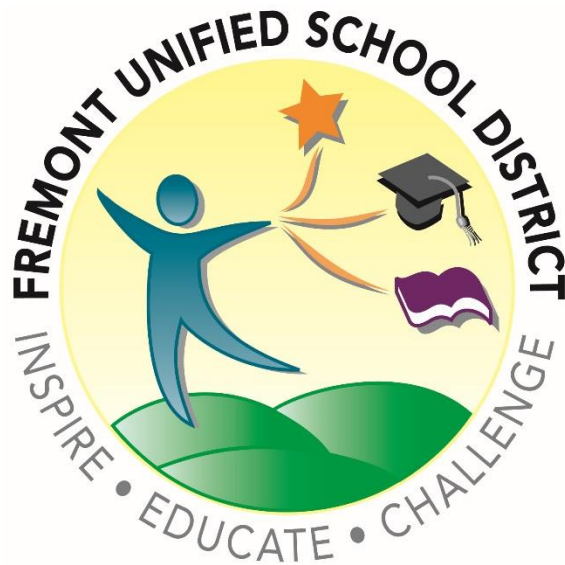


*Fremont Unified School District*

# High School Course Catalog



*2017-2018*

# **Fremont Unified School District**

## **High School Course Catalog**

**2017-2018**



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Secondary Education  
James Maxwell, Director

# Fremont Unified School District Information

District Website: <http://www.fremont.k12.ca.us>

(High school web pages may be accessed through the district web page.)

## **FUSD COMPREHENSIVE HIGH SCHOOLS:**

American High School	36300 Fremont Blvd.	(510) 796-1776
Irvington High School	41800 Blacow Rd.	(510) 656-5711
John F. Kennedy High School	39999 Blacow Rd.	(510) 657-4070
Mission San Jose High School	41717 Palm Ave.	(510) 657-3600
Washington High School	38442 Fremont Blvd.	(510) 505-7300

## **GENERAL INFORMATION:**

All FUSD high schools are fully accredited by the Western Association of Schools and Colleges (WASC).

All FUSD Comprehensive High Schools offer the following:

- Core curriculum classes which meet the FUSD graduation requirements.
- Full spectrum of college preparatory classes, grades 9-12.
- Course content aligns with state curriculum standards.
- Special education classes.
- Instruction for students with limited English proficiency.
- A variety of elective course offerings.
- A wide selection of extra-curricular and co-curricular activities.
- Opportunities to participate in R.O.P. classes both on and off home school campuses.
- Some Ohlone College courses on home school campuses.
- Honors and Advanced Placement classes.
- Academic, career, and personal counseling services.
- Committees and organizations for parent input and involvement.

**ALTERNATIVE HIGH SCHOOL PROGRAMS:** (Students must enroll through their home comprehensive high school)

Cal SAFE/Teen Parent Program	4455 Seneca Park Ave.	(510) 657-9155
College Connections	Available through each high school	
Fremont Adult School	4700 Calaveras Ave.	(510) 793-6465
Mission Valley Regional Occupational Program (MVROP)	5019 Stevenson Blvd.	(510) 657-1865
Robertson Continuation High	4455 Seneca Park Ave.	(510) 657-9155
Vista Alternative School	4455 Seneca Park Ave.	(510) 657-7028

**Fremont Unified School District**  
**High School Course Catalog**  
**2017-2018**

**Table of Contents**

School Descriptions.....	1-8
Selecting a Course of Study .....	9
Graduation Requirements.....	10
College Entrance Requirements/High School Four Year Plan/Student Activity Planner/ Related Websites .....	11-15
Guidance Information.....	16-17
Format of Course Descriptions.....	18
Course Descriptions:	
AVID .....	19
Career Technical Education .....	19-21
College Connections.....	21
English.....	22-25
Fine Arts: Visual and Performing.....	26-32
Health .....	33
Mathematics .....	34-37
Physical Education .....	38
Science.....	39-41
Social Science.....	42-45
Special Education .....	45
Teaching Assistant.....	46
Work Experience Education.....	46
World Language .....	47-49
Mission Valley Regional Occupational Program .....	50-54
American High School On-Campus Regional Occupational Program .....	55
Irvington High School On-Campus Regional Occupational Program .....	56-57
Kennedy High School On-Campus Regional Occupational Program.....	58-59
Mission San Jose High School On-Campus Regional Occupational Program .....	60
Washington High School On-Campus Regional Occupational Program.....	61
Mission Valley ROP On-Campus Courses.....	62-64
Vista Course List .....	65
Ohlone Courses .....	66-67

**A HARD COPY OF THE COURSE CATALOG IS AVAILABLE  
AT THE SCHOOL SITES UPON REQUEST  
FUSD Website: [www.fremont.k12.ca.us](http://www.fremont.k12.ca.us)**

# GENERAL INFORMATION ABOUT FREMONT UNIFIED HIGH SCHOOLS



## American High School

### **Home of the Eagles**

American High School is one of five comprehensive 9-12 grade high schools in the Fremont Unified School District. It was constructed in 1972 as an open-spaced school attracting the most innovative teachers in the area. In 1991, American High School was remodeled to a state of the art facility and currently houses the newest swimming/sports complex, library/media technology center, and multi-purpose room.

### **School Mission**

American High School provides a learning community that challenges students to reach their academic, civic and social potential in a diverse community so they may become participating and cooperative members of society.

### **School Community**

The school's enrollment is over 2,200 and the student body is diverse. The ethnic breakdown of our student body reflects our local community. A significant percentage of students are classified as English Learners. American High School receives strong support from parents and the community through PTSA, boosters, ROP, Ohlone College, and Project Lead the Way. The American attendance area includes the following six elementary schools: Ardenwood, Brookvale, Forest Park, Oliveira, Patterson, and Warwick. All students in the American attendance area attend Thornton Junior High School.

### **Curriculum and School Programs**

Student Achievement is a primary goal for American High School. Our curricular program includes a wide range of college preparatory, honors and Advanced Placement courses to challenge all students. We also have an extensive special education program and offer English Language Development classes for English Learners. In order to personalize each student's learning experience; American High School encourages students to participate in our award winning visual/performing arts programs, World Languages, ROP courses, AVID program, Ohlone College courses, engineering program, and clubs.

**American High School offers two specific pathways, the Pathway to Engineering (Project Lead the Way – PLTW) and the new Computer Science Pathway (CSP)**

**PLTW's Pathway to Engineering (PTE)** curriculum is designed as a four-year high school sequence. Foundation courses (Introduction to Design, Principles of Engineering, and Digital Electronics) are supplemented by a number of electives to create a rigorous, relevant, and reality-based program.

### **Foundation Courses**

- **Introduction to Design (IED)**

Designed for 9th or 10th grade students, the major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. This course meets the a-g requirement for visual arts.

- **Principles of Engineering (POE)**

This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community. This course meets the a-g elective requirement.

- **Digital Electronics (DE)**

Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras and high-definition televisions. The major focus of the DE course is to expose students to the process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation. This course is designed for 10th or 11th grade students.

### **Specialization Course - Capstone for Project Lead the Way**

- **Civil Engineering and Architecture (TJPBP)**

In this Project Lead the Way (PLTW) capstone course, students learn about various aspects of civil engineering and architecture applying their knowledge to the design and development of residential and commercial properties and structures. Students use 3D design software to design and document solutions for major course projects, will communicate and present proposals to their peers and members of a professional community of engineers and architects. No PLTW classes need to have been completed; an interest in Architecture or Physics is all you need.

**Computer Science Pathway is about driving job growth and innovation throughout our economy and society. More than half of projected jobs in STEM fields are in computing occupations. Computer science develops students' computational and critical thinking skills and shows them how to create, not simply use, new technologies. This fundamental knowledge is needed to prepare students for the 21<sup>st</sup> century, regardless of their ultimate field of study or occupation. American High School is committed to ensuring computer science is a central part of our student's education, by offering a Computer Science Pathway (CSP) to include the following courses:**

- **Introduction to Computer Science**, a one-semester course in which students will develop their computer literacy through communication, making computers work, and the future impact of computers. (See page 20 for a deeper description)
- **Exploring Computer Science**, designed to teach the fundamental concepts of, and big ideas of, computing, using an inquiry approach to solving problems and creating artifacts. (See page 21 for a deeper description)
- **AP Computer Science Principles (CSE)** is intended to foster a wider appeal for the computer science discipline. (See page 20 for a deeper description)
- **AP Computer Science A**, as an equivalent first-semester, college-level course in computer science (See page 19 for a deeper description)

Courses included in CS Pathway are sequenced to allow students to apply their learning to real world applications. The primary goal of this pathway is to provide students with transferable skills necessary for post-secondary education and career employment.



## **Irvington High School**

### **Irvington High School**

Irvington High opened in the fall of 1961 and now serves a diverse student population of 2,250 students. Our 47-acre campus is located in the south-central section of Fremont. We enjoy a solid reputation as a warm, caring school.

### **School Mission**

Irvington provides a safe, creative community that challenges students to develop their courage, empathy, knowledge, and passions.

Graduates of Irvington are disciplined, life-long learners who persevere, advocate for themselves, and serve their community.

### **School Community**

The ethnic breakdown of Irvington reflects the local community. The Irvington attendance area includes the following five elementary schools: Warm Springs, Weibel, Green, Hirsh, and Grimmer. All students in the Irvington attendance area attend Horner Junior High School.

### **Curriculum and School Programs**

Irvington students are served by varied academic programs. We offer a full set of college preparatory courses as well as a variety of Honors and AP courses to challenge our students. In 1998, Irvington High was designated a Visual and Performing Arts Magnet. Students from across the district attend Irvington High School's Visual and Performing Arts Magnet and Center for the Creative Arts. Irvington may also elect course work in a range of programs in the technical arts and the vocational arts. More than a dozen Regional Occupation Program classes are offered on campus, as are a wide range of Ohlone College courses. In addition, Irvington provides a complete, integrated special education program.

### **Scholastic Excellence**

Irvington High School's innovative academic program consists of several major components, which include a team-taught family program for students in the ninth and tenth grades, three school-to-career pathways, and benchmark assignments at the end of the freshman and sophomore years. Irvington has a unique grading system which eliminates the D grade. Students earn an A, B, C, I or an NC, which stands for "No Credit."

### **QUEST**

Additionally, all students complete a community service-based senior benchmark project (QUEST).

Please see this link: [QuestProject](#)

### ***IRVINGTON HIGH SCHOOL'S ARTS MAGNET PROGRAM/CENTER FOR THE CREATIVE ARTS***

The Center for the Creative Arts (CCA) is a specialized secondary program focusing on the fine arts: dance, drama, music and the visual arts. Its purpose is to provide students with the most comprehensive connection to the arts that is possible in a high school setting. All 9th and 10th grade CCA students belong in an Arts Family in which core academic material is presented and enriched with arts-related examples and activities. Please go to this [link](#) for more information on the application process and timelines.



## **John F. Kennedy High School**

### **School Community:**

John F. Kennedy High School, established in 1965, educates approximately 1350 students in grades 9-12. JFK celebrates its diverse student population and continues to work to improve the student experience here at the campus. In the fall of 2011, the newly remodeled JFK Amphitheater was completed, and staff and students continue beautification efforts. We invite our school community to campus several times annually, and work to expand student opportunities through programs with a strong focus on college preparation such as Advancement via Individual Determination (AVID), and two California Partnership Academies (CPAs).

### **School Mission:**

John F. Kennedy High School is committed to teaching our students the skills needed to succeed in college and the workplace through academic achievement, environmental and social responsibility, self-advocacy and leadership.

### **Curriculum and School Programs:**

JFK is the only school in the district to employ a 4X4 “block” schedule and has done so for a decade. Each block class is 85 minutes in length, and students are enrolled in 4 blocks per day. With 8 blocks per year, JFK is able to be creative in how it can offer programming. Our focus on improving student achievement has been assisted by our recent five years as a Small Learning Community (SLC) Grant school. We schedule the 9<sup>th</sup> graders into families to personalize the first year of high school. Two CPAs, Green Ventures Academy and Building Smart Academy offer students a college focus and real-world experiences in grades 10 - 12. JFK has a fully certified AVID program with over 145 students enrolled in grades 9 – 12.

JFK has continued to develop Advanced Placement programs and regularly offers a course in Chemistry, Biology, English 11 & 12, Calculus (AB and BC), Statistics, World Languages (French and Spanish), US History, Government and Studio Art. Students may enroll in several Ohlone College classes offered at JFK, including, Sociology, Psychology and Philosophy. John F. Kennedy also participates in the “College Connection” program at Ohlone College. ROP classes are available both on-campus and within close proximity at the new ROP Center.

### **Scholastic Excellence:**

John F. Kennedy students perform well in state and national academic competitions, earning increasing numbers of local, regional, and state scholarships. Approximately 90% of JFK’s 2015 graduates entered post-secondary. JFK graduates have been accepted to an impressive list of schools including Johns Hopkins, Stanford, the Air Force Academy, West Point, Yale, University of Southern California, Santa Clara University, Academy of Art, all of the University of California and most California State University campuses.

John F. Kennedy received a full six-year accreditation term by the Western Association of Schools and Colleges in August of 2011. JFK’s Academic Performance Index increased more than 50 points during the last six years of measurement and reached 742.

We are Titans, and we are proud.





## **Mission San Jose High School**

Mission San Jose High School, one of five comprehensive 9-12 high schools in the Fremont Unified School District, opened in 1963. Mission San Jose is located in the southeastern portion of the City of Fremont near the historic Mission San Jose District and Ohlone College.

### **Mission Statement**

*“Preparing the Next Generations for the Global Community*

Mission San Jose High School prepares students for an innovative, evolving, advanced and culturally diverse global community. We believe that a solid, well-rounded education is the basis for personal and professional development. We create a positive, safe and supportive learning environment. We nurture the academic, personal, and social development of our students, preparing them for a lifetime of learning, service, and leadership.

\*Parents partner with the school in assisting students in their academic achievement and growth toward personal maturity.

\*Students engage in learning as active participants in their own development.

\*Teachers focus on creating a rigorous and relevant curriculum which will prepare students to be college- and-career-ready.

\*Teachers, counselors, and administrators all support rigor and relevance for the student and place an emphasis on ensuring that positive and collaborative relationships are established to foster deeper and more meaningful learning.

### **School Community**

Mission San Jose has a population of 2100 talented and hard-working students. A key to their success is the high level of parental involvement. The two main parent groups are Mission Possible, our PFA, and Mission Boosters. These parent groups are key to our success. Together they have brought renovated landscaping, improved sound systems, large screen classroom televisions, new band uniforms, replacement library computers, Chromebook/laptop carts, an outfitted flexible learning room and much more to our school community.

### **Curriculum and School Program**

The school’s curricular program offers a wide range of courses to challenge students, including college preparatory, honors and Advanced Placement. Another integral part of Mission San Jose’s curriculum is our elective program. Our drama and music programs consistently garner awards in various regional and state competitions. Students have the opportunity to enroll in ROP courses offered both on and off campus. An ancillary program of Mission San Jose High School involves health and wellness. The program titled Challenge Success is instrumental in addressing academic and social stress.

### **Scholastic Excellence**

Mission San Jose and individual students at our school are consistently recognized for academic excellence on a local, statewide, national and international level. Mission San Jose graduates virtually every senior and the attendance rate for the school is above 95% with a dropout rate of less than 1%. Over ninety percent of our graduates matriculate to post-secondary education with 84% attending four-year colleges/universities including all UC and CSU campuses. Mission San Jose has over a 99% graduation rate.

Mission San Jose High received a full 6-year WASC accreditation in 2014. Mission San Jose is the district leader in average SAT scores above 650 in Writing, Reading, and Math and has maintained an Advanced Placement test pass rate above 90%. Mission San Jose also leads Alameda County in the number of National Merit Finalists each year and US news and World Report has recognized Mission San Jose as one of the top high schools in California... Our students, with the assistance of faculty and staff members, continue to accumulate awards for individual and group competitions. These awards include national recognition by the Siemens and Regeneron Science Talent Search competitions. Mission San Jose is extremely proud of its students and the accomplishments of our rich and diverse community.



## **Washington High School**

### **Home of the Huskies**

Established in 1891, Washington High School was the second high school in California to be created under the Union High School Law passed by the California state legislature. We are centrally located in the City of Fremont and one of five comprehensive high schools in the Fremont Unified School District.

### **Mission Statement**

“The mission of Washington High School is to provide an equitable, rigorous curriculum that prepares all students, socially and academically, for their future.” We accomplish this by developing the following Schoolwide Learner Outcomes:

- **H**ealthy individuals who are physically and emotionally intelligent.
- **U**nited by diversity
- **S**tudious individuals who are critical thinkers and effective communicators
- **K**ind and compassionate towards others
- **Y**ou wish you were one!

### **School Community**

Washington High School serves students in the Washington Attendance Area. Our students come from Centerville Jr. High School who in turn receives students from area elementary schools: Cabrillo, Glenmoor, Maloney, Niles, Parkmont, and Vallejo Mill.

