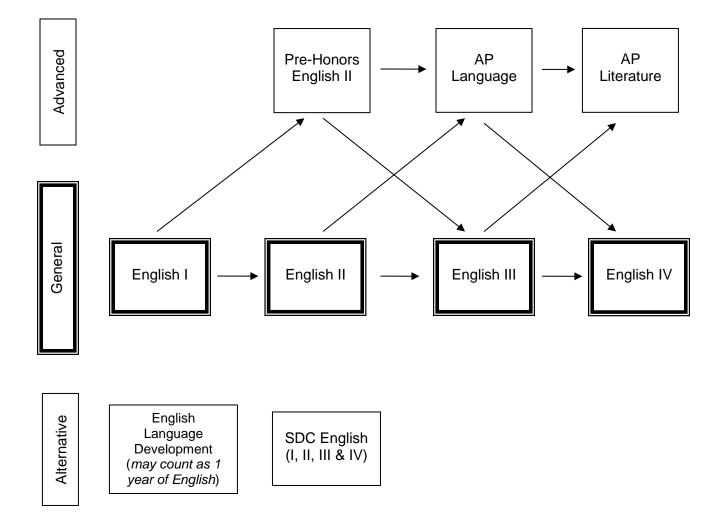
## EL ACADEMIC LANGUAGE DEVELOPMENT B (0691)

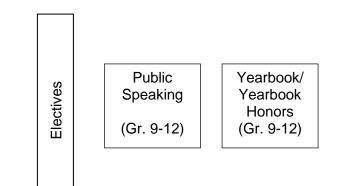
Grades 9-12

Prerequisite: If offered, completion of EL ALD A

EL Academic Language Development (ALD) Course B is designed to teach Long-term English Learners the academic language necessary for the academic success that leads to reclassification. The core instructional units, Rites of Passage and Pursing the American Dream, parallel and reinforce the grade-level expectations of a freshman or sophomore English language arts course, while also providing English Language Development instruction at the Early Advanced and Advanced proficiency levels. Students in this class also read and discuss culturally relevant novels and work with their teacher or assigned staff member to set personal academic goals and monitor their progress toward them. The purpose of the course is to provide Long-term English Learners with the academic mentoring, the instruction in the forms and functions of academic language, and the strategically-scaffolded practice reading, speaking, and writing about grade-level-content-related themes that they need to Re-classify as Fluent English Proficient.

## **ENGLISH COURSE MATRIX**





## 11<sup>TH</sup> GRADE ENGLISH COURSES

## ENGLISH III, Grade 11 (0130)

Grade 11 Prerequisite: Tenth (10<sup>th</sup>) grade English II This course fulfills the UC/CSU "b" requirement

English III is a required junior class. This course will enable students to continue developing their abilities in the skills of English. Works of literature with an emphasis on American authors will be studied; composition work will emphasize developing ability in a variety of written modes. Skills and concepts are taught in an integrated way to be mutually reinforcing. (This course is aligned with the MDUSD adopted Language Arts Content Standards).

## AP ENGLISH LANGUAGE, Grade 11 (0126)

Grade 11 Prerequisite: Successful Application and Teacher Recommendation This course fulfills the UC/CSU "b" requirement

This AP course engages students in becoming skilled readers of prose written in a variety of historical periods, disciplines, and rhetorical contexts. Students also become skillful writers who compose for a variety of purposes which prepares them to become effective and confident writers not only in their college courses but in their professional and personal lives as well. The purpose of this course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Students will experience the process of composing while writing in a variety of genres emphasizing the expository, analytical, and argumentative modes which form the basis of academic and professional communications. They also will engage in personal and reflective writing that fosters the development of writing in any context. Students will become increasingly aware of themselves as writers and techniques employed by the writers they read.

## **ENGLISH LANGUAGE DEVELOPMENT (ELD) 1 (0249)**

Grade 9 - 12 Prerequisite: Placement by ELD/CELDT Assessment. This course fulfills the UC/CSU "b" requirement (students may only use 1 year toward this requirement)

This is a two period course designed for English Learners at CELDT level 1 (Beginning), who have been in the United States for less than one year and have no literacy skills in their primary language. The direct English instruction contained in this course will move students from Beginner (CELDT level 1) to Early-Intermediate (CELDT level 2). The course objectives include basic communication skills in listening, speaking, reading, and writing through lessons and activities that promote and allow students to demonstrate mastery of basic grammar, vocabulary, and other language elements in various receptive and productive contexts. Students will gain an awareness of a variety of career opportunities as they learn the English Language.

## ENGLISH LANGUAGE DEVELOPMENT 2 (0272)

Grades 9 - 12

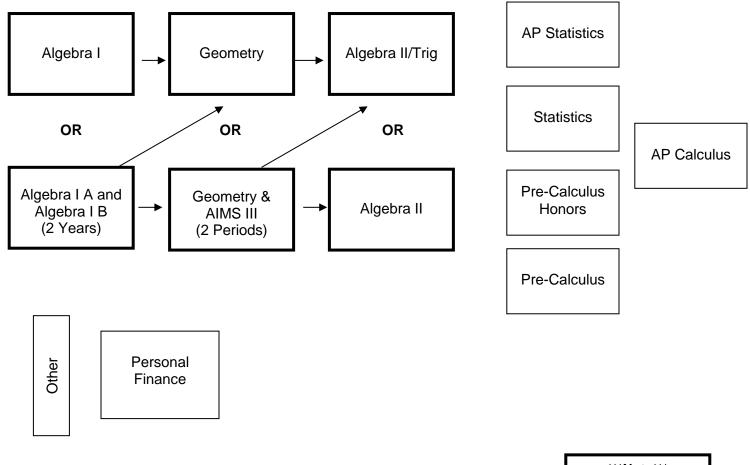
Prerequisite: Overall score of a 3 or above on CELDT This course fulfills the UC/CSU "b" requirement (students may only use 1 year toward this requirement)

This course is designed for English learners at CELDT level 3. The direct English instruction contained in this course will move students from Intermediate (CELDT level 3) to Early Advanced (CELDT level 4). The course objectives include communication skills in listening speaking, reading, and writing through lessons and activities that promote and allow students to demonstrate master of intermediate grammar, vocabulary,

and other language elements in various receptive and productive contexts. Students will gain an awareness of a variety of career opportunities as they learn the English Language.

## MATHEMATICS COURSE MATRIX

## This level based on teacher recommendation



\*\*\***Note**\*\*\* Boxes in Bold are the minimum requirements to be considered for UC and CSU admission.

## 11<sup>TH</sup> GRADE MATHEMATICS COURSES

## \*\*\*Algebra I is a requirement for graduation

Taking a course that is beyond a student's preparation or ability will have a detrimental effect on the student and his/her progress. Choose the appropriate math course, keeping in mind prerequisites and the ability and motivation of the student.



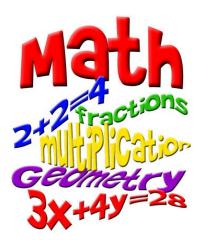
Regarding calculators:

Most college prep courses (Algebra I and above) at Concord High are taught on the assumption that students own or have regular access to a programmable graphing calculator. Most teachers use the TI-82 in class on a regular basis and there are limited class sets of TI-82's for use in the classroom. We recommend the TI-83 for Algebra I thru Calculus.

