


WOLF PACK

MERRILL F. WEST HIGH SCHOOL

# Course Catalog

## 2022-2023

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# Welcome to the Pack

Greetings Wolf Pack families,

Welcome to another great year at West High School! The High School Course Selection Guide you now hold in your hands is essential in planning your high school program. Time spent reading and understanding the contents of this document will be among the most important time investments you make during your high school years. Understanding its contents will dramatically increase your ability to make educational choices best suited to your needs. These choices will not only help you conclude your high school years, they will also define the choices available to you in the years that follow high school.

In the High School Course Selection Guide, you will find the information you need to plan, explore, and identify programs that will make your high school years exciting and meaningful. As a high school student today, and an adult of the new millennium, you must become a life-long learner, willing and capable of setting and resetting educational directions for yourself. Ultimately, your success in high school and the years that follow, will be dependent upon the responsibility you assume to direct your own educational program. The High School Course Selection Guide is your map to the world of high school education opportunities. Use it to expand your horizons and fulfill your dreams. Looking forward to you leading the pack.

Have a great year!

West High School Counseling Department

209.830.3370
www.westhigh.tracy.k12.ca.us

# Staff Contacts




Merrill F. West High School
1775 W. Lowell Avenue
Tracy, California 95376
209.830.3370 ph | 209.830.3371 fax

## Administration

| | | |
|---|---|---|
| Annabelle Lee | Principal | alee@tusd.net |
| Steve Wichman | Vice Principal (A-Gon) | swichman@tusd.net |
| Nico Sandoval | Vice Principal (Goo-O) | nsandoval@tusd.net |
| Bond Cashmere | Vice Principal (P-Z) | bcashmere@tusd.net |

## Counseling

| | | |
|---|---|---|
| Iris Abraham | Students A-C | ibraham@tusd.net |
| Alex Boranian-Jackson | Students D-GA & AVID | aboranianjackson@tusd.net |
| Sarah Banchero | Students GE-H & SEA | sbanchero@tusd.net |
| Gurneet Sharma | Students I-Moo | gsharma@tusd.net |
| Laurie Tomlin | Students Mor- Rof | ltomlin@tusd.net |
| Idi Gaines | Students Rom-Z | igaines@tusd.net |

## Office Staff

| | | |
|---|---|---|
| Audrey Harrison | Principal Secretary | aharrison@tusd.net |
| Ana Arroyo | Asst. Principal Secretary | arroyo@tusd.net |
| Connie Henson | Attendance Secretary | chenson@tusd.net |
| Edna Riddle | Registrar | eriddle@tusd.net |
| Melinda Gallegos | Counseling Secretary | mgallegos@tusd.net |
| Gayle Jackson | Career Center | gjackson@tusd.net |
| Lori Borges | Bookkeeper | lborges@tusd.net |
| Rachel Ramirez | AP & SEA Secretary | rramirez@tusd.net |
| Imelda Navarro | Parent Liaison | inavarro@tusd.net |

# High School Graduation Requirements Vs.
# 4 - Year Entrance Requirements

A student must earn 220 units of credit and satisfy the subject requirements listed below to receive a diploma of graduation from Merrill F. West High

A-G requirements are the courses students are required to take in high school to meet the eligibility requirements for the UC and CSU systems. Most 4 year private institutions or out of state colleges/universities require similar courses; it is best to check the school's website. Each course presented in this catalog will indicate which A-G requirement that class meets (if any). All A-G classes must be passed with a grade of a C- or better.

| Subject Requirement | TUSD Graduation Req. | Colleges/Universities |
|---|---|---|
| History | 3 years | 2 years |
| English | 4 years | 4 years |
| Math | 2 years (including Algebra) | 3 Years (4 years recommended) |
| Science (Biology, Chemistry, Physics) | 3 years | 2 years (lab sciences, 3 yrs recommended) |
| Foreign Language | 1 year* | 2 years (3 yrs recommended) |
| Visual/Performing Arts | 1 year* | 1 year |
| Physical Education | 2 years | None |
| Electives | 70 credits minimum | 1 year (must be A-G approved) |

*TUSD Requires 1 year of a foreign language OR 1 year of fine arts for graduation

** Class of 2022 and beyond are required to take Biology, Physics, & Chemistry

220 Credits are required for Graduation

# WHS-4 YEAR PLAN WORKSHEET

| | |
|---|---|
| Career Plans | Student Career Plan: _____ |
| WHS Career Pathways | Business & Marketing<br>Agriculture<br>JROTC<br>VAPA – Visual Arts – Music - Drama<br>Advanced Placement Program (AP)<br>AVID<br>College Preparatory<br>Space & Engineering Academy |

**Requirements**

**West High School Graduation**

| Credits | Course |
|---|---|
| 40 | English (4 yrs) |
| 30 | Social Studies (3 yr) |
| 30 | Science (3 yr) |
| 20 | Mathematics (2 yr) |
| 20 | Physical Education |
| 10 | Fine Art/Modern Lang (1yr) |
| 70 | Electives (any pathway subject) |
| 220 | Credits needed to graduate |

**A-G College Requirements***

A. History (2 yr)
B. English (4 yr)
C. Mathematics (3 yr, 4 recommended)
D. Laboratory Science (2 yr, 3 recommended)
E. Modern Language (2 yr, 3 recommended)
F. Visual or Performing Arts (1 yr)
G. College Preparatory Electives (1 yr)

(*all classes must be passed with C- or higher)

| 9 - Freshman | S1 | S2 | 10 - Sophomore | S1 | S2 |
|---|---|---|---|---|---|
| English 1 | | | English II | | |
| Algebra 1 | | | World History | | |
| Science (Biology) | | | Math | | |
| PE | | | Science (Chemistry) | | |
| Elective | | | PE | | |
| Elective | | | Elective | | |
| | | | | | |
| Total | | | Total | | |

| 11 - Junior | S1 | S2 | 12 – Senior | S1 | S2 |
|---|---|---|---|---|---|
| English III | | | English IV | | |
| U.S. History | | | Government/Economics | | |
| Science (Physics) | | | Elective | | |
| Elective | | | Elective | | |
| Elective | | | Elective | | |
| Elective | | | Elective | | |
| | | | | | |
| Total | | | Total | | |

**Post Grad**

4-year University
Community College
Trade/Technical School
Military
School to Work

# University of California Requirements

Grade Point Average

Students must earn at least a 3.0 GPA in all "A-G" or college-preparatory courses to meet this requirement. The University calculates GPA by converting grades earned in all "a-g" courses completed between summer after 9th grade through summer after 11th grade to grade points: A=4 points, B=3 points, C=2 points, D=1 points. (Pluses and minuses don't count.) Then the grade point totals are divided by the number of "A-G" courses taken in 10th and 11th grade.

Extra points for honors/AP courses is of high interest to students. UC allows an extra point for each semester of a UC honors-level course, with a maximum of 8 points between 10th and 11th grades.

For 10th grade, you cannot use more than 4 honors points. Classes taken during the summer after 9th grade count as 10th grade; classes in summer after 10th grade count as 10th grade; classes in summer after 11th grade count as 11th grade.

Honors courses are Advanced Placement courses, and designated Standard Level courses, UC-transferable college courses and UC-certified honors courses that appear on your school's course list. To be considered for admission, you must complete 15 yearlong high school courses with a grade of C- or better — at least 11 of them prior to your senior year.

The UC systems no longer use the SAT/ACT for admission decisions. Applicants will not be penalized in the admission review process if they don't submit SAT/ACT scores. UC does not require SAT Subject Tests, but certain programs on some campuses recommend them, and you can use subject tests to satisfy the "A-G" requirements listed above.

It is recommended that students who completed Advanced Placement courses complete the related AP examination to demonstrate subject mastery. You can use subject tests for class placement in the UC system.

Eligibility in Local Context (ELC) Students who rank in the top 9% of their graduating class based on their UC/CSU CATEGORY: CATEGORY Weighted GPA (GPA of 3.0+ and completion of at least 11 "A-G" courses prior to starting their senior year) are eligible for admission to the UC through the ELC program - a partnership set up between the UC System and California high schools. This early evaluation and admission occurs during the summer leading to the students' senior year. To remain eligible, students must fulfill all general admission requirements.

For more information please visit:
admission.universityofcalifornia.edu

# CSU Requirements

Grade Point Average

The CSU system is currently using 10th – 12th grade for eligibility. A minimum GPA of 2.5 is required, a GPA of 2.0-2.49 may be accepted in non-impacted schools and or special circumstances.

Eligibility

1. Earn a high school diploma or equivalent
2. 2. Complete "A-G" requirements with Grades of C- or better
3. Currently SAT or ACT scores are suspended
4. Meet the CSU Eligibility Index
   See more information here: https://www.calstate.edu/apply/freshman

# Grade Point Average (GPA)

Grade Point Average is calculated using the student's Semester grades, as following:

A = 4.0 (Honors/AP/IB Weighted GPA A = 5.0)
B = 3.0 (Honors/AP/IB Weighted GPA A = 4.0)
C = 2.0 (Honors/AP/IB Weighted GPA A = 3.0)
D = 1.0 (Honors/AP/IB Weighted GPA A = 1.0)
F = 0.0

West High lists three types of GPAs on our transcripts For the follow purposes:

Academic GPA 9-12: Calculated using grades earned in all A-G courses from grade 9 to grade 12, both weighted and non-weighted.
Academic GPA 10-12: Calculated using grades earned in all A-G courses from grade 10 to grade 12, both weighted and non-weighted.
Total GPA 9-12: Calculated using grades earned in all A-G courses from grade 9 to grade 12, both weighted and non-weighted. This GPA is used to determine eligibility for graduation and participation in athletic programs.

UC/CSU CATEGORY: CATEGORY A-G Weighted GPA: calculated using grades in only "a-g" courses during grades 10 to 12. This GPA is used to determine college eligibility. It is important to note that the UC/CSU CATEGORY: CATEGORY system recalculates GPA for admissions differently. Please note that "a-g" courses that are taken in 9th grade are also integral as they are part of the minimum requirements necessary for UC/CSU CATEGORY: CATEGORY eligibility.

Repeating Courses

Students may choose to repeat a course for purposes of meeting high school graduation requirements or to meet college eligibility requirements. Once the repeated course is completed, both the initial grade and the repeated grade will appear on the student's transcript. Credit from the initial course will be removed, as credit is only allowed once per course. When a course is being repeated during the school year, you must consider the loss of credit when calculating credit requirements for graduation. Courses can be repeated during summer school, during the school year (with some exceptions, or online (with some exceptions).

# WHS Athletic Program

**Eligibility Requirements**: Students who intend to participate in athletics must meet eligibility guidelines: 1. A minimum of a "C" average (2.0 on a 4 point scale) for all classes. High School District students must be currently enrolled in at least 6 classes or the equivalent of 30 credits. 2. No course failures in any eligibility period 3. Students in grades 9-12 may be placed on academic probation if they receive one "F" during a grading period affecting eligibility. A student on academic probation is allowed to compete or perform in extra and co-curricular activities while on academic probation. The terms of a student's academic probation must be agreed upon by the student, their parent/guardian and their coach/advisor. The terms of a student's academic probation will also include sound interventions designed to help students succeed. Students may be on academic probation only two times during their high school career. Once a student has been on academic probation two times in their high school career, they must maintain a 2.0 average on a 4.0 scale and have no course failures (no F grades) in any eligibility period thereafter in order to compete or perform. The two times in which a student is allowed to be on academic probation may not be in consecutive grading periods affecting their eligibility. If you are interesting in applying for academic probation, please see your high school's Athletic Director, Mr. Anastacio or email him at sanastasio@tusd.net. You can also visit our WHS Athletic Department website at https://westhigh.tracy.k12.ca.us/activities-athletics/sports

**Required Documents**: All athletes must have on file in the athletic director's office before the first day of practice the following: Complete record of physical examination, proof of insurance form, emergency medical card, and a signed handbook consent form.

**Fall Sports**
Football
Cross Country
Girls Golf
Girls Tennis
Volleyball
Water Polo

**Winter Sports**
Basketball
Wrestling
Soccer Girls
Soccer Boys

**Year Round Sports**
Cheer
Dance Team

**Spring Sports**
Baseball
Softball
Swimming
Track
Boys Golf
Boys Tennis
Boys Volleyball

# Student Athlete NCAA Requirements

The NCAA

Student athletes who are interested in playing NCAA Division I or Division II sports in college must register with the National Collegiate Athletic Association (NCAA) Eligibility Center. Students who would like to play to Division III sports do not need to register. The Eligibility Center determines if prospective college athletes are eligible to play Division I and Division II sports at participating institutions of higher education. Meeting NCAA requirements does not guarantee admission into college nor does is guarantee students placement on a Division I or Division II athletic team.

Registration with NCAA

It is recommended that student athletes register online at the beginning of their junior year in high school. However, many students will register before their junior year. Students must be cleared by the eligibility center before they can compete at a Division I or Division II institution or receive athletic scholarships. Students must create an account online with the NCAA Eligibility Center. Students will create a personal profile and pay a registration fee. Student who have received a waiver for the SAT or ACT are eligible for a registration fee waiver. The student's counselor must submit confirmation of the test fee waiver. Submission of final transcripts, SAT and/or ACT scores, and proof of graduation at the end of senior year is the student's responsibility.

Coursework Requirements

To play Division I or Division II sports, students must:

- Complete a certain number of high school core courses (see course list)
- Earn a certain minimum grade point average in core courses (see www.eligibilitycenter.org)
- Earn a certain minimum score on the SAT and/or ACT (see www.eligibilitycenter.org)
- Graduate from high school

Division I (16 core courses)

4 years of English
3 years of Math (Algebra 1 or higher)
2 years of Science (Natural or physical, including 1 year of lab science)
2 years of Social Science
1 extra year of English, Math or Science
4 years of additional core courses (from any category above, foreign language, or philosophy

Division II (16 core courses)

3 years of English
2 years of Math (Algebra 1 or higher)
2 years of Science (Natural or physical, including 1 year of lab science)
2 years of Social Science
3 extra year of English, Math or Science

# NCAA Requirements (cont]



Eligibility Center

## DIVISION I ACADEMIC REQUIREMENTS

College-bound student-athletes will need to meet the following academic requirements to practice, receive athletics scholarships, and/or compete during their first year.

### Core-Course Requirement

Complete 16 core courses in the following areas:

| ENGLISH | MATH (Algebra I or higher) | NATURAL/ PHYSICAL SCIENCE (Including one year of lab, if offered) | ADDITIONAL (English, math, or natural/physical science) | SOCIAL SCIENCE | ADDITIONAL COURSES (Any area listed to the left, foreign language or comparative religion/philosophy) |
|---|---|---|---|---|---|
| 4 years | 3 years | 2 years | 1 year | 2 years | 4 years |

### Full Qualifier

- Complete 16 core courses.
  - Ten of the 16 core courses must be completed before the seventh semester (senior year) of high school.
  - Seven of the 10 core courses must be in English, math or natural/physical science.
- Earn a core-course GPA of at least 2.30.
- Earn the ACT/SAT score matching your core-course GPA on the Division I sliding scale
- Graduate high school.

### Academic Redshirt

- Complete 16 core courses.
- Earn a core-course GPA of at least 2.00.
- Earn the ACT/SAT score matching your core-course GPA on the Division I sliding scale
- Graduate high school.

**Full Qualifier:**
College-bound student-athletes may practice, compete and receive athletics scholarships during their first year of enrollment at an NCAA Division I school.

**Academic Redshirt:**
College-bound student-athletes may receive athletics scholarships during their first year of enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment.

**Nonqualifier:**
College-bound student-athletes cannot practice, receive athletics scholarships or compete during their first year of enrollment at an NCAA Division I school.

**NOTE: The NCAA is currently not requiring the ACT/SAT but check back for most recent information as some Universities are still requiring exams.**

**International Students:** Please visit ncaa.org/international for information and academic requirements specific to international student-athletes.