Washington High School has an enrollment of approximately 1850 students, 85 teachers, 4.5 counselors, 4 administrators, and a wonderful support staff. There is a strong commitment of support from the Washington community helps us to meet our goals. This support is provided through a number of parent, student, and staff groups including: PTSA, Sports Boosters, Band Boosters, Fine Arts Boosters, and an active Alumni Association and School Site Council.

### **Curriculum and School Programs**

The school is currently undergoing the Western Association of Schools and Colleges (WASC) accreditation process. A six-year accreditation was given in March 2010 which extends through June 2016.

Washington High School offers a strong core academic program, supplemented by an elective program including the visual and performing arts, foreign languages, gifted and talented, honors, Advanced Placement (AP), AVID, Project Lead the Way (PLTW), Laptop Academies and the Media and Design Arts Academy. Our 9th and 10th grade students are organized into “families” where the students share a common group of teachers in English, Science and/or Social Studies. By doing this we are able to provide a more personalized learning experience for students. In addition, family teachers are able to identify at-risk students and target intervention, proactively.

### **Scholastic Excellence**

Washington High School offers a strong extracurricular program. Our focus is on student achievement in all areas of life, including scholastics, athletics, and social development. In 2009, Washington was named a California Distinguished High School.



## **Robertson Continuation High School**

Robertson High School is the only continuation high school serving the five comprehensive high schools in the Fremont Unified School District. The Robertson campus is an alternative education center that also houses Vista Alternative School, the district's independent study program, and Cal-Safe, which provides support to current and expecting teen parents. Robertson is a fully accredited high school diploma program. Students can either complete their diploma with us or return to their comprehensive high schools once they have made up any deficient credits.

### **School Mission**

Our mission is to engage, challenge, and nurture our students in an equitable educational environment where they develop the skills necessary to succeed in college and the professional workplace, as well as to become contributing members of society.

### **School Community**

The school's enrollment is approximately 250 students. We have a diverse student population with 51% Hispanic, 19% White, 7% African American, 19% Asian, 1% Native American, and 3% mixed race.

### **Curriculum and School Programs**

The common core state standards are taught via Direct Interactive Instruction (DII) in every course offered on campus. The focus is on student learning and engagement. Students who begin the year at Robertson will complete three trimesters of instruction, and be eligible to earn a total of 90 credits. In order to meet the needs of the students, we provide them an opportunity to continue their education in a small group setting with many interventions and support. Counseling services are available school-wide. With the assistance of Youth and Family Services, we are able to offer one-on-one counseling to our student body. A teen parenting program, with a daycare facility on site, is available to all pregnant and parenting students. This feature has resulted in improved student achievement and school attendance for our young parents. We also provide an English Language Learner (ELL) support class, a Teacher Advisory Group (TAG), as well as individual staff mentors for all struggling students. In addition, we have partnered with Beyond the Locker to strengthen our parent engagement program and to provide a successful leadership program for students.

Our most intense intervention occurs directly in the classroom. We utilize federal Title I funding to hire additional staffing to "push-in" to classrooms to work directly with students who may otherwise fall behind. We have a full-time Title I Coach who also assists teachers in improving and honing their instruction.

We also have an active sports program with volleyball, basketball, and softball teams that compete against other, local, continuation high schools. We host a school-wide prom and barbeque each spring, and provide student recognition for academic performance via our Principal's List and Gold Club.

### **Scholastic Excellence**

Robertson continuously strives for academic excellence. Our attendance and graduation rate are strong evidence that the academic program at Robertson is thriving. We received the Model Continuation High School recognition and are fully accredited by the Western Association of Schools and Colleges. We believe that even though our students have not been successful in a traditional high school setting that this does not mean that they cannot learn. We have an unwavering commitment to provide a quality academic program for students in an alternative setting.

## Selecting a Course of Study

### A word about making decisions . . .

This course catalog contains basic information about courses of study at the high schools in the Fremont Unified School District. Use your school's registration materials to make your course choices, as not all courses are offered at all schools. As you investigate your choices for the upcoming school year, we ask that you consider the following suggestions:

- **Read the information yourself** and go after more information if you need it. Do not make decisions based on guesses or biases and remember that choices that are appropriate for your friends may not be the right ones for **you**.
- **Work with a pencil** and use this booklet as a workbook: underline, make marginal notes, mark your requirements, and list your alternatives.
- **Use the graduation requirements** for your graduating class to check off what you have completed and to see what you still need to complete. The four-year planning form will also help you see what requirements should be met during the upcoming year.
- **Consider college entrance requirements** in making your choices, if you plan on going to college. If you are undecided about college now, keep your options open by taking the most rigorous courses you can manage.
- **Involve your parents** in your decision-making process.
- **Talk to staff members** who know your capabilities and/or aspirations.
- **Make thoughtful choices.** The master schedule of classes and the assignment of instructors to teach those classes are based on the courses you choose.

## Graduation Requirements

Board Policy 6146 specifies that students receiving a high school diploma from the Fremont Unified School District must successfully complete 230 credits of course work. (Ten credits equal one year of work for one period a day.) In addition, students will complete a minimum of 40 hours of Service Learning.

The following credits are required for graduation:

<u>Credits</u>	<u>Subject</u>
40	English
30	Math (Algebra 1 required)
20	Physical Education
30	Social Science
20	Science
10	Fine Arts or World Language or Career Technical Education (CTE)
5	Health Education
75	Electives (75 elective credits required for students at high schools that integrate computer literacy skills into their curriculum and not as a separate class.)
<hr/>	
230	Total

### Credits required for promotion to next grade.

FUSD Board policy governs how students are promoted to the next higher grade level:

<u>From - To</u>	<u>Required Credits</u>
9 <sup>th</sup> – 10 <sup>th</sup>	50
10 <sup>th</sup> – 11 <sup>th</sup>	110
11 <sup>th</sup> – 12 <sup>th</sup>	170
<b>Graduation</b>	<b>230</b>

**COMPARISON OF VARIOUS HIGH SCHOOL COURSE PATTERNS  
FOR GRADUATION AND COLLEGE**

<b>High School Subject Area &amp; A-G Category</b>	<b>FUSD Graduation Requirements</b>	<b>UC Required Courses*</b>	<b>CSU Required Courses*</b>
English "B"	<b>40 Credits</b>	<b>40 Credits</b>	<b>40 Credits</b>
Mathematics "C"	<b>30 Credits</b> Must include completion of Algebra 1 or equivalent	<b>30 Credits</b> Algebra 1 or equivalent, Geometry, Algebra II 40 Credits recommended	<b>30 Credits</b> Algebra 1 or equivalent, Geometry, Algebra II 40 Credits recommended
Social Science "A"	<b>30 Credits</b> World History US History American Government/Econ	<b>20 Credits</b> World History (10) US History/Government (10)	<b>20 Credits</b> US History/Government (10) (1 semester of each) Social Science (10)
Science "D"	<b>20 Credits</b> <b>Physical and Life Sciences</b>	<b>20 Credits</b> Must be in 2 of these 3 disciplines: Biology, Chemistry & Physics 30 Credits recommended	<b>20 Credits</b> 1 year of Physical Science 1 year of Biological Science (Must be lab sciences) 30 Credits recommended
World Language "E"	<b>10 Credits</b> <b>or</b>	<b>20 Credits</b> 30 Credits Recommended	<b>20 Credits</b>
Visual/Performing Arts "F"	<b>10 Credits</b> <b>or</b>	<b>10 Credits</b>	<b>10 Credits</b>
CTE	<b>10 Credits</b>		
Electives "G"	<b>75 Credits</b>	<b>10 Credits</b>	<b>10 Credits</b>
Physical Education	<b>20 Credits</b>	<b>0</b>	<b>0</b>
Health	<b>5 Credits</b>	<b>0</b>	<b>0</b>
<b>TOTAL CREDITS</b>	<b>230 Credits</b>	<b>150 Credits **</b>	<b>150 Credits **</b>
Examinations		SAT or ACT	SAT or ACT
Service Learning	40 Hours		

\*Four-year colleges (UC and CSU) require a **minimum** of C or better to meet specific requirements.

\*\*All courses must be UC certified and appear on the high school's UC certified a-g list. At least 70 credits of the 150 credits must be taken in 11<sup>th</sup> and 12<sup>th</sup> grade.

Possible Credits earned in High School (except John F. Kennedy High School)

6 Courses per year = 60 Possible Credits/Year  
60 Possible Credits x 4 Years = 240 Possible Credits

Possible Credits earned at John F. Kennedy High School

8 Courses per year = 80 Possible Credits/Year  
80 Possible Credits x 4 Years = 320 Possible Credits

Robertson Continuation High School (must be 16 years old)  
18 courses per year = 90 possible per year  
200 credits required to graduate (minus 30 elective credits)  
Does not meet UC/CSU requirements

# HIGH SCHOOL FOUR YEAR PLAN

GRADE 9	Semester Grades
1. English 9	_____
2. Math	_____
_____	_____
3. Biology or Int. Science	_____
_____	_____
4. Physical Education	_____
5. Health	_____
6. Elective	_____
_____	_____
*7. Elective	_____
_____	_____
**8.	_____
_____	_____

GRADE 10	Semester Grades
1. English 10	_____
2. Math	_____
_____	_____
3. Biology or Int. Science	_____
_____	_____
4. Physical Education	_____
5. World History	_____
_____	_____
6. Elective	_____
_____	_____
*7. Elective	_____
_____	_____
**8.	_____
_____	_____

GRADE 11	Semester Grades
1. English 11	_____
2. Math	_____
_____	_____
3. U.S. History	_____
_____	_____
4. Elective	_____
_____	_____
5. Elective	_____
_____	_____
6. Elective	_____
_____	_____
*7. Elective	_____
_____	_____
**8.	_____
_____	_____

GRADE 12	Semester Grades
1. English 12	_____
2. Econ/Govt	_____
_____	_____
3. Elective	_____
_____	_____
4. Elective	_____
_____	_____
5. Elective	_____
_____	_____
6. Elective	_____
_____	_____
*7. Elective	_____
_____	_____
**8.	_____
_____	_____

<u>Graduation Requirements</u>	
English	40 credits/4yrs.
Math	30 credits/3yrs.
Science	20 credits/2yrs.
Social Science	30 credits/3yrs.
Fine Arts, World Lang or CTE	10 credits/1yr.
Physical Education	20 credits/2yrs.
Health	5 credits
<u>Electives</u>	<u>75 credits</u>
<b>TOTAL</b>	<b>230 credits</b>
<p><u>Algebra 1 Requirement:</u> Passing grade in both semesters of Algebra 1 from Junior or Senior High School</p> <p><u>Service Learning Requirement:</u> 40 hours Progress toward requirement: _____</p>	

<u>California Community College Admission Requirements</u>
<p><i>Completed any of the following:</i></p> <ul style="list-style-type: none"> <li>• Age 18</li> <li>• High school graduate</li> <li>• Passed CA High School Proficiency Exam</li> <li>• Passed GED</li> </ul>

<u>California State University and University of California Admission Requirements</u>														
<p><i>Required Tests: SAT or ACT</i></p> <p><i>All courses from a-g list</i></p> <p><i>Minimum grades of C; UC GPA 3.0 minimum</i></p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">(a) U.S. History, Government</td> <td style="text-align: right;">2 years</td> </tr> <tr> <td style="padding-left: 20px;">(b) English</td> <td style="text-align: right;">4 years</td> </tr> <tr> <td style="padding-left: 20px;">(c) Math*</td> <td style="text-align: right;">3 years</td> </tr> <tr> <td style="padding-left: 20px;">(d) Lab Science*</td> <td style="text-align: right;">2 years</td> </tr> <tr> <td style="padding-left: 20px;">(e) World Language*</td> <td style="text-align: right;">2 years</td> </tr> <tr> <td style="padding-left: 20px;">(f) Visual and Performing Arts</td> <td style="text-align: right;">1 year</td> </tr> <tr> <td style="padding-left: 20px;">(g) College Prep Elective</td> <td style="text-align: right;">1 year</td> </tr> </table> <p>* UC recommends an additional year</p>	(a) U.S. History, Government	2 years	(b) English	4 years	(c) Math*	3 years	(d) Lab Science*	2 years	(e) World Language*	2 years	(f) Visual and Performing Arts	1 year	(g) College Prep Elective	1 year
(a) U.S. History, Government	2 years													
(b) English	4 years													
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(d) Lab Science*	2 years													
(e) World Language*	2 years													
(f) Visual and Performing Arts	1 year													
(g) College Prep Elective	1 year													

\* Special Approved Cases Only  
\*\* Kennedy Only

Student Signature \_\_\_\_\_ Parent Signature \_\_\_\_\_



**These are estimations of how much time you will need to spend on homework each night to pass the class.**

9<sup>th</sup> through 12<sup>th</sup> grade homework is based on the rigor of the student’s course schedule. Average homework time is between 70 to 120 minutes per evening, or 280-480 minutes per week. These minutes are based on time estimated for an average student working at an average pace. Please refer to Board Policy 6154 for more information on District Policies regarding homework.

Link: [BoardPolicy6154](#)

<b>ENGLISH</b>	Min/Night
CP English 1, 2, 3, 4	20-30
Honors English 1, 2, 3, 4*	20-30
AP English*	45-60
<i>Marked (*) expect a lot of reading!!!</i>	

<b>MATH</b>	Min/Night
Pre-Algebra	30
Algebra 1	30
Geometry	30
Honors Geometry	30
Algebra II/Trig	30
Honors Algebra 2/Trig	30
Math Analysis	30
Pre-Calculus	30
AP Statistics	30
AP Calculus AB, BC,	30
Finite/Discrete	30
Linear Algebra	30

<b>SOCIAL STUDIES</b>	Min/Night
Psychology	30
World History	20
Government/Econ	15-20
U.S. History	20-30
Geography/Health	20
AP US History	60
AP World History	15-20

<b>SCIENCE</b>	Min/Night
Integrated Science	20
Biology	20-30
Honors Biology	20-30
Chemistry	20-30
Honors Chemistry	20-30
Physics	30-45
Anatomy/Physiology	45-60
AP Environmental Science	50-60
AP Biology	60
AP Chemistry	60+
AP Physics	45

<b>WORLD LANGUAGE</b>	Min/Night
Level 1 & 2	20-30
Level 3 & 4*	20-30
AP Level*	30-40
<i>Marked (*) expect major projects!!!</i>	

<b>ELECTIVES</b>	Min/Night
Journalism 1*	20-30
Journalism 2*	30-45
Journalism 3*	45-60
AP Studio Art*	40
Art 1, 2, 3*	20
Yearbook*	60
Drama 1-4*	15
Leadership 1 and 2*	15
Band Courses*	30
<i>Marked (*) significant extra time can be expected.</i>	

## DAILY ACTIVITY PLANNER

<b>School Activities</b>	<b>Average Hours/ Night</b>
School (7 hours)	7
<i>Course Title</i>	
English:	
Social Studies:	
Math:	
Science:	
Elective:	
Elective:	
<b>Total school hours:</b>	

<b>Extra-Curricular Activities</b>	<b>Average Hours/ Night</b>
Clubs:	
Hobbies / Interests / Music / Leadership:	
Community Service:	
Sports:	
Paid Job:	
Other:	
<b>Total extra-curricular hours:</b>	

<b>Daily Living Activities</b>	<b>Average Hours/ Night</b>
Sleep (9 hours recommended by experts)	9
Necessities (eating, showering, chores, etc.)	
Family Time	
Free Time (friends, TV, phone, Internet, video games, etc.)	
<b>Total daily living hours:</b>	

	<b>Average Hours/ Night</b>
<p><b><u>Total Hours</u></b></p> <p>School Hours                   = _____</p> <p>Extra-Curricular Hours       = _____</p> <p>Daily Living Hours            = _____</p> <p>Your total hours: <span style="border: 1px solid black; display: inline-block; width: 100px; height: 20px; vertical-align: middle;"></span> vs.</p>	<p><b>Maximum Hours</b></p> <p style="font-size: 2em;"><b>24</b></p>

# CAREER AND COLLEGE INFORMATION WEBSITES

[www.californiacolleges.edu](http://www.californiacolleges.edu)

General information about, and links to the systems of higher education in California (UC, CSU, community colleges and independent/private schools). Explore colleges and careers and take self-assessments.