## **PERSONAL FINANCE (6041)**

Grades 11 - 12 Prerequisite: None This course fulfills one year of a three-year mathematics requirement for graduation. This class does not meet the UC/CSU math requirement.

A comprehensive course that covers career exploration, basic mathematical concepts, personal money management skills, introduction to applicable technology, research techniques, and problem-solving skills as each relates to personal finance. Specific topics include but are not limited to budgeting, tax preparation, banking, credit, purchasing a car, home ownership, insurance and investments. Students will leave this course with the knowledge and tools to be successful in their personal finances involving their careers and everyday life. Recommended for students that have satisfied the graduation requirement of Algebra I.



## GEOMETRY (1320)

Grades 9 - 12 Prerequisite: Successful completion of Algebra I. This course fulfills the UC/CSU "c" requirement.

This course provides the student with the knowledge of concepts identified in the California State Standards. Emphasis is on geometry skills and concepts. The ability to communicate mathematical reasoning and understanding will be incorporated in all the topics. In addition, students will develop their ability to construct formal, logical arguments and proofs in geometric settings and problems. This course is the second course in the three-year mathematics requirement for four-year college admission.

## ALGEBRA II (1330)

Grades 9 - 12 Prerequisite: Successful completion of Geometry. This course fulfills the UC/CSU "c" requirement



This course provides the student with the knowledge, concepts and skills identified in the California State Math Standards for Algebra II. The ability to communicate mathematical reasoning and understanding will be incorporated into all math topics. In addition, students will develop their ability to construct formal, logical arguments in algebraic settings and problems. This course is the third course in the three-year mathematics requirement for four-year college admission.

## ALGEBRA II/ TRIGONOMETRY (1340)

Grades 10 - 12

Prerequisites: Successful completion of Geometry with a "B" or higher and teacher recommendation. This course fulfills the UC/CSU "c" requirement.

This course provides the student with the knowledge, concepts, skills identified in the California State Math Standards for Algebra II and Trigonometry. The ability to communicate mathematical reasoning and understanding will be incorporated into all topics. In addition, students will develop their ability to construct formal, logical arguments in algebraic and trigonometric settings and problems. This course is the third course in the three-year mathematics requirement for four-year college admission. *This class moves at a faster pace than Algebra II (1330).* 

## **PRE-CALCULUS (1390)**

Grades 11 – 12

Prerequisite: Completion of Algebra 2 with a "C" or better and/or teacher recommendation This course fulfills the UC/CSU "c" requirement

The first semester of this course is a study of trigonometry. During the second semester selected advanced algebra topics are studied. These topics include logarithms, sequences and series, matrices and determinants, probability and statistics. The course is culminated with use of the computer to enhance understanding of the concepts studied in this course.

## **PRE-CALCULUS HONORS (1405)**

Grades 10 – 12 Prerequisites: B or better in Algebra 2/Trigonometry or Trigonometry & Advanced Topics and teacher recommendations This course fulfills the UC/CSU "c" requirement

Pre-Calculus Honors is considered to be the third or fourth year of a very strong mathematics program. It is taught at the college level where it is the second college level course in mathematics after trigonometry. Pre-Calculus Honors refines the Trigonometric, Geometric and Algebraic techniques needed in the study of Calculus. New skills will be introduced and many old skills will be pushed to new heights with a conceptual understanding beyond the reach of most high school students.

## AP CALCULUS AB (1375)

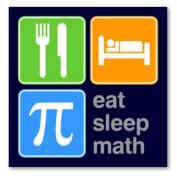
Grade 11 - 12 Prerequisite: Successful application This course fulfills the UC/CSU "c" requirement

This course consists of the study of functions, limits, continuity, differentiation, integration, and applications of the principles of differential and integral calculus. The course will prepare students for the Advanced Placement Test in Calculus AB.

## **STATISTICS (1520)**

Grade 11 - 12 Prerequisite: C or better in Algebra II or Algebra II/Trig This course fulfills one year of the high school mathematics requirement and UC/CSU "c' requirement.

The purpose of the Statistics course is to encourage student awareness of the importance of mathematics in the real world. This course is an introduction to fundamental statistical problem solving and interpretation of data. Students will gather, analyze and interpret data. Students will apply appropriate statistical models to draw conclusions and learn to use technology in solving statistical problems. The course will cover basic statistical concepts that will prepare the student to take a College-level statistics course in the future.



## **AP STATISTICS (1530)**

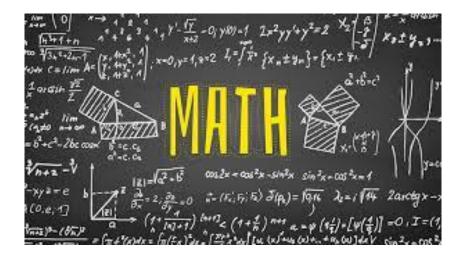
Grade 11 - 12 Prerequisite: Successful application or Algebra II This course fulfills the UC /CSU "c" requirement

The purpose of the course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four board conceptual themes:

- Exploring data: Observing patterns and departures from patterns
- Planning a study: Deciding what and how to measure
- Anticipating patterns: Producing models using probability and simulation
- Statistical inference: Confirming models

#### RATIONALE

In colleges and universities, the number of students who take a statistics course is almost as large as the number of students who take a calculus course. At least one statistics course is typically required for majors such as engineering, psychology, sociology, health science, and business. Every semester more than 170,000 students take their first statistics course from the mathematics or statistics department at a college or university. The vast majority of these students take a non-calculus based introductory course that is equivalent to the Statistics AP course. A large number of other students take a similar introductory course from other departments who teach their own statistics course. Science, engineering, business, and mathematics majors usually take an upper division calculus-based course in statistics, for which the Statistics AP course will be effective preparation.



## ASL I (5901)

Grades 9-12 Prerequisites: None This course fulfills the UC/CSU "e" requirement

Level 1 ASL is a communication/performance based course in which students use receptive and expressive ASL skills to begin to develop fluency. Students learn to use these skills while exploring a variety of themes and topics. They begin to recognize similarities and differences between the target culture and the hearing culture\* (see glossary). Students will communicate within the context of learned vocabulary and structure. In a learning environment that is supportive of and conducive to the development of new perspectives, students may acquire intercultural awareness and experience personal and academic growth through positive personal interactions. Students will develop confidence in moving between an aural/oral language and a visual/gestural language. Receptive and expressive skills are still emerging.

## ASL II (5902)

Grades 9-12 Prerequisites: Successful completion of ASL I This course fulfills the UC/CSU "e" requirement

Level II ASL is a communication/performance-based course in which students hone their receptive and expressive ASL skills to expand fluency. Students apply these skills and learn more advanced skills while exploring a variety of themes and topics. They compare and contrast similarities and differences between the target culture and the hearing culture\* (see glossary). In doing so, they develop cultural sensitivity and awareness of appropriate behaviors and attitudes within the target culture. Students will meet the expectations of the communicative functions within the context of familiar vocabulary and structures. In a learning environment that continues to be supportive of and conducive to the development of new perspectives, students acquire intercultural awareness and experience personal and academic growth through positive personal interactions.