# West High School Clubs/Leadership

| WHS Active Clubs | | |
|---|---|---|
| Academic Decathlon | Drama Club | Project Smile |
| Anime Club | Esports | Poly Club |
| Art Club | Future Farmers Assoc. | Recycling Crew |
| API – Asian Pacific Islander | Futsal Club | Robotics |
| AVID Club | GSA | Royal G's |
| Baseball Club | Helping Homeless Club | Science Olympiad |
| Basketball Club | Journalism Club | Sikh Honor Service Society |
| Boxing Club | JROTC Club | Skate Club |
| BSU - Black Student's Union | KPOP Club | Smash Club |
| Chess Club | MECHA | Weightlifting Club |
| Christian Club | Middle Eastern Club | Wrestling Club |
| CSF | Music Club | Video Production |
| Debate/Mock Trial | | |

# WOLF PACK LEADERSHIP

Leadership students are hardworking students that are an integral part of a team. Do you like being involved in school activities that promote school pride and spirit? Are you a student that believes in making a difference for your school, community and our country? IF the answer is YES to all of these questions, you may be interested in joining the West High Leadership class/program. The class/program is made up of selected and elected students to fulfill student government positions. ALL freshmen positions and commissioners are selected by the Associated Student Body Cabinet.

How it works:

In the spring, candidate packets will be provided at the middle school sites and at West High for you to pick up and complete. In these forms, you will be asked to obtain recommendations and parent permission. The packet will also include descriptions, due dates, and contact numbers for any questions. The class becomes a team made up of all class levels of officers and commissioners. We provide, create, organize and participate with commitment to activities such as Frosh n' Friends, Homecoming, Multicultural Week, Community Service Projects, Dances, performances for our school district and much more. This is an opportunity to get involved and create a life-time of wonderful high school memories! If this is for you, we want to hear from you. Any questions email abehman@tusd.net

# West High A-G Courses

## A History & Social Science

World History
World History ELL
AP World History
US History
US History ELL
AP US History
American Government/Econ
American Government/Econ ELL
AP Government & Politics

## B English

English 1
English 1 Academy
Advanced English 1
Advanced English 1 Academy
English 2
Advanced English 2
Advanced English 2 Academy
English 3
English 3 Academy
AP English 3
English 4
English 4 Academy
AP English 4
CSU Expo Reading & Writing 11
CSU Expo Reading & Writing 12

## C Mathematics

Algebra 1P
Algebra 1 ELL
Algebra 1B
Algebra 2P
Advanced Algebra 2
Geometry
Geometry ELL
Pre-Calculus Honors
Advanced Math
AP Computer Science A
AP Calculus AB
AP Calculus BC
AP Statistics

## D Laboratory Science

Biology
Biology ELL
Enhanced Biology
Enhanced Biology SEA Academy
AP Biology
AG (Agriculture) Biology
AG (Agriculture) Chemistry
Chemistry
Chemistry ELL
Enhanced Chemistry
AP Chemistry
Enhanced Chem SEA Academy
Human Physiology
Physics
Physics ELL
AP Physics C Mechanics
AP Physics 1
Enhanced Physics
Physics SEA Academy
AG (Agriculture) Physics
Engineering Design
Product Design
Animal Science

## E Modern Language

French 1P
French 2P
French 3P
AP French
Spanish 1P
Spanish 1 Native Speakers
Spanish 2P
Spanish 2P Native Speakers
Spanish 3P
AP Spanish Language
AP Spanish Literature

## F Visual & Performing Arts

Advanced Piano (Pending)
Art & Design
Drawing & Painting
Graphic Arts 1
Multicultural Art & Design
3D Design
Advanced Art & Design
AP Drawing
Introduction to Animation
Drama
Advanced Drama
Technical Theater
Graphic Arts & Communication
Adv. Comm. & Graphic Arts
Concert Band
Jazz Band
Orchestral Strings
Piano Keyboard
Symphonic Band
Art History of Floral Design

## G College Preparatory Elective

Adv. Entrepreneurship
Adv. Integrated Animal Science
Ag Mechanics
AP Psychology
AVID (9 – 12)
Child Development
Child Development 2
Computer Literacy
Consumer Home Economics
Economics
Economics ELL
Entrepreneurship
Food & Nutrition
Freshman Seminar
Human Rights & Contemporary Society
Journalism
Psychology/Sociology
Retail Marketing
Senior Odyssey
World Geography/Anthropology
Yearbook Design

# West High School Academies

## Space and Engineering Academy

We are small learning community within Merrill F. West High School that prepares students for college studies and careers in science, engineering, and technology. Read on below for more information about our four year program. SEA students create and follow a Four Year Plan that shows all of the courses they will take to match their interests, meet high school graduation requirements, meet college entrance requirements, and prepare them for their chosen career. SEA students who want to graduate from our program go beyond the typical high school graduation requirements by doing community service, job shadowing, a senior service project, and other college and career-related activities.

The SEA has about 200 students total across all four grade levels. About 60 freshmen join the SEA each year, and 30-40 students graduate each year who have completed SEA Graduation requirements. All SEA students have the same counselor, Ms. Banchero, who can answer questions about classes, colleges, careers, etc. The SEA has its own student leadership who plan social activities such as barbecues, game nights, and stargazing nights. SEA students can also take advantage of educational field trips, such as visits to Lawrence Livermore National Laboratory, the Patriots Jet Team, and Great America (to study the physics of amusement park rides). SEA students can also join the Wolf Pack Robotics Club and build robots for competition in VEX Robotics tournaments.

SEA students set and achieve goals above and beyond that of a typical high school student, and there are several ways they can be recognized. SEA students who get all A's on a quarter report card are put on the SEA Honor Roll. SEA students can earn an SEA Block W or be chosen as Students of the Year by participating in SEA activities and maintaining good grades. SEA seniors complete a long-term Senior Service Project that benefits a community organization and demonstrates their planning, engineering, and teamwork skills. And as their biggest achievement for their four years at West High, SEA students can earn certification as SEA Graduates.

## Advanced Placement

Advanced Placement courses are college-level courses for prepared high school students. Through college-level AP courses, you enter a universe of knowledge that might otherwise remain unexplored in high school; through AP Exams, you have the opportunity to earn credit or advanced standing at most of the nation's colleges and universities. With so many courses and exams across so many subject areas (more than a dozen subject areas at West High School). AP offers something for everyone. The requirements are strong grades in previous courses, a strong curiosity about the subject you plan to study, and the willingness to work hard.

# West High School Academies Info

## FFA/Agriculture

Future Farmers Association (FFA) is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education.

FFA develops members' potential and helps them discover their talent through hands-on experiences, which give members the tools to achieve real-world success. Members are future chemists, veterinarians, government officials, entrepreneurs, bankers, international business leaders, teachers and premier professionals in many career fields.

FFA is an intracurricular student organization for those interested in agriculture and leadership.

## JROTC

JROTC (Junior Reserve Officer's Training Corps) is a military-regulated program designed to offer high school students leadership experiences and motivate them to become better American citizens. JROTC combines classroom instruction with service to school and community, extracurricular and social activities and the chance to take on leadership roles. For those high school students who are interested in pursuing a career in the military, JROTC offers relevant experience and an opportunity to improve entry-level rank.

## Visual and Performing Arts



The Visual and Performing Arts (VAPA) pathway offers a wide variety of classes in music, theatre and the visual arts. As students in the pathway develop their arts abilities, they learn key skills that will benefit them throughout their personal life, and in any profession they may choose to enter. VAPA students are a diverse group who work both individually and together to create final products. Whether that product is a Dia de los Muertos exhibit, a jazz band concert, a stage play, a yearbook or a musical performance, students have a great time working together to achieve their ultimate goals. Students will increase their arts abilities and use a ton of creativity, but they also develop good people skills, presentation skills, and time management.

## AVID

AVID (Advancement Via Individual Determination)
The AVID class is an elective within the school day. AVID focuses on students who have the potential to go to college and once there, be successful. If accepted into the AVID program, a commitment every year of high school is made.

# West High School AVID Program

AVID is for students who are:

- Interested in college and fulfilling the necessary A-G requirements
- Hardworking, but may need extra support
- Achieving grades of Bs, Cs or Ds, but are motivated to be more successful
- Looking to take AP and Honors classes
- Would be first generation college students

The AVID class is an elective within the school day taken every year of high school. AVID focuses on students who have the potential to go to college. If accepted into the AVID program, students commit to enroll in AVID every year of high school.

An average week in the AVID class consists of:

- Tutorials: small groups who work with peers and/or avid tutors to help them better understand their academic curriculum.
- AVID curriculum: strategies for writing, inquiry, collaboration and reading.
- Socratic Seminars: student led discussions similar to what goes on in many colleges; with a goal of better understanding a topic through listening and speaking strategies.
- Teambuilding exercises: helps students learn to collaborate with each other.
- Guest speakers: teaches students about potential careers, colleges, study habits, life plans and college preparation.
- Field Trips: 1-2 field trips a year to visit colleges and universities.

AVID focuses on organization. Students are required to:

- Keep an organized 3-ring binder for all their classes.
  - Take Cornell notes every day in their academic classes
  - Monitor their grades.
  - Grade checks are taken to classes and brought home to parents frequently to help monitor progress.

Applications are available in the Counseling Office. You may visit www.avidonline.org for more information about AVID or contact either the AVID Counselor Alex Boranian Jackson (aboranianjackson@tusd.net) or the AVID Coordinator, Melinda Williams (mwilliams@tusd.net)

# West High School FFA Agriculture

## 4 Year Plan by Industry Pathway

| Grade | Agriscience Pathway | Animal Science Pathway | Floriculture Pathway | Ag Mechanics Pathways |
|---|---|---|---|---|
| 9th | English | English | English | English |
| | Math | Math | Math | Math |
| | Core P.E. | Core P.E. | Core P.E. | Core P.E. |
| | Modern Language | Modern Language | Modern Language | Modern Language |
| | Elective | Elective | Elective | Elective |
| | Agriculture Biology | Agriculture Biology | Agriculture Biology | Agriculture Biology |
| | | | | |
| 10th | English | English | English | English |
| | Math | Math | Math | Math |
| | P.E. | P.E. | P.E. | P.E. |
| | Modern Language | Modern Language | Modern Language | Modern Language |
| | World History | World History | World History | World History |
| | Agriculture Chemistry | Agriculture Chemistry | Agriculture Chemistry | Agriculture Chemistry |
| | | | | |
| 11th | English | English | English | English |
| | Math | Math | Math | Math |
| | US History | US History | US History | US History |
| | Elective | Elective | Elective | Elective |
| | Elective | Integrated Animal Science | Art & History or Floral Design | Ag. Mechanics |
| | Agriculture Physics | Agriculture Physics | Agriculture Physics | Agriculture Physics |
| | | | | |
| 12th | English | English | English | English |
| | Math | Math | Math | Math |
| | Economics/Govt | Economics/Govt | Economics/Govt | Economics/Govt |
| | Ag. Mechanics or Elective | Elective | Elective | Elective |
| | Int. Animal Science or Elective | Art & History or Floral Design | Elective | Art & History or Floral Design |
| | Art & History or Floral Design | Advanced Animal Science | Floriculutre II ROP | Ag. Mechanics 2 (pending) |
| | | | | |
| | | | | |

*All agriculture courses require participation in Future Farmers of America (FFA) and Supervised Agriculture Experience (SAE) for a combined 20% of your final grade

*Completing 1 or more pathways provides students with industry-ready certifications. Some classes provide junior college credit through Modesto Junior College and Delta College.

*Students may complete as many pathways as they would like.

*If student does not take Art & History Floral Design another Fine Art class must be taken for the high school graduation requirements.

# West High Advanced Placement

## Advanced Placement

West High School offers several courses for Advanced Placement. The College Board Advanced Placement (AP) Program gives students the opportunity to pursue college level courses while still in high school. Each course has a corresponding exam which is administered in May. Most colleges and universities give credit or placement to students with qualifying AP Exam grades. In addition, all designated AP/H classes receive extra grade point weighting for grades of C- or higher. The AP course descriptions are available at www.apcentral.collegeboard.com. The following courses are offered at West High:

| *AP Course* | *Pre-Requisites* |
|---|---|
| Studio Art | Advanced Art Portfolio |
| Biology | Biology / Enhanced Chemistry |
| Calculus AB | Pre Calculus Honors |
| Calculus BC | Calculus AB |
| Chemistry | Chemistry Enhanced |
| Computer Science A | Algebra 2/Advanced Algebra 2 |
| English Language | English 2 |
| English Literature | English 3 or English 3 AP or ERWC 11 |
| US Government & Politics | US History |
| US History | World History |
| Physics C / Physics 1 | PreCal H AND Chem, Chem ENH, or Physics |
| Psychology | English 2 or 3, World History or US History |
| Spanish Language | Spanish 3 or Spanish for Spanish Speakers 2 |
| Spanish Literature | Spanish 4 AP |
| Statistics | Algebra 2 or Advanced Math |
| World History | English 1 |

To enroll in an AP class, the Class Registration Form must be signed by the student, parent, teacher of the prerequisite class and the AP teacher.

## AP Scholar Awards

| | |
|---|---|
| AP Scholar | Granted to students who receive grades of 3 or higher on three or more AP Exams. |
| AP Scholar with Honor | Granted to students who receive an average score of at least 3.25 on all AP Exams taken, **and** scores of 3 or higher on four or more of these exams |
| AP Scholar with Distinction | Granted to students who receive an average score of at least 3.5 on all AP Exams taken, **and** scores of 3 or higher on five or more of these exams |

# West High Space & Engineering Academy

## SPACE & ENGINEERING ACADEMY

❒ Science þ Engineering þ Technology
❒ College þ Career



SEA students earn a special diploma and medallion at graduation if they complete all Academy Graduate requirements

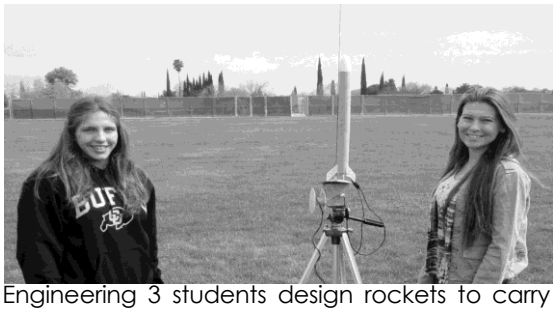
**Community -** SEA students are part of a small learning community. They are with students and teachers who share their interests, giving them a supportive and personalized high school experience. SEA students are also part of West High, so they can participate in all West High sports, clubs, and other activities.


Engineering 1 students design tennis-ball catapults that can hit a target 50 feet away

**Courses -** SEA students take special Science & English courses that develop their critical thinking, problem-solving, communication, and teamwork skills. SEA English courses include literature with science and engineering themes. Engineering 1 and 2 teach core science principles and apply them to engineering projects. Engineering 3 and 4 teach the design process and students use 3D design software to design bridges, rockets, robots, toys, and smart devices.

**Four Year Plans -** SEA students follow a four-year plan that exceeds graduation and college entrance requirements. Incoming students meet with the SEA Coordinator to make their four year plan in the spring before their freshman year. Students choose one of two pathways: the Engineering Pathway prepares students to go to a four-year university, and the Technology Pathway prepares students to go to a community college or technical school.

**Electives & Honors -** Advanced students can take advanced Pre-AP or AP courses each year. All students can take electives in subjects such as technology, music, graphic arts, business, and science.


Engineering 3 students design rockets to carry payloads such as eggs and altimeters to the highest altitude & return safely

**Activities -** SEA students can select from a variety of activities each year. They may go to places such as Lawrence Livermore Labs, the Stanford Linear Accelerator, the Patriots Jet Team Foundation, or EA Games. Engineering students may go to Great America to study the physics of amusement rides. Some students join the Robotics Club where they design, build, program, and operate robots that they enter in regional and state tournaments.