<p>The University of California <a href="http://admission.universityofcalifornia.edu/">http://admission.universityofcalifornia.edu/</a></p> <p>The California State University System <a href="http://www.csumentor.edu">www.csumentor.edu</a></p> <p>California Private/Independent Colleges <a href="http://www.aiccu.edu">www.aiccu.edu</a></p> <p>California Community Colleges <a href="http://www.cccco.edu">www.cccco.edu</a></p> <p>Explore colleges, careers, self-assessments <a href="http://www.californiacolleges.edu">www.californiacolleges.edu</a></p> <p>Student transfer information for California Colleges <a href="http://www.assist.org">www.assist.org</a></p> <p>SAT Registration <a href="http://sat.collegeboard.org/home">http://sat.collegeboard.org/home</a></p> <p>SAT Prep <a href="http://www.collegeboard.com/student/testing/sat/rep_one/prep_one.html">http://www.collegeboard.com/student/testing/sat/rep_one/prep_one.html</a></p> <p>PSAT Prep <a href="http://www.collegeboard.com/student/testing/psat/psatextra.html">http://www.collegeboard.com/student/testing/psat/psatextra.html</a> (free if you have taken the PSAT)</p> <p>ACT Registration <a href="http://www.act.org">www.act.org</a></p> <p>ACT Prep <a href="http://www.actstudent.org/testprep/">http://www.actstudent.org/testprep/</a></p>	<p>Financial Aid</p> <p>Federal Student Aid Information <a href="http://www.studentaid.ed.gov">www.studentaid.ed.gov</a></p> <p>This Web site is your source of information for the Federal Student Aid PIN <a href="http://www.pin.ed.gov">www.pin.ed.gov</a></p> <p>File the FAFSA, FAFSA4caster: <a href="http://www.fafsa.ed.gov">www.fafsa.ed.gov</a></p> <p>(EFC is the index students end up with after filing their FAFSA, the one colleges use to determine financial need)</p> <p>The CSS/Financial Aid profile is sometimes requested by private colleges and can be accessed at <a href="http://css.collegeboard.org/">http://css.collegeboard.org/</a></p> <p>Cal Grant Information <a href="http://www.csac.ca.gov/">http://www.csac.ca.gov/</a></p> <p>Research Careers O*NET – <a href="http://online.onetcenter.org">http://online.onetcenter.org</a> (click on Find Occupations)</p> <p>Occupational Outlook Handbook – <a href="http://www.bls.gov/oco">http://www.bls.gov/oco</a> (type in general term for career of interest)</p> <p>Self-Assessments of Career Interests and Personality Preferences <a href="http://www.naviance.com">www.naviance.com</a></p> <p>Scholarship database <a href="http://www.fastweb.com">www.fastweb.com</a></p> <p>National College Athletics Association <a href="http://www.ncaa.org">www.ncaa.org</a></p>
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## Guidance Information

### Add/Drop Course

Students may add a course up to three (3) weeks into a new semester. Courses may be dropped up to three (3) weeks into a semester, if students are adding a new course in a different subject (Subject to availability). Students may request a change up to five (5) weeks for the purposes of changing levels within same subject only. Any class change must be made with teacher/counselor input. Except with school approval, R.O.P. courses may not be dropped. Exceptions noted for transfers and new students. AR6146

**\*JFKHS students contact school counselor due to the JFKHS's "block scheduling".**

### Grade Point Average

A student's grade point average (GPA) is calculated each quarter on the basis of grades received from all of the courses in which the student is enrolled, but only semester grades are included in transcripts as a part of a student's permanent school record. The GPA is used to determine college and university admission, and academic eligibility for extracurricular and co-curricular activities.

### MVAL Eligibility Requirements

Follow the MVAL guidelines: [www.themval.net](http://www.themval.net)

### Repeating Courses for Credit

A student's GPA for a single grading period and/or his/her cumulative GPA may be improved if a student 1) earned a grade lower than a "C" and 2) repeats the course with a higher grade. This may be done the following semester or year as well as in summer school. Students should check with an administrator prior to repeating a course to ensure that proper credit will be earned. Note: A student who repeats a course for grade improvement will NOT receive additional credits. Colleges will not accept a repeat course for grade improvement unless the original grade was below a "C".

## Alternative Programs

The following programs provide an alternative means of earning a high school diploma or its equivalent. Further information and/or necessary papers may be obtained from a site administrator or counselor.

**Adult School (Regular Enrollment)** - Students who are 18 years old or who are granted a waiver may become regular Adult School students. An accredited Adult School diploma may be earned upon completion of a designated course of study.

**Adult School (Graduate Equivalent Diploma (GED))** - Students who take and pass this test are given a certificate of equivalency in meeting five curricular areas: writing skills & essay, reading, mathematics, social studies, and science. A student must be at least 18 years of age to take this examination.

**California High School Proficiency Exam (CHSPE)** - Students who take and pass this test are given a certificate of proficiency for the state of California which may or may not be accepted as being the equivalent of a regular high school diploma. A student must be at least 16 years of age to take this examination.

**College Connections** - The College Connections Program is a unique program available to high school seniors in the Fremont Unified School District that allows them to complete their final year of high school while taking college courses at Ohlone Community College at the same time. This program is designed for highly motivated students who are ready to begin their transition to college before they graduate. The first semester, students take the following high school courses: American Government, ERWC, and the elective; You and the Law. During the second semester, students take the following high school courses: Economics and two electives, Humanities 12 and Literature, Justice and Society. The program is open to FUSD high school seniors provided they are in good academic standing and have a minimum 2.5 GPA by the end of their junior year. There is an application process to gain admission. *See attached link:* [CollegeConnectionLink](#)

**Vista Alternative School/Independent Study** - provides an additional option for the pursuit of educational goals. This voluntary independent study program is designed for those students who prefer to learn on their own. Students who would benefit from this program typically: want to work faster than most students, have personal health needs that make it difficult to attend a full day of school, have special training for sports or the arts that requires a flexible schedule or need to work full time. Students must have the ability to read and understand the district textbooks on their own, and the discipline to complete at least 25 hours of work at home every week. Enrollment is limited and interested students must apply to be admitted to Vista. The application is reviewed by the principal, the counselor, the lead teacher, and the transcript must reflect that the student has the ability to pass high school level classes.

## **GATE (Gifted and Talented Education)/Honors /Advanced Placement Courses**

GATE classes at the secondary level are designed as Honors (H).

Honors classes combine GATE students with other high achieving students in courses designated as Honors classes. To qualify or continue:

- Non GATE identified students with “A” grades in all four semesters of 7<sup>th</sup> and 8<sup>th</sup> grades, within a subject matter class may enter into an Honors class within that subject area (A’s in English – Honors English, A’s in Science – Honors Science)
- or
- Successful completion (C or better grades) at the previous level to continue in the Honors course.

Honors math will follow the established math pathways; see math section of this course catalog.

Advanced Placement (AP) classes are open to any student who is interested in the subject and is willing to work hard. Students do not have to be GATE identified to qualify for an AP course. All course prerequisites must be met. AP classes are college level classes.

### **Curriculum**

Curriculum for all Honors/AP classes shall be appropriately differentiated from the Core curriculum. Curriculum objectives will reflect the more challenging levels of interaction with curricular material.

### **Grading Policy**

These guidelines shall be communicated by the Honors teachers to students and parents at the beginning of the year and discussed as necessary for clear understanding.

1. It is a realistic expectation for all GATE identified and high achieving students to succeed academically in Honors classes.
2. A parent conference by phone, or in person, must be scheduled for any student receiving a grade below a “C” at the quarter in an Honors class. The student’s continued presence in the class must be evaluated at that time.
3. Underachieving students are not to be dropped from the Honors classes without a parent meeting and, if necessary, a referral to the Student Study Team (SST) or sub-committee\*.
4. All students in Honors classes will have parent notification of underachieving performances.

### **Homework Policy**

1. Honors homework will be in keeping with the Fremont Unified School District policy (BP/AR 6154) and not require excessive amounts of time; differences should be in depth and complexity not in quantity and length of assignments.
2. Advanced Placement (AP) classes will require more homework time for students.
3. 9<sup>th</sup> - 12<sup>th</sup> grade homework will be approximately 70-120 minutes per evening or 280-480 minutes per week.
4. Teachers may not assign summer homework or require students to complete assignments during summer vacation in preparation for the next school year’s Honors/AP course(s). Reading lists may be distributed. However, it is the student’s option to read during the summer. No test or extra credit, based on summer reading, may be given at the start of the school year.

### **Honors Program Exit Criteria**

1. GATE identified students and high-achieving students enrolled in Honors course(s) must maintain appropriate grades acceptable to the University of California and the California University systems.
2. Students whose grades consistently fall below the UC and CSU standards (D or F grade) in an Honors class(es) will be notified by the teacher, and a parent conference by phone or in person, must be scheduled. These students may have until the end of the semester to improve their grade(s) for continuance in the class(es) or may be referred to the Student Study Team or sub-committee\* as appropriate for one of the following recommendations:
  - A. Continuance in the Honors class.
  - B. Transfer to a college preparatory class(es); parents must be informed of the transfer.
3. Parents and/or students may appeal the decision of the Student Study Team to the Director of Secondary Education.
4. Students may petition to enroll in an Honors class(es) the following year.

\* The sub-committee may be comprised of an administrator, teacher, or counselor who understands the characteristics of gifted students.

# FORMAT OF COURSE DESCRIPTIONS

## How to Read a Course Description

All of the information in the course description entry is important. Be sure that you read it all and understand what it says. Check back to this page as needed.

### Example:

<u>Course Title</u> (A, I, K, M, R, W)	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
Digital/Photography 2	10-12	g*	10 credits/year
Drawing 1	9-12		5 credits/semester

Note: Blank indicates non fulfillment of UC/CSU “a-g” requirements.  
An asterisk (\*) pending UC/CSU approval.

<u>California State University and University of California Admission Requirements</u>	
(a) U.S. History, Government	2 years
(b) English	4 years
(c) Math*	3 years
(d) Lab Science*	2 years
(e) World Language*	2 years
(f) Visual and Performing Arts	1 year
(g) College Prep Elective	1 year
* UC recommends an additional year	

(A, I, K, M, R, W) denotes abbreviation for each of the Fremont Unified Schools  
(CC) denotes College Connections

### Explanation:

- ◆ Digital/Photography 2 is open to 10-12 grade students. It fulfills University of California “a-g” requirement, as a “g” elective. It is a 10 credit course/year long.
- ◆ Drawing 1, a beginning class is open to 9-12 grade students. It does not fulfill University of California “a-g” requirement. It is a 5 credit course, one semester long.

### Additional Notes:

- ◆ The courses listed in this catalog represent all the approved courses for the Fremont Unified School District. Due to factors such as student enrollment, student interest, teacher credentialing and staffing allocations, not all of the courses are offered at each campus, nor are they necessarily offered each year. At the time of registration/scheduling, each school will provide students with a list of courses offered for their particular site.
- ◆ Credits earned in all courses will be applied toward the fulfillment of Fremont Unified School District graduation requirements.
- ◆ Only courses designated “a-g” meet University of California entrance requirements. Individual school’s UC “a-g” lists are available from administrators, guidance staff, or online at [www.ucop.edu/doorways](http://www.ucop.edu/doorways).
- ◆ Honors courses are high school level courses that are more rigorous, designed to challenge the Gifted and Talented (GATE) and other high achieving students.
- ◆ Advanced Placement (AP) courses are college level courses offered on our high school campuses. Some colleges and universities will grant credit or accelerated placement based on passing scores earned on the Advanced Placement Examination administered in May. (Check individual college and university catalogs for specific requirements.)
- ◆ Students are not allowed to take sequenced courses in the same subject area, concurrently.

## AVID

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>AVID (A, I, K, M, W)</b>	9	g	<b>10 credits/year</b>
	10	g	
	11	g	
	12	g (K only)	

AVID (Advancement Via Individual Determination) is offered as an elective course that prepares students for entrance into four-year colleges. There is an emphasis on analytical writing, preparation for college entrance and placement exams, study skills and test taking, note-taking, and research. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth. AVID students learn skills such as time management, note-taking, textbook reading, library research, and maintaining the AVID binder. Students are expected to maintain an organized binder including an assignment calendar, class and textbook notes, assignments, and homework, which is graded regularly. **Students who enroll in the course will be required to commit to the program for four years.**

### **AVID Senior Seminar (A, K)**

*Prerequisite: AVID 9 & 10 & 11*

12	g	<b>10 credits/year</b>
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The AVID Senior Seminar is a two-year interdisciplinary course for AVID juniors and seniors who elect to take a course that prepares them for the rigors required for college work. Students will engage in high levels of WIC-R, (writing, inquiry, collaboration and reading) strategies needed to prepare for the level of work required to produce a culminating research project at the end of the senior year. In addition to the academic focus of the AVID Senior Seminar, there are college bound activities, methodologies, and tasks that should be achieved during the junior and senior years. .

### **AVID Tutor (A, I, K, M, W)**

10-12		<b>10 credits/year</b>
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AVID tutor is a one year elective course for students wishing to be tutors in the AVID elective program. Students will tutor 5-7 AVID students twice a week during the tutorial portion of the AVID elective class, and assist the teacher in providing academic and organizational skills to students. The tutors are expected to be able to help in at least three academic subjects in which they have been successful, either in Honors or Advanced Placement levels. These could include, but are not limited to: World Languages, Language Arts, Mathematics, Sciences, and Social Sciences. Tutors will receive instruction and training using the inquiry method that encourages higher level thinking by students. Repeatable for credit.

## CAREER TECHNICAL EDUCATION

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>Business Ownership and Management (A, W)</b>	9-12	g	<b>10 credits/year</b>
Basic principles in owning, running, or managing a small business; create a business plan, use business math and accounting principles; understand business systems/functions, advertising, marketing, merchandising and technology. Internships may qualify for up to 20 additional credits. <b>Receives general math credit. Mission and Chabot College credit.</b>			
<b>Computer Operations (A, K, R)</b>	9-12		<b>5 credits/semester</b>
This course teaches the basic operations of word processing, spreadsheets, presentation software, desktop publishing, file management, and typing by touch using Microsoft Office and Google Drive (Docs, Sheets, Slides).			

### **AP Computer Science A (A, I, M, W)**

11-12	g	<b>10 credits/year</b>
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*Prerequisite: Algebra II/Trigonometry with a B or better and passed pre-calculus with B or better.*

This course emphasizes object oriented programming, algorithm development, and problem solving. The Java programming language will be used to write programs. Students are expected to work at least 2-3 hrs. per week outside of class hours on their computers. They will have access to school PCs. Students can also run and debug their programs on their personal computers. The computers must be able to compile and run Java code.

<b>Introduction to Design (A, I, M, W)</b> <i>Engineering Pathway (A)</i>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
This course is an introductory course, which develop students' problem skills, with emphasis placed upon the concept of developing 3-D models or solid rendering of an object. Engineering careers and educational preparation will be researched. This course is the first in a sequence of three engineering courses. Meets Visual and Performing Arts requirement.			
<b>Principles of Engineering (A, M, W)</b> <i>Engineering Pathway (A)</i>	<b>10-12</b>	<b>g</b>	<b>10 credits/year</b>
This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering courses of study. Students will employ engineering and scientific concept in the solution of engineering design problems.			
<b>Digital Electronics (A)</b> <i>Engineering Pathway (A)</i>	<b>10-12</b>	<b>g</b>	<b>10 credits/year</b>
Digital Electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, etc. The major focus of this course is to expose students to the process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation.			
<b>AP Computer Science Principles (A)</b> <i>Computer Science Pathways (A)</i>	<b>11-12</b>	<b>g*</b>	<b>10 credits/year</b>
Computer Science and Software Engineering (CSE) is year-long specialization course within PLTW's Pathway to Engineering. It is project- and problem-based, with students working in teams to develop computational thinking and solve open-ended, practical problems that occur in the real world. The course aligns with the College Board's new Computer Science Principles framework. This course does not aim to develop programming expertise in one particular programming language; it aims instead to develop computational thinking, generate excitement about the field of computing, and to introduce a variety of computational tools that foster creativity. *Pending UC/CSU approval.			
<b>Media Arts/IT Wheel (A)</b> <i>Computer Science Pathways (A)</i>	<b>9</b>		<b>5 credits/semester</b>
Media Arts/IT is a semester course divided into two quarters-Media Arts and IT Technology. In this course students will learn to use Microsoft software to create Word documents, spreadsheets, and power point presentations. They will learn how to import/download digital photographs and videos and convert them into animated clips using Adobe and Microsoft software. The basic skills of reading, writing, and math will be reinforced throughout the course. This course meets the computer literacy requirement.			
<b>Robotics (I)</b>	<b>11-12</b>		<b>10 credits/year</b>
The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on micro controllers, autonomous mobile robots and real world applications. Information presented in class will be linked to lab experiments. Students will work in teams to build and test increasingly more complex LEGO-based mobile robots. Students will apply what they have learned through a series of robot contests.			
<b>WebDesign Technology (A, W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Students will learn design principles to create Web sites of their choice using the latest software applications. Students will also learn to analyze Web sites created in a wide range of fields and various cultures. Topics include CSS, typography, color, copyright issues, accessibility, contracts, digital imaging optimization, and techniques to display sound, animation and video. *Pending UC/CSU approval.			
<b>Marketing 1, 2 (A, W)</b>	<b>10-12</b>	<b>g</b>	<b>10 credits/year</b>
Students will learn the basics of advertising, marketing, merchandising, and technology in preparation for entry-level marketing positions and college-level study. They will understand elementary business systems, functions; and practices, and business math.			
<b>Introduction to Computer Science (A, I)</b> <i>Computer Science Pathway (A)</i>	<b>9</b>		<b>5 credits/semester</b>
Students will spend one semester developing their computer literacy through three units:			
<ul style="list-style-type: none"> <li>• How We Communicate – Computers as facilitators of human interactions.</li> <li>• Making Computers Work – An introduction to programming and physical computing</li> <li>• The Internet of Things – An exploration of the future impact of computers in our lives</li> </ul>			



**Exploring Computer Science (A)** **10** **g\*** **10 credits/year**  
*Computer Science Pathway (A)*

The course forwards a new orientation to computer science classrooms – one shaped with an interweaving of learning foundational computer science concepts while developing the computational practices that support an inquiry approach to solving problems and creating artifacts.