## ASL III (5903)

Grades 9-12 Prerequisites: Successful completion of ASL II This course fulfills the UC/CSU "e" requirement

Level III ASL is a communication/performance-based course in which students deepen their receptive and expressive ASL skills to expand fluency. Students apply these and more advanced skills in exploring a variety of topics and special projects. They reinforce their understanding of the similarities and differences between the target culture and the hearing culture\* (see glossary). In doing so, they strengthen their cultural sensitivity and awareness of appropriate behaviors and attitudes within the target culture. Students meet the expectations of the communicative functions within the context of familiar vocabulary and structures. They communicate in a manner that is comprehensible to most native speakers. In a learning environment that continues to be supportive of and conducive to the development of new perspectives, students acquire intercultural awareness and experience personal and academic growth through positive personal interactions.

## **SPANISH I (5700)**

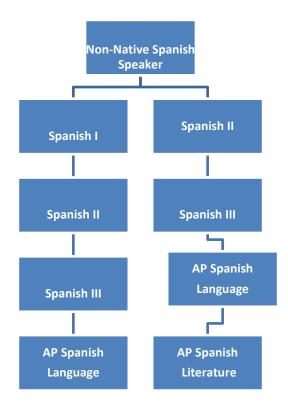
Grades 9 – 12 Prerequisite: None This course fulfills the UC/CSU "e" requirement

Level I Spanish is a communication-based course where students use listening, speaking, reading, and writing skills to begin to develop fluency in Spanish. Students learn to use these skills while exploring a variety of themes or topics. They begin to recognize similarities and differences between target culture(s) and American culture.

Students will meet the expectations of the communicative functions within the context of familiar vocabulary and structures. Phonological and grammatical errors are frequent and are addressed in a way which promotes communication and student confidence.

## SPANISH II (5710)

Grades 9 – 12 Prerequisite: Spanish I or consent of instructor This course fulfills the UC/CSU "e" requirement



Level II Spanish is a communication-based course in which students use listening, speaking, reading and writing skills as they continue to develop fluency in Spanish. Students learn to use these skills while exploring a variety of themes or topics. They begin to gain cultural sensitivity and awareness of appropriate behaviors and attitudes within the target culture(s).

Students will meet the expectations of the communicative functions within the context of familiar vocabulary and structures. They will communicate in a manner that is comprehensible to a native speaker who is accustomed to non-native speakers. Phonological and grammatical errors are frequent and are addressed in a way which promotes communication and student confidence.

## SPANISH III (5720)

Grades 10 – 12 Prerequisite: Spanish II or consent of instructor This course fulfills the UC/CSU "e" requirement

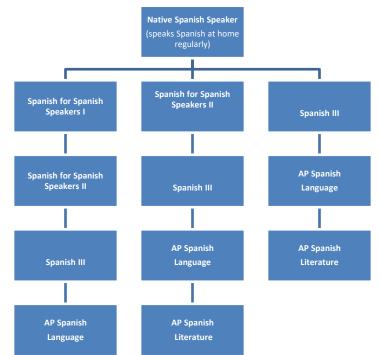
Level III Spanish is a communication-based course in which students' progress on the continuum of developing fluency in Spanish. Students explore and expand a variety of themes or topics. Students are introduced to the literature of the target culture(s). They gain cultural sensitivities and awareness of appropriate behaviors and attitudes within the target culture(s). Students will meet the expectations of the communicative functions within the context of familiar vocabulary and structures. Students will communicate in a manner that is comprehensible to most native speakers. Phonological and grammatical errors are frequent and are addressed in a way which promotes communication and student confidence.

## **SPANISH FOR SPANISH SPEAKERS I (5701)**

Grades 9 - 12 Prerequisite: Oral proficiency This course fulfills the UC/CSU "e" requirement

Spanish for Spanish Speakers is a communicationbased course in which students improve their language skills in listening and speaking, and concentrate on developing reading and writing proficiency. Students expand these skills while exploring a variety of themes and topics. They begin to recognize similarities and differences between cultures and to appreciate the cultural contributions of Spanish speaking peoples.

The course is an alternative to Spanish I for Spanish speaking students and prepares students for Spanish II or a higher level course. The instructional strategies, emphasis and time spent on specific performance objectives differ from Spanish I because of greater emphasis on reading and writing skills. Much of the content for cultural understanding is based on the students' own experience and questions.



## SPANISH FOR SPANISH SPEAKERS II (5702)

Grades 9 - 12

Prerequisite: Oral proficiency in Spanish, Spanish for Spanish Speakers I, and/or teacher recommendation. This course fulfills the UC/CSU "e" requirement

Spanish for Spanish Speakers II is a language arts course for students to advance their language skills in listening and speaking, and continue to develop their reading and writing proficiency. Students expand these skills while exploring literature-based themes and topics. They recognize similarities and differences between cultures and appreciate the cultural contributions of Spanish speaking peoples. Successful completion of this course ("C" or better/teacher recommendation) allows students to enroll in any appropriate advanced level Spanish course.

## **SPANISH HONORS (5841)**

Grades 10 – 12 Prerequisite: Spanish II or consent of instructor

This course fulfills the UC/CSU "e" requirement

Spanish Honors is a performance based course in which Native Speaking students progress on the continuum of developing biliteracy in Spanish. This is the third year of the Native Speakers pathway. Students explore and expand a variety of themes or topics. Students are introduced to the literature of the target culture(s). They gain cultural sensitivities and awareness of appropriate behaviors and attitudes within the target culture(s).

Students will meet the expectations of the communicative functions within the context of familiar vocabulary and structures. Students will communicate in a manner that is comprehensible to most native speakers. Phonological and grammatical errors are frequent and are addressed in a way that promotes communication and student confidence.

## **AP SPANISH LANGUAGE (5840)**

Grades 11 - 12 Prerequisites: Successful Application and Spanish III or consent of instructor This course fulfills the UC/CSU "e" requirement

Level IV Spanish is a communication-based course in which students' progress on the continuum of developing fluency in Spanish. Students explore and expand a variety of themes or topics. Students continue a study of literature of the target culture(s). They increase their cultural sensitivity and attitudes within the target culture(s).

Students will meet the expectations of the communicative functions within the context of familiar vocabulary and structures. Students will communicate in a manner that is comprehensible to most native speakers.

## 11<sup>TH</sup> GRADE SCIENCE COURSES

## CHEMISTRY IN THE EARTH SYSTEM (2940)

Grades 10 - 12

Prerequisites: Algebra I completion with grade of "C" or better, concurrent enrollment in Geometry This course fulfills the UC/CSU "d" requirement

Chemistry in the Earth System, a course based on the Next Generation Science Standards, explores the way in which matter interacts, combines and changes. This course explains how chemical processes help drive the earth system. By using science and engineering practices, evidence from experiments, research, and observations, students will learn how to formulate questions, evaluate claims, use mathematics and computational thinking, and develop models to make interpretations and investigate the natural world.