**For more information, see Mr. Moehnke in H-6 .**

# Space & Engineering Academy Four Year Plan

| | | | |
|---|---|---|---|
| **Name:** | | **Year of Graduation:** | |
| **SEA Counselor:** | Ms. Banchero | **Date:** | |

| | **Plan After High School** | **Career Goal** |
|---|---|---|
| | Four Year College Direct: | Student"s Choice: |
| | Community College: | |
| | Technical School: | Parent's Choice: |
| | Military: | |

| Academy Graduate Pathway | | | |
|---|---|---|---|
| | Technology Pathway Graduate | | Engineering Pathway Graduate |
| | Technology Pathway with Honors | | Engineering Pathway with Honors |

*Both pathways meet graduation requirements. The Engineering pathway also meets college requirements.*

| | **Grade 9 – Freshman** | | **Grade 11 – Junior** |
|---|---|---|---|
| 1 | Academy English I or Advanced | 1 | Academy English III (or AP) |
| 2 | Math - | 2 | U.S. History (or AP) |
| 3 | SEA Physics | 3 | Math - |
| 4 | Freshman Physical Education | 4 | SEA Chemistry |
| 5 | | 5 | Engineering Design |
| 6 | | 6 | |
| other | | other | |

| | **Grade 10 – Sophmore** | | **Grade 12 – Senior** |
|---|---|---|---|
| 1 | Academy English II or Advanced | 1 | Academy English IV (or AP) |
| 2 | World History (or AP) | 2 | Government/Econ (or AP) |
| 3 | Math - | 3 | Math - |
| 4 | SEA Biology | 4 | Senior Science or Product Design |
| 5 | Physical Education | 5 | |
| 6 | | 6 | |
| Other | | other | |

**Required Technology Pathways Courses**

Product Design
WHS Fine Art or Modern Language

**Required Engineering Pathways Courses**

First Modern Language Course
Second Modern Language Course
UC Visual & Performing Arts Course

**Senior Science Courses**

Product Design
AP Physics 1
AP Physics C (Must also be in Calculus)
AP Chemistry or AP Biology

**Mathematics Course Sequence**

| Sci/Eng – Strong | Sci/Eng – Good | Tech/other |
|---|---|---|
| Algebra I | Algebra I | |
| Geometry | Geometry | Algebra I |
| Algebra 2 | Algebra 2 | Geometry |
| Pre-Calculus H | Pre-Calculus H | Algebra 2 |
| AP Calculus AB | AP Calculus AB | Adv Math |
| AP Calculus BC | AP Statistics | Pre-Calculus H |
| AP Statistics | | AP Calculus AB |

# VAPA Pathway

For years experts have agreed that students who engage in the arts education perform better academically in math, reading and writing and demonstrate a greater capacity for analyzing and problem solving. West High School students have the opportunity to enhance their education and develop their creative abilities while fulfilling their academic requirements for graduation through the VAPA curriculum. By following the VAPA path- way of their choice, students can ensure they are meeting college entrance requirements, and also choose to graduate with VAPA honors.

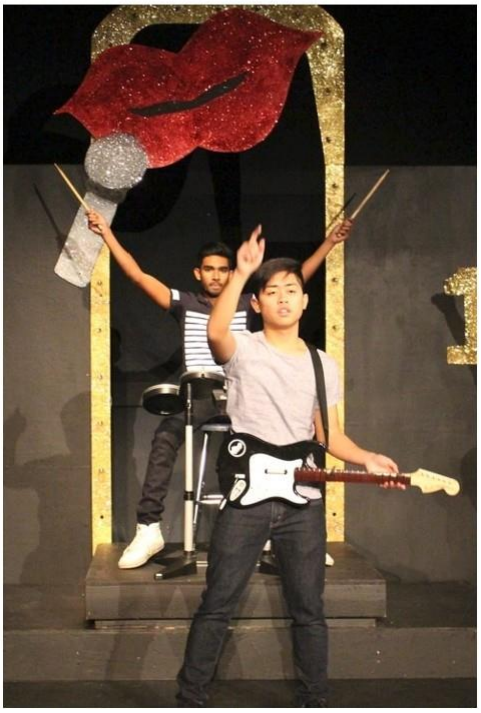


Students can choose from three areas of interest in the arts:

**Music**
**Theatre**
**Visual Arts**

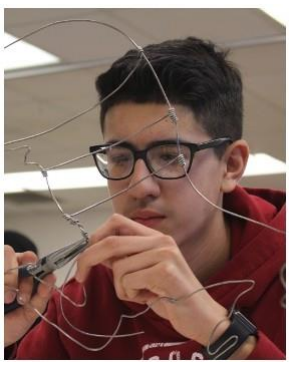


Any of the above areas of interest will not only fulfill a graduation requirement, but also fulfill one of the requirements for admission into UC colleges. Students can thrive in an atmosphere that not only encourages creativity, but also inspires critical thinking, problem solving, time-management, presentation skills and team-work. Pathways help students to establish closer relationships with each other and an almost family-like atmosphere develops where students feel more supported and encouraged to try new things and are guided on the pathway to success.









# West High Visual & Performing Arts (VAPA) Pathways

## Music/Theatre/or Visual Arts Track

40 units of VAPA Emphasis + 10 units of other VAPA elective

| | |
|---|---|
| 9th Grade<br>1. English<br>2. Math<br>3. Science<br>4. PE<br>5. Year 1 VAPA emphasis<br>6. VAPA or Elective | 10th Grade<br>1. English<br>2. Math<br>3. Science<br>4. World History<br>5. PE<br>6. Year 2 VAPA emphasis |
| 11th Grade<br>1. English<br>2. Science<br>3. U.S. History<br>4. Year 3 VAPA emphasis<br>5. VAPA or elective<br>6. Elective | 12th Grade<br>1. English<br>2. Govt/Econ.<br>3. Year 4 VAPA emphasis<br>4. VAPA or elective<br>5. Elective<br>6. Elective |

## A-G VAPA Track

40 units of VAPA Emphasis+ 10 units of other VAPA elective

| | |
|---|---|
| 9th Grade<br>1. English<br>2. Math<br>3. Science<br>4. PE<br>5. Foreign Language<br>6. Year 1 VAPA Emphasis | 10th Grade<br>1. English<br>2. Math<br>3. Science<br>4. World History<br>5. Foreign Language<br>6. Year 2 VAPA Emphasis |
| 11th Grade<br>1. English<br>2. Math<br>3. Science<br>4. U.S. History<br>5. Foreign Language or P.E.<br>6. Year 3 VAPA Emphasis | 12th Grade<br>1. English<br>2. Govt/Econ.<br>3. Math or PE.<br>4. Year 4 VAPA Emphasis<br>5. VAPA Elective<br>6. Elective |

## VAPA w/Honors

40 units of VAPA Emphasis + 30 units of other VAPA elective

| | |
|---|---|
| 9th Grade<br>1. English<br>2. Math<br>3. Science<br>4. PE<br>5. Year 1 VAPA Emphasis<br>6. VAPA or Elective | 10th Grade<br>1. English<br>2. Math<br>3. Science<br>4. World History<br>5. PE<br>6. Year 2 VAPA Emphasis |
| 11th Grade<br>1. English<br>2. Science<br>3. U.S. History<br>4. Year 3 VAPA Emphasis<br>5. VAPA or elective<br>6. Elective | 12th Grade<br>1. English<br>2. Govt/Econ.<br>3. Year 4 VAPA Emphasis<br>4. VAPA or elective<br>5. Elective<br>6. Elective |



# West High School Honor Scholars

## Academic Block W

A student may qualify for the Academic Block W in one of two ways:

1. Straight A's (or a GPA of 4.0 or higher)
   - Freshmen with Straight A's in their first semester at West High
   - Sophomores, juniors and seniors with Straight A's, or a GPA of 4.0 or higher, in either of their two most recent semesters at West High

*In order for students to earn their Academic Block W using the Straight A's or a GPA of 4.0 or higher option, they must have taken a minimum of three courses from the University of California A-G list during their Straight A's or a GPA of 4.0 or higher semester.

2. Cumulative Academic Grade Point Average (9-12) (called ACA GPA (9-12) on transcript) at the end of Fall semester
   - 10th graders with a 3.94 or higher
   - 11th graders with a 3.85 or higher
   - 12th graders with a 3.75 or higher

*In order for students to earn their Academic Block W using the Cumulative Academic GPA (9-12) option, they must have taken a minimum of three courses from the University of California A-G list in each semester of high school they have completed.

## California Scholarship Federation

The California Scholarship Federation is a state-wide organization which recognizes students for their high academic achievement while providing an opportunity for students to participate in community service activities. Students who have been members in CSF for 4 out of their last 6 semesters, and have qualified with their senior grades at least one semester get the honor of graduating as a CSF Seal Bearer. Seal Bearers have earned the honor of receiving: the Gold CSF pin, a Gold tassel, and Gold chord (if an inactive member) or Gold stole (if an active member). In addition, CSF Seal Bearers have the CSF Seal placed on their diploma and are seated in the front at graduation while receiving special recognition.

In order to become an official member of CSF, you must turn in:

- your application (due on designated dates September and February)
- photocopy of your semester report card or transcript (transcript does not need to be official)
- receipt from bookkeeper for semester dues donation of $7.00/

** Students who are members of CSF still need to apply every semester.

*** No late applications will be accepted

Any questions regarding the application process should be directed to Mr. Haut dhaut@tusd.net
Or Ms. Evans kevans@tusd.net.

# West High School Course List

## Agriculture Science

| | |
|---|---|
| 3105 | Ag Biology |
| 3125 | Integrated Animal Science |
| 3126 | Adv Animal Science |
| 3188 | Ag Chemistry |
| 3191 | Ag Physics |
| TBA | Ag Food Systems |
| TBA | Ag Marketing & Animal Industries |
| 3520 | Flori Culture Advanced |
| 3521 | Floral Art History |
| 3192 | Ag Mechanics |

## Business Education

| | |
|---|---|
| 4503 | Computer Applications |
| 4514 | Accounting Principles |
| 4515 | Accounting Principles II |
| 4520 | Computer Literacy |
| 4540 | Intro to Marketing |
| TBA | Entrepreneurship |
| TBA | Advanced Entrepreneurship |
| TBA | Retail Marketing |

## English Courses

| | |
|---|---|
| 0204 | ELD 12 |
| 0205 | ELD 11 |
| 0206 | ELD 10 |
| 0207 | ELD 9 |
| 1203 | Beginning ELD |
| 0208 | Newcomer ELD |
| 0230 | Freshman Seminar |
| 1003 | English 1P |
| 1010 | Advanced English 1 |
| 1015 | English 1P (Academy) |
| 1018 | Advanced English 1 (Academy) |
| 1125 | Advanced English 2 |
| 1133 | English 2P |
| 1146 | Advanced English 2 (Academy) |
| 1150 | English 2P Academy |
| 1263 | English 3P |
| 1265 | English 3P Academy |
| 1273 | AP English Lang 3 |
| 1284 | CSU Expo Reading & Writing 11 |
| 1285 | CSU Expo Reading & Writing 12 |
| 1383 | English 4P |
| 1393 | AP English Lit 4 |
| 1395 | English 4P Academy |

## History & Social Studies

| | |
|---|---|
| 7010 | Geography/Anthropology |
| 7103 | World History |
| 7104 | AP World History |
| 7135 | World History ELL |
| 7253 | US History |
| 7255 | AP US History |
| 7286 | US History ELL |
| 7320 | Amer Gov/Econ ELL |
| 7345 | AP Human Geography |
| 7346 | Human Rights & CS |
| 7350 | Psychology & Sociology |
| 7352 | AP Psychology |
| 7383 | AP Government & Politics |
| 7381 | Economics/Government |
| 7391 | Amer Government/Economics |

## Home Economics

| | |
|---|---|
| 5501 | Consumer Home Econ |
| 5502 | Foods & Nutrition II |
| 5450 | Child Development |
| 5541 | Child Development II |

## Fine Arts

| | |
|---|---|
| 3067 | Tech Theater |
| 3521 | Floral Art History |
| 6003 | Art & Design |
| 6008 | Advanced Art |
| 6016 | 3D Design |
| 6020 | AP Drawing |
| 6022 | Drawing & Painting |
| 6025 | Multi-Cultural Art & Design |
| 6030 | Graphic Arts 1 |
| 6031 | Yearbook Production |
| 6036 | Intro Animation |
| 6042 | Drama 1 |
| 6046 | Digital Animation |
| 6053 | Advanced Drama |
| 6090 | Concert Band |
| 6093 | Symphonic Band |
| 6100 | Piano Keyboard |
| TBA | Advanced Piano |
| 6103 | Orchestra |
| 6113 | Jazz Band |
| 6133 | West High Sing 1 |
| 6135 | West High Sing 2 |
| 6136 | Advanced Graphic Design |

## Mathematics

| | |
|---|---|
| 2020 | AP Statistics |
| 2040 | Advanced Math |
| 2052 | Algebra 1P |
| 2060 | Algebra 1A |
| 2061 | Algebra 1B |
| 2065 | Algebra Readiness |
| 2067 | Algebra Readiness ELL |
| 2070 | Algebra 1 ELL |
| 2093 | Algebra 2P |
| 2103 | Geometry |
| 2106 | Geometry ELL |
| 2132 | AP Calculus AB |
| 2136 | AP Calculus BC |
| 2137 | Pre-Calculus Honors |
| 2110 | Advanced Geometry |
| 2200 | Advanced Algebra 2 |

## World Languages

| | |
|---|---|
| 4013 | French 1P |
| 4033 | Spanish 1P |
| 4103 | Spanish 1 Spanish Speakers |
| 4123 | French 2P |
| 4153 | Spanish 2P |
| 4053 | Spanish 2P Spanish Speakers |
| 4230 | French 3 |
| 4270 | Spanish 3 |
| 4345 | AP French Language 4 |
| 4385 | AP Spanish Language 4 |
| 4390 | AP Spanish Literature 5 |

## Physical Education

| | |
|---|---|
| 9001 | Core 9 PE |
| 9101 | Advanced PE |
| 9201 | Aerobics |
| 9400 | Comp Athletics |
| 9430 | Speed/Power Development |

# West High School Course List

| Science | |
|---|---|
| 3136 | Biology |
| 3153 | Biology ELL |
| 3163 | Enhanced Biology |
| 3360 | ENH Bio Academy |
| 3339 | AP Biology |
| 3203 | Human Physiology |
| 3266 | Chemistry |
| 3294 | Enhanced Chemistry |
| 3295 | AP Chemistry |
| 3370 | ENH Chemistry Academy |
| 3723 | Chemistry ELL |
| 3311 | Enhanced Physics |
| 3315 | AP Physics 1 |
| 3316 | AP Physics C Mechanics |
| 3330 | Physics |
| 3331 | Physics ELL |
| 3380 | Physics Academy |
| 3354 | Engineering Design |
| 3356 | Product Design |

| Special Education | |
|---|---|
| 8280 | English Skills |
| 8281 | Math Skills |
| 3128 | Science Skills |
| 8279 | History Skills |
| 8266 | Vocational Ed Skills |
| 8258 | English 9/10 MM |
| 8258 | English 11/12 MM |
| 8260 | Biology MM |
| 8311 | Chemistry MM |
| 8312 | Physics MM |
| 8236 | US History MM |
| 8235 | World History MM |
| 8239 | Govt/Econ MM |
| 8233 | Math MM |
| 8223 | Algebra MM |
| 8278 | ACC Support |

| Non Departmental Courses | |
|---|---|
| 0115 | AVID 9 |
| 0215 | AVID 10 |
| 0315 | AVID 11 |
| 0415 | AVID 12 |
| 0514 | Air Force JROTC |
| 0700 | Conflict Management |
| 1363 | Journalism |
| 8040 | Math Tutor |
| 8130 | AVID Tutor |
| 8460 | Leadership |
| TBD | Intro. To Teaching Ed. |
| 8471 | Outside Work 1hr |
| 8472 | Outside Work 2hr |

# AGRICULTURE COURSES

## AG BIOLOGY - 3105

Grade Level: 9
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: D-Lab Science
**Prerequisite:** None

Biology is the natural science that involves the study of life and living organisms, including their physical and chemical structure, function, development and evolution. This course gives students a good foundation in Biology with related Earth Science phenomena and Engineering applications. The following topics will be covered: cell structure and function; mitosis and cell division; cell differentiation; systems of specialized cells; homeostasis and feedback mechanisms; energy and matter flow through ecosystems; ecosystem dynamics; photosynthesis and cellular respiration; history of earth's atmosphere and biogeochemical cycles; DNA structure and function; meiotic cell division; genetics; DNA replication; protein synthesis; evidence of evolution; natural selection and adaptations; social interactions and group behavior; ecosystem stability and its response to climate change; the influence of natural resource availability, natural hazards, and changes in climate on human populations; human impacts on ecosystems; natural resources and global climate change; conservation of natural resources-solutions and sustainability. This course also provides an opportunity and expectation for student's participation in the National FFA organization including FFA participation and a SAE Project. This course meets all NGSS standards for Biology and Engineering Design, and many NGSS standards for Earth and Space Sciences as well as a variety of Agriculture standards and frameworks. This is one of three agriculture science courses that are required for high school graduation.