**Wood 1 (K)** **9-12** **10 credits/year**

Wood 1 is a problem-solving course that introduces students to the proper techniques and safety procedures in the use of power machinery. It is designed to begin or increase the student's ability in using hand tools, machine tools, and basic joinery. The application of these skills will be developed with emphasis on pre-finish technology and finishing techniques. Sound safety measures and attitudes in the lab will be stressed.

**Parenting/Family Living (A, I)** **11-12** **10 credits/year**

In this year-long class, the first semester provides a general overview of the preparation for, and responsibilities of, parenthood with special emphasis on the development of the child from conception to eighteen months. The second semester provides an overview of the developing child from eighteen months to five years of age. The units that are covered include physical, emotional, and social development; feeding, clothing and health care; discipline; television/books; play-toys; and careers in early childhood education. Highlights at Irvington, include designing a nursery, experiencing flour sack babies, caring for the electronic “Baby Think It Over,” and designing a toy and writing a children’s book. In addition, Irvington has a pregnancy simulator vest for students to experience pregnancy.

**Culinary Arts 1 (Beginning) (I)** **9-12** **10 credits/year**

Students will learn how to prepare soups, salads, main dishes, quick and yeast breads, pies, cakes, and other desserts as well as how to use convenience foods in creative ways. Students will increase their ability to apply principles of nutrition, meal planning, and diet planning to meet specific health and lifestyle needs. Students will increase their culinary skills through advanced recipes and preparation techniques.

**Culinary Arts 2 (Advanced) (I)** **10-12** **10 credits/year**

*Prerequisite: C or better in Culinary Arts 1 or teacher approval.*

Students: Let your taste buds travel as you prepare and sample dishes from foreign countries and various regions of the United States. Then learn about making and serving party foods and techniques of entertaining.

## COLLEGE CONNECTIONS

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>College Connections: (All)</b> (Location: Ohlone College)	<b>12</b>		<b>60 credits/year</b>
1. Government		<b>a</b>	
2. Economics		<b>g</b>	
3. You & the Law			
4. Literature, Justice & Society		<b>g</b>	
5. ERWC		<b>b</b>	
6. Humanities 12		<b>g</b>	

# ENGLISH

## SUGGESTED COURSE SEQUENCES

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English 9	English 10	English 11	English 12/ERWC
English 9 Honors	English 10 Honors	English 11 Honors AP English 11	AP English 12

**\*NOTE:** Students may only use 20 credits of ELD towards English graduation requirements.

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
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<p><b>Academic Literacy (K)</b></p> <p>This course focuses on the development of reading strategies that help students negotiate their way through all levels of literary study. Teachers follow the Reading Apprenticeship Framework (WestEd), helping students develop the knowledge, strategies and dispositions they need to become more powerful readers. Teachers model disciplinary ways of reading in different subject areas and genres, support students’ discovery of their own reasons to read, and guide students to explore, strengthen and assess their own reading. Literacy study is extended through writing, discussion, presentations, and public speaking.</p>	<b>9</b>		<b>10 credits/year</b>
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<p><b>American Studies 11 (I, W)</b></p> <p><i>Prerequisite: Successful completion of English 10 or enrollment in English Skills Support class; successful completion of World History.</i></p> <p>This course combines the curriculum of <u>U.S. History</u> with that of 11<sup>th</sup> grade <u>American Literature</u>. Students will study and explore American History using specific pieces of literature and primary sources that are tied to key historical events, movements, trends, and individuals. The confluence of numerous cultures, as shown through the California State Framework, will factor into this one year course as will the study of writing, literature, and comprehension skills.</p>	<b>11</b>	<b>b</b>	<b>10 credits/year</b>
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<p><b>*ELD Connections (All)</b></p> <p><b>*ELD 1 Reading (All)</b></p> <p><b>*ELD 1 Writing (All)</b></p> <p>English Language Development is for students who have had limited instruction in English. This is a basic course for acquiring and improving skills in reading, writing, listening, and speaking. There is an emphasis on development of vocabulary, reading comprehension and awareness of literary forms. This is a two/three-period a day course. *Placement in these classes depends on CELDT scores.</p>	<b>9-12</b>		<b>10/year Elective credits</b>
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<p><b>**ELD 2 Reading (All)</b></p> <p><b>**ELD 2 Writing (All)</b></p> <p>English Language Development for students continuing to improve their English skills. The instruction is literature based. It includes reading, writing, listening and speaking skill development. There is an emphasis on writing including sentence, paragraph and essay forms. This is a two-period a day course. **Placement in these classes depends on CELDT scores.</p>	<b>9-12</b>		<b>10/year English credits</b>
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<p><b>**ELD 3 (All)</b></p> <p>English Language Development is an alternative to mainstream English and follows English 9 (CP) curriculum. ELD 3 is for students continuing to improve their English skills.</p>	<b>9-12</b>		<b>10/year English credits</b>
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<p><b>ELD 3D</b></p> <p>This course is designed for EL 3, and long term 4, and 5 students that need additional support with academic vocabulary, writing, speaking and listening. This program emphasizes speaking and listening skills through class discussions, peer collaboration and formal speeches. There is a focus on developing academic writing skills in summary, opinion, informative texts and research papers. Students also read engaging complex informative texts. Many of the routines support college and career readiness particularly in speaking and listening.</p>	<b>9-12</b>		<b>10/year Elective credits</b>
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**English 9 (All)** **9** **b** **10 credits/year**

This college prep English 9 class offers opportunities for students to receive instruction in reading, writing, speaking and listening skills. Students will read, analyze and compare district-adopted core literature.

**English 9 Honors (A, I, K, M, W)** **9** **b** **10 credits/year**

*Prerequisite: GATE identified or District Honors policy.*

This college preparatory English 9 class offers opportunities for those students who seek an academic challenge and who wish to demonstrate the ability to earn honors credit. In addition to social and cooperative skills, the ninth grade college prep course offers differentiated instruction based on students' individual needs. Instruction ranges from reading, writing, listening, and speaking skills to an awareness of literary forms. Students learn the structure of a personal and expository essay. Several literary genres will be explored in depth with the honors students responding at a higher critical and creative level.

**English 10 (All)** **10** **b** **10 credits/year**

This English course gives all students, including the college-bound, an overview of world literature in its historical context based on district-adopted texts. Students will develop and strengthen essay and research skills, study career paths, and increase vocabulary skills as guided by the Common Core State Standards. Additionally, students will continue preparation for the California Assessment of Student Performance and Progress.

**English 10 Honors (A, I, K, M, W)** **10** **b** **10 credits/year**

*Prerequisite: GATE identified or District Honors policy.*

Students will focus on analyzing literature as they study dramatic works, short stories, and novels. Composition skills will be further developed through compare/contrast and persuasive essays. Career Path preparation continues with exploration of career paths, personal skills surveys, and appropriate technology. An additional focus will be college preparatory vocabulary. Student outcomes include work with reading, writing, literature, speaking, listening, personal responsibility, and social/cooperative skills.

**English 11 (All)** **11** **b** **10 credits/year**

Students will study representative works and literary eras of the United States. Extensive expository writing (including poetry explication) and discussion will focus on the values and philosophy of United States' culture. Students will study college preparatory vocabulary.

**English 11 Honors (M, W)** **11** **b** **10 credits/year**

*Prerequisite: GATE identified or District Honors policy.*

This English course will emphasize an in-depth study of classic works of American Literature. Students will focus on style analysis, analytical writing and critical thinking. Composition skills will be refined as students develop an awareness of style and rhetoric. Students are expected to have mastered basic oral and written communication skills so that they can focus on extended reading assignments, research, and group presentations. Students will study college preparatory vocabulary.

**AP English 11 (English Language & Composition) (A, I, K)** **11** **b** **10 credits/year**

This course will emphasize style analysis, analytical writing and critical thinking. Composition skills will be refined as students develop an awareness of style and rhetoric. Students are expected to have mastered basic oral and written communication skills so that they can focus on extended reading assignments, research, and group presentations. College preparatory vocabulary and American Literature will be studied. This course is considered preparation for the AP English Language and Composition exam to be taken in May of their junior year. This class will require more homework time for students.

**English 12 (A, I, K, M)** **12** **b** **10 credits/year**

In English 12, students will study influential world writers of various literary genres. Extensive expository writing will include the literature-based essay and a critical analysis, which utilizes primary and secondary sources.

<b>Expository Reading and Writing Course (All)</b>	<b>12</b>	<b>b</b>	<b>10 credits/year</b>
<i>Prerequisite: Completion of three years of high school English</i>			
This course will prepare college-bound seniors for the literacy demands of higher education. Through a sequence of fourteen rigorous instructional modules, students in this yearlong, rhetoric-based course develop advanced proficiency in expository, analytical, and argumentative reading and writing. Course texts include contemporary essays, newspaper and magazine articles, editorials, reports, biographies, memos, assorted public documents, and other nonfiction texts. The course materials also include modules on two full-length works (one novel and one work of nonfiction). Written assessments and holistic scoring guides conclude each unit.			
<b>AP English 12 (English Literature &amp; Composition) (A, I, K, M, W)</b>	<b>12</b>	<b>b</b>	<b>10 credits/year</b>
This is a rigorous class; students should have excellent reading skills and have achieved high grades in previous English classes. In AP English, students will learn to discover the meanings in literature by being attentive to the diction, imagery, and other literary strategies authors use to evoke intellectual and emotional responses from readers. Students are expected to justify their interpretations and compare them with those proposed by literary critics, teachers, and fellow students. The course will require the in-depth study of influential British and world writers, with an emphasis on poetry. Students will develop analytical and composition skills necessary for college and in preparation for the AP Literature and Comprehension Exam in May. This class will require more homework time for students.			
<b>Common Core Skills (I)</b>	<b>9</b>		<b>10 credits/year</b>
<i>This is a one semester course that will fulfill the computer requirement.</i>			
The Common Core Skills class will prepare students for the skills necessary for success in the Common Core classroom. Students will learn to read with purpose through annotation, how to construct argument, both written and oral, and presentation skills.			
<b>Creative Writing (A, I, K, W)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<b>(M)</b>		<b>g</b>	<b>5 credits/semester</b>
This course explores creativity in the writing of short stories and poems (even novels) with an eye to publishing. The concentration is on developing writing skills, critiquing own and others' work, and improving literary appreciation. The class includes thorough coverage of the different literary genres and the use of such techniques as dialogue, plotting, foreshadowing, and figurative language.			
<b>Humanities 12 (I, CC)</b>	<b>12</b>	<b>b</b>	<b>10 credits/year</b>
This course which combines the required elements of <u>American Government</u> , <u>Economics</u> , and <u>English 12</u> in a format that uses literature, the arts, and primary source readings from the social sciences to examine major themes of civilization. An interest in writing, reading, discussing ideas, and being creative is necessary for students in this class.			
<b>Public Speaking (A, K)</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
<b>(M)</b>	<b>11-12</b>	<b>g</b>	<b>5 credits/semester</b>
This course is for students interested in developing skills in oral presentations. Students will learn how to research, outline, organize and deliver various types of formal speeches, including informative, persuasive, and special occasion. Additional presentations will include impromptu speeches, oral interpretations of poetry and prose, and debates. Students will enter speech contests and observe local forensic league competitions. At American, this year long course is repeatable for credit.			
<b>Journalism 1 (A, I, K, M, W)</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of all English 9 outcomes and/or completion of application process.</i>			
Students will study: writing for a school newspaper, proofreading, editing, layout, advertising and marketing, legal responsibility, and desktop publishing. Students will learn and practice all skills necessary to produce a school newspaper.			
<b>Journalism 2 (A, K, I, M, W)</b>	<b>10-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: Journalism 1 and/or completion of application process.</i>			
Develop skills in Electronic Desktop Publishing, website design and information management skills while making the editorial decisions for the school newspaper. (May be repeated for credit)			
<b>Journalism 3 (M)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: Journalism 1 and/or completion of application process.</i>			
Develop skills in Electronic Desktop Publishing, website design and information management skills while making the editorial decisions for the school newspaper. (May be repeated for credit)			

<b>Literature in Film (A)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: Completion of English with a C or better.</i>			
This course is about analyzing film as a piece of literature. The focus is on film analysis from cinematic, literary, and theatrical views. Students also progress through the film creation process from storyboarding to screenwriting and finally into filming and production. The course requires writing (creative, critique, and analysis) and analysis (but not in reading).			
<b>Literature, Justice, and Society (A, W, CC)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: Completion of English with a C or better.</i>			
This course is an interdisciplinary college prep class designed to promote the values and beliefs needed to build and sustain a free and democratic society. Students will study the historical development and lessons surrounding collective violence and racism, making the connection between history and moral choices confronted in their own lives. Units of study center on literature, art and film.			
<b>Publications 1 (A, K, M, W)</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: B or better in English and approval of advisor.</i>			
This hands-on production course teaches desktop publishing skills, including layout design, graphic design, copy writing, typesetting, editing, proofreading, and photography in relation to scholastic yearbook publishing. Spending time outside of class and meeting all deadlines are required. Publications 1 provides a good foundation for careers in publishing and photography.			
<b>Advanced Publications (A, K, M, W)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: B or better in Publications 1 and approval of advisor.</i>			
This course not only offers advanced study of scholastic yearbook production but also presents opportunities for editorships and staff leadership. This course provides a good foundation for careers in publishing and photography.			
<b>World Mythology (A)</b>	<b>10-12</b>	<b>g*</b>	<b>5 credits/semester</b>
This course is an introduction to myths from around the world. Students will study the similarities and differences between various mythologies, analyze how past cultures have used mythology to explain the world and human nature, and explore why myths are relevant to humans today. This class requires frequent reading of assigned myths, regular writing assignments, and occasional essays, presentations, and projects.			
<b>Legends and Folklore (A)</b>	<b>10-12</b>	<b>g*</b>	<b>5 credits/semester</b>
This course is an overview of legends and folklore from around the world. Students will gain exposure to legendary figures, creatures, and quests that have dominated our imaginations since before humans began writing. Students will also consider cross-cultural connections to analyze how humans have used legendary figures as tools in telling stories about the human experience. This class requires frequent reading of assigned folklore, regular writing assignments, and occasional essays, presentations, and projects.			
<b>Critical Thinking (A)</b>	<b>9-10</b>		<b>5 credits/semester</b>
This is an elective credit recovery class where students will explore their educational options and make comparisons. They will learn to use data and critical thinking in making decisions.			