## **CHEMISTRY HONORS (2280)**

Grades 10 - 12

Prerequisites: Geometry completion with grade of "B" or better, concurrent enrollment in Algebra II This course fulfills the UC/CSU "d" requirement

Chemistry is the study of the structure of matter-atoms, molecules, crystals, solutions – and how that structure is related to the properties and behavior of matter. A quantitative approach is used to investigate the processes that occur during chemical change, when matter changes its form, and with the energy that is always involved with those processes. Basic principles of chemistry are developed and applied to real life situations. Chemistry Honors differs from Chemistry in that the pace of instruction is faster, additional topics are included, and many topics are treated in greater depth and with more application of mathematics. Chemistry Honors meets the criteria set forth by the University of California and California State Universities and colleges for a laboratory science honors course.

## AP CHEMISTRY (2281)

Grades 11 – 12 Chemistry or Chemistry Honors and the successful completion of Algebra II with a grade of C or better

The AP Chemistry course is designed to be the equivalent of a college introductory chemistry course usually taken by chemistry and other science majors during their first year. After showing themselves to be qualified on the AP Examination, some students, as college freshman, are permitted to undertake upper level courses in chemistry or register for courses for which chemistry is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory-science course and will be able to undertake other courses to pursue their majors. AP Chemistry is a second year course to 11th and 12th grade students that have completed Chemistry or Honors Chemistry. Several topics (stoichiometry, relationships in the periodic table, the mole concept, the structure of atoms, molecular shapes & bonding, data acquisition, manipulation, and communication in written reports) are covered extensively during the first year of chemistry. These topics are studied at a deeper level and applied in AP Chemistry in the areas of thermodynamics, equilibrium chemistry, kinetics and electrochemistry.

## **BIOTECHNOLOGY I (2250)**

Grades 11 - 12 Prerequisites: Previously taken Living Earth

Biotechnology allows advanced biology students to further their study in the specific areas of genetics, microbiology, and molecular biology. The course will be current, in-depth and provide practical applications and will include trends, issues and employment opportunities in these areas of science. Included are the

study inheritance, physiology of genetic diseases, the human immune system and the relationship of technology with human affairs, medicine and industry. Science attitudes, thinking process and skills and applications of science and technology to social problems are emphasized.

## AP BIOLOGY (2044)

Grades 11 - 12 Prerequisites: Completion of Biology and Chemistry with a "B" or higher and teacher recommendation This course fulfills the UC/CSU "d" requirement

The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. After showing themselves to be qualified on the AP examination, some students, as college freshmen, are permitted to undertake upper-level courses in



biology or register for courses for which biology is a prerequisite. Other students may have fulfilled a basic requirement for a laboratory-science course and will be able to undertake other courses to pursue their majors. AP Biology includes those topics regularly covered in a college biology course for majors or in the syllabus from a high-quality college program in introductory biology. The college course in biology differs significantly from the usual first high school course in biology with respect to the kind of textbook used, the range and depth of topics covered, the kind of laboratory work done by students, and the time and effort required of students. The textbooks used for AP Biology should be those also used by college biology majors. The kinds of labs done by AP students must be the equivalent of those done by college students.

The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry as well. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

## PHYSICS (2720)

Grades 11 - 12

Prerequisites: Completion of Geometry and current Math/science teacher recommendation/test evaluation.

This course fulfills the UC/CSU "d" requirement

Physics is a laboratory course that provides a systematic understanding of the fundamental principles of physical phenomena that govern chemical, biological, terrestrial and astronomical processes. The course provides a foundation for the intensive studies of most of the other sciences and for an understanding of many technological applications of science. Major areas of content include mechanics, work and energy; wave motion, light, electromagnetism, modern atomic and nuclear physics. Science attitudes, thinking processes, and skills, and applications of science and technology to social problems and personal decision-making are emphasized. The course qualifies as a laboratory science in meeting University of California entrance requirements.



## **PHYSICS HONORS (2725)**

Grades 11 - 12

Prerequisites: Completion of Algebra II/Trig with a grade of "B" or better and permission of instructor This course fulfills the UC/CSU "d" requirement

Honors Physics is an intensive study into the physical phenomena that govern the events that occur in the world around us. Mathematical analysis and problem solving approaches are emphasized. Laboratory exercises will require students to apply knowledge to new situations and require them to work in situations that require unique and imaginative solutions. Honors Physics is intended for the serious student with an interest in the sciences or science-related careers. Topics discussed are mechanics, vectors, forces, gravity, energy, thermodynamics, gas laws, waves, electromagnetism, nuclear physics, and modern physics.

## PHYSIOLOGY (2840)

Grade 10 - 12 Prerequisite: Biology with a "C" or better This course fulfills the UC/CSU "d" requirement

This is a laboratory course that includes a detailed and comprehensive study of the structure and function of cells, tissues, organs, and systems of the human body. Concepts from the physical sciences are developed and applied as needed. Science attitudes, thinking processes, laboratory and communication skills and technology are incorporated. Personal as well as global health issues are emphasized. This course qualifies as a laboratory science in meeting University of California entrance requirements.

## **PHYSIOLOGY HONORS (2785)**

Grade 10-12 Prerequisite: Biology with an "A" or "B" This course fulfills the UC/CSU "d" requirement

This is a laboratory course that includes a detailed and comprehensive study of the structure and function of cells, tissues and the organ systems of the human body. Concepts from the physical sciences are developed and applied as needed. Science attitudes, thinking processes, laboratory and communication skills and applications of science to social problems and personal decision making are emphasized. This course qualifies as a laboratory science in meeting University of California entrance requirements. (Included in all of the units are college level laboratory experiences which incorporate qualitative and quantitative problem solving processes unique to most high school physiology classes. Also biotechnology equipment will be used to enhance the students experience of physiological systems and the human genome.)

## **ZOOLOGY (2920)**

Grade 10 – 12 Prerequisites: Biology with a "C" or better and consent of instructor This course fulfills the UC/CSU "d" requirement

This is a course deals with the diversity, characteristics and classification of major groups of both invertebrate and vertebrate animals, including functional systems, adaptations and behavior. The course also deals with geographical distribution of animals, animal evolution, ecological relationships and conservation. Laboratory and fieldwork is integral to the course and includes study of both live animals and preserved specimens. The course qualifies as a laboratory science for University of California entrance requirements.

## $\mathbf{11}^{\text{TH}}$ SOCIAL SCIENCE COURSES

## **UNITED STATES HISTORY (3530)**

Grade 11 This course fulfills the UC/CSU "a" requirement

The primary focus of this course will be to explore the major events, personalities, social, cultural, political, economic and technological changes that have shaped United States history in the twentieth century. The course begins with a selective review of American history from the Age of Discovery to the Gilded Age, with an emphasis on the following themes: the nation's beginnings, the origins of



democratic government, the rise of sectionalism and the industrial transformation of the United States. The course continues with an intensive study of the history of the United States in the twentieth century. The major historical units will include: the Progressive Era, World War I, the 1920's, the New Deal and the Great Depression, World War II, the Cold War and the 1950's, the 1960's, the 1970's, and contemporary America. Students will develop a sense of historical connection and an appreciation of historical literacy regarding twentieth century United States history. Finally, the course will promote democratic values and good citizenship through its examination of the evolution, effectiveness and abuse of democratic institutions in America.

## **AP UNITED STATES HISTORY (3531)**

Grade 11 Prerequisite: Successful application This course fulfills the UC/CSU "a" requirement

The aim of AP U.S. History is to provide students with a learning experience equivalent to that obtained in post college introductory U.S. History courses and to prepare students for successful completion of the AP exam. This course will explore the major events, personalities, social, cultural, and technological changes that have shaped U.S. history from the 15<sup>th</sup> to the 20<sup>th</sup> centuries.