## INTEGRATED ANIMAL SCIENCE - 3125

Grade Level: 10, 11, 12
Course Length: 1 year
Credits: 10
UC/CSU CATEGORY: D-Lab Science
**Prerequisite:** Completion of Ag Biology or teacher approval

Using animal systems and Agriculture examples as the learning vehicle, the course emphasizes a management approach to animal production. Production Agriculture and good management tactics are fundamentals and relate to all the other sciences, economics, ecosystems, and are a large key to understanding our world and its sustainability. Topics include: Anatomy and Physiology, Animal Breeding and Genetics, Respiratory System and Respiration, Nervous System, Reproductive Systems, Common Integument and Derivations, Animal Health and Sanitation

## AG CHEMISTRY - 3188

Grade Level: 10, 11, 12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: D-Lab Science
**Prerequisite:** C or better in Algebra 1

This course gives students a good foundation in Chemistry with related Earth Science phenomena and Engineering applications. The following topics will be covered: scientific measurements, combustion, conservation of mass and energy, atomic structure and bonding, Coulomb's law, the internal structure of the earth, feedback loops, thermochemistry, periodic table, chemical reactions, stoichiometry, Le Châtelier's law, reaction rates, greenhouse gases, climate change and human effects, solutions, acids and bases, the carbon cycle, resource management, and engineering designs. This course also provides an opportunity and expectation for student's participation in the National FFA organization including FFA participation and a Supervised Agriculture Experience Project. This course meets all NGSS standards for Chemistry and Engineering Design, and many NGSS standards for Earth and Space Sciences as well as a variety of agriculture standards and frameworks. This is one of three agriculture science courses that are required for high school graduation.

## ADVANCED ANIMAL SCIENCE - 3126

Grade Level: 11, 12
Course Length: 1 year
Credits: 10
UC/CSU CATEGORY: G - Elective
**Prerequisite:** Completion of Integrated Animal Science or teacher approval

A scientific approach to the livestock industry encompassing all aspects of modern meat and fiber production and recreation from livestock. This course builds on prior knowledge gained in Integrated Animal Science. Class topics include: anatomy and physiology, nutrition, selection and evaluation, genetics and breeding, epidemiology, meat science and processing, and proper handling and application of best management decisions based on scientific and agribusiness principles. Students will be assigned quarterly livestock projects for grow out. Class projects will be marketed on campus and in the community. Students will learn leadership and record keeping through FFA and SAE projects. An Agriscience research project will be conducted during the Fall semester and will be included in the final exam. Students will complete this class by taking a final at Modesto Junior College to earn articulation credits.

## AG FOOD SYSTEMS-TBA)=

Grade Level: 10,11,12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: G-Elective
**Prerequisite:** Ag Biology

Agriculture Food Systems is designed to teach students science through food, the food industry,

agriculture and technological advances. Students will learn about the production of food and agriculture products from planting to consumption. A hands on approach will be used as students learn about the following topics: the importance of soil, components of soil, basic plant identification, plant growth and nutrient requirements, pest control and prevention, water management, production practices and genetic engineering. Throughout the course, students will be graded on their participation in intra-curricular FFA activities as well as the development and maintenance of

a Supervised Agricultural Experience (SAE).

## AG PHYSICS - 3191

Grade Level: 10, 11, 12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: D-Lab Science
**Prerequisite: None**

Physics is the study of matter and energy and the interaction between them. Physics is about asking fundamental questions about the world around us and trying to answer them by observing and experimenting. This course gives students a good foundation in Physics with related Earth Science phenomena and Engineering applications. The following topics will be covered: forces, laws of motion, structures, plate tectonics, momentum, collisions, universal gravity, Kepler's laws, planetary motion, waves, earthquakes, wave technology, the nature of light, optics and light spectra, the big bang theory, electrostatics, electricity and circuits, magnetism and electromagnetic induction, energy, power plants, renewable sources, nuclear radiation and processes, and history of the Earth, stars and the universe. This course also provides an opportunity and expectation for student's participation in the National FFA organization including FFA participation and a Supervised Agriculture Experience Project. This course meets all NGSS standards for Physics and Engineering Design, and many NGSS standards for Earth and Space Sciences as well as a variety of agriculture standards and frameworks. This is one of three agriculture science courses that are required for high school graduation.

## AG MARKETING & ANIMAL INDUSTRIES

Grade Level: 9 10, 11, 12
Course Length: Summer Course
Credits: 10
UC/CSU CATEGORY: G-Elective
**Prerequisite:** Ag Biology or concurrent enrollment

This course is designed to train students for entry-level jobs in agricultural marketing, especially so with respect to marketing in the livestock industries. This will involve student management of an approved livestock SAE project to be exhibited at the San Joaquin AgFest each June. Students will gain theory in animal husbandry and marketing livestock; students will also apply that theory in the execution of their Supervised Agricultural Experience (SAE) project. The nature of this course is interdisciplinary in that students will practice business and economic theories, apply scientific principles, utilize technology, engineer proper animal housing and calculate nutritional requirements and feed rationing (STEM). This course reinforces and extends vocational learning experiences found in all Agriculture pathways through approved entrepreneurship work experience via an approved SAE project.

## AG MECHANICS -TBA

Grade Level: 10, 11, 12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: G - Elective
**Prerequisite:** Ag Biology

This course provides theory and hands-on experiences that provide opportunities for students to develop basic knowledge and skills in agriculture mechanics. Instructional areas include the basic fundamentals of maintaining and repairing small gasoline engines, basic electricity, welding, construction, cold metal work, and operating agricultural equipment safely.

## FLORICULTURE ADVANCE - 3520

Grade Level: 10, 11, 12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: None
**Prerequisite:** None

This course will train students in: Floral Design, Marketing, Display, Preparation, Sales, Employability Skills, Floral Identification, Cut Flower Production, Floral Career Opportunities g1017 Program projects will be marketed on campus and in the community. Students will learn leadership and record keeping through FFA and SAE projects. This course has a lab fee of $15.00 for extended projects.

## THE ART HISTORY OF FLORAL DESIGN - 3521

Grade Level: 10, 11, 12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: F – Fine Arts
**Prerequisite:** None

The Art and History of Floral Design provides an introduction to artistic and creative perception including aesthetic valuing through a series of projects in various media including tempera, pencil, flowers, tile, and a variety of papers. Students are also introduced to the elements and principles of visual art design such as line, shape/form, color, balance, and emphasis using a series of floral-based projects to explore the connections, relations, and application to visual arts design. Students will research and study floral trends to understand and develop an appreciation for floral design within historical and cultural, formal and casual, ceremonial and traditional, including an understanding that floral designs are affected by society, culture, history, politics, and economic influence. Various assignments based on abstract two and three dimensional designs, historical culture and theory, color theory, and analytical critiques of various floral art works using design vocabulary in conjunction with development of technical skills in floral art will serve as a foundation for more complex works such as multi-part floral designs and creative expression through wedding consultations.

# BUSINESS EDUCATION

## COMPUTER APPLICATIONS - 4503

Grade Level: 11, 12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: G – ELECTIVE
Prerequisite: Must be 16 or older, completed Computer Literacy with a grade of "C" or higher or receive teacher approval

This course is designed to teach students to use the following computer applications at an introductory level: Microsoft Word, Microsoft Excel, Microsoft PowerPoint and Microsoft Access.

## ACCOUNTING PRINCIPLES I

Grade Levels: 10, 11, 12
Course Length: 1 year
Credits: 10 credits
UC/CSU CATEGORY: G – ELECTIVE
Prerequisite: None

This course is designed to introduce students to the basic procedures in accounting. The students will develop the skills to keep books efficiently for themselves and for any type of simple business organization. Students maintain sets of actual books. The course is a foundation for careers in accounting, law, business administration, income tax preparation and other business fields. It is a must for anyone planning on majoring in Business in college.

## ACCOUNTING PRINCIPLES II – 4515

Grade Levels: 11, 12
Course Length: 1 year
Credits: 10
UC/CSU CATEGORY: None
Prerequisite: Accounting 1 with a "C" or better

This course will help prepare students for entry-level jobs in an accounting, payroll or record-keeping environment. Emphasis will be placed on departmentalized accounting, accounting control systems and corporate accounting. Students will be exposed to management and cost accounting. Textbook and workbook exercises will be supplemented periodically with simulations based on corporate accounting situations. Students will also be introduced to automated accounting.

## COMPUTER LITERACY - 4520

Grade Levels: 9, 10, 11, 12
Course Length: 1 year
Credits: 10
UC/CSU CATEGORY: G – ELECTIVE
Prerequisite: None

This course is the first step in the CTE Department's Computer Information Processing and Computer Technology pathways. Students will use the computer as a tool to explore word processing, PowerPoint, the Internet and apply these and other computerized resources to research a variety of career options. This course also teaches students the proper format of various documents including MLA reports (required by other departments on the West High campus and the most commonly used college report format), science lab reports and standard business forms like letters and memos. Emphasis is placed on:

- Career Exploration, including Internet and other research techniques
- Real world business simulation
- Word Processing skills, including document preparation
- PowerPoint presentations
- Keyboarding technique and improvement of keying skills
-

## ENTREPRENUERSHIP

Grade Level: 10 ,11
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: G – ELECTIVE
Prerequisite: None

This course content includes Introduction to Marketing, Sales, and Service course content. Knowledge and skills common to entrepreneurs and entrepreneurship, including the human characteristics vital for entrepreneurial thinking in a twenty-first century global world are covered. Entrepreneurial thinking may be applied to all industry sectors. Business knowledge and skills are required for entrepreneurs as well as intangible skills and knowledge such as creativity and innovation skills re developed. Students demonstrate the acquisition of content through the research and development of business plans.

## ADVANCED ENTREPRENUERSHIP

Grade Level: 11,12
Course Length: 1 year
Credit: 10 credits
UC/CSU CATEGORY: G – ELECTIVE
Prerequisite: None

This course content builds on previous course content and may focus on advanced strategies and Entrepreneurial concepts that culminate in this final course of the Advanced Entrepreneurship/Self-Employment pathway sequence.

## RETAIL MARKETING

Grade Level: 11,12
Course Length: 1 year
Credit: 20 credits
UC/CSU CATEGORY: G – ELECTIVE
Prerequisite: None

This 2-hour course content includes Introduction to Marketing, Sales, and Service course content. This capstone course content builds and focuses on advanced strategies and professional sales concepts that culminate in on-the job experiences in professional retail sales through a school run student store. The curriculum includes instruction in sales skills, customer service, communications, cash register operation, customization of products, design procedures for various apparel and school items.

# ENGLISH COURSES

## FRESHMAN SEMINAR – 0230

Prerequisite: None
Grade Levels: 9
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

This course is broken up into two semesters. The first semester is designed to support a successful transition into high school and ultimately into adulthood. Students learn and practice valuable skills to help them to be career and college ready. Students will demonstrate their understanding of career paths through a variety of assessments, projects, research assignments, online portfolio, and a budget project. Students will identify academic interests, skills, values and personality types, research employers and industries, familiarize themselves with college and job search tools, strengthen writing skills, and learn goal setting techniques that are monitored by the instructor. In the second semester, students will study Speech and Debate in order to prepare them for the speaking and listening requirements in all English courses, as well as in many other academic classes. During this part of the class students will learn expository, persuasive, extemporaneous, demonstrative and impromptu speaking as well as listening skills, current events, oratory, oral interpretation, memorization and debate. The speech assignments will be thematic and support the concepts introduced in the first semester course.

## ELD 9 - 0207

Prerequisite: None
Grade Levels: 9
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors. Through the application of ELD instructional strategies, students develop skills necessary to make gains toward proficiency of the four language domains.

## ELD 10 - 0206

Prerequisite: None
Grade Levels: 10
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors. Through the application of ELD instructional strategies, students develop skills necessary to make gains toward proficiency of the four language domains.

## ELD 11 - 0205

Prerequisite: None
Grade Levels: 11
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors. Through the application of ELD instructional strategies, students develop skills necessary to make gains toward proficiency of the four language domains.

## ENGLISH ELD 12 - 0204

Prerequisite: None
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors.

## NEWCOMER ELD - 0208

Prerequisite: None
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors.

# ENGLISH COURSES (cont)

## BEGINNER ELD - 1203

Prerequisite: None
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: N/A
This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors.

## ENGLISH I - 1003

Prerequisite:
None Grade
Levels: 9
Credits: 10
UC/CSU CATEGORY: B – ENGLISH
This college prep course offers the development & refinement of Language Arts skills. Reading, writing, listening and speaking are taught using the CA State approved, and TUSD adopted, Holt Literature and Language Arts & Grammar-Third Course textbooks. All state mandated Standards and Frameworks are covered and will prepare students for English II-CP, as well as State testing.

## ADVANCED ENGLISH 1-1010

Prerequisite: a "B" or better in 8th grade Core and teacher recommendation
Grade Levels: 9
Credits: 10
UC/CSU CATEGORY: B - ENGLISH
Students must meet proficiency criteria for enrollment. This class is an option for the student who wishes an additional challenge. Advanced students will develop critical reading and writing skills in preparation for more advanced work. The class requires advanced reading skills and a commitment to an additional challenge. Summer reading will be required prior to starting this class.

## ENGLISH 1 ACADEMY-1015

Prerequisite: Enrollment in the Space & Engineering Academy
Grade Levels: 9
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This course meets the requirements of English I CP, sharing a portion of that curriculum. The remainder of the course focuses on exploring a n d using applied technical communication skills and literature and projects related to space, engineering and technology. At least one project will be done jointly with the Principles of Engineering I course.

## ADVANCED ENGLISH 1 ACADEMY-1018

Prerequisite: Enrollment in the Space & Engineering Academy
Grade Levels: 9
Credits: 10
UC/CSU CATEGORY: B - ENGLISH
This strand is an option for the student who wishes an additional challenge. Each quarter, students are required to critically read a more advanced piece of literature in addition to English I Academy work. Thematic analysis of the work is required. This strand requires advanced reading skills and commitment to an additional challenge

## ENGLISH 2 – 1133

Prerequisite: None
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This college preparatory course offers further development and refinement of the language arts skills previously practiced. Writing, reading, speaking and SAT vocabulary skills are integrated in a literature-based program. The writing process is emphasized. The literature-based curriculum requires students to read and respond critically to different genres.

## ADVANCED ENGLISH 2 - 1125

Prerequisite: "C" or better in current English Class recommendation
Grade Levels: 10
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

Students must meet proficiency criteria for enrollment. This class is an option for the student who wishes an additional challenge. Advanced students will develop critical reading and writing skills in preparation for more advanced work. The class requires advanced reading skills and a commitment to an additional challenge. Summer reading will be required prior to starting this class. It includes Murder on the Orient Express by Agatha Christie and selections from Edith Hamilton's Mythology.

## ENGLISH 2P ACADEMY - 1150

Prerequisite: None
Grade Levels: 10
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This course meets the requirements of English II CP, sharing a portion of that curriculum. The remainder of the course continues to focus on developing applied technical communication skills and literature and projects related to space, engineering and technology. At least one project will be done jointly with the Principles of Engineering II course.