# FINE ARTS: VISUAL AND PERFORMING

## Visual Arts

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>Art 1 (All)</b> In the Art 1 course students will explore various media used in drawing, painting, sculpting, printmaking, and other two and three-dimensional art forms. The basics of design and composition will be studied, including space, line, shape, form, texture, and color. Art from various cultures will be presented.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Art 2 (All)</b> Two Dimensional Designs <i>Prerequisite: Successful completion of Art 1 and teacher’s approval.</i> Students will further their knowledge of design and composition, and deepen their appreciation of art as they develop skills in painting, sculpture, printmaking, and drawing techniques.	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Art 3 (A, K, M)</b> <i>Prerequisite: Successful completion of Art 2 with a C grade or better or approval of instructor based on portfolio review.</i> Students will further their knowledge and appreciation of the art techniques used by Rembrandt and the Flemish masters through use of glazing techniques and undercoating in paint, (acrylic & oil). Advanced techniques in 3 <sup>rd</sup> dimensional art/sculpture will be covered in the second half of the year. Material may include clay, with use of armatures and assemblage using soldering, wire & metal. Advanced techniques of ink illustration and mixed media will also be covered.	<b>12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Art Spectrum (I)</b> Art Spectrum introduces students to a wide variety of the visual and performing arts skills including: drawing, painting, and graphic design; music appreciation, creative movement, and stage presence. In collaboration with teaching artists from San Francisco Opera’s High School program, PEAK (Practicing Everyday Arts Knowledge) this course integrates opera’s multi-disciplinary characteristics into a diverse curriculum, utilizing the opera as a prism to explore the connection of a number of subjects across the arts, such as music, singing, costume, lighting, set design, make-up, as well as making historical and cultural connections.	<b>9</b>		<b>5 units/semester</b>
<b>Sculpture and Ceramics (I, K, M)</b> Students who enjoyed creating papier-mâché and ceramic sculpture in Art 1 can further develop their sculpting skills. Clay, plaster, wire, and papier-mâché are some of the materials used. This course includes an introduction to the potter’s wheel and will require both a gallery tour and review.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Sculpture 2 (I)</b> <i>Prerequisite: Sculpture &amp; Ceramics.</i> Sculpture 2 is designed for the second year sculpture student. Students will further their knowledge of three-dimensional art through a rich study in both observational and conceptual projects. Students will participate in a wide range of experiences including research, field studies and critiques. Students will study plaster, clay, wire, papier-mâché and found objects as sculptural materials.	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Ceramics 1 (K, W)</b> This ceramics course will cover the basic hand building method, wheel method, and decorative techniques. Creative design and individual expression will be emphasized through functional and non-functional projects. Students will gain an appreciation of historical and contemporary ceramics. Ceramics may be repeated for credit.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Ceramics 2 (K, W)</b> <i>Prerequisite: Successful completion of Ceramics 1 and teacher’s approval.</i> This ceramics course will be a continuation of Ceramics 1. Students will further their knowledge and expertise in both hand building and throwing techniques and explore a variety of glazing techniques. Emphasis will be on advanced techniques in construction and glazing.	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Architectural Design 1 (A)</b> Architecture students learn the essentials of buildings. Units of study include: concept form and function, floor and elevation drawing, model construction, site and landscape plans, and interior design. This is a College Preparation course, designed for the college-bound student.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>

<b>Architectural Design 2 (A)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Architectural Design 1.</i>			
Architectural Design 2 is designed for the second year advanced architecture student. In addition to building upon the foundation of Architectural Design 1, Architectural Design 2 students will study designs of commercial structures, city planning, the effects of light with structures, the Uniform Building Code, site analysis, and career paths. This study will be achieved through research papers, design drawings and models, oral presentations/critiques, and field study. Architectural Design 2 students are expected to work at an advanced level and accelerated pace.			
<b>Architectural Design 3 (A)</b>	<b>11-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Architectural Design 2.</i>			
Architectural Design 3 is designed for the third year advanced architecture student. In addition to building upon the foundations of Architectural Design 2, Architectural Design 3 students will study tenant improvement, residential communities, and proportioning systems. This study will be achieved through research papers, design drawings and models, oral presentations/critiques, and field study. Architectural Design 3 students are expected to work at an advanced level and accelerated pace.			
<b>Architectural Design 4 (A)</b>	<b>11-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Architectural Design 3.</i>			
Architectural Design 4 is designed for the fourth year advanced architecture student. In addition to building upon the foundations of Architectural Design 1, Architectural Design 2, and Architectural Design 3, Architectural Design 4 students will study organic design, geometric design, ecological design, and landscape architecture. This study will be achieved through research papers, design drawings and models, oral presentations/critiques, and field study. Architectural Design 4 students are expected to work at an advanced level and accelerated pace.			
<b>Studio Art (A, I, W)</b>	<b>11-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Completion of Art 2 with a <u>B</u> or better and demonstrated ability for self-directed learning and work habits (must have instructor's approval for enrollment).</i>			
Art Studio is designed for the self-directed advanced student. This course provides an opportunity for self-directed in-depth study. The student, with instructor advisement, defines and clarifies course parameters and learning objectives. The student is required to exhibit at least a one-week display of his/her artwork in June. Course is designed to prepare the student for Advanced Placement Studio Art. Students are encouraged to provide personal materials for special types of study (as in stretched canvases, etc.).			
<b>AP Studio Art Drawing, or 2D, or 3D (I, K, M, W)</b>	<b>11-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Completion of Art 1 and 2 with a B or better and teacher's approval.</i>			
The Advanced Placement program in Studio Art enables highly motivated students to perform at the college level while still in high school. Students spend the year developing their portfolio in and outside of class. This portfolio is viewed as the culminating experience in a student's secondary school visual arts training. It serves as a performance-based exam offered by the College Board. They will have the ultimate decision on whether or not college credit is received. Students who seek AP credit will be required to pay an application fee for the test.			
<b>Digital Imaging 1 (I, K, M, W)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
Digital Imaging is a largely project-based class. Instruction focuses on both the fine arts and the applied arts (mainly graphic design); topics covered include, but are not limited to: the elements and principles of design, basic rules of composition, photo-editing, the design process, art history, basic advertising, typography, and illustration. Students create artwork and design pieces using software programs that are the industry standards for 2D design such as a Photoshop, Illustrator and InDesign.			
<b>Digital Imaging 2 (K, M, W)</b>	<b>11-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Digital Imaging 1 or permission from instructor.</i>			
This class builds on the foundations covered in Digital Imaging 1 with the continued use of Adobe Photoshop and Bryce, a three-dimensional rendering program. Topics will include: Study of Principles of Design and Elements of Art, Student designed projects and criteria. Emphasis of student work will be on Art History and multicultural influences. Discussion and creation of web page design and exploration of multimedia presentations will be covered.			
<b>Digital Video Arts Production 1, 2 (W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and "live TV"; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.)			

**Digital Photography 1, 2 (I, K)****9-12****f****10 credits/year**

This course is designed to provide students with a solid grounding in digital photographic essentials focusing on the power of contemporary software tools such as Adobe Photoshop. Students will have hands-on access to the latest photographic equipment. Instruction covers digital photography essentials, lighting, set design, studio configuration, lighting, field issues, camera operation, software interfaces, and color management. Students may enroll in a second year for more advanced instruction. (Black & White and dark room special effects are used at Irvington).

**Digital Photography 3 (I, K)****10-12****f****10 credits/year**

*Prerequisite: Completion of Photography 1 & 2 with C or better or teacher's approval; and access to 35 mm camera.*

This course is designed to provide experience in wet lab and digital. Students will critique work and exhibit finished products. Students may visit galleries and museums.

**2-D Animation (W)****9-12****f****10 credits/year**

Students learn the creative process for producing 2-dimensional digital animations. Students write short stories, draw sketches and storyboards; develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations.

**AP Art History (A, I, K, M)****11-12****f (pending)****10 credits/year**

This course is equivalent to a two-semester introductory college course that explores such topics as the nature of art, making of art, and responses to art. Students investigate a specific set of 250 works within ten content areas ranging from Global Prehistory (beginning 30,000 BCE) to Global Contemporary (present).



## Performing Arts

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>Symphonic Band (A, I, K, M)</b> <i>Prerequisite: Audition and teacher’s recommendation.</i> This advanced course is designed for students who play a band instrument and are interested in the total range of band music and activities. You will continue to improve instrumental skills, musicianship and showmanship. You will continue learning music theory, music history how to perform chamber music, concert music, and symphonic literature. Attendance at rehearsals and performances is required. This course is recommended for students who have successfully completed a year of Band I. (May be repeated for credit)	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Wind Ensemble (I)</b> <i>Prerequisite: Teacher approval.</i> This ensemble, consisting of woodwind, brass, and percussion players, is designed for the most advanced and motivated student musicians on campus. Since these students will have advanced technical skills as a prerequisite for the class, the curricular focus will be on artistic and soloistic expression. In addition to full ensemble playing, a great deal of time will be spent in chamber ensembles. (May be repeated for credit)	<b>11-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Jazz Band 1 (A, I, K, M)</b> <i>Prerequisite: Previous instrumental experience, audition; Concurrent enrollment in Band 1, 2, Advanced Band 1, 2, 3 or Orchestra 1, 2, 3, 4.</i> This class will explore a variety of jazz styles and time periods. Skills in tone production, intonation, technique, music reading and musical expression will be studied within the big band and combo repertoire. Improvisational techniques will be introduced. Attendance at evening concerts, festivals, community events and rehearsals will be required as scheduled. Rehearsals times are determined by school site and variable unit credit may be given. This is a repeatable course.	<b>9-12</b>	<b>f</b>	<b>5 credits/semester 10 credits/year</b>
<b>Jazz Band 2 (M)</b> <i>Prerequisite: Jazz Band 1, audition; Concurrent enrollment in Band 1, 2, Advanced Band 1, 2, 3 or Orchestra 1, 2, 3, 4.</i> This class will explore a variety of jazz styles and time periods. Skills in tone production, intonation, technique, music reading and musical expression will be studied within the big band and combo repertoire. Improvisational techniques will be expanded. Attendance at evening concerts, festivals, community events and rehearsals will be required as scheduled. Rehearsals times are determined by school site and variable unit credit may be given.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Jazz Band 3 (M)</b> <i>Prerequisite: Jazz Band 2, audition; Concurrent enrollment in Band 1, 2, Advanced Band 1, 2, 3 or Orchestra 1, 2, 3, 4.</i> This class will explore a variety of jazz styles and time periods. Skills in tone production, intonation, technique, music reading and musical expression at an advanced level will be studied within the big band and combo repertoire. Improvisational techniques will be expanded. Attendance at evening concerts, festivals, community events and rehearsals will be required as scheduled. Rehearsals times are determined by school site and variable unit credit may be given.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Jazz Band 4 (M)</b> <i>Prerequisite: Jazz Band 3, audition; Concurrent enrollment in Band 1, 2, Advanced Band 1, 2, 3 or Orchestra 1, 2, 3, 4.</i> This class will explore a variety of jazz styles and time periods. Skills in tone production, intonation, technique, music reading and musical expression at an advanced level will be studied within the big band and combo repertoire. Improvisational techniques will be expanded. Attendance at evening concerts, festivals, community events and rehearsals will be required as scheduled. Rehearsals times are determined by school site and variable unit credit may be given.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Band 1 (A, I, K, M, W)</b> This is a performance class for all students who have had previous experience playing a band instrument. Students who wish to restart or begin playing a band instrument should contact the director. Skills in tone production, intonation, technique, music reading and musical expression will be studied. Attendance at evening concerts, parades, football games, community events and rehearsals will be required as scheduled.	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>

<b>Band 2 (I, K, M)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Band 1 and teacher's recommendation.</i>			
This is a performance class for all students who have had previous experience in high school Concert Band. Skills in tone production, intonation, technique, music reading and musical expression will be studied. Attendance at evening concerts, parades, football games, community events and rehearsals will be required as scheduled.			
<b>Advanced Band (M, W)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Band 1 or 2; Audition and teacher's approval.</i>			
This course is designed for students who have played a band instrument and have experience in a range of band and music activities. Skills in tone production, intonation, technique, music reading and musical expression at an advanced level will be studied within the Symphonic Band repertoire. Students must demonstrate skills in precision teamwork, body carriage, musicianship and showmanship, Marching Band techniques and movement are assessed in competitions. Attendance at evening concerts, parades, football games, community events and rehearsals will be required as scheduled. This is a repeatable course.			
<b>Advanced Band 2 (M, W)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Advanced Band 1; Audition and teacher's approval.</i>			
This course is designed for students who have played a band instrument and have experience in a range of band and music activities. Skills in tone production, intonation, technique, music reading and musical expression at an advanced level will be studied within the Symphonic Band or Wind Ensemble repertoire. Students must demonstrate skills in precision teamwork, body carriage, musicianship and showmanship, Marching Band techniques and movement are assessed in competitions. Attendance at evening concerts, parades, football games, community events and rehearsals will be required as scheduled.			
<b>Advanced Band 3 (M)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Advanced Band 2; Audition and teacher's approval.</i>			
This course is designed for students who have played a band instrument and have experience in a range of band and music activities. Skills in tone production, intonation, technique, music reading and musical expression at an advanced level will be studied within the Symphonic Band or Wind Ensemble repertoire. Students must demonstrate skills in precision teamwork, body carriage, musicianship and showmanship, Marching Band techniques and movement are assessed in competitions. Attendance at evening concerts, parades, football games, community events and rehearsals will be required as scheduled.			
<b>Marching Band (A, I, M, W)</b>	<b>9-12</b>	<b>f</b>	<b>5 credits/semester</b>
This course is designed for students who play a band instrument and are interested in the total range of band music and activities. Students will improve instrumental skills as well as acquire skills in precision teamwork, body carriage, musicianship, and showmanship. This course counts as P.E. credit, and may be repeated each fall semester. Students who are flag team members, majorettes or other band auxiliary must enroll.			
<b>AP Music Theory (I, M)</b>	<b>11-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Musical experience and teacher interview.</i>			
This class leads to an aural and visual understanding of musical structure including compositional procedures, part writing, basic harmony and chorale structure. It also emphasizes melodic and harmonic dictation and sight singing. It is designed to prepare students to take the AP Music Theory exam. This class will require more homework time for students.			
<b>Musical Theatre Vocal Workshop (M)</b>	<b>9-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Previous enrollment in Choir 1 &amp; 2 or Chorale; audition and teacher approval.</i>			
This course encourages students to develop their vocal skills utilizing the materials of musical theatre. They will be required to sing solos and in small and large ensembles. Students will research and present the work of major musical theatre composers. Students will also rehearse and prepare for upcoming productions.			
<b>Orchestra 1 (M, I, W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Previous string experience.</i>			
Students with experience in playing the violin, viola, cello and string bass will improve instrumental, musical, listening skills, and music theory studies. Skills in tone production, intonation, technique, music reading and musical expression will be studied within the string and symphonic repertoire. Activities include concerts, contests, small ensemble works and the spring musical. Attendance at evening concerts, community events, musicals and rehearsals will be required as scheduled. This is a repeatable course.			
<b>Orchestra 2 (I, M, W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Orchestra 1, audition, director's approval.</i>			
Students with experience in playing the violin, viola, cello and string bass will improve instrumental, musical, listening skills, and music theory studies. Skills in tone production, intonation, technique, music reading and musical expression will be studied within the string and symphonic repertoire. Activities include concerts, contests, small ensemble works and the spring musical. Attendance at evening concerts, community events, musicals and rehearsals will be required as scheduled.			

<b>Orchestra 3 (M)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Orchestra 2, audition, director's approval.</i>			
Students with experience in playing the violin, viola, cello and string bass will improve instrumental, musical, listening skills, and music theory studies. Skills in tone production, intonation, technique, music reading and musical expression at an advanced level will be studied within the string and symphonic repertoire. Activities include concerts, contests, small ensemble works and the spring musical. Attendance at evening concerts, community events, musicals and rehearsals will be required as scheduled.			
<b>Orchestra 4 (M)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Orchestra 3, audition, director's approval.</i>			
Students with experience in playing the violin, viola, cello and string bass will improve instrumental, musical, listening skills, and music theory studies. Skills in tone production, intonation, technique, music reading and musical expression will be studied within the string and symphonic repertoire. Activities include concerts, contests, small ensemble works and the spring musical. Attendance at evening concerts, community events, musicals and rehearsals will be required as scheduled.			
<b>Choir 1 (A, I, K, M, W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Choir is a course designed for students who wish to improve their singing skills, including sight reading, ear training, and vocal technique. A variety of musical styles will be performed, including popular and classical forms. Note: Outside performances are required in this class. <b>(May be repeated for credit)</b>			
<b>Choir 2 (A, I, K, M, W)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Teacher's approval and audition.</i>			
This course is designed for students who have successfully completed Beginning Choir and who would like to continue singing. Outside performances are required in this class. <b>(May be repeated for credit)</b>			
<b>Treble Ensemble (I, M)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Teacher's approval.</i>			
This course is an intermediate vocal ensemble which focuses on choral music for treble voices. Sight reading and listening (ear training) will be emphasized as well as good vocal technique. Outside performances and rehearsals are required. <b>(May be repeated for credit)</b>			
<b>Chamber Chorale (I, K, M)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Teacher's approval.</i>			
Chamber Chorale is an advanced vocal ensemble which studies a variety of choral music in great detail. Sight reading and listening (ear training) will be emphasized, as well as good vocal technique. Outside performances and rehearsals are required. A spring concert tour is part of the course. <b>(May be repeated for credit)</b>			
<b>Chorale 2 (I, K, M)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Teacher's approval &amp; successful completion of Chamber Chorale.</i>			
Chorale 2 is an advanced vocal ensemble which studies a variety of choral music in great detail. This course is designed for students who have successfully completed Chamber Chorale and who would like to continue singing. Sight reading and listening (ear training) will be emphasized, as well as good vocal technique. Outside performances and rehearsals are required. A spring concert tour is part of the course. <b>(May be repeated for credit)</b>			
<b>Guitar 1 (A, I, K, W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
This course provides instruction for the beginning guitar player. Emphasis will be on reading and playing chords, basic strumming and accompaniment techniques. More advanced students will develop chord skills; refine right and left hand skills, and soloing techniques.			
<b>Guitar 2 (A, W)</b>	<b>10-12</b>	<b>f</b>	<b>10 credits/year</b>
<i>Prerequisite: Guitar 1 or permission of guitar teacher.</i>			
Students will develop advanced chord skills; further refine right and left-hand skills, and soloing techniques.			
<b>Drama 1 (A, K, I, M, W)</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Drama 1 provides the student with a basic background in theatrical principles, with emphasis on stage voice and movement, scene and monologue work, pantomime, improvisation, acting technique, and stage terminology. Students will apply newly acquired principles in the production of an assigned play. Outside rehearsals are required second semester.			