## 11<sup>TH</sup> GRADE PHYSICAL EDUCATON COURSES

BASKETBALL (8875) Grades 10 – 12 Prerequisite: PE9

Advanced Basketball is the examination of advanced mental and physical fundamentals of the game of basketball. This course may not be for everyone, it requires mental, physical, and emotional preparation. Mental fundamentals will consist of how to play the game of basketball offensively. Students will learn how to play team defense as well as team offense. Physical fundamentals will include form shooting, and specific drills related to dribbling and passing.

## **SOCCER (8810)**

Grades 10 - 12 Prerequisite: PE9

This course is designed to give students the opportunity to learn and develop fundamental and advanced skills and strategies of soccer activities, as well as fitness concepts and conditioning techniques used for achieving and maintaining optimal physical fitness. Students will benefit from comprehensive team activities and cardio respiratory activities. Students will learn basic fundamentals and advanced techniques of soccer, aerobic training, and overall fitness training and conditioning. Course includes both lecture and activity sessions. Students will be empowered to make wise choices, meet challenges, and develop positive behaviors in team activities, aerobic fitness, wellness, and movement activity for a lifetime.

## **TEAM SPORTS (8870)**

Grades 10 – 12 Prerequisite: PE9

Team sports consist of the following units of instruction: Volleyball, football, soccer, speedball, basketball, and softball. Instruction in skills will be provided in each activity. Cognitive-based physical and health-related concepts and grade level physical fitness performance objectives will be reviewed, applied and evaluated for all grade levels. Team sports is a course is designed to give students the opportunity to learn team sports and techniques used for obtaining optimal physical fitness. Activities may include, but are not limited to, volleyball, football, soccer, basketball, and softball. Students will learn basic to intermediate fundamentals of each sport and overall fitness training and conditioning. Cognitive-based physical and health-related concepts and grade level physical fitness performance objectives will be reviewed, applied and evaluated for all grade levels.

## WEIGHT TRAINING, Level I (8890)

Grades 10 – 12 Prerequisite: PE9

Weight training is a three-day-a-week-work-out program. Students will lift on Monday, Wednesday, and Friday. The off days are used for cardio respiratory fitness. Various team sports are also offered during off days. Workouts are based upon the set/repetitions concept. Free bar, universal machines, and dumb bells are the major sources of training. Students are grouped by abilities and each student works on his/her own individual capacity. Cognitive-based physical and health-related concepts and grade level physical fitness performance objectives will be reviewed, applied and evaluated for all grade levels.

## YOGA, PILATES AND FITNESS TRAINING (8880)

Grades 10 – 12 Prerequisite: PE 9

This course provides an exercise experience using a non-competitive approach. The primary physical activities involve experiences in yoga, Pilates and other whole-life fitness programming. Students will establish a set of personal fitness goals. One course goal is to harmonize the body, mind, and spirit through a combination of physical movement, yoga postures, breathing and biofeedback techniques.

## ELECTIVES FOR 11<sup>TH</sup> GRADE STUDENTS

## AP STUDIO ART (AP Drawing and AP 2D Art and Design ) (4280)

Grades 11 - 12 Prerequisite: Art I, Art II, consent of instructor, attendance at spring meeting. Pathway: none This course fulfills the one-year Fine Arts Requirement and the UC/CSU "f" requirement

This is an advanced course, which prepares the student to submit a portfolio for college credit in the spring of the year enrolled. Each student develops and submits a portfolio that serves as a direct demonstration of achievement. The portfolio consists of two sections: Sustained Investigation (60% of the exam score) and Selected Works (40% of the exam score). The Sustained Investigation portion requires the student to submit at least 15 guality pieces that include works of art and design and process documentation. The Selected Works portion requires the student to submit 5 physical works with written responses describing the materials, processes, and ideas used. Students will focus on in-depth, inquirybased art and design making; on skillful synthesis of materials, processes, and ideas; and on articulating information about their work. The Drawing portfolio focuses primarily on mark-making and drawing and painting skills while taking the elements of art and principles of design into consideration. This may include digital forms of drawing and painting, along with traditional fine art mediums. The 2-D Art and Design portfolio consists of a wide range of work that focuses on making decisions about how to use the principles and elements of art to create works of art that convey meaning. Any two-dimensional medium may be used for this portfolio. This is a demanding course; 15 quality works of art and corresponding written responses are to be completed before May. Students are required to attend an AP meeting in the spring before the enrollment year and to complete a specific portion of their portfolio in the summer, before the enrollment year.

## AP PSYCHOLOGY (3774)

Grades 11 – 12 Prerequisite: Successful application Pathway: None This course is certified by the University of California as an "a-g" course in the "**G-Elective**"

The aim of AP Psychology is to provide students with a learning experience equivalent to that obtained in most college introductory psychology courses and to prepare students for successful completion of the AP exam. The course will 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 sub fields within psychology. They also learn about the methods psychologists use in their science and practice.

## ART DESIGN A (4241)

Grades 9 - 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

This course introduces students to the fundamentals and principles of visual arts. This class provides a basic understanding of how to see, evaluate, and interpret experience through a variety of media such as wire, glass, wood, leather, plaster, computer graphics, etc. Basic tools are explained and demonstrated and techniques are practiced to promote creative expression through active student participation. The history and criticism of visual arts are presented through the use of projects, films, videos, and slides. Work outside of class is required, for example: portfolio or project preparation, reading, writing, or critical viewing where appropriate. This class is designed for all students with or without previous experience in the visual arts and prepares students for Art Design B-4240 and more advanced classes.

## ART DESIGN B (4242)

Grades 9 - 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

This course provides a deeper understanding of the concepts and techniques learned in Art Design A-4241. This class provides a basic understanding of how to see, evaluate, and interpret experience through a variety of media such as wire, glass, wood, leather, plaster, computer generated ideas, etc. Tools are explained and demonstrated and techniques are practiced to promote creative expression through active student participation. Work outside of class is required, for example: portfolio or project preparation, reading, writing, or critical viewing where appropriate. The history and criticism of visual arts are presented through the use of projects, films, videos, and slides. This course prepares students for more advanced classes.

## ART I (4130)

Grades 9 - 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Art I is a visual arts class that introduces students to the elements of art and principles of design. Students improve drawing skills and visual perception, the basis of most visual art, through principles based on the text "Drawing on the Right Side of the Brain." This class provides a basic understanding of how to see, evaluate, and interpret experience through a variety of media such as printmaking, pastel, pencil, paint, and ink. The student will respond to, analyze, and make judgments about form, content, techniques, and purpose in works of art as evidenced by creation/evaluation of portfolios. Major conceptual ideas in art and art history are also included. Tools and techniques are explained, demonstrated, and practiced to promote creative expression through active student participation. This course supports cross-curricular learning and basic school-to-career awareness. Art I is designed for students with or without previous experience in the visual arts and can prepare students for more advanced classes.