# ENGLISH COURSES (cont)

## ADVANCED ENGLISH 2 ACADEMY - 1146

Prerequisite: "C" or better in current English Class
Grade Levels: 10
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This strand is an option for the student who wants an additional challenge. Each quarter, students are required to read and analyze a more advanced piece of literature in addition to English II Academy work. Thematic analysis of the works is required. This strand requires advanced reading and writing skills and a strong commitment to an additional challenge. Summer reading is required prior to starting this class.

## ENGLISH 3P - 1263

Prerequisite:
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This college preparatory class builds and expands on skills taught in English I & II. The curriculum is literature based. Students respond critically to core literature through writing and speaking. Students will study vocabulary root words. The writing process is continued as performance expectations increase.

## ENGLISH 3P ACADEMY - 1265

Prerequisite:
Grade Levels: 11
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This course is designed to introduce students to English via the four domains of reading, writing, listening, and speaking by Interacting in Meaningful Ways (Part 1 of English Language Development standards) and Learning How English Works (Part 2 of the English Language Development standards) in order to demonstrate language proficiency at the expanding level based on the ELD descriptors. Through the application of ELD instructional strategies, students develop skills necessary to make gains toward proficiency of the four language domains.

## AP ENGLISH LANG & COMP - 1273

Prerequisite: Approval from Eng 10 teacher
Grade Levels: 11
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This course begins a two-year program of advanced study of challenging literature. Students will develop skills in analysis of different literary genres and rhetorical devices. This is a rigorous college level course and students are expected to perform at a sophisticated level that will prepare them to take the Advanced Placement examination in Language and Composition. It is recommended that entering students have completed English II Pre AP; however, English II CP students may enroll with teacher recommendation. Summer reading is required prior to starting this class.

## CSU EXPO READ & WRITING 11 - 1284

Prerequisite:
Grade Levels: 11
Credits: 10
UC/CSU CATEGORY: B – ENGLISH

The goal of the Expository Reading and Writing Course is to prepare college-bound seniors for the literacy demands of higher education and career oriented seniors for the rigors of the workforce. This yearlong course covers a series of 12 Instructional Modules: 2 Portfolio Modules, 5-6 Core Modules, and 4 Mini-Modules. Students will meet rigorous, college-preparatory learning goals in reading, writing, listening, and speaking. Using these 12 Instructional Modules, students in this year long course develop advanced proficiency in expository, analytical and argumentative reading and writing. Modules also provide instruction in research methods and documentation conventions. Students will read closely to examine the relationship between an author's argument or theme and his or her audience and purpose; to analyze the impact of structural and rhetorical strategies; and to examine the social, political and philosophical assumptions that underlie the text.

# ENGLISH COURSES (cont)

## ENGLISH 4P - 1383

Prerequisite:
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This college prep class builds and expands on skills taught in previous English classes, including root words. Students will study literature to continue to develop ethical, aesthetic and critical values; as well as cultural literacy. Through this in-depth study, students will confront and explore major social and political issues. Critical analysis, thoughtful discussion and writing are emphasized.

## ENGLISH 4P ACADEMY - 1395

Prerequisite:
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

English IV Academy will complete the spectrum of English courses offered within the Space and Engineering Academy. Students completing this course will continue to hone their language arts skills through reading literature, extensive writing (with an emphasis on technical writing) and vocabulary development. As a culminating activity, students will complete a Senior Project which will showcase the student's acquired skills.

## AP ENGLISH LITERATURE - 1393

Prerequisite: "C" or better in current English class and completion of the AP contract
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

This is the second course in a two-year program of advanced study. Students will study challenging, college-level literature. They will develop advanced analytical skills through critical reading of quality literature. Performance expectations are very high. This course prepares students to take the Advanced Placement examination in literature and composition. Summer reading is required prior to starting this class

## CSU EXPO READ & WRITING 12 - 1285

Prerequisite:
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: B - ENGLISH

The goal of the Expository Reading and Writing Course is to prepare college-bound seniors for the literacy demands of higher education and career oriented seniors for the rigors of the workforce. This yearlong course covers a series of 12 Instructional Modules: 2 Portfolio Modules, 5-6 Core Modules, and 4 Mini-Modules. Students will meet rigorous, college-preparatory learning goals in reading, writing, listening, and speaking. Using these 12 Instructional Modules, students in this year long course develop advanced proficiency in expository, analytical and argumentative reading and writing. Modules also provide instruction in research methods and documentation conventions. Students will read closely to examine the relationship between an author's argument or theme and his or her audience and purpose; to analyze the impact of structural and rhetorical strategies; and to examine the social, political and philosophical assumptions that underlie the text.

# HISTORY & SOCIAL STUDIES

## GEOGRAPHY/ANTHROPOLOGY– 7010

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits 10
UC/CSU CATEGORY: G - ELECTIVE

This course is an elective designed for all students to familiarize them with the land and peoples of the World. While Three fourths of the class will be devoted to the study of geography, both physical (the land and water) and cultural (the people who inhabit the land and how their culture is affected by the land); anthropology will be integrated into the class making up the other one quarter of the course with students studying how different cultures react to the same situations (e.g., love, status of women, marriage, the care of children). This course will emphasize study skills, communication skills and critical thinking.

## WORLD HISTORY AP – 7104

Perquisite: Recommendation from English teacher Grade Levels 10, 11, 12
Credits 10
UC/CSU CATEGORY: A - SOC SCI

The AP World History course requires students to engage with the dynamics of continuity and change across the historical periods that are included in the course. Students will be taught to analyze the processes and causes involved in these continuities and changes. In order to do so, students will focus on FIVE overarching themes which serve throughout the course as unifying threads, helping them to put what is particular about each period or society into a larger framework. The themes also provide ways to make comparisons over time and facilitate cross-period questions. Each theme will receive approximately equal attention over the course of the year.

- Interaction between humans and the environment
- Development and interaction of cultures
- State-building, expansion, and conflict
- Creation, expansion, and interaction of economic systems Development and transformation of social structures.

## US HISTORY & GEOGRAPHY -7253

Prerequisite: None Grade levels: 112
Credits: 10
UC/CSU CATEGORY: A - SOC SCI

This is a required course which builds on the foundation of US History instruction given in 8th grade. The course is an in-depth study of United States History in the 20th century, beginning with the post-civil war reconstruction in the 19th century and ending in the present era. Emphasis will be on reading, writing, thinking and speaking.

## WORLD HISTORY – 7103

Prerequisite: None Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: A - SOC SCI

This is a required course designed to build on the foundations of world history instruction given in middle school (6th & 7th grades). The course examines the major events in world history from the rise of democratic states in the 17th century to the present day. Emphasis will be on reading, writing, thinking and speaking skills.

## WORLD HISTORY ELL – 7135

Prerequisite: Identified as limited-English proficient Grade Levels: 10, 11, 12
Credits, 10
UC/CSU CATEGORY: A - SOC SCI

This course in World History provides limited English proficient students with an introduction and general overview of the areas, issues and problems of the modern World since the Renaissance. Sheltered instructional approaches and techniques are used. This course also develops English and Social Science vocabulary and communication skills. Spanish language assistance is available through a bilingual teacher/paraprofessional and instructional materials in Spanish.

## US HISTORY AP - 7255

Prerequisite: C or higher in World History CP/AP, completion of the AP Entry form
Grade Levels: 11
Credits: 10
UC/CSU CATEGORY: A - SOC SCI

This course should be taken by students who wish for a more rigorous course study in preparation for college and advanced placement exams. Students will be expected to do more, do it quicker and do it better. This course is an in depth study of United States History beginning with the colonial period and ending at present times. Document based research is expected, as well as other reading, writing and speaking assignments.

## US HISTORY ELL – 7286

Prerequisite: Identified as limited-English proficient Grade Levels 10, 11, 12
Credits 10
UC/CSU CATEGORY: A – SOC SCIENCE

This course in US History and Geography provides limited English proficient students with the same content as US History and Geography. The course also develops English and Social Science content vocabulary and communication skills. Language assistance is available in Spanish through a bilingual teacher/paraprofessional and instructional materials in Spanish.

# HISTORY & SOCIAL STUDIES

## AP HUMAN GEOGRAPHY - 7345

Prerequisite: Completion of the AP Entry form
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: A – SOC SCIENCE

AP Human Geography is a college-level course that introduces students to the systematic analysis and description of patterns and processes that have shaped human activities on Earth. This course will help students prepare to pass the AP Exam on Human Geography for college credit.

### HUMAN RIGHTS & CONTEMPORARY SOCIETY- 7346

Prerequisite: C or higher in US or World History
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: G – ELECTIVE

This course will investigate aspects of social psychology in an attempt to learn about human behavior. This course will expose you to the study of genocide (Armenia, Rwanda, Holocaust, Cambodia, etc), hate crimes, exploitation, slavery, women's right, torture, etc. This course requires significant reading, writing, and reflecting.

## PSYCHOLOGY & SOCIOLOGY - 7350

Prerequisite:
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

This course is an elective designed to introduce the student to areas of social studies outside of the traditional History/Government courses. Each semester-long block of instruction will focus on a different social studies area, but throughout the course hands-on learning, experiments and communication skills will be emphasized. Semester 1 will focus on Psychology and students will get a better understanding of themselves and how the individual relates to others. Topics to be covered this semester include: discovering how the brain works, how we learn, stages of human development, human emotions, problem solving, mental health and careers in psychology. Semester 2 will focus on Sociology, and students will study how groups, neighborhoods, cities and societies influence each individual's ideas and behavior. Some of the topics that will be covered are: roles and relationships, values, religion and society and careers in sociology.

## PSYCHOLOGY AP - 7352

Prerequisite: Completion of the AP Entry form
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

This course is an elective designed for 11th and 12th graders who wish to receive college credit in Psychology by passing the Advanced Placement test. This will be a very challenging course which will move quickly and cover a vast amount of material. It will be especially heavy in the biological aspects of Psychology (how the brain operates), various theories of behavior, motivation and personality. This course will give students an analytical perspective on government and politics in the United States. This course prepares students to earn college credits by passing the Advanced Placement test on government and satisfies the 12th grade social studies requirement

### AMERICAN GOVERNMENT & ECONOMICS ELL – 7320

Prerequisite: Identified as limited-English proficient
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: A – SOC SCIENCE

This course is a graduation requirement. The American Government portion of the course consists of one semester, which will focus on how national, state and local governments are organized and function. The Economics semester will survey macro and micro economics. Both courses will stress communications and thinking skills, as well as both individual and group work. This course in American Government/Economics provides limited-English proficient students with the same content as American Government/Economics. The course also develops English and Social Science content vocabulary and communication skills. Spanish language assistance is available through a bilingual teacher/paraprofessional and instructional materials written in Spanish.

## AMERICAN GOVERNMENT/ ECONOMICS - 7391

Prerequisite: None
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: A – SOC SCIENCE (American Gov)
G – ELECTIVE (Economics)

This course is a graduation requirement and must be taken in the 12th grade. The American Government portion of the course consists of one semester, which will focus on how national, state and local governments are organized and function. The Economics semester is designed to develop and promote economic literacy and enhance students understanding of the economic problems and institutions of the nation and the world in which we live.

## US GOVERNMENT AND POLITICS AP - 7383

Prerequisite: C or higher in U.S. History CP/AP, completion of the AP Entry form
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: A – SOC SCIENCE

This course will give students an analytical perspective on government and politics in the United States. This course prepares students to earn college credits by passing the Advanced Placement test on government and satisfies the 12th grade social studies requirement. **This course may not be dropped mid-year.**

# FAMILY & CONSUMER SCIENCE

## CONSUMER HOME ECONOMICS – 5501

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

This is a comprehensive course, which includes mini units in basic areas of home economics. **Personal Development**, **Nutrition and Food:** cooking demonstrations and labs for a variety of different foods. **Sewing:** Beginning sewing techniques.. **Financial Literacy** with a focus on the importance of credit scores, using credit and making good financial decisions.

## CHILD DEVELOPMENT – 5450

Prerequisite: Consumer Home Economics recommended
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: G – ELECTIVE

This course covers the process of human development from conception through early childhood as determined by heredity, society, and personal human interaction with applications for child guidance. Students will explore the responsibilities of parenting an infant by participating in the "Real Care" infant simulation program.

## FOOD & NUTRITION II – 5502

Prerequisite: Consumers Home Ec or approval from Home Ec Teacher
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

This is a comprehensive course, which includes mini units in basic areas of home economics. **Personal Development**, **Nutrition and Food:** cooking demonstrations and labs for a variety of different foods. **Sewing:** Beginning sewing techniques.. **Financial Literacy** with a focus on the importance of credit scores, using credit and making good financial decisions.

## CHILD DEVELOPMENT II - 5541

Prerequisite: Child Development I recommended
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: G – ELECTIVE

This course covers the process of human development from age seven through late adolescence. Students will explore childhood through adolescence within the context of physical, social, emotional, and cognitive development with applications for building positive relationships. Exploration of the variety of childcare programs and career opportunities in our community as well as current issues and trends within the field of child development will also be investigated. Child Development II is a great foundation for students interested in nursing, teaching, psychology, sociology, health, medicine, and human development.

# FINE ARTS COURSES

## ART & DESIGN 1 – 6003

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F – FINEARTS

This course explores the basic elements of art and design: color, value, line, texture, shape, form and space. Specific artists and periods in art history are studied. The basic elements of art are incorporated into two and three-dimensional projects. Experience in various mediums including pencil, charcoal, chalk, pastel, pen and ink, scratchboard, tempera, colored pencil and watercolor will be featured. Student projects may include drawing, painting, printmaking and sculpture

## THREE-DIMENSIONAL DESIGN - 6016

Prerequisite:
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This course is an exploration into various forms of sculpture. Students will have the opportunity to work with a variety of mediums such as: wood, plaster, plastic, wire, glass, clay, etc, in order to develop 3-dimensional skills. This course will emphasize ceramics throughout the year. Students will investigate three- dimensional art forms from the past and present, along with specific artists. Students in this course will be involved in individual creations as well as collaborative projects, which will be visible both on campus and in the community.

This course is designed for students who have successfully completed Art & Design 1. It builds and expands on the knowledge and skills acquired in Art & Design 1. It also applies the elements and principles of art through a variety of mediums and two and three dimensional projects. Students will be encouraged to display their work and participate in class critiques. Careers in art and art programs in higher education institutes will be explored.

## DIGITAL ANIMATION – 6046

Prerequisite: Introduction to Animation Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

Digital Animation is a continuation of Introduction to Animation. The focus for Digital Animation is to further develop drawing skills, increase animation skills and introduce editing skills. Students will be introduced to Lip Syncing. Skills learned in Introduction to Animation are essential for Digital Animation.

## ADVANCED ART & DESIGN – 6008

Prerequisite: Art & Design 1 or Multicultural Art
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This course is designed for students who have successfully completed Art & Design 1. It builds and expands on the knowledge and skills acquired in Art & Design 1. It also applies the elements and principles of art through a variety of mediums and two and three dimensional projects. Students will be encouraged to display their work and participate in class critiques. Careers in art and art programs in higher education institutes will be explored.

# FINE ARTS COURSES

## DRAWING AND PAINTING – 6022

Prerequisite: Art & Design 1 or Multicultural Art
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

The elements and principles of art studied in Art 1 will be applied to a variety of two-dimensional compositions in this drawing and painting course. Second and third-year art students will become more proficient in rendering and painting skills as they work with landscape, still life, portrait and life form subject matter. Examples from master works and self-study will help students to define their own experience. Material, including charcoal, ink, prisma color, scratchboard, tempera paint, watercolor, oil and acrylic paints, will be applied to a variety of surfaces. Students will exhibit work in the student art gallery and participate in the District Art Show.

## GRAPHIC ARTS 1 – 6030

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Graphic Design makes use of words and images in order to interest, inform, persuade and sell. This introductory course will give students the basic knowledge of industry standard computer software such as Adobe Photoshop and Adobe Illustrator. Students will gain an understanding of the art elements and design principles used by artists. Some projects may include but are not limited to: Adobe software tutorials, corporate identity, branding, package product design, advertising and so on. Students are encouraged to have access to digital cameras.