**Drama 2 (A, K, I, M, W)** **9-12** **f** **10 credits/year**

*Prerequisite: C or better in Drama 1.*

This class is designed as a continuation of Drama 1 for students who wish to study various acting styles and design techniques. There will be a strong emphasis on classical and/or improvisation styles, monologues, and scene performance, as well as play writing. Students will participate in outside theater competitions and are required to attend drama productions periodically throughout the year. Students will study theatrical make-up, theater history, children's theater, and advanced theater techniques, and memorized scenes. The class will produce and perform a one-act plays. Ohlone credit may be offered.

**Drama 3 (A, I, M, W)** **10-12** **f** **10 credits/year**

*Prerequisite: C or better in Drama 2 and teacher approval (by audition).*

This class is designed as a continuation of Drama 2 for students who wish to study various acting styles and design techniques from a director's viewpoint. There will be strong emphasis on classical and/or historical styles, including monologues, scene performance, and full play production; as well as directing for film and play writing. A donation will cover the cost of items such as scripts, costumes, rights and royalties, lighting, scenery, make-up, transportation, entrance fees, and supplies. Ohlone credit may be offered. Students are encouraged and may be required to participate in outside theater competitions, attend drama productions periodically throughout the year, and compete in several drama festivals in the spring. Outside rehearsals and performances may also be required. **(May be repeated for credit)**

**Drama 4 (A, M, W)** **10-12** **f** **10 credits/year**

*Prerequisite: Teacher's approval (by audition).*

This is a class for students who have a strong interest and ability in drama. Advanced study in theater acting styles, directing, mime, stage movement, and musical theater, will be explored. Spring semester students also compete in several drama festivals which include a three-day trip to Sacramento and a five-day trip to Southern California for annual drama festivals. Ohlone credit may be offered.

**Dance 1 (I)** **9-12** **f** **10 credits/year**

Students will study the basic aspects and qualities of the art of dance. Different styles of dance will be taught: jazz, Afro-Haitian, ballroom, modern, musical theater routine, etc. Activities will involve principles of improvisations of choreographed routines; researching period dances; and study techniques of different choreographers, dance groups, and musical productions. If class composition permits, a dance recital will be produced in the spring semester. Sections will be divided by experience and skill level if there is sufficient enrollment. Dance shoes and costumes may be needed. Outside rehearsals are required.

**Advanced Dance (I)** **10-12** **g** **10 credits/year**

The class will, through movement and research, explore the historical significance, cultural background, and ethnic relevance of American social dance. We will concentrate specifically on the social dances of the 20<sup>th</sup> century, not to exclude the experience of other forms of dance such as ballet, jazz, folk, theatrical, and modern. **(May be repeated for credit)**

**Production & Stage Management (I, W)** **9-12** **f** **10 credits/year**

Play production offers many opportunities for both backstage and auditorium management. Students in this class will assist in all production procedures, including costuming, property management, publicity, business management, and stage crew work. In short, students will "crew" a show. Outside rehearsals are required. **(Maybe repeated for credit.)**

**Rehearsal & Performance (I)** **9-12** **5 credits/semester**

*Prerequisite: Teacher's approval (by audition).*

Each semester students will audition for a part in a school play. Those students selected for parts may enroll in Rehearsal & Performance to earn unit credit for their play participation. Students will study acting techniques through actual performances. Outside rehearsals and performances are required. **(May be repeated for credit)**

# HEALTH

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>Health (All)</b> <b>Health is a one-semester course designed to complete the health and safety requirements for graduation. This course is required for ninth-grade students.</b> The Board of Education approved a semester Health course for your child with the goal of promoting wholesome attitudes toward his/her own health, both physical and mental, and that the information received by the student will help him/her make intelligent decisions about life long health habits.	<b>9</b>		<b>5 credits/semester</b>

Our one semester 9<sup>th</sup> grade Health course requirement includes the following six units:

- |   |  |
|---|--|
| 1. Mental and Emotional Health            | 4. First Aid and Emergency Care  |
| 2. Use and Misuse of Chemical Substances  | 5. Diseases and Disorders  |
| 3. Nutrition, Fitness and Personal Health | 6. Family, Life, and Sexual Health (FLASH) (Including human reproduction, sexually transmitted diseases and HIV/AIDS Prevention Education) |

Refer to the course outline handout of the board adopted health curriculum. FUSD uses the Holt Lifetime Health textbook and materials from 9/10 Family, Life, and Sexual Health (FLASH) curriculum. This program complies with Education Code.

The Board of Education recognizes that Education Code 51240 states that “if any part of a school’s instruction in health conflicts with the religious training and beliefs of a parent or guardian of a pupil, the pupil, upon written request of the parent or guardian, shall be excused from the part of the instruction that conflicts with the religious training and beliefs.” Also, Education Code 51938 states “a parent or guardian of a pupil has the right to excuse their child from all or part of comprehensive sexual health education, HIV/AIDS prevention education, and assessments related to that education.”

Questions about these program choices may be directed to the high school guidance staff, Health Department chairperson or school administration.



<b>Accelerated Geometry/Algebra 2 (A, I, M, W)</b>	<b>9-10</b>	<b>c*</b>	<b>10 credits/year</b>
<i>Prerequisites: B- or better in both semesters of the accelerated 8th grade course (GFA/Algebra 1) or an A- in both semesters of Common Core Algebra 1 with a 90% or better on the District benchmarks. Students who earn less than a B- at semester 1 may be moved from the accelerated class to Geometry. Students who earn less than a B- at semester 2 will not remain in the accelerated class the following year.</i>			
This is the first year of a two year program encompassing all standards from Common Core Geometry, Common Core Algebra 2/Trigonometry, and Precalculus. This course will cover 7 critical focus areas: 1) congruence, 2) similarity, right triangles, and trigonometry, 3) circles, 4) expressing geometric properties with equations, 5) geometric measurement and dimension, 6) modeling, and 7) statistics and probability.			
<b>Accelerated Algebra 2/Precalculus (A, I, M, W)</b>	<b>9-10</b>	<b>c*</b>	<b>10 credits/year</b>
<i>Prerequisites: B- or better in both semesters of CC Geometry/Algebra 2 (This course begins in the 2017-18 school year.)</i>			
This is the second year of a two year program encompassing all standards from Common Core Geometry, Common Core Algebra 2/Trigonometry, and Precalculus. This course will cover 7 critical focus areas: 1) the complex number system, 2) vector and matrix quantities, 3) seeing structure in expressions, 4) reasoning with equations and inequalities, 5) interpreting functions, 6) building functions, and 7) statistics and probability			
<b>Common Core Algebra 2 CP (All)</b>	<b>10-12</b>	<b>c</b>	<b>10 credits /year</b>
<i>Prerequisites: C- or better in both semesters of CC Geometry</i>			
Algebra II will focus on four critical areas: (1) relate arithmetic of polynomials and rational expressions to arithmetic of rational numbers; (2) expand understandings of functions and graphing; (3) synthesize and generalize functions and extend understanding of linear, quadratic, and exponential functions and their respective inverse functions; and (4) relate data display and summary statistics to probability and explore a variety of data collection methods			
<b>Common Core Trigonometry CP (All)</b>	<b>11-12</b>	<b>c</b>	<b>10 credits/year</b>
<i>Prerequisite: C- or better in both semesters of CC Algebra 2.</i>			
This is a college prep course and a follow-up to Algebra 2. Major topic to be covered includes the six trigonometry functions, unit circle, right triangle trigonometry, Radian measure, graphing and inverse functions, identities and formulas, equations, triangles and complex numbers and polar coordinates. Further topics include addition formulas for sine and cosine half-angle and double-angle formulas, law of sine and law of cosines, de Moivre theorem and using trigonometry and a variety of applications.			
<b>Common Core Algebra 2/Trigonometry (All)</b>	<b>9-10</b>	<b>c</b>	<b>10 credits/year</b>
<i>Prerequisite: B- or better in both semesters of CC Geometry, C- or better in both semesters of CC Geometry Honors. <b>May be taken concurrently with Geometry with approval of principal and grades of B- or better in all 4 semesters of Algebra 1 and GFA (except Irvington High School).</b></i>			
Algebra II/Trigonometry will focus on four critical areas: (1) relate arithmetic of polynomials and rational expressions to arithmetic of rational numbers; (2) expand understandings of functions and graphing to include trigonometric functions; (3) synthesize and generalize functions and extend understanding of linear, quadratic, and exponential functions and their respective inverse functions; and (4) relate data display and summary statistics to probability and explore a variety of data collection methods.			
<b>Pre-Calculus (A, I, K, M, W)</b>	<b>10-12</b>	<b>c</b>	<b>10 credits/year</b>
<i>Prerequisite: B- or better in both semesters in CC Algebra 2/Trigonometry, C- or better in both semesters of CC Algebra 2/Trigonometry Honors</i>			
Note: A graphing calculator (such as the TI-83) is required.			
Pre-calculus includes the study of trigonometry, complex numbers, polynomial functions, logarithmic and exponential functions, and analytic geometry. Other topics studied include sequence, series, and polar coordinates. Projects may be required.			
<b>Pre-Calculus Honors (A, I, K, M, W)</b>	<b>10-12</b>	<b>c</b>	<b>10 credits/year</b>
<i>Prerequisite: B-or better in both semesters of CC Algebra 2/Trigonometry Honors</i>			
Note: A graphing calculator (such as the TI-83) is required.			
Pre-calculus math is comprised of the study of formal trigonometry and its application to complex numbers, coordinates, and scientific applications. Students will be expected to complete in-depth projects.			
<b>Calculus (A, I, K, M, W)</b>	<b>11-12</b>	<b>c</b>	<b>10 credits/year</b>
<i>Prerequisite: Pre-Calculus with a C- or better for both semesters</i>			
The objective of this course is to provide a review of functions, including trigonometric, exponential, and logarithmic. The course will include an introduction to limits and continuity, difference quotients, the derivative, and the definite integral. Techniques and applications of differentiation and integration will be included. Students who have successfully completed Pre-Calculus, but are not interested or prepared for the demands of the advanced placement calculus will benefit from this class as it provides continuity of the rigors of advanced math as well as a more solid base from which to enter college level calculus in their post-secondary studies.			

**AP Calculus AB (A, I, K, M, W)****11-12****c****10 credits/year**

*Recommended: Pre-calculus with a grade of A for both semesters or Honors Pre-Calculus with a grade of C- or better for both semesters.*

Note: A graphing calculator (such as the TI-83) is required.

Calculus is a one-year course of college-level calculus. It combines a study of rates of change, limits, derivatives of various functions, maximum and minimum problems, and integration. Instruction emphasizes the modern terminology, notation, and proof, which is included in contemporary calculus courses. A passing score on the AB AP Exam generally grants 1 semester of credit and/or placement to the second semester Calculus class. This class will require more homework time for students.

**AP Calculus BC (A, I, K, M, W)****11-12****c****10 credits/year**

*Recommended: High A in Honors Pre-calculus for both semesters and recommendation of teacher or C- or better in both semesters of AP Calculus AB.*

This is a fast paced, rigorous treatment of a full one-year college level Calculus class. A passing score on the BC AP Exam generally grants 2 semesters of credit and/or placement to the third semester Calculus class. In addition to the AB topics, Calculus of vector functions, parametric equations, polar coordinates, sequence and series are studied. This class will require more homework time for students.

**Introduction to Statistics (A, I, K, W)****11-12****c****10 credits/year**

*Prerequisite: Algebra 2 with a grade of C- or better both semesters.*

This class will examine the basic elements of probability, binomial and normal distributions, measures of center and spread, linear correlation, statistical tables, and use of technology for developing statistical theory and applications.

**AP Statistics (A, I, K, M, W)****11-12****c****10 credits/year**

*Prerequisite: Successful completion of Algebra 2/Trigonometry and/or Pre-Calculus with a grade of C- or better both semesters.*

Note: A graphing calculator (the TI-83+) is required.

AP Statistics will cover graphical displays of data, measure central tendencies of data, explore data distributions, explore bivariate data and frequency tables, develop strategies to test hypotheses, explore probability, make statistical inferences, and test for significance at various levels of confidence. The chi-square, normal, and t distributions will be studied. This class will require more homework time for students.

**Introduction to Computer****Programming Using C++\* (M)****9-12****5 credits/semester****(Ohlone College Course CS-102 – Introduction to Computer Programming Using C++)**

*Prerequisite: Precalculus or Honors Precalculus with a grade of B or better in both semesters.*

*Co-requisite: (a) the student must be currently enrolled in AP Calculus AB or AP Calculus BC or (b) the student must have taken AP Calculus AB or AP Calculus BC and earned a grade of B or better in both semesters.*

An Ohlone College course offered on site. This course is an introduction to computer programming. Its primary objective is to teach problem solving using the C++ programming language. Emphasis will be placed on structured procedural programming with an introduction to object oriented programming.

**Discrete Math\* (M)****12****5 credits/semester****(Ohlone College Course – Math 163 – Discrete Mathematics for Computers)**

*Prerequisite: Precalculus or Honors Precalculus with a grade of B or better in both semesters.*

*Co-requisite: (a) the student must be currently enrolled in AP Calculus AB or AP Calculus BC or (b) the student must have taken AP Calculus AB or AP Calculus BC and earned a grade of B or better in both semesters.*

An Ohlone College course offered on site. This course is an introduction to discrete mathematics and its applications. Topics covered include logic and sets, relations and functions, combinatorics, probabilities, graph and tree theory, recurrence relations, Boolean algebra, proofs, algorithms, and finite-state machines.



**Multivariable Calculus\* (I, M)****11-12****5 credits/semester****(Ohlone Course Math 101C – Calculus III)**

*Prerequisite: Calculus BC with a grade of C or better in both semesters and AP Calculus BC test with a score of 3 or better and AB subscore of 3 or better. Preference is given to seniors. If the course is impacted, then preference is based on performance in AP Calculus BC and on the AP Calculus BC Test Score.*

An Ohlone course offered on site. This course includes vector analysis, functions of several variables, partial derivatives, multiple integration, integration of vector valued functions, and applications.

**Linear Algebra\* (I, M)****11-12****5 credits/semester****(Ohlone Course Math 103 – Linear Algebra)**

*Prerequisite: Calculus BC with a grade of C or better in both semesters and AP Calculus BC test with a score of 3 or better and AB subscore of 3 or better. Preference is given to seniors. If the course is impacted, then preference is based on performance in AP Calculus BC and on the AP Calculus BC Test Score.*

An Ohlone course offered on site. This course includes an introduction to linear algebra including vector spaces, matrices, determinants, linear transformations, eigenvectors, techniques of solving systems of equations, and applications.

**Business Math (A, K, I, W)****11-12****10 credits/year**

This is a one-year application course covering basic math functions. Many formulas used in business including theory, drill, practice and personal finance management are covered. This course applies math to solve personal and business-related math problems. A calculator will be required. This course receives math credit.

**\* These are Ohlone courses offered on a FUSD site.**

# PHYSICAL EDUCATION

## PHYSICAL EDUCATION REQUIREMENTS:

**All students are required to take Physical Education 1 as freshman and Physical Education 2 as sophomores.**

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Physical Education 9	Physical Education 10	Physical Education Elective	Physical Education Elective

**Course Title**

**Grade(s)**

**“a-g” Fulfillment**

**Length of Course**

**Physical Education 9 (A, I, K, M, W)**

**9**

**10 credits/year**

The Physical Education 9 course will provide an opportunity for students to participate in a variety of sports and games designed to teach teamwork, movement skills and to increase fitness levels. Emphasis is placed on development, enjoyment, and appreciation of physical activity, leading to lifelong fitness and personal well-being. This course is required of ninth-grade students. The California Physical and Health-Related Fitness Test is given as a required measurement of fitness.

**Physical Education 10 (A, I, K, M, W)**

**10-12**

**10 credits/year**

*Prerequisite: Physical Education 9. Tenth grade status recommended.*

The Physical Education 10 course continues the emphasis placed on fitness awareness and teamwork. In both dual and individual sports, students develop awareness and enthusiasm for leisure-time activities. The goal of this participation is to extend the student's involvement in "carry-over" activities.

**Physical Education Adv. (A, R)**

**11-12**

**10 credits/year**

*Prerequisite: Open to juniors or seniors.*

This physical education course is for 11<sup>th</sup> and 12<sup>th</sup> graders similar to P.E. 10 with the addition of some dual sports. Goal is to allow upper classmen to make up P.E. credits and to provide an elective opportunity.

**Weight Training 1 (A, I, K)**

**11-12**

**10 credits/year**

**Weight Training 2 (A, I)**

**11-12**

**10 credits/year**

*Prerequisite: Must have earned 20 credits in P.E. 9 & 10.*

This course is designed as an elective class for students seriously interested in daily resistance training. Weight machines, free weights and plyometrics will be utilized.

**Team Sports 1 (A)**

**11-12**

**10 credits/year**

**Team Sports 2 (A)**

**11-12**

**10 credits/year**

*Prerequisite: Must have earned 20 credits in P.E. 9 and 10.*

There is an emphasis on football, volleyball, soccer, street hockey, basketball, softball, badminton, ultimate Frisbee, and pickle ball.