## ART II (4150)

Grades 10 - 12 Prerequisite: Art I or recommendation by Art teacher Pathway: None This course is certified by the University of California as an "a-g" course in the "**F-Elective**"

Art II is an advanced class that expands students' knowledge and abilities in the fundamentals and principles of two-dimensional art forms. The history and criticism of these forms are presented through the use of projects, lectures, and visual materials. This class provides an expanded understanding of how to see, evaluate, and interpret experience through projects such as pencil, ink, watercolor, acrylic, tempera, collage, pastels, charcoal, and clay. The students will respond to, analyze, and make judgments about form, content, technique, and purpose in works of art as evidenced by the creation and evaluation of portfolios. Related tools and techniques are explained, demonstrated and practiced to promote creative expression through active student participation. Work outside of class is required, for example: portfolio or project preparation, reading, writing, or critical viewing where appropriate. This course continues cross curricular and School to career awareness.

## **ASB LEADERSHIP (9210)**

Grades 9 – 12 Prerequisite: Required for elected or appointed student body and class officers Pathway: None This course is certified by the University of California as an "a-g" course in the **"G-Elective**"

This is a year course which develops those unique characteristics, attitudes, and skills which empower a person to make significant changes in self and to move a group of people in new and positive directions. When a student is enrolled beyond one year, he or she has been elected or appointed to an office with increased scope and responsibility. In addition to refining the skills learned previously, the student will be expected to complete more difficult projects, prepare and provide peer instruction, and do additional reading, interviewing, and research in the areas of leadership and group process.

## **AUTOMOTIVE ENGINEERING (7010)**

Grades 11 – 12 and must be 16 Prerequisite: None This course fulfills the UC /CSU "g" requirement

Automotive Engineering is a study of the interaction of science and technology as they apply to the automotive transportation system and the engineered sub-systems that are responsible for the functioning of the automobile. These include integrated mechanical, electrical, chemical, and computer engineered systems. The mathematics and specific concepts associated with these systems will also be explored. Students will develop their understanding of science, as it applies to the study of engineered automotive systems, by building on their knowledge of physics and mathematics while conducting investigative research. Students will be engaged in a theoretical program that integrates academic study with technical skills. This course is proposed to prepare and motivate students to pursue a post-secondary education in science and engineering programs.

## CERAMICS I (4250)

Grades 9 - 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the "**F-Elective**"



Ceramics I is a class that introduces students to the fundamentals and principles of the visual arts and is open to any student in grades 9-12. The history and criticism of visual arts are presented through the use of projects, lectures, films and slides. This class provides a basic understanding of how to see, evaluate and interpret visual arts through a variety of media. Basic tool techniques are explained, demonstrated and practiced to promote creative expression through active student participation. This class is designed for all students with or without previous experience in the visual arts and can prepare students for more advanced classes.\* Techniques are pinch, coil, slab, sculpture, decorating, and glazing works made of clay.

## **CERAMICS II (4260)**

Grades 10 – 12

Prerequisite: Successful completion of Ceramics I, II, or demonstrated ability with instructor's approval Pathway: None

This course is certified by the University of California as an "a-g" course in the "F-Elective"

Ceramics II is an advanced class that expands students' knowledge and abilities in the fundamentals and principles of three-dimensional visual art forms. The history and criticism of ceramics are presented through the use of projects, lectures, and visual arts materials. This class provides understanding of how to see, evaluate and interpret visual arts through projects such as: wheel throwing, slab, coil, sculpting, glazing, and firing methods. Related tools and techniques are explained, demonstrated and used to promote creative expression through active student participation. Work outside of class is required, for example: project preparation, reading, writing, or critical viewing where appropriate. This class is designed for all students with successful experience in Ceramics I who are prepared for a more advanced level of ceramics.

## **COMPUTER APPLICATIONS (6022)**

Grades 10 - 12 Prerequisite: None Pathway: Computer Applications Pathway Course 1 Note: These two semester-long classes are taken together as one elective.

This course provides comprehensive instruction in the Microsoft Office Suite software programs including Word, Excel, Publisher, Access, and Powerpoint. Instruction will also cover the Windows operating system, Internet use and basic webpage design. Students will learn computerized writing and presentation skills both for school uses like term papers and essays, as well as everyday business uses expected by employers. An option exists for students who are interested in taking the Microsoft Certification exam in Office Technologies.

## **COMPUTER INTEGRATED MANUFACTURING (7719)**

Grades 10 – 12 Pre-Requisite: None, Algebra II, Principles of Engineering or Intro to Engineering recommended. Pathway: Engineering Pathway Course 3 This course is certified by the University of California as an "a-g" course in the "**G-Elective**"

This course will examine the key elements of manufacturing and product development from the inception of the concept through design and all the way to final production. Students will interpret blueprints and select appropriate materials for final production. The use of computer software will help students understand the science behind pneumatics, sensors and materials testing that will set the foundation for the appropriate use of robotics, computer numerical control (CNC), computer-assisted design(CAD), and computer assisted manufacturing(CAM), and computer integrated manufacturing(CIM). Quality control and precision measurement will become critical components of the student's projects. Students will use state-of-the-art rapid prototyping machines, 3D Printer, and CNC Milling Router to produce a 3D prototype for projects. This course will enable students to experience the process of translating an idea into a finished product.

## **COMPUTER INTEGRATED MANUFACTURING HONORS (7120)**

Grades 10 – 12 Pre-Requisite: Engineering Essentials and Intro to Engineering Design Pathway: Engineering Pathway Course 3 This course is certified by the University of California as an "a-g" course in the "**G-Elective**"

Computer Integrated Manufacturing is one of the specialization courses in the PLTW Engineering program. The course deepens the skills and knowledge of an engineering student within the context of efficiently creating the products all around us. Students build upon their Computer Aided Design (CAD) experience through the use of Computer Aided Manufacturing (CAM) software. CAM transforms a digital design into a program that a Computer Numerical Controlled (CNC) mill uses to transform a block of raw material into a product designed by a student. Students learn and apply concepts related to integrating robotic system such as Automated Guided Vehicles (AGV) and robotic arms into manufacturing systems. Throughout the course students learn about manufacturing process and systems. This course culminates with a capstone project where students design, build, program, and present a manufacturing system model capable of creating a product.

## **CONSTRUCTION TECHNOLOGY (5502) (ROP)**

Grades 10 – 12 Prerequisite: Woodworking Pathway: Construction Pathway Course 2 This course is certified by the University of California as an "a-g" course in the **"G-Elective"** 

This competency-based course prepares students for entry-level positions in the construction industry. Integrated throughout the course are career preparation standards, which include basic academic skills, communication, interpersonal skills, problem solving, workplace safety, technology, and employment literacy. Students will have hands-on opportunities to learn all phases of basic residential construction, including carpentry, drawing and reading blueprints, drywall, electrical, flooring painting, plumbing, roofing, tile setting and welding. During the first part of the course, students will learn about construction safety, rough framing, electrical science, foundations and other trade theory. Students will then make practical application of their classroom studies at a field-site construction project.



## **ENGINEERING ESSENTIALS (7715)**

Grades 9 - 10 Prerequisite: Enrollment in Algebra 1 Pathway: Engineering Pathway Course 1 This course is certified by the University of California as an "a-g" course in the **"G-Elective"** 

Engineering Essentials will offer a multidisciplinary approach to teaching and learning foundational concepts of engineering practice, providing students opportunities to explore the breadth of engineering career opportunities and experiences, and solve engaging and challenging real-world problems through engineering essentials. By inspiring and empowering student with an understanding of engineering and career opportunities, Engineering Essentials will broaden participation in engineering education and the engineering profession.