## YEARBOOK PRODUCTION - 6031

Prerequisite: Teacher approval
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

Yearbook Design is a full-year course dedicated to the production of the school yearbook. The yearbook is produced by a student staff and contains a pictorial history of the school year. Students with a "B" average in English may apply to become a staff member. Students wishing to enter the class must obtain a signature from the yearbook teacher. A formal application and interview may also be required, including the recommendation of an English teacher before registration in the Spring. Editors usually have some prior experience in yearbook and have computer skills. Yearbook staff members and editors are required to put in several out-of-school hours covering school events in addition to the class period. Computer experience in Photoshop and Illustrator are not a requirement but a plus.

## ART & HISTORY OF FLORAL DESIGN - 3521

Prerequisite: None
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F – FINEARTS

This course will train students in:

- Floral Design Principles
- Floral Materials
- Floral Techniques
- Flower Preservation
- Floral Career Opportunities

## AP DRAWING – 6020

Prerequisite: Teacher recommendation and submission of AP form
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Advanced Placement Studio Art is an intense course designed for serious art students who are dedicated and self-motivated. Students will be required to make approximately 30 works of art during the course of the year that satisfies the requirements of the Breadth and Concentration of the AP Portfolio. Each student will choose to complete either a Drawing Portfolio or a 2-D Design Portfolio. Through studio practice, application of design concepts and informed decision making students will create a body of work that demonstrates a high level of quality and growth. The option of taking an exam for advanced placement will be made available through the AP College board and is highly encouraged. Students accepted will receive the summer assignments in May.

## MULTICULTURAL ART & DESIGN – 6025

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This course explores the basic elements and principles of art and design through the discovery and understanding of many cultures. Like few other subjects, the arts can unlock meaning and provide entrance into cultures, bringing about mutual understanding and an appreciation of differences. Through participation in art activities, students from many backgrounds are encouraged to explore the artistic richness of their own culture as well as the cultures of others. This course will focus on similarities of artistic expression across cultures, and projects will be experienced in various mediums including pencil, charcoal, chalk, pastel, pen and ink, scratchboard, tempera, colored pencil and watercolor. Student projects may be two and three-dimensional which will include drawing, painting, printmaking, sculpture and paper-mache.

## INTRODUCTION TO ANIMATION – 6036

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Introduction to Animation introduces students to the drawing process and procedure of basic animation. Students will be introduced to the principles and steps in animating a scene, as well as character development. Students will also be introduced to the Pre-production process, which includes script writing, storyboarding, file management, digital storyboard, animatics, audio editing and x-sheets.

# FINE ARTS COURSES (cont)

## TECHNICAL THEATRE - 3067

Grade level: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This is a hands-on course that will introduce students to the behind-the-scenes technical needs in theatrical productions, as well as career options that are available in the theatre. Students enrolled in this course will be exposed to stage and set design, lighting and sound design, costume and make-up design, design history, prop building, stage management, theatre management, and publicity. Students' work will be showcased formally in school productions throughout the year. Students enrolled in the course will need to attend the after-school rehearsals and evening shows of one school production each semester in order to perform the tech for the show. Students can receive credit for three years in this class.

## JAZZ BAND - 6113

Prerequisite: Experienced player and an audition
Grade levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This is an auditioned group of musicians interested in learning and playing jazz styles. Students will be introduced to musical styles such as classic jazz, be-bop and ballads. Students will be required to attend after-school and evening activities (performances and rehearsals) and purchase a uniform. Permission from the instructor is required for admission to this class. Students will gain permission through auditions which will be held in May of the semester before the start of a new school year.

## PIANO KEYBOARD- 6100

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Anyone who wishes to learn to play the piano or to improve their current skills may take this class. Music reading and musicianship skills will be taught. No previous piano experience is necessary. More advanced students will be encouraged to expand their repertoire and to play in performances at the solo/ensemble festival. This course can be repeated for credit, with teacher's permission.

## ADV. PIANO KEYBOARD - TBA

Prerequisite:
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Anyone Students who are looking to continue their piano education and/or interested in pursuing a career in music after high school may take this class. This course builds on the fundamentals provides in its pre-requisite. Topics that will be explored in this class included advance music theory concepts and techniques, leaning about various music genres (classical, jazz, etc.) music composition, improvisation, and performing difficult piano repertoire.

## DRAMA - 6042

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This course is designed to give the student an overview of all the elements of theater. Emphasis is placed on acting, improvisational theatre games and scene study. Skills such as directing and play-writing are also stressed. Students will be introduced to musical theatre, basic set design, costume design and make-up techniques, theatre vocabulary and theatre etiquette.

## ADVANCED DRAMA – 6053

Prerequisite: Drama I with a "C" or better and student audition
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This course is designed to give the advanced drama student additional challenging experiences in acting and directing. Over the year, this class will introduce dialect, study drama of various cultures and do advanced work in Shakespeare, American drama and musical theatre. This course offers experience in set design, costuming, directing other students, further audition techniques and developing an actor's portfolio and director's promptbook. Students will select plays to be directed in the school year and will have the opportunity to act in the plays presented to the public. Students can receive credit for three years in this class.

## CONCERT BAND - 6090

Prerequisite: One year's experience with instrument and approval of the instructor
Grade levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This band will be mainly comprised of freshmen or first-year players. The class will have the components of marching band, pep-band and concert band. Students will play music of varying styles and time periods. Throughout the year, students will be expected to attend co-curricular performances/rehearsals outside of school. Instrumental and musical fundamentals will be reviewed.

## SYMPHONIC BAND - 6093

Prerequisite: Audition on primary instrument and approval by instructor
Grade levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

This band will be comprised of advanced musicians who have met an advanced standard on their primary instrument. The class will be comprised of three sections: marching band, pep band and concert band. Throughout the year, we will explore varying styles and difficulties of music. Instrumental and musical techniques will be discussed on an advanced level.

# FINE ARTS COURSES (cont)

## ADVANCED GRAPHIC DESIGN - 6136

Prerequisite: Teacher approval
Grade Levels: 10,11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Students will continue to develop proper individual vocal and ensemble singing techniques. This is a class for those with singing experience. They will rehearse and perform music of varied styles and periods while focusing on "show" styles that include choreography. They will also gain an understanding of basic musical notation. Singers will be required to attend after school and evening activities (performances and rehearsals) and purchase a uniform. Students can receive credit for four years in this class. Auditions for this group are held in May to allow time for placement and class information.

## WEST HIGH SING 1 – 6133

Prerequisite: None
Grade Levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Students will develop proper individual vocal and ensemble singing techniques. This is a class for those with little to no singing experience. They will rehearse and perform music of varied styles and periods. They will also gain an understanding of basic musical notation. Singers will be required to attend after school and evening activities (performances and rehearsals) and purchase a uniform.

## WEST HIGH SING 2 - 6135

Prerequisite: Beginning Choir and/or audition
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F – FINEARTS

Students will continue to develop proper individual vocal ensemble singing techniques. This is a class for those with singing experience. They will rehearse and perform music of varied styles and periods while focusing on "show" styles that include choreography. They will also gain an understanding of basic musical notation. Singers will be required to attend after school and evening activities (performances and rehearsals) and purchase a uniform. Students can receive credit for four years in this class. Auditions for this group are held in May to allow time for placement and class information. Students can receive credit for four years in this class.

## ORCHESTRAL STRINGS- 6103

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: F - FINEARTS

Orchestral Strings covers techniques, performance practice and historical background of various types of orchestral music. Training in tone, technique, sound production and group rehearsal practices are covered in this class. Students will be required to attend after-school and evening performances. Students can receive four years of credit for this class.

# MATHEMATICS COURSES

## ALGEBRA 1 - 2052

Prerequisite: Grade of "C" or better in Algebra Readiness or teacher recommendation
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

This class is designed to provide for a full year of fundamentals of Algebra. Main topic areas covered are: Integers and rational numbers, Solving Equations, Inequalities, Exponents, Polynomials, Factoring, Graphs and linear equations, Systems of Equations, Absolute Value, Rational Expressions, Radical Expressions, Relations and Functions and Quadratic Equations.

## ALGEBRA 1 ELL - 2070

Prerequisite: Identified limited-English proficient student and teacher recommendation
Grade Levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: C - MATH

This course offers the same content as Algebra 1. It is designed for those limited English proficient students who require a Sheltered Instructional approach in mathematics. This course also develops higher-level, English-math vocabulary. Spanish language assistance is available through a bilingual paraprofessional.

# MATHEMATICS COURSES

## ALGEBRA 1A - 2060

Prerequisite: Grade of "C" or better in Algebra Readiness or teacher recommendation
Grade Levels: 9, 10, 11
Credits: 10
UC/CSU CATEGORY: N/A

This class is part one of a two year Algebra 1 program. The class covers Algebra concepts, CAHSEE concepts and basic math skills that every student should be proficient at. The main Algebra topics covered are: Integers and Rational Numbers, Solving Equations, Inequalities, Exponents, Polynomials and Factoring. Upon successful completion of Algebra 1A, students must complete Algebra 1B to fulfill graduation requirements of Algebra 1.

## ALGEBRA 2 - 2093

Prerequisite: Grade of "C" or better in Algebra 1 AND Geometry
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

Algebra 2 involves using those skills mastered in Algebra 1 and applying them to more complex problems. The course consists of solving advanced equations, operations with rational expressions, negative and fractional exponents, functions, complex numbers, analytic geometry and logarithms. Many students will use this course as preparation for further studies in higher mathematics and science. This course does NOT prepare students for Pre-Calculus Honors.

## GEOMETRY - 2103

Prerequisite: Grade of "C" or better in Algebra and teacher recommendation
Grade Levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: C - MATH

Geometry demands a thorough knowledge of Algebra 1; therefore students enrolling in geometry should have successfully completed Algebra 1. The course consists of the basic properties and reasoning skills as applied to triangles, parallels, constructions, polygons, proportional figures, similarity, circles, area and Volume.

## ADVANCED GEOMETRY - 2110

Prerequisite: Grade of "C" or better in Algebra and teacher recommendation
Grade Levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: C - MATH

Geometry demands a thorough knowledge of Algebra 1; therefore students enrolling in geometry should have successfully completed Algebra 1. The course consists of the basic properties and reasoning skills as applied to triangles, parallels, constructions, polygons, proportional figures, similarity, circles, area and Volume.

## ALGEBRA 1B - 2061

Prerequisite: Grade of "C" or better in Algebra Readiness or teacher recommendation
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

This class is part two of a two year Algebra 1 program. This course reviews concepts taught in Algebra 1A, CAHSEE concepts, basic math skills, and continues with Algebra 1 concepts. Main Algebra topic areas covered are: Graphs and Linear Equations, Systems of Equations, Absolute Value, Rational Expressions, Radical Expressions, Relations and Functions and Quadratic Equations. Upon successful completion of Algebra 1B, students will be prepared to enroll in Geometry.

## ADVANCED ALGEBRA 2 - 2200

Prerequisite: Grade of "B" or better in Algebra 1 AND Geometry Pre-AP
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

The Purpose of Advanced Algebra 2 is to prepare students for the rigors of Pre-Calculus Honors. Algebra 2 Honors will move at a faster pace than Algebra 2 and will cover mathematical concepts not covered in a non-Honors Algebra 2 course. In addition to solving advanced equations, operations with rational expressions, negative and fractional exponents, functions, complex numbers, analytic geometry and logarithms, the students will also solve advanced polynomial equations, solve problems involving trigonometric ratios and the unit circle. The students will cover topics in statistics, series and combinations. This course is articulated with Delta College.

## GEOMETRY ELL – 2106

Prerequisite: Grade of "C" or better in Algebra 1 LEP and teacher recommendation
Grade Levels: 9,10,11,12
Credits: 10
UC/CSU CATEGORY: C - MATH

This course offers the same content as Geometry. It is designed for those limited English proficient students who require a Sheltered Instructional approach in mathematics. This course also develops higher-level, English-math vocabulary. Spanish language assistance is available through a bilingual paraprofessional.

## STATISTICS AP - 2020

Prerequisite: A grade of "B" or better in Algebra 2, Algebra 2 Pre-AP and completion of the AP Entry Form
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

Advanced Placement Statistics is a rigorous, fast-paced college level, non-calculus based course in introductory Statistics. There are four sections to this course: exploring data, planning a study, anticipating patterns and Statistical inference. Extensive work with graphing calculators and computers is required. Individual and group research projects are a significant part of the course. This course is designed to prepare students for the Advanced Placement Statistics Exam.

# MATHEMATICS COURSES (cont)

## AP CALCULUS AB - 2132

Prerequisite: A grade of "B" or better in Pre-Calculus Honors and completion of the AP entry form
Grade Level: 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

Advanced Placement Calculus AB is a college level course taught at the high school. AB Calculus requires college level time and effort. Topics include: Limits, Differentiation, Applications of Derivatives, Derivatives and Integrals involving Logarithmic, Exponential and other Transcendental Functions, Integration and techniques of integration, Area between curves, Volumes of Revolutions and applications of Integration. Towards the end of the school year, an AP exam will be offered for the opportunity to earn college credit at most universities and colleges.

## PRE-CALCULUS HONORS - 2137

Prerequisite: A grade of "B" or better in Algebra 2 Pre-AP Grade
Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

Pre-Calculus Honors is a rigorous preparation for AP Calculus or college mathematics. It is designed for students who have successfully completed Algebra 2 Pre-AP and wish to further their study of advanced mathematics. Topics will include: analytic geometry, derivatives, functions and their graphs, patterns, polar coordinates, quadratic equations, translations, regression equations and trigonometry. This course is articulated with Delta College.

## ADVANCED MATH - 2040

Prerequisite: Grade of "C" or better in Algebra 2 Grade
Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

Advanced Math is a non-honors level course for students who desire a third or fourth year of Math. The course is designed for those students who have not successfully completed Algebra 2 Pre-AP (with at least a C) and are not fully prepared for Pre-Calculus Honors. This course is also for those students who took Algebra 2 (not Pre-AP) and need additional mathematics prior to entry into an Advanced Algebra Course. During the year, students will continue exploring such concepts as functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities, sequences and series, and topics in analytic geometry. Students will be introduced to the trigonometric and inverse trigonometric functions will prove trigonometric identities and solve trigonometric equations. Throughout the year, students will apply concepts learned to solve real-life problems, developing problem-solving strategies and critical thinking skills.

## AP CALCULUS BC – 2134

Prerequisite: A grade of "A" in Pre-Calculus Honors with teacher recommendation and completion of the AP entry form
Grade Level: 12
Credits: 10
UC/CSU CATEGORY: C - MATH

Advanced Placement Calculus BC is the most rigorous math course offered. It is a college course taught at the high school with the expectations of students willing and eager to work at the college level. The course will include all the subjects taught in the AP Calculus AB program and many additional topics. Topics include: Functions, Graphs, Limits, Derivatives, Integrals, Polynomial Approximations and Series and Taylor Series. In addition, the use of a graphing calculator will be taught. Towards the end of the school year, an AP exam will be offered for the opportunity to earn college credit at most universities and colleges.

## AP COMPUTER SCIENCE A - 3317

Prerequisite: Concurrent Enrollment in Algebra 2
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: C - MATH

AP Computer Science A is equivalent to a first-semester, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using the Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. This class is designed to prepare students to take and pass the Advanced Placement (AP) Examination in Computer Science A. The design of the course is to provide rigorous content and coursework to challenge students to develop a high-level understanding of the principles of computer programming. A part of this rigorous content is the inclusion of at least 20 hours of hands-on lab experience. Throughout the school year, students will work independently, in pairs, or in small groups to investigate problems. Students will work and share with their peers as they design computer-based solutions to these problems

# WORLD LANGUAGES COURSES

## MODERN LANGUAGE 1

**SPANISH – 4033 | FRENCH - 4013**

Prerequisite: a "C" or higher in English and English teacher recommendation
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: E – LANGUAGE OTHER THAN ENGLISH

The first year course stresses communication and interpersonal relationships in meaningful cultural contexts. Students will learn to speak about themselves, their families and their preferences. They will be given frequent opportunities to express themselves both orally and in writing. Students will read simple passages in the target language. The class will be taught mostly in the target language. *Daily attendance is necessary for students to be successful in a foreign language.