**Kinesiology 258 (I)**

**11-12**

**10 credits/year**

This course is designed to introduce principles of exercise prescription and strength and conditioning. Topics will include exercise physiology, exercise prescription for special and general populations, free weight and machine exercise techniques, nutrition and weight management, biomechanical concepts, and emergency and legal issues related to fitness and strength training.

**Club Fitness (A, M)**

**11-12**

**10 credits/year**

Club Fitness is designed to enhance student fitness levels, convey fitness knowledge, and promote an understanding and discipline to facilitate an awareness of life-long physical activity & wellness. Techniques taught in the class are modeled off those offered at fitness clubs and gyms. Such activities include but not limited to: cross-fit, Tae Bo, Insanity, Boot Camp, Yoga, weights & resistance training, aerobics, Zumba, and marathon. Lessons are intended for all ability levels.

# SCIENCE

## SUGGESTED COURSE SEQUENCES

9th Grade	10th Grade	11th Grade	12th Grade
NGSS 1	Biology	Chemistry	Physics
NGSS 1	Biology Honors	Chemistry Honors	Physics Honors
Biology Honors	Chemistry	Physics	AP Science
Biology Honors	Chemistry Honors	Physics Honors	AP Science

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
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<b>Next Generation Science Standards 1: (A, K, I, M, W)</b>	<b>9</b>	<b>(d* or g*)</b>	<b>10 credits/year</b>
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This class is the first in a proposed sequence of three Next Generation Science Standards courses aligned to the new California Science Framework which will prepare students to successfully pass the SBAC science assessment coming in 2018. This course will cover Life Science, Physical Science, Earth and Space Science, and Engineering standards. This is a college preparatory Lab Science course eligible for UC/CSU credit.

<b>Integrated Science 1 (All)</b>	<b>10-12</b>	<b>g</b>	<b>10 credits/year</b>
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This is an introductory science course that covers the four disciplines of science: Chemistry, Physics, Biology and Earth Science. The topics covered include Atomic Structure, Chemical Bonds, Dynamic Earth Processes, California Geology, Heat and Thermodynamics, Waves, Electricity, Evolution and Ecology.

<b>Biology (All)</b>	<b>9-10</b>	<b>d</b>	<b>10 credits/year</b>
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This course is a college preparatory lab science course which focuses on the cell and its development into complex plant and animal systems. Other areas of study are ecology, genetics, and population dynamics and control, reproduction, embryology, and microbiology. Students develop evaluative skills through lab activities.

<b>Biology Honors (A, I, K, M, W)</b>	<b>9-10</b>	<b>d</b>	<b>10 credits/year</b>
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*Prerequisite: Must have completed the Honors Science program in Jr. High, GATE identification or high achiever.*

This course is a rigorous college preparatory lab science which focuses on the cell and its development into complex plan and animal systems. Other areas of study are ecology, genetics, population dynamics and control, reproduction, embryology, and microbiology. Students develop evaluative skills through lab activities.

<b>AP Biology (A, I, K, M, W)</b>	<b>10-12</b>	<b>d</b>	<b>10 credits/year</b>
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*Prerequisite: Biology or Biology Honors (College Board recommends that the student received an A or B in Biology and Chemistry).*

AP Biology is a one-year course of college-level biology. It combines the study of biochemistry, molecular biology, anatomy and physiology, developmental biology, evolution and ecology. Instruction emphasizes the molecular approach to the study of major problems in biology. This class will require more homework time for students.

<b>Bioethics (A)</b>	<b>11-12</b>		<b>10 credits/year</b>
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Bioethics deals with ethical questions surrounding biotechnology and medicine. This course will give students the opportunity to learn about and discuss the ethical and safety concerns presented by the medical, pharmaceutical, agricultural, and forensic applications of biotechnology.

<b>Biochemistry (A)</b>	<b>10-12</b>	<b>d</b>	<b>10 credits/year</b>
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Biochemistry focuses on the study of inorganic chemistry and organic chemistry as it relates to the human body and other living organisms. Emphasis is placed on chemical reactions, bonding, kinetics, thermodynamics, acid-base equilibrium, and biochemistry. This course is designed to meet the Chemistry requirement of students entering a biological or medical field. Successful completion of Algebra I, Biology and Biotechnology with a grade of C or better, or instructor permission is recommended. \*Pending UC/CSU approval.

<b>Chemistry (A, I, K, M, W)</b>	<b>10-12</b>	<b>d</b>	<b>10 credits/year</b>
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*Prerequisite: Successful completion of Algebra 1 with at least a grade of C or higher and Biology with a grade of C or higher. Concurrent enrollment in Algebra 2 or higher level math course strongly encouraged.*

This course is a college preparatory lab course, which focuses on the study of inorganic chemistry: composition and structure, chemical reactions, and quantitative analysis. Investigative skills are developed through lab activities. This course emphasizes the application of algebra to solve problems. A strong math background is required.

<b>Chemistry Honors (A, K, M, W)</b>	<b>10</b>	<b>d</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of Algebra 1 with at least a grade of C or higher and Biology with a grade of C or higher. Concurrent enrollment in Algebra 2 or higher level math course strongly encouraged.</i>			
This course is a study of inorganic and organic matter, with emphasis on quantitative skills, analysis, individual study, problem-solving and lab activities. This course emphasizes the application of algebra to solve problems. A strong math background is required.			
<b>AP Chemistry (A, I, K, M, W)</b>	<b>11-12</b>	<b>d</b>	<b>10 credits/year</b>
<i>Prerequisite: It is strongly recommended that the student received an A or B in Chemistry.</i>			
A college level course and text. This course is an accelerated study of inorganic chemistry, physical chemistry, and quantitative analysis, advanced laboratory procedures, written reports and exams. Prepares students for the AP Exam in Chemistry. This course emphasizes the application of algebra to solve problems. A strong math background is required. This class will require more homework time for students.			
<b>Chemical Technology (A)</b>	<b>11-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Chemistry</i>			
This course prepares students for careers involving laboratory science in the chemical industry. Students learn procedure and laboratory skills required for chemical technicians performing analytical chemistry and instrumental analysis. Instruction will include both “hands-on” and traditional classroom experiences. After completing the course, students will be prepared to continue at the university level or a two year applied sciences program. .			
<b>Physics (A, I, K, M, W)</b>	<b>11-12</b>	<b>d</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of chemistry with at least a C grade. Successful completion of Algebra II/Trigonometry with at least a C grade, or successful completion of two years of college prep or honors math with at least a C grade and concurrent enrollment in Algebra II/Trigonometry. Concurrent enrollment in Pre-Calculus or higher math recommended.</i>			
Investigation of the nature of forces, motion, and energy in the universe: optics, waves, electricity, magnetism, and emphasizes discovery by experimentation, problem solving, and the design and construction of special projects.			
<b>AP Physics 1 (A, I, K, M, W)</b>	<b>11-12</b>	<b>d</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of Chemistry with an A or B grade. Successful completion of Algebra II/Trigonometry with an A or B grade. Successful completion of Pre-calculus with an A or B grade, or concurrent enrollment in Pre-calculus.</i>			
This course is a college-level analytical and lab-centered approach to the study of motion, forces, energy, waves and electricity, and the design and construction of special projects. This class will require more homework time for students.			
<b>AP Physics 2 (A, I, K, W)</b>	<b>11-12</b>	<b>d</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of AP Physics 1 with at least a C grade.</i>			
This course is a college-level analytical and lab-centered approach to the study of fluid mechanics, thermodynamics, electricity and magnetism, optics, atomic and nuclear physics, and the design and construction of special projects. This class will require more homework time for students.			
<b>AP Physics C (I, M, W)</b>	<b>11-12</b>	<b>d</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of Physics or AP Physics B (2013-2014) or AP Physics I (2014-2015 and later) with an A or B grade, and completion of Calculus (A or B grade) or concurrent enrollment in Calculus.</i>			
This course is a college-level analytical and lab-centered approach to the study of motion, forces, energy, electricity and magnetism, and the design and construction of special projects. This course emphasizes the application of calculus and problem solving. This class will require more homework time for students.			
<b>Marine Biology (A)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: Successful completion of two years of required science.</i>			
A survey course in which selected groups of marine plants and animals are used to develop an understanding of biological principles and processes that are basic to all forms of life in the sea. Additional topics include aspects of oceanography, taxonomy, and change over time, ecology, behavior, and physiology of organisms.			
<b>Biotechnology (A, I, W)</b>	<b>10-12</b>	<b>d</b>	<b>10 credits/year</b>
This course prepares students for careers involving laboratory science and the biotechnology industry. Students learn procedures and laboratory skills required for lab technicians working with DNA manipulation and micro-pipetting, and other advanced laboratory techniques. Instruction includes both “hands-on” and traditional classroom experiences. After completing the course, students will be prepared to continue at the university level or apply for entry-level positions with biotechnology labs and research facilities.			

**AP Environmental Science (A, I, M)****11-12****d****10 credits/year***Prerequisite: Successful completion of Algebra I, Biology and Chemistry.*

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. Yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science. The course will serve as a preparation for the AP Environmental Science Exam. This class will require more homework time for students.

**Nutritional Food Science (K)****10-12****g****10 credits/year***Prerequisite: Prior completion of Physical Science or Integrated Science.*

For students who are not yet ready for chemistry, this course integrates chemistry and biology through nutritional chemistry and food processing. It is an interdisciplinary Home Economics and Science Department course, which serves as a good introduction to chemistry QCIP.

**Anatomy and Physiology (A, I, K, M, W)****10-12****d****10 credits/year***Prerequisite: Biology & Chemistry (or taken concurrently).*

Anatomy and Physiology is an upper division college preparatory course for those with an interest in learning more fully about the human body or in exploring a medical career includes: the eleven systems of the body. Presentation modes include lectures, labs, dissection, computer applications, written assignments, and tests.

**Advanced Anatomy (A)****11-12****d****10 credits/year***Prerequisite: Completion of the Anatomy with strong teacher approval.*

Advanced anatomy covers an in-depth evaluation of each of the 11 systems of the human body along with video presentations, medical guest speakers on related subject matter, and disease research to the related system failures.

# SOCIAL SCIENCE

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Geography	World History	US History	American Government/Economics
	World History Honors	AP US History	American Government Honors or Economics 12
	AP European History	AP US History	AP American Government or AP Economics
		American Studies	We the People

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
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<b>Civics (All)</b>	<b>9-12</b>		<b>5 credits/semester</b>
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This course uses an inquiry- based model to assist students in developing the necessary skills for success in their career, college, and civic life. Included in the curriculum will be various aspects of media literacy, service-learning, and proactive citizenship.

<b>Geography/Reference Skills (A, I, M, W)</b>	<b>9</b>		<b>5 credits/semester</b>
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Geography/Reference Skills will emphasize physical, cultural and political geography while at the same time improving the study skills of all students through the use of research based projects and computer technology. Hands-on computer experience encompasses in their projects will include word processing, spreadsheet construction, computer graphics, Internet searching skills, and PowerPoint. These skills will be taught in a computer lab with Internet capabilities. All projects are presented orally by students in class, strengthening presentation skills, and students will demonstrate proficiency in PowerPoint. Thinking critically as well as test-taking, note taking, and map work will be integral parts of the class. This course is strongly recommended for students planning AP studies in Social Science. This class meets computer literacy graduation requirement.

<b>World History (All)</b>	<b>10</b>	<b>a</b>	<b>10 credits/year</b>
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The focus of this course is the chronological progression of events in world history. Students will develop a global view of the relationship between today’s cultures and those of the past, as well as an awareness of cultural similarities, differences, and achievements. Content will also include the geographical location and influence of classical civilizations, Europe, Asia, Africa, and the Americas.

<b>World History Honors (I)</b>	<b>10</b>	<b>a</b>	<b>10 credits/year</b>
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*Prerequisite: Honors class prerequisites.*

World History is the study of social, cultural, political and technological change. The units of study presented in this course are: The Rise of Democracy, Industrial Revolution, Imperialism, World War I, Totalitarianism, Holocaust, World War II, and Unresolved Problems of the Modern World. Students will write a research paper, and read novels such as “All Quiet on the Western Front.” Writing skills will be developed through essay writing and short reports. Group projects and presentations will be done throughout the year. Geography skills and interpretations of graphs and charts will be emphasized throughout the year.

<b>AP World History (M)</b>	<b>11-12</b>	<b>a</b>	<b>10 credits/year</b>
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Note: Elective credit only.

The AP World History course is designed to follow the course outline as described by College Board. The purpose is to provide students with a broader understanding of the process and results of greater global contacts and interactions across continents and time periods. Students will acquire factual knowledge as well as further developing the skills of analysis and evaluation of the cultural, institutional and technological changes within and between political borders. This class will require more homework time for students.

<b>AP European History (A, K, W)</b>	<b>10-12</b>	<b>a</b>	<b>10 credits/year</b>
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This is a rigorous course designed for the student with ability and intense interest in the advanced study of European History. Students will work with primary documents and use a college-level text. Sophomores who opt to take this course will also fulfill their World History graduation requirement. Upper classmen may take this course for elective credit. The course begins with a study of the Black Death and continues to the fall of Communism. The course of study will follow the College Board curriculum in order to prepare for the AP test in May. There will also be post-test, standards-based curriculum from the California State Framework focusing on a more global view of today’s cultures. It is strongly recommended that the student has taken Geography in their Freshman year. This class will require more homework time for students.

**U. S. History (All)** **11** **a** **10 credits/year**  
 This course will examine the chronological growth and change of the United States regarding social eras, political developments, economic policies, and foreign relations. The California Framework units include a review of US History in the 19<sup>th</sup> Century after the Civil War, The Progressive Era, World War I, Roaring 20's, the Depression years, New Deal, World War II, The Cold War, Civil Rights Movement, Vietnam, the 80's and post-Cold War. Students will continue to develop research skills, data analysis, written and oral communication, and service learning related to citizenship. Individual and cooperative group work will be assigned.

**AP U. S. History (A, I, K, M, W)** **11** **a** **10 credits/year**  
 This is a rigorous course designed for the student with high ability and interest in the advanced study of history. Students will work with primary documents and will write a variety of papers and essay examinations. Course prepares students for the US History Advanced Placement Exam. This class will require more homework time for students.

**American Government/ Economics (All)** **12** **a** **5 credits/semester**  
**12** **g** **5credits/year semester**  
 Government is a study of the structure of the United States government, the role of the citizen in a democratic republic, the significance of political parties and lobby groups, and the differences between the national government and the state's and the state and local governments' powers. Students are required to complete text reading including the Federalist Papers 10, 51 and 78 (as per the California Framework).

Economics is an introduction to macroeconomics and microeconomics, consumerism and comparative economic systems. Graphing skills as well as the ability to read charts and statistical information are used to complete assignments. Assessment of student work in Government and Economics is heavily dependent on cooperative learning skills, as many units of study require completion of group projects and service learning. (Satisfactory completion of both courses is also connected to the QUEST senior project at Irvington).

**AP American Government / AP Economics (Macro) (A, I, K, W)** **12** **a** **5 credits/semester**  
**12** **g** **5 credits/semester**

This course is designed for honor students seeking preparation for the Advanced Placement Exams in May in both American Government and in Macro Economics. This course will examine in greater depth the curriculum investigated in the standard American Government and Economics courses offered 1<sup>st</sup> and 2<sup>nd</sup> semester. In addition, primary source documents will be read to increase our understanding of the democratic process and of the workings of the economic system. Strong writing and discussion skills highly desired. These classes will require more homework time for students.

**American Government Honors / Economics Honors 12 (I)** **12** **g** **5 credits/semester**  
**5 credits/semester**

*Prerequisite: Recommendation by Interview/Audition before a panel of current students and teacher.*

The government section of the course follows the "We the People, the Citizen and the Constitution" curriculum. Students in this course must be able to master public speaking skills and work cooperatively. The class takes part in the national senate hearing competition. Extensive research must be completed as well as persuasive thesis papers. Cooperative groups must commit to meeting a minimum of 90 minutes a week outside of class.

At Irvington, the economics section completes several hands-on projects based on the major themes of the California Framework; individual writing assignments are also required. Comparative economic and governmental systems are debated. In both sections Socratic dialogues are expected to be led by students. (Service learning assignments are also completed, as are components of QUEST at Irvington).

**American Studies (I, W)** **11-12** **a** **10credits/year**

*Prerequisite: A grade of C or higher in World History.*  
 This two-hour course combines the curriculum of American History with American Literature. Students will study and explore American History using specific pieces of literature and primary sources tied to key historical events, movements, trends, and individuals. The confluence of numerous cultures, as shown through the California State Framework, will factor into this one-year course as will the study of writing, and literature comprehension. Units of study are often thematic, rather than chronological, and will regularly require cooperative group work outside of class. An honors option is available in this program. Students taking the honors option must accept the challenge for both history and literature as this is an integrated course. Honors students are required to meet an hour a week outside of class.