## ETHNIC STUDIES (3497) - Pilot Course (may not be offered if demand is low)

Grades 9-12 Prerequisite: None Pathway: None

Through a balance of historical and sociological approaches, this course examines the American experience of citizens and residents such as African Americans, Native Americans, Latinos, Middle Easterners, Asians, and Pacific Islanders. Major focus is placed on the themes of immigration, cultural values/traditions, law and society, and labels and stereotypes. This course promotes a development of cross-cultural understanding and respect for the perspectives of others.

## **GUITAR - BEGINNING (4740)**

Grades 9-12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Beginning Guitar is a course open to students in grades 9-12. Students will earn basic comprehensive skills and applications that relate to the overall concepts of guitar technique, performance, responsiveness, and discrimination. They will address criteria for critically judging the quality of performances and compositions that derive from social and historical influence. Work outside of class involves project preparations, written assignments, and exploration of school-to-career possibilities.

## **GUITAR - ADVANCED (4770)**

Grades 9-12 Prerequisite: Successful completion of Beginning Guitar or teacher approval. Pathway: None This course is certified by the University of California as an "a-q" course in the **"F-Elective"** 

Advanced Guitar is a course open to students in grades 9-12. Students will use the skills and knowledge acquired in Beginning Guitar to advance the overall concepts of guitar technique, performance, responsiveness, and discrimination. They will address criteria for critically judging the quality of performances and compositions that derive from social and historical influence. Work outside of class involves project preparations, written assignments, and exploration of school-to-career possibilities.

## **INTRODUCTION TO ENGINEERING (7717)**

Grade 10 - 12 Prerequisite: Algebra 1 Pathway: Year 2 of Engineering This course is certified by the University of California as an "a-g" course in the "**G-Elective**"

Principles of Engineering explores the interaction of science and technology. Students are introduced to different types of engineering (mechanical, civil, electrical, computer, and chemical) as well as the underlying mathematics and scientific concepts associated with these disciplines. Using the design team as a model, students work in small groups to research, design, and construct engineering projects. Students will deepen their understanding of science by building on their knowledge of physics and mathematics and by conducting investigative research. Included is history of engineering and the scientific theory behind technological advances in civilization.

## JAZZ BAND - INSTRUMENTAL MUSIC III (4700)

Grades 10 – 12 Prerequisite: Instrumental Music II, or equivalent experience with teacher recommendation Pathway: None

This course is certified by the University of California as an "a-g" course in the "F-Elective"

Jazz Band – Instrumental Music III is an advanced course in jazz. Students must be able to play their instrument with a high degree of skill. The music will consist of professional level commercial and jazz music. Students will be expected to improvise with some skill and to know and understand the harmonic structure of the music that is played. Students will be encouraged to write for this ensemble. The jazz band will perform on many occasions for the general public at music festivals. Membership in the group is by teacher recommendation to insure that the students have a high level of musical skill and to maintain a balanced instrumentation.

## **MUSIC TECHNOLOGY I (4950)**

Grade 9 - 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Introductory course for students with skill levels of beginning to developing. Music Tech I will develop the students Artistic Skills in the areas of Artistic Perception, Creative Expression, Historical & Cultural Context, Aesthetic Valuing, Connections/Relationships/Applications, Creativity, Performing/Presenting/Producing, Responding, and the Connecting of music through study and performance. Emphasis will be placed on musicianship skills and technology and engineering skills, including filtering, dynamic processing, effects processing, synthesizers/samples/MIDI, microphones/recording practice, and mixing and mastering.

## **MUSIC TECHNOLOGY II (4960)**

Grade 9 – 12 Prerequisite: Music Technology I Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Second course for students who are developing their skills from Music Tech I. Music Tech II will continue to develop the students Artistic Skills in the areas of Artistic Perception, Creative Expression, Historical & Cultural Context, Aesthetic Valuing, Connections/Relationships/Applications, Creativity, Performing/Presenting/Producing, Responding, and the Connecting of music through study and performance. Emphasis will be placed on musicianship skills and technology and engineering skills, including filtering, dynamic processing, effects processing, synthesizers/samples/MIDI, microphones/recording practice, and mixing and mastering.

## **ORCHESTRA - INSTRUMENTAL MUSIC II (4980)**

Grades 9 – 12 Prerequisite: Teacher recommendation Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Orchestra – Instrumental Music II is a course in orchestral music of different styles and periods. Students must possess some ability to perform on their instrument. At times, the group will perform as a full orchestra with the addition of wind and percussion players. A number of concerts will be performed each year for the general public and at music festivals. This class is open to students who already play a string instrument, but with teacher permission a student who wishes to learn to play an instrument could be accepted.

## **PHOTOGRAPHY ARTS I (4420)**

Grades 9 – 12 Prerequisite: None Pathway: Photo Arts Pathway Course 1 This course is certified by the University of California as an "a-g" course in the "**F-Elective**"

Photography, as a non-verbal language, allows all students, in a differentiated setting, to increase their visual perception and provides a medium for creative expression. The history of photography will be evaluated in the context of historical, social, cultural and artistic developments. In producing their own work and by studying the photographs of others, all students will expand their base for making informed aesthetic judgments. Students will learn to operate 35 mm cameras and light meters while using black and white film. They will process negatives, create proof and enlargement prints and learn the basics of design and lighting theories related to photography. Students will be challenged with assignments that replicate professional work with the enhancement of critical thinking skills. They will learn how to apply elements from the study of photography to other art forms, content areas, and careers.

## **PHOTOGRAPHY ARTS II (7750)**

Grades 10 – 12 Prerequisite: Successful completion of Photo I or Teacher Recommendation Pathway: Photo Arts Pathway Course 2 This course is certified by the University of California as an "a-g" course in the **"F-Elective**"



Photography Arts II is a year-long intermediate course in the study of photography. Using pinhole, traditional and digital camera operations students increase their knowledge of the terminologies and techniques of black and white and color photographic productions. Students will continue to explore fine art photography, photojournalism, fashion photography, commercial, portrait, scientific, nature and wildlife, graphic design, and sports photography. Students will be challenged with assignments that replicate work done in various career options with the enhancement of critical thinking skills, communication, health and safety, responsibility, technology, ethics and leadership.

PIANO I (4730) Grades 9-12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the "F-Elective"

Piano is an introductory course for students with skill levels of Beginning to Developing. Piano I will develop the students Artistic Skills in the areas of Artistic Perception, Creative Expression, Historical & Cultural Context, Aesthetic Valuing, Connections/Relationships/Applications, Creativity, Performing/ Presenting/Producing, Responding, and the Connecting of music through study and performance. Emphasis will be placed on musicianship skills which include Aural Skills (internal and external hearing and listening), Visual Skills (Music Literacy), and Kinesthetic Skills required to perform on the piano.