## MODERN LANGUAGE 2

**SPANISH – 4153 | FRENCH - 4123**

Prerequisite: a "C" or better in Modern Language 1 and teacher recommendation
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: E – LANGUAGE OTHER THAN ENGLISH

Upon entering this class, a student must be able to comprehend and accurately utilize material covered in level 1. Students will continue to learn how to communicate and be able to talk about past events as well as their future plans. As their vocabulary skills grow, they will apply them in a variety of conversational and cultural situations. A student should be able to comprehend short readings in the target language. Oral and written skills will be expanded. Students should expect to be assigned daily homework. Strong study skills, self-discipline and daily attendance are necessary. The class will be taught mostly in the target language.

## MODERN LANGUAGE 3

**SPANISH – 4270 | FRENCH - 4230**

Prerequisite: a "C" or better in Modern Language 2 and teacher recommendation

A student entering this class must thoroughly understand and utilize the material covered in level 2. Students will continue practicing the material learned the previous two years. They will learn more sophisticated language skills and will be able to communicate about global issues. The cultures of the target language will continue to be explored. Students will read short stories, legend, poetry and articles. Students will develop essay writing skills. The class will be taught in the target language. Daily homework will be assigned. Strong study skills, self-discipline and daily attendance are required.

## AP SPANISH LANGUAGE 4

**SPANISH – 4385**

Prerequisite: A grade of "C "or better in Modern Language 3, teacher recommendation and completion of the AP Entry form
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: E – LANGUAGE OTHER THAN ENGLISH

This is an advanced college-level course in language preparation for the Advanced Placement Exam. Students will expand their knowledge of grammar, read short stories and articles with ease and understanding, converse with considerable fluency and write with correctness and clarity on topics of non-technical nature in order to be successful in the class. Responsibility and daily attendance are essential. No English will be used in this class.

## AP SPANISH LITERATURE 5

**SPANISH – 4390**

Prerequisite: A grade of "C "or better in Spanish 4, teacher recommendation and completion of the AP Entry form
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: E – LANGUAGE OTHER THAN ENGLISH

The Advanced Placement Spanish Literature course is intended to be the equivalent of a third-year college Introduction to Literature in Spanish. Covering selected works from the literatures of Spain and Spanish speaking America. Since students read and analyze literature orally and in writing in Spanish for this purpose, the language proficiency reached by the end of the Advanced Placement course is generally equivalent to that of college students who completed a fifth or sixth semester of Spanish in composition, conversation, and grammar.

## SPANISH FOR SPANISH SPEAKERS 1 – 4103

Prerequisite: Native Spanish speakers only and a "C" or higher in English and English teacher recommendation
Grade Levels: 9 , 10. 11, 12
Credits: 10
UC/CSU CATEGORY: E – LANGUAGE OTHER THAN ENGLISH

This course is designed for students who speak Spanish at home but need to learn or improve how to write and read it. Students will learn the difference between formal Spanish and informal Spanish. This course will provide a basic introduction to Spanish grammar, spelling, academic language development, basic writing, and reading skills. Students will learn the culture and history of selected Spanish speaking countries and will be introduced to selected Hispanic literary works including short stories, plays, and poems. Students should expect to be assigned homework on a daily basis. Emphasis is placed on building a good foundation in Spanish language skills that will enable the student to become bi-literate and successful in advanced Spanish courses, leading to the California State Seal of Biliteracy. Most instruction is in Spanish.

## SPANISH FOR SPANISH SPEAKERS 2 – 4053

Prerequisite: Native Spanish speakers only and a "C" or higher in English and English teacher recommendation
Grade Levels: 9 , 10. 11, 12
Credits: 10
UC/CSU CATEGORY: E – LANGUAGE OTHER THAN ENGLISH

Spanish for Native Speakers 2 expands on the Spanish Language Arts skills presented in Spanish for Native Speakers 1. Advanced grammar, writing listening and speaking skills are developed. Also core readings from Hispanic literature and experiences form the basis of the course. Spanish speakers are prepared for advanced Spanish courses leading to the California State Seal of Biliteracy. Students who successfully complete this course (with a B or better) may advance to Spanish 4 the following year. All instruction is in Spanish.

# PHYSICAL EDUCATION COURSES

## CORE 9 PE - 9001

Prerequisite: None
Grade Level: 9
Credits: 10
UC/CSU CATEGORY: N/A

This is a required course for freshmen that will emphasize fitness development. Units will be broken into 3-week blocks of instruction and activity, and include a timed weekly cardio-vascular fitness run for all students. Activities offered will include team, individual and lifetime sports. Gym clothes are required (athletic shoes, PE shirt, and PE shorts). Grading is based on participation, effort and skill attainment.

## AEROBICS - 9201

Prerequisite: None
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This class is designed to be a complete exercise program. It should benefit the entire body, especially the heart and lungs. It works to improve flexibility, strengthen and tone muscles and improve coordination, balance and agility. It should aid in burning calories; this helps in losing inches and taking off pounds. Sometime will be spent on nutrition and healthful eating. The class will be hard work but should be fun for the student serious about health and body. Class may be taken more than once for credit.

## SPEED & POWER DEVELOPMENT - 9430

Prerequisite: None
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: CATEGORY

This course is designed to provide the opportunity to develop high levels of fitness through involvement in weight training, running and calisthenics. Speed & Power can be used to fulfill the Advanced PE requirement for graduation. Class may be taken more than once for credit.

## ADVANCED PE - 9101

Prerequisite: None
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This is a varied activity course which is required for all 10th graders and recommended for 11th and 12th graders. Units will be broken into 3-week blocks of instruction and activity, and include a timed weekly cardio-vascular fitness run for all students. Students will have the opportunity to participate in such activities as volleyball, badminton, aerobics, basketball, step-aerobics, weight training, floor hockey, cross-country running and sports medicine; as well as many others. Gym clothes are required (athletic shoes, PE shirt, and PE shorts). Grading is based on participation, effort and skill attainment.

## COMPETITIVE ATHLETICS - 9400

Prerequisite: **Signature required from Athletic Director or Coach**
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed only for students who meet academic eligibility requirements and participate in interscholastic athletics at West High. This class is offered sixth period only. Students must have the Athletic Director's or Coach's written consent to enroll in the course. Class may be taken more than once for credit. There is not enough space in this class for all athletes. Priority is given to those who play multiple sports and/or play a sport that often leaves early.

# SCIENCE COURSES

## BIOLOGY P – 3136

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

Biology is the natural science that involves the study of life and living organisms, including their physical and chemical structure, function, development and evolution. This course gives students a good foundation in Biology with related Earth Science phenomena and Engineering applications. The following topics will be covered: cell structure and function; mitosis and cell division; cell differentiation; systems of specialized cells; homeostasis and feedback mechanisms; energy and matter flow through ecosystems; ecosystem dynamics; photosynthesis and cellular respiration; history of earth's atmosphere and biogeochemical cycles; DNA structure and function; meiotic cell division; genetics; DNA replication; protein synthesis; evidence of evolution; natural selection and adaptations; social interactions and group behavior; ecosystem stability and its response to climate change; the influence of natural resource availability, natural hazards, and changes in climate on human populations; human impacts on ecosystems; natural resources and global climate change; conservation of natural resources-solutions and sustainability. This course meets all NGSS standards for Biology and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## AP ADVANCED BIOLOGY – 3339

Pre-requisite: A "C" or better in Chemistry Honors, "C" or better in Biology Pre-AP or Engineering 2 and completion of the AP entry form
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

Advance Biology is a one-year course for those students who are interested in a career in a Biological Science or who enjoy Biology and want the challenge of a rigorous honors class. Some of the topics covered include: biochemistry, cells, genetics, evolution and human biology. This course is equivalent to a first-year college Biology course and uses a college text. This course is designed to prepare students to take the AP Biology Exam in the spring; students who score well on this exam can earn advanced placement and/or college credit in Biology. This course qualifies for UC Honors credit. This course has a required summer assignment.

## BIOLOGY ELL - 3153

Prerequisite: ELL Student
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

These courses are designed for students that are English Learners. They cover the same core content as Biology, with additional support for English learners. For the ELL course, students should be below the Intermediate level on their CELDT scores. Topics presented include cell structure and function, ecology, molecular biology, evolution, human body systems and genetics.

## ENHANCED BIOLOGY – 3163

Prerequisite: Elementary Algebra
Grade Levels: 9
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

Biology is the natural science that involves the study of life and living organisms, including their physical and chemical structure, function, development and evolution. This course gives students a good foundation in Biology with related Earth Science phenomena and Engineering applications. In addition, Enhanced Biology provides students with the additional skills and content necessary for advanced study in the sciences. The following topics will be covered: cell structure and function; mitosis and cell division; cell differentiation; systems of specialized cells; homeostasis and feedback mechanisms; energy and matter flow through ecosystems; ecosystem dynamics; photosynthesis and cellular respiration; history of earth's atmosphere and biogeochemical cycles; DNA structure and function; meiotic cell division; genetics; DNA replication; protein synthesis; evidence of evolution; natural selection and adaptations; social interactions and group behavior; ecosystem stability and its response to climate change; the influence of natural resource availability, natural hazards, and changes in climate on human populations; human impacts on ecosystems; natural resources and global climate change; conservation of natural resources-solutions and sustainability. This course meets all NGSS standards for Biology and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## ENHANCED BIOLOGY ACADEMY – 3360

Prerequisite: Membership in Space & Engineering
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This is the second-year science course for students in the Space and Engineering Academy. Biology is the natural science that involves the study of life and living organisms, including their physical and chemical structure, function, development and evolution. This course gives students a good foundation in Biology with related Earth Science phenomena and Engineering applications. Engineering practices are integrated into this course through team design projects. A connection to space sciences is made by relating topics to the colonization of Mars. This course also provides students with skills and content necessary for additional study in science and engineering. The following topics will be covered: cell structure and function; mitosis and cell division; cell differentiation; systems of specialized cells; homeostasis and feedback mechanisms; energy and matter flow through ecosystems; ecosystem dynamics; photosynthesis and cellular respiration; history of earth's atmosphere and biogeochemical cycles; DNA structure and function; meiotic cell division; genetics; DNA replication; protein synthesis; evidence of evolution; natural selection and adaptations; social interactions and group behavior; ecosystem stability and its response to climate change; the influence of natural resource availability, natural hazards, and changes in climate on human populations; human impacts on ecosystems; natural resources and global climate change; conservation of natural resources-solutions and sustainability. This course meets all NGSS standards for Biology and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

# SCIENCE COURSES

## CHEMISTRY – 3266

Prerequisite:
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This course gives students a good foundation in Chemistry with related Earth Science phenomena and Engineering applications. The following topics will be covered: scientific measurements, combustion, conservation of mass and energy, atomic structure and bonding, Coulomb's law, the internal structure of the earth, feedback loops, thermochemistry, periodic table, chemical reactions, stoichiometry, Le Châtelier's law, reaction rates, greenhouse gases, climate change and human effects, solutions, acids and bases, the carbon cycle, resource management, and engineering designs. This course meets all NGSS standards for Chemistry and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## ENHANCED CHEMISTRY ACADEMY – 3370

Prerequisite:
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This is the third-year science course for student in the Space and Engineering Academy. Chemistry is the study of matter – its structure, functions, and interactions. This course gives students a good foundation in Chemistry with related Earth Science phenomena. Engineering practices are integrated through team design projects. The application of chemistry to space science is also a theme in this course. This course also provides students with skills and content necessary for additional study in science and engineering. The following topics will be covered: scientific measurements, combustion, conservation of mass and energy, atomic structure and bonding, Coulomb's law, the internal structure of the earth, feedback loops, thermochemistry, the periodic table, chemical reactions, stoichiometry, Le Chatelier's law, reaction rates, climate change and human effects, solutions, acids and bases, the carbon cycle, and resource management. This course meets all NGSS standards for Chemistry and Engineering Design, and many NGSS standards for the Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## CHEMISTRY ELL – 3723

Prerequisite: A "C" or better in Biology ELL and must be an identified ELL student
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

These courses are designed for students that are English Learners. They cover the same core content as Chemistry, with additional support for English learners. For the ELL course, students should be below the Intermediate level on their CELDT scores. For the SDAIE course, students should be at an Intermediate level or better on their CELDT scores. Topics covered will include lab safety & procedures, matter & its classification, the periodic table, chemical bonding, chemical reactions, states of matter, solutions, acids & bases and atomic structure. This course meets all California State Standards in Chemistry.

## ENHANCED CHEMISTRY – 3294

Prerequisite: Elementary algebra, completion of biology
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This course gives students a good foundation in Chemistry with related Earth Science phenomena and Engineering applications. In addition, Enhanced Chemistry provides students with the additional skills and content necessary for additional study in the sciences. The following topics will be covered: scientific measurements, combustion, conservation of mass and energy, atomic structure and bonding, Coulomb's law, the internal structure of the earth, feedback loops, thermochemistry, periodic table, chemical reactions, stoichiometry, Le Châtelier's law, reaction rates, greenhouse gases, climate change and human effects, solutions, acids and bases, the carbon cycle, resource management, and engineering designs. This course meets all NGSS standards for Chemistry and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## AP CHEMISTRY – 3295

Prerequisite:
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

AP Chemistry is an introductory college Chemistry course. In this course, students will attain a depth of understanding of chemistry fundamentals and a reasonable competence in dealing with chemical problems. Students will develop their abilities to think clearly, and to express their ideas, orally and in writing, with clarity and logic. This course is different from Chemistry or Honors Chemistry in that it uses a college textbook, it covers more advanced topics, it emphasizes chemical calculations and the mathematical formulation of principles, and it involves more advanced laboratory work. This course is designed to prepare students to take the AP Chemistry Exam in the spring; students who score well on this exam can earn advanced placement and/or college credit in Chemistry. This course qualifies for UC Honors credit. This course has a required summer assignment.

## PHYSICS ELL – 3331

Prerequisite: A "C" or better in Biology ELL and must be an identified ELL student
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This course is designed for English Learners. It covers the same core content as Physics, with additional support for English Learners. Physics is the study of matter and energy and the interaction between them. Physics is about asking fundamental questions about the world around us, and trying to answer them by observing and experimenting. This course gives students a good foundation in Physics with related Earth Science phenomena and Engineering applications. This course meets all NGSS standards for Physics and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

# SCIENCE COURSES

## AP PHYSICS C: MECHANICS - 3316

Prerequisite: A "C" or better in Pre-Cal, Chemistry or Physics, concurrent enrollment in Calculus and completion of the AP Entry form.
Grade Levels 11, 12
Credits 10
UC/CSU CATEGORY: D - LAB SCIENCE

AP Physics C: Mechanics focuses on one area of Physics and studies it in great depth and detail. Topics covered include one- dimensional motion, two-dimensional motion, laws of motion, energy, momentum, rotational motion and harmonic motion. This course requires students to use high-level problem solving and critical thinking skills and advanced math concepts including Calculus. This course uses an introductory college physics textbook and prepares students to take the Advanced Placement Physics C: Mechanics exam. AP Physics C: Mechanics is designed for students who are planning a career in science or Engineering, whether or not they plan to use this course to obtain advanced placement. This course qualifies for UC Honors credit.

## ENHANCED PHYSICS ACADEMY - 3380

Prerequisite: Membership in the Space & Engineering Academy
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This is the first-year science course for students in the Space and Engineering Academy. Physics is a foundational science course for studies in space science and engineering. Physics is the study of energy and the interactions between matter and energy. Physics is about asking fundamental questions about the world around us, and trying to answer them by observing and experimenting. This course gives students a good foundation in Physics with related Earth Science phenomena. Engineering practices are integrated into this course through team design projects, one for each unit of study. The application of physics to space science is also a theme in this course. This course also provides students with skills and content necessary for additional study in science and engineering. The following topics will be covered: motion, laws of motion, mechanical energy, momentum, gravity and motion in space, fluids, waves, light and optics, electricity and magnetism, nuclear energy, and electric power. This course meets all NGSS standards for Physics and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## AP PHYSICS 1 - 3315

Pre-requisite: A "C" or better in Algebra 1, Biology ELL and must be an identified ELL student recommendation
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This course will prepare students for the AP exam in AP Physics. This course provides a systematic introduction to the main principles of physics and emphasizes the development of conceptual understanding and problem-solving ability using algebra and trigonometry, but rarely calculus. The course provides a foundation in physics for students in the life sciences, premedicine, and some applied sciences, as well as other fields not directly related to science. The five main content areas that are included to prepare students for the AP exam are: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics.