## **PIANO II (4735)**

Grades 9-12 Prerequisite: Successful completion of Piano I or teacher approval Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Piano II is the second course in the piano sequence for students with skill levels of Proficient to Accomplished. Piano II will continue to develop the students Artistic Skills in the areas of Artistic Perception, Creative Expression, Historical & Cultural Context, Aesthetic Valuing, Connections/Relationships/Applications, Creativity, Performing/Presenting/Producing, Responding, and the Connecting of music through study and performance. Continued emphasis will be placed on musicianship skills which include: Aural Skills (Musical Literacy (reading, writing, thinking, & creating in the language of music)), and Kinesthetic Skills (Performance Abilities (study of body movement & the perception of one's own body movement)) required to perform on the piano.

## **PUBLIC SPEAKING I (0860)**

Grades 9 - 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the "**G-Elective**"

Public Speaking I is an elective course designed to help students develop oral language skills in a variety of planned and spontaneous public speaking situations, and to gain research and organizational skills necessary for a variety of types of oral presentations.

## **SPORTS MEDICINE I (8502)**

Grades: 11-12 Prerequisite: Biology Pathway: None This course is certified by the University of California as an "a-g" course in the "**G-Elective**"

Sports Medicine I is a course designed to explore human anatomy and physiology as it pertains to athletic movements of the body as well as hands-on training in the basic duties of athletic training, academic proficiency in a medical environment, and employability skills. Students learn about nutrition, exercises, athletic injuries as well as treatments and rehabilitation techniques for those injuries with emphasis on: lower leg and foot, upper leg and pelvis, shoulder, and hand and wrist. Throughout the course, Sports Med I students will explore different medical career paths and will become familiar with CPR, First Aid, and automated external defibrillator (AED) use.

## STAGE BAND - INSTRUMENTAL MUSIC II (4710)

Grades 9 – 12 Prerequisite: Teacher recommendation Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Stage Band– Instrumental Music II is an introductory course in playing jazz. Students must be able to play their instrument with a fair degree of skill. The music will consist of different styles of commercial music and jazz. Students will begin to develop the skills of improvisation and knowledge of harmony. The stage band will make a number of public performances during the year. Membership in the group is by teacher recommendation to insure that the students have sufficient skills in playing their instrument to benefit from the class and to maintain a balanced instrumentation.

## SYMPHONIC BAND - INSTRUMENTAL MUSIC III (4720)

Grades 9 – 12 Prerequisite: Teacher recommendation Pathway: None This course is certified by the University of California as an "a-g" course in the "**F-Elective**"

Symphonic Band-Instrumental Music III is an advanced instrumental music class. Students must be able to play their instrument with a high degree of skill, and teacher recommendation is required for enrollment in this class. This band will give a number of performances for the general public and at music festivals. Marching band will be a part of the activity of this band. The music teacher can supply information regarding this part of the program. Membership in this band is by teacher recommendation.

## **TRANSPORTATION TECHNOLOGY I (7050)**

Grades: 9-12 Prerequisite: None Pathway: Automotive Engineering Pathway Course 1

Introductory automotive/transportation technology course designed to impart broad knowledge about automotive systems, with hands-on experience in the safe use of tools and shop equipment to complete selected projects in a simulated workplace team environment. Students will also learn about career opportunities in the transportation technology industry and develop a personal consumer education as it relates to the ownership of a personal vehicle.

## UNIFIED SPORTS (8990) - Pilot Course (may not be offered if demand is low)

Grades 10 – 12 Prerequisite: Application Pathway: None

This course consists of three sport units: Soccer, Basketball, and Track and Field. This is a physical education environment which provides a unique opportunity for students with and without intellectual disabilities (ID) to come together through ongoing educational and physical activities, using the power of Special Olympics. Unified PE classes may have the opportunity to compete in sports with other schools or participate in Special Olympics competitions and events.

## VOCAL MUSIC II - CONCERT CHOIR (4910)

Grades 9 – 12 Prerequisite: None Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Concert Choir is a class that is open to any student 9-12. Students will learn vocal techniques, and rehearse and perform choral music of different styles, cultures and periods. Performances for school, community and music festivals are an important part of the class instruction. Concert Choir will help a student prepare for Vocal Ensemble or Show Choir.

## VOCAL MUSIC III (4920) - SHOW CHOIR

Grades 10 – 12 Prerequisite: Audition Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Vocal Ensemble is open to students in grades 10-12 by teacher recommendation and who can demonstrate advanced skill and knowledge of vocal techniques, elements of music and interpretation of musical styles, periods, and cultures. Membership is by audition or teacher recommendation. The Ensemble performs on many occasions for school and community and at music festivals.

## VOCAL MUSIC III (4925) - ADVANCED CHOIR

Grades 10 – 12 Prerequisite: Audition Pathway: None This course is certified by the University of California as an "a-g" course in the **"F-Elective"** 

Vocal Ensemble is open to students in grades 10-12 by teacher recommendation and who can demonstrate advanced skill and knowledge of vocal techniques, elements of music and interpretation of musical styles, periods, and cultures. Membership is by audition or teacher recommendation. The Ensemble performs on many occasions for school and community and at music festivals.

## **WOODWORKING TECHNOLOGY (7930)**

Grades 9 – 12 Prerequisite: None Pathway: Construction Pathway Course 1 This course is certified by the University of California as an "a-g" course in the **"G-Elective"** 

Basic Woodworking Technology introduces a student to the basic skills of cabinet making, furniture making and carpentry. The student will be able to demonstrate knowledge of hand and power tool operation and appreciate safe working practices, and to use materials with understanding and conservation. Explore occupational and vocational interests. Have a working knowledge of measurement, planning and applicable mathematical calculations. Demonstrate and appreciate good design, craftsmanship, and construction techniques. Become an informed consumer of wood and wood by-products.

## WORK EXPERIENCE EDUCATION (9400)

Grade: Minimum age 16 Prerequisite: Paid employment to meet program standards with parent approval. Pathway: None

Work Experience education is an instructional program focused on CTE "soft skills" that combines inschool learning with on-the-job training in the community. Students attend weekly seminars which cover areas of job search, survival and advancement; economic, career and self-awareness; and other meaningful career related information. Coupled with the related instruction is actual on-the-job training. Students learn many skills while they are compensated for their efforts through employment in the business community. Depending on how many hours a student works per week double credit may be awarded.

## YEARBOOK (0810)

Grades 9 - 12 Prerequisite: Application Pathway: None This course is certified by the University of California as an "a-g" course in the **"G-Elective"** 

This course introduces students to a variety of writing and layout skills involved in creating and publishing a yearbook. Students will study current and trendy design theories, the aesthetics of composition and the evaluation of visual communication. These elements will then be applied to learning in other art forms across the curriculum. The pace and setting of the course will simulate the professional work environment preparing students for a variety of post-graduation careers.

## YEARBOOK HONORS (0810)

Grades 9 - 12 Prerequisite: Application Pathway: None This course is certified by the University of California as an "a-g" course in the **"G-Elective"** 

Yearbook Honors: Advanced Media Leadership is a year-long capstone option in which students undertake editorial positions, which teach leadership skills. Editors in this class have successfully completed pre-requisites in design, photography and journalism production and writing. This leads to a year of serving in a design leadership role in the production team for the student yearbook, as well as studying college and career options and preparing for the future. Leadership options will range from serving as the chief design organizer and planner of story teams to serving as editors over larger staffs.