## ENHANCED PHYSICS – 3311

Grade Levels 10, 11, 12
Credits 10
UC/CSU CATEGORY: D - LAB SCIENCE

Physics is the study of matter and energy and the interaction between them. Physics is about asking fundamental questions about the world around us, and trying to answer them by observing and experimenting. This course gives students a good foundation in Physics with related Earth Science phenomena and Engineering applications. In addition, Enhanced Physics provides students with the additional skills and content necessary for advanced study in the sciences. The following topics will be covered: forces, laws of motion, structures, plate tectonics, momentum, collisions, universal gravity, Kepler's laws, planetary motion, waves, earthquakes, wave technology, the nature of light, optics and light spectra, the big bang theory, electrostatics, electricity and circuits, magnetism and electromagnetic induction, energy, power plants, renewable sources, nuclear radiation and processes, and history of the Earth, stars and the universe. This course meets all NGSS standards for Physics and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## PHYSICS – 3330

Prerequisite: Biology
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

Physics is the study of matter and energy and the interaction between them. Physics is about asking fundamental questions about the world around us, and trying to answer them by observing and experimenting. This course gives students a good foundation in Physics with related Earth Science phenomena and Engineering applications. The following topics will be covered: forces, laws of motion, structures, plate tectonics, momentum, collisions, universal gravity, Kepler's laws, planetary motion, waves, earthquakes, wave technology, the nature of light, optics and light spectra, the big bang theory, electrostatics, electricity and circuits, magnetism and electromagnetic induction, energy, power plants, renewable sources, nuclear radiation and processes, and history of the Earth, stars and the universe. This course meets all NGSS standards for Physics and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation.

## HUMAN PHYSIOLOGY – 3203

Prerequisite:
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: D - LAB SCIENCE

This course is for those students interested in careers in any field related to health or medicine. While it is NOT an Advanced Placement course, this course uses a college textbook and is taught at the first-year college level. This course includes the study of the human body, its structure and how it functions. The course concentrates on the organ systems making up the human body. Each of the 19 chapters covered in this course includes a lab that is directed toward the anatomy of the organ system being studied and a lab directed toward its physiology. Dissections are a required part of this course. Students need good study and organizational skills, above average reading ability and excellent vocabulary skills.

# SCIENCE COURSES (cont)

## ENGINEERING DESIGN – 3354

Prerequisite:
Grade Levels: 11
Credits: 10
UC/CSU CATEGORY: D - SCIENCE

This is a required junior science course for students in the Space & Engineering Academy. In this course, the focus is on the engineering design process. Students learn to think and act like engineers, using engineering design methods. Students learn to use Creo, a 3D engineering design program used by professional engineers, as well as other simulation and programming software. Students also learn technical communication through engineering notebooks and oral presentations. Students do long-term projects where they design a solution to an engineering problem, create a working model of their solution, and test the performance of their models. Projects are taken from different areas of engineering, including Civil Engineering (road bridges), Aerospace Engineering (payload rockets), and Robotic Engineering (rescue robots). For the rocket project, students design the nosecone of their rocket in Creo and print it on a 3D printer.

## PRODUCT DESIGN – 3356

Prerequisite:
Grade Levels: 12
Credits: 10
UC/CSU CATEGORY: D - SCIENCE

This is an elective senior science course for students in the Space & Engineering Academy. This course continues the development of students' engineering skills with a focus on Product Development. Students learn more advanced features in Creo and learn about the product development process – using engineering design to develop a product that will be sold to consumers. This course is a "MakerSpace" – a place where inventors design and prototype products. Students do long-term projects where they design a new product and create a working prototype. Students also develop marketing and support materials for their products, such as web pages, video games, and user guides. In the first semester students design mechanical products which they print on our 3D printers. In the second semester students learn electronics and then design and make a smart device or "Internet of Things" device.

# SPECIAL EDUCATION COURSES

## ALGEBRA MM- 8223

Prerequisite: A "C" or better in Math MM
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This class will cover Algebra using a standards based curriculum that covers integers and rational numbers to quadratic equations used in a wide variety of problem solving situations. The material will be covered at a pace more appropriate for each student's individual learning needs.

## MATH MM - 8233

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This is a yearlong course, which emphasizes basic math survival skills through a hands-on approach. Areas covered are: budgeting, figuring a paycheck, consumer education, credit, measurement, banking, buying a car, vacation planning, apartment living, goal setting and decision making. An Individualized Math Program, which is standardized based, will prepare students to transition from special education to a general education math class.

## ACADEMIC SUPPORT - 8278

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 5
UC/CSU CATEGORY: N/A

This course is designed to assist students with regular education academic classes. Students will spend time learning strategies designed to enhance their performance in content areas.

## ENGLISH MM - 8258

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to increase the student's basic understanding of reading, oral and written language and spelling skills. Each student will be working toward successful completion of the high school certificate of completion. This course prepares students for successful advancement to the Accommodated English program. State grade-level standards and high school exit exam standards are not comprehensively addressed.

## WORLD HISTORY MM - 8235

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to increase the student's understanding of World History, from the earliest world cultures to the present day. Emphasis will be on reading, writing and speaking skills, using individual and group work.

## ECONOMICS/GOVT MM – 8239

Prerequisite: None
Grade Levels: 9,10, 11, 12
Credits: 10

This course fulfills a high school graduation requirement in Social Science.

## US HISTORY MM - 8236

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to build on the foundation of US History instruction given in middle school (8th grade). The course examines the major events in US History from the earliest American cultures to the present day. Emphasis will be on reading, writing and speaking skills, using individual and group work.

## BIOLOGY MM– 8260

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

These courses are designed to increase the student's understanding of concepts in physical science, earth science and life science. The curriculum will cover the properties and characteristics of matter, life cycles of plants and animals, the human body and discovering planet earth and the solar system. The curriculum is standards- based and will give the students an opportunity to gain scientific- process skills, such as observing, collecting and organizing data, measuring, classifying, hypothesizing and predicting. These skills will be explored with collaborative groups working independently, projects, labs and class discussions.

## CHEMISTRY MM– 8311

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course gives students a foundation in Chemistry with related Earth Science phenomena and Engineering applications. The following topics will be covered: scientific measurements, combustion, conservation of mass and energy, atomic structure and bonding, Coulomb's law, the internal structure of the earth, feedback loops, thermochemistry, periodic table, chemical reactions, stoichiometry, Le Châtelier's law, reaction rates, greenhouse gases, climate change and human effects, solutions, acids and bases, the carbon cycle, resource management, and engineering designs. This course meets all NGSS standards for Chemistry and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation. This course will be offered to students with an Individuated Education Plan (IEP) that require a smaller setting and or additional supports.

## PHYSICS MM– 8312

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

Physics is the study of matter and energy and the interaction between them. Physics is about asking fundamental questions about the world around us, trying to answer them by observing and experimenting. This course gives students a good foundation in Physics with related Earth Science phenomena and Engineering applications. The following topics will be covered: forces, laws of motion, structures, plate tectonics, momentum, collisions, universal gravity, Kepler's laws, planetary motion, waves, earthquakes, wave technology, the nature of light, optics and light spectra, the big bang theory, electrostatics, electricity and circuits, magnetism and electromagnetic induction, energy, power plants, renewable sources, nuclear radiation and processes, and history of the Earth, stars and the universe. This course meets all NGSS standards for Physics and Engineering Design, and many NGSS standards for Earth and Space Sciences. This is one of three science courses that are required for high school graduation. This course will be offered to students with an Individuated Education Plan (IEP) that require a smaller setting and or additional supports.

## ALGEBRA READINESS MM - 8292

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

Algebra Readiness MM This is a remedial course for freshmen students who are not ready to take Algebra I. The course includes the study of the pre-algebraic skills and concepts described in the Mathematics Framework for California Public Schools. The nine topics covered are whole numbers, operations on whole numbers, rational numbers, operations on rational numbers, symbolic notation, equations and functions, the coordinate plane, graphing proportional relationships, and algebra.

## ENGLISH SKILLS - 8280

Prerequisite: None Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

In addition to Language, this course helps students recognize and understand survival vocabulary Students in this course are working toward a Certificate of Completion and must have an active Individual Education Plan (IEP) on file

## MATH SKILLS - 8281

Prerequisite: None Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to help students recognize coins and bills, count out specified amounts of money using coins and/or bills, and to learn how to make and count change. Students in this course are working toward a Certificate of Completion. Any student enrolled in this course must have an active IEP on file.

## SCIENCE SKILLS- 3128

Prerequisite: None Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This course is designed to help in science skills. Students in this course are

working towards a Certificate of Completion. Any student enrolled in this course must have an active IEP on file.

## HISTORY SKILLS- 8279

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This elective course is designed to build on previously learned topics in social sciences including US History, World History, Economics, Government and Civics. The course examines major events, people, and places in history as well as key topics in economics, government and civics. Emphasis will be on reading, writing, critical thinking, communication and technological skills. Teaching methods will include individual and small group work; group projects to encourage and enhance socialization and communication; art and/or hands-on projects to encourage various ways of learning as well as creativity.

## VOCATION ED. SKILLS - 8266

Prerequisite: None
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

The Independent Living course is an elective class in Special Education for students working for a certificate of completion. It is designed to teach practical and functional skills that will help the students as they get older and get them thinking about living on their own. The students learn various household tasks: dusting, sweeping, decorating, planting flowers and watering plants. The students complete mock job applications. Kits are used for learning the concept of money and how to spend it at a simulated grocery store. Certain ommercials on television are reviewed to better understand persuasion. The Recycle Club Project emphasizes recycling and teaches about the California Redemption Value.

# NON DEPARTMENTAL COURSES

## AVID (Advancement Via Individual Determination)

**9th grade – 0115 | 10th grade – 0215 | 11th grade – 0315 | 12th grade - 0415**

Prerequisite: Application and teacher recommendation
Credits: 10 credits per grade level

The AVID course is an elective class for students who are college bound. While concurrently enrolled in a four-year college preparatory course of study, including appropriate honors level courses, students learn strategies to enhance success. To ensure success in coursework, students work individually, as well as in tutor-led collaborative groups. Note taking, outlining, writing, speaking, reading, test-taking strategies and self-awareness are stressed. In addition, the course includes college motivational activities. The AVID curriculum focuses on writing, inquiry, collaboration, organization, and reading (WICOR) through the AVID High School Libraries in both teacher and tutor-led activities.

## CONFLICT MANAGEMENT – 0700

Prerequisite: Application and teacher recommendation Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

Conflict Management is designed to provide comprehensive, skills-based training for student conflict management. The course will prepare students to facilitate student conflicts before conflicts become physical. Students will be trained in communication, decision-making, self-awareness, listening skills and helping skills. After being trained, student conflict mediators will be available during their class period to facilitate conflicts, contributing towards a safer campus

## LEADERSHIP - 8460

Prerequisite: Application and teacher recommendation Grade Levels: 9, 10, 11, 12
Credits: 10

The student leadership course at West High is mandatory for elected and appointed student council officers of the 10th, 11th and 12th grades. The 9th grade president, when selected, will also be enrolled. Students who meet eligibility requirements, have teacher references, course instructor approval, are interested in elected or appointed positions as ASB officers, class officers or commissioners, meet the prerequisites for enrollment. This is a great opportunity for students! Elections take place in the spring of each year prior to the upcoming school year with the exception of freshmen. This class may be repeated for credit.

## MATH TUTOR- 8040

Prerequisite: Teacher recommendation
Grade Levels: 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

The Math Tutor is a tutor in one of the following courses: Algebra Readiness, Algebra IA, Algebra IB or Algebra 1. The tutor is to support students in their understanding of mathematics. The tutor must have good attendance, good character, study skills and communication skills.

## AVID TUTOR - 8130

Prerequisite: Recommendation from Ms. Tomlin or Ms. Williams
Grade level: 11, 12
Credits: 10

Avid tutoring is a full-year course of one period per day to assist the AVID teacher in working with AVID students who need help in improving their study skills and academic performance in the areas of English, math, social studies and science. Must have good study skills and good grades, and must be willing to participate in 16 hours of training.

## JOURNALISM - 1363

Prerequisite: Teacher approval, through application and interview
Grade Levels: 10, 11, 12
Credits: 10
UC/CSU CATEGORY: G - ELECTIVE

The journalism class publishes the student newspaper, The Zephyr. Students are taught how to write for news, sports, features and opinion sections in the journalistic style and instructed in the responsibility of the free press.
Students will interview students, staff and community members for stories that pertain to our population, write, and take pictures and layout the paper on the computer. Students should be responsible and demonstrate maturity. Students may be required to work after school covering various activities. Some students will be selected for editorial and layout positions. Skills learned involve writing, interviewing, time management and journalistic integrity. Students will end with a portfolio they can use for journalism job applications and a college newspaper

## WORK EXPERIENCE

**1 HOUR - 8472 | 2 HOUR - 8572**

Prerequisite: 16 years of age, employed and completion of appropriate forms
Grade Levels: 11, 12
Credits: 10

Students wishing to enroll in work experience should see their counselor for the preliminary application. Preliminary applications will be accepted on a first come first serve basis. Students must be 16 years of age, have less than 16 hours of Saturday School and be employed at an acceptable job station in Tracy. Enrollment forms must be returned to the coordinator of Work Experience. All Work Experience students are required to attend related instruction classes.

# NON DEPARTMENTAL COURSES

## SENIOR ODYSSEY - 0131

Prerequisite:
Grade Levels: 12
UC/CSU CATEGORY: N/A

Journey through your senior year with Senior Odyssey. Each senior has a story to reflect on that is their own. We are each the hero of our own life story. 12th grade year is a "call to adventure" where we are tested and must have resilience. How do we move from our teenage years and learn how to become an adult? How do we grow ourselves up in the world we live in today? The focus is a self- journey where we reflect on our personal goals, our personal struggles and find the reward of growth through gratitude and wisdom. Topics include problem solving, surviving the teenage brain, resilience, the value of gratitude, sustained happiness, and wisdom for our future self. The course includes group discussion through Socratic Seminar, group and individual projects, presentations, reading, writing and reflection.

## INTRO TO TEACHING ED- TBA

Prerequisite:
Grade Levels: 10,11,12
UC/CSU CATEGORY: N/A

Do you enjoy helping others? Do you want to be on the path to a rewarding career in education as a teacher or counselor? This course is the first course in a career path to transfer to college and earn a degree and teaching credential to teach Pre K - 12th grade. Students will study human development; standards, regulations, and codes; positive guidance and counseling techniques; age-appropriate and grade-appropriate learning strategies; learning theories; and how to design instruction for all levels.

## AIR FORCE JROTC – 0514

Prerequisite:
Grade Levels: 9, 10, 11, 12
Credits: 10
UC/CSU CATEGORY: N/A

This class is taught in a pseudo-military environment however the main focus is on improving citizenship through leadership and aviation history studies. There is no obligation to join the military. Students become cadets and are expected to comply with Air Force hair and grooming standards and also wear Air Force JROTC uniforms on a weekly basis. (Uniforms are provided to the cadet at no cost.) The weekly schedule typically has three days of lecture/activity, one day of drill, and one day of intense physical training. There are also before school and after school activities that cadets may choose to participate in as well: Color Guard, Fitness Team, Kitty Hawk Air Society (Honors group) and Drill Team. Leadership opportunities are extended to those cadets that take the initiative and prove they can handle the extra responsibility. Finally, cadets will experience several community service opportunities, military based ceremonies and field trips that enhance the curriculum.