**Humanities I (I, CC)** **12** **a** **10 credits/year**  
*Prerequisite: A grade of C or higher in American Studies is strongly recommended, U.S. History and English 11 or Honors US History and Honors English 11, and an interview with the Humanities teachers.*

This course combines the required elements of Government, Economics, and English 12 in a format that uses literature and primary source readings from the social sciences and the arts to examine major themes of civilization. Components of philosophy and art history are included. An interest in writing, reading, discussion, and creative thinking are essential qualities for students who choose this program. An honors option is available for this program. Students must accept honors for both Govt/Econ and English.

<b>Ethnic Studies (A, M, R, W)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
<i>Prerequisite: World History.</i>			
This course is designed to help students understand and analyze the fundamental principles, historical interpretations, and effects of various cultures on present day society. Students will research and discuss such questions as: How has globalization caused our community, and society, in general, to evolve from a contemporary European society to one that is ethnically diverse? How do students' own individual identities fit into the community? Students will explore these various ethnic groups through poetry, music, literature, plays, food, films, folktales, writing, and events in the community.			
<b>California History (A, W)</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
This course traces the history of California from the pre-Spanish Indian past to the present. Specific focus will be upon the geographic, economic, social, intellectual, and political development of California from Spanish colonial times to the present, including the Mexican period, Gold Rush, the railroad era, Great Depression, World War II, the 1960's, and the high-tech era. The course will also include a unit on the History of Fremont, field trips to local historical sites, and a research paper.			
<b>Big History (K)</b>	<b>9</b>	<b>a*</b>	<b>10 credits/year</b>
This course is a new field in historical research that seeks to explore history on the largest timescales possible. The purpose is to provide students with a common cultural literacy of the modern world and to create context for further explorations into history, social studies and the sciences. *Pending UC/CSU approval.			
<b>Psychology (A, I, M, W)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
This course is designed to provide the student with an understanding of human behavior. Its emphasis is on personality development, self-awareness, mental health, and use of psychology in everyday life. This course will benefit students who wish to understand themselves and others better, become better students and thinkers, and prepare more wisely for marriage and a vocation			
<b>AP Psychology (A, I, M, W)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
Extends the survey of fundamental concepts and principles in psychology and prepares the student to pass the Advanced Placement Test in Psychology. This class will require more homework time for students.			
<b>Peer Resources 1 (A, K, M, R)</b>	<b>10-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Approval Process.</i>			
The Peer Resource course is a peer assistance program offering students the opportunity to work as trained peer facilitators with other students. Participants will be trained in a variety of helping skills which will enable them to assist other students in having a more positive and productive school experience. Positive peer influence will be utilized as a strategy for addressing such issues as low achievement, dropout prevention, substance abuse prevention, suicide, absenteeism, negative attitudes about school, behavior problems, and other issues of concern in the school.			
<b>Peer Resources 2 (A, K)</b>	<b>10-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Approval Process.</i>			
In this Advanced Peer Resource Class, students will obtain advanced skills in communication, facilitation and leadership. Students will gain skills regarding such issues as: substance abuse, violence prevention, suicide prevention and other topics as needed. All students will be responsible in planning, organizing, and implementing programs that will provide a service to the school and/or community. Students in this course will also take an active role in assisting with the training and project implementation for Peer Resources 1.			
<b>You and the Law (CC)</b>	<b>12</b>		<b>10 credits/year</b>
This course deals with the rights, duties, and responsibilities of American citizens under the law. It is a survey course in American law, emphasizing criminal, civil, consumer, and family law and dealing with basic legal facts and concepts. Emphasis will be placed on the Rights of youth in American society. Whenever possible, the course will include active participation in the legal process.			
<b>Sociology (W)</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
This is an elective course that introduces the field and its methodology. It is a survey class that involves learning about relationships between individuals and the society in which one lives. Students will be introduced to the tools and vocabulary of sociology as well as learning about structure, function and patterns of behavior in various societies, cultural traits, adaptation, socialization, values and norms, problems of adolescence, adulthood and work, social stratification, family problems, population and ecology.			
<b>Leadership 1 (A, K, I M, W, R)</b>	<b>9-12</b>		<b>10 credits/year</b>
<i>Prerequisite: Application process.</i>			
Apply leadership skills to practical settings, group interaction and committee work. This course is recommended for class officers and ASB officers. Repeatable for credits.			



**Leadership 2 (A, K, I, M, W)****9-12****10 credits/year***Prerequisite: Application process. There is an interview as part of the application process.*

This course instructs students in leadership knowledge and skills needed to conduct student body business, such as problem-solving techniques, organizational methods, and parliamentary procedures. Instruction includes the study of human relations, group dynamics, public relations, and public speaking. Upon completion, students will be better able to function effectively in leadership roles. This is a required course for all elected associated student body officers, appointed council associates and all elected class officers. \*\*\*It is at the discretion of the school if Freshman officers are required to take the course. This leadership course will require students to attend mandatory events before the start of the school year, after school and on weekends. Repeatable for credits.

**AP Human Geography (M)****11-12****a****10 credits/year**

This course is a two-semester course that examines cultural constructs including politics, religion, language, race, agriculture, region and place. Students will be prepared to take the AP Human Geography test in the spring.

**Women's Studies (M)****11-12****g****10 credits/year**

The class will help students see women's past and current role in the country and in the world with a deeper understanding of their significance. Units include an overview of women's coalitions, violence against women, international women's issues, women and the media, body image, and a research project on a subject of personal choice. Through these topics students will be empowered with tools of political activism and self-advocacy as they question existing social and political structures. All students will have the opportunity to enhance their understanding of themselves and the world by studying inspirational examples of powerful women.

## SPECIAL EDUCATION

**Course Title****Grade(s)****"a-g" Fulfillment****Length of Course****CORE Support (All)****9-12**

This course is designed to assist students in grades 9 - 12 with an Individual Education Plan (IEP) to develop self-advocacy skills while being provided with core support and limited homework support. Both academic/transition goals from student's IEP, as well as transition planning, will be addressed. Students will learn test strategies and will be assessed on their progress towards meeting their annual IEP goals. Students may have the opportunity to receive support from additional program staff (Workability, Transition Partnership Program) in an effort to improve transition planning. This can be a semester or yearlong course, based upon IEP team decision.

## TEACHING ASSISTANT

- ◆ *A maximum of 10 credits of Clerical or Teaching Assistant may be taken per year.*

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
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<b>Teaching Assistant School Office (All)</b>	<b>11-12</b>		<b>10 credits/year</b>
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*Prerequisite: Staff recommendation.*

Students earn a Pass/Fail mark in this class. Strong skills in communication, filing, and computer literacy are critical. Responsibilities may include: answer the telephone, take messages, and interact with parents and staff. Students shall complete a standard district-wide application form to apply for either student assistant position. The application will also include a contract agreement that outlines job expectations and will include parent signature of approval. Student assistants will only be assigned to certificated personnel. Repeatable for credits.

<b>Teaching Assistant (All)</b>	<b>By Department</b>	<b>11-12</b>	<b>10 credits/year</b>
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*Prerequisite: Staff Recommendation.*

Students earn a letter grade in this class, working as an assistant to the teacher. Responsibilities may include: perform clerical tasks, assist students with assignments and resources, lead small groups, make presentations to students, and prepare equipment for class. Students shall complete a standard district-wide application form to apply for either student assistant position. The application will also include a contract agreement that outlines job expectations and will include parent signature of approval. Student assistants will only be assigned to certificated personnel. Repeatable for credits.

**Business**  
**Consumer Home Economics**  
**English**  
**Health**  
**Library Science**  
**Math**  
**Performing Arts**  
**Physical Education**  
**Science Lab Tech**  
**Science Classroom**  
**Social Science**  
**Special Education**  
**Technology**  
**Visual Arts**  
**World Language**

## WORK EXPERIENCE EDUCATION

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
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<b>Work Experience Education (K)</b>	<b>11-12</b>		<b>1-10 (variable)</b>
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*Prerequisite: 16 years old; must be employed and/or Work Experience Coordinator's approval.*

This is a program under which a student may receive school credit and may be released part-time from school for employment. It is designed to assist students in developing positive work attitudes and experiences in an on-the-job situation. Students must have approval and register with the Work Experience Coordinator.

# WORLD LANGUAGES

## Level 1

Using the four language skills of listening, speaking, reading, and writing, students will communicate about daily life, everyday activities, hobbies, school, entertainment, weather, time, sports, family, and friends. Students will progress from using memorized language to creating original conversational and written exchanges. Language learned will reflect the customs, attitudes, values and characteristics of the country. A grade of C or higher is required to proceed to the next level.

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>French 1 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Spanish 1 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Chinese 1 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Japanese 1 (M)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>American Sign Language 1 (A, I, W) Grade 10 &amp; Up (Ohlone Course 101A Principles of ASL I)</b>	<b>10-12</b>	<b>e</b>	<b>10 credits/year</b>

*Prerequisite: At grade 10: a GPA of 3.0 or higher; at grades 10-12: a GPA of 2.75 or higher.*

This class is taught on campus by Ohlone College. High School and College credit given.

This course covers the beginning fundamental principles of American Sign Language and introduces basic information about the Deaf Community and Deaf Culture. Within the Ohlone system, this course is required for students majoring in American Sign Language/Deaf Studies and is a prerequisite for students wishing to enter the Interpreter Preparation Program. Students are expected to attend outside events at their own expense and may be required to purchase textbooks.

## Level 2

This course will build upon the foundation in listening, speaking, reading, and writing acquired in the Level 1 language course. Students will acquire additional skills in expressing personal and biographical information and in giving detailed information about activities, hobbies, family, and friends. Students will acquire sufficient cultural awareness to be comfortable in typical exchanges with native speakers. A grade of C or higher is required to proceed to the next level.

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>Chinese 2 (A, I, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>French 2 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Japanese 2 (M)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Spanish 2 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>American Sign Language 2 (A, I, W) (Ohlone Course 102A Principles of ASL 2)</b>	<b>10-12</b>	<b>e</b>	<b>10 credits/year</b>

*Prerequisite: Teacher Approval.*

This course covers the fundamental principles of Level 2 American Sign Language and introduces more advanced information about the Deaf Community and Deaf Culture. Within the Ohlone system, this course is recommended for students majoring in American Sign Language/Deaf Studies and students wishing to enter the Interpreter Preparation Program. Students are expected to attend outside events at their own expense. Students interested in third and four-year programs in American Sign Language can take those courses at Ohlone College and may be required to purchase textbooks.

### Level 3

Building upon skills acquired in the Level 2 language course, students will learn additional vocabulary and structures to allow them to increase written and spoken self-expression. They will be able to participate in a conversation with native speakers and handle situations even when a complication occurs. An appreciation of diverse cultures is enhanced through readings and discussions in the foreign language. A grade of C or higher is required to proceed to the next level. Some schools offer level 3 classes as concurrent Ohlone courses.

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>Chinese 3 (A, I, K, AM, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>French 3 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Japanese 3 (M)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Spanish 3 (A, I, K, M, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Spanish for Spanish Speakers (A, I, K, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>

This course will build upon the foundation in listening, speaking, reading, and writing acquired in the Level 1 & 2 language course. Students will acquire additional skills in expressing personal and biographical information and in giving detailed information about activities, hobbies, family, and friends. Students will acquire sufficient cultural awareness to be comfortable in typical exchanges with native speakers. This is a literature based class.

<b>American Sign Language 3 (W)</b> <b>(Ohlone Course 103A Principles of ASL 3)</b>	<b>10-12</b>	<b>e</b>	<b>10 credits/year</b>
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*Prerequisite: Teacher Approval.*

This course covers the fundamental principles of Level 3 American Sign Language and introduces more advanced information about the Deaf Community and Deaf Culture. Within the Ohlone system, this course is recommended for students majoring in American Sign Language/Deaf Studies and students wishing to enter the Interpreter Preparation Program. Students are expected to attend outside events at their own expense. Students interested in third and four-year programs in American Sign Language can take those courses at Ohlone College and may be required to purchase textbooks. This course is offered only at the Washington campus and at the Ohlone Community College.

### Level 4

This course builds upon the skills acquired in the Level 3 language course, enhancing the students' abilities to express and defend opinions and to describe or narrate, conversationally or in writing, the events of their lives. A variety of literary selections form the basis for discussion and appreciation of (language) culture and civilization. Students taking AP designated classes will develop skills useful for the Advanced Placement Examination and more homework time will be required. A grade of C or higher is required to proceed to the next level. Some schools offer Level 4 classes as concurrent Ohlone courses.

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>American Sign Language 4 may be taken at Ohlone College.</b>			
<b>Chinese 4 (A, I)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>AP Chinese Language and Culture (M, W)</b>	<b>10-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>French 4 (A, M)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>French 4 Honors (A)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>AP French Language and Culture (I, K, W)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>AP Japanese Language and Culture (M)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>Spanish 4 (I, M)</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>
<b>AP Spanish (K, W)</b> <b>Language and Culture</b>	<b>9-12</b>	<b>e</b>	<b>10 credits/year</b>

<b>Level 5 &amp; 6</b>
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This course improves skills acquired in preceding levels and focuses on the study of literature and language structure. Students taking AP designated classes will develop skills useful for the Advanced Placement Examination and more homework time will be required. A grade of C or higher is required to proceed to the next level.

<u>Course Title</u>	<u>Grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
AP Chinese (I, M) Language and Culture	9-12	e	10 credits/year
AP French (A, M) Language and Culture	9-12	e	10 credits/year
French 6 (A) Civilization and Culture	9-12	e	10 credits/year
AP Spanish (A, I, M) Language and Culture	9-12	e	10 credits/year
AP Spanish (A, M, W) Literature and Culture	9-12	e	10 credits/year
Spanish Culture and Civilizations (I)	11-12		10 units/year

## MISSION VALLEY REGIONAL OCCUPATIONAL PROGRAM (MVROP)

<u>Course Title</u>	<u>Course Code</u>	<u>grade(s)</u>	<u>“a-g” Fulfillment</u>	<u>Length of Course</u>
<b>2-D Animation (A)</b> Ohlone College Credit Students learn the creative process for producing 2-dimensional digital animations. Students write short stories, draw sketches and storyboards; develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations.	<b>74005</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
<b>Algebra 2/ Trigonometry in Construction 2</b> Diablo Valley College Credit (for Construction section) This course combines the mathematics of Algebra 2/ Trig with advanced, real-world engineering and construction techniques. Applications include designing and building advanced roofs for complicated structures, circuit board analysis and design, and general household electrical installation. Students will be prepared to college courses in engineering and applied sciences, as well as skills necessary to find work in the construction industry.	<b>74151</b>	<b>11</b>	<b>c</b>	<b>10 credits/year</b>
<b>Anatomy and Physiology (K, I)</b> Ohlone College Credit Students will gain a strong foundation in anatomy and physiology needed in the health care profession through guest speakers, field trips and labs. Lab skills include study of body systems and basic medical terminology. Pre-requisite: Biology.	<b>74007</b>	<b>10-12</b>	<b>g</b>	<b>10 credits/year</b>
<b>Automotive Technology 1 (K, W)</b> <b>1 hour class</b> General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service.	<b>74050</b>	<b>9-12</b>		<b>10 credits/year</b>
<b>Automotive Technology 1, 2 (MVROP)</b> <b>2 hour class</b> Chabot College Credit for Year 2 General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service. Introduction to hybrid “green” technology. <i>Must earn a C or better in Auto Tech 1 to take Auto Tech 2.</i>	<b>74040/74041</b>	<b>9-12</b>		<b>20 credits/year</b>
<b>Automotive Technology 2 (W)</b> <b>credits/year 2hour class</b> General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service. <i>Chabot College credit.</i>	<b>74051</b>	<b>9-12</b>		<b>10</b>
<b>Auto Technology/Basic Car Care (W)</b> This course provides pre-entry level training in automotive service/maintenance and is designed to be the first course for students entering transportation technology career pathways. Instruction covers the following areas: engine systems, electrical systems, tires and brakes, lubrication service, cooling systems, ignition and emission device service.	<b>74010</b>	<b>9-12</b>		<b>10 credits/year</b>
<b>Auto Body Painting and Refinishing 1, 2 (K)</b> Certified Instructor will teach introduction to Auto Body and Refinishing. Identification of the use of tools, materials and techniques needed for entry level position.	<b>74030/74031</b>	<b>9-12</b>		<b>10 credits/year</b>
<b>Auto Body Painting and Refinishing 1, 2 (MVROP)</b> Certified Instructor will teach introduction to Auto Body and Refinishing. Identification of the use of tools, materials and techniques needed for entry level position.	<b>74020/74021</b>	<b>9-12</b>		<b>10 credits/year</b>

**Careers in Education 1, 2 (MVROP) 74110/74112 9-12 20 credits/year**  
 Chabot College Credit for Year 1, Ohlone College Credit for Years 1 & 2  
 Proof of current TB test required. Develop skills in leadership, supervision of children, equipment operations, and curriculum development. Internship required.

**Civil Engineering and Architecture (MVROP) 74120 11-12 g 20 credits/year**  
 In this PLTW capstone course, students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. Students learn hand drafting, make architectural models and use 3D design software to design and document solutions for major course projects, will communicate and present solutions to their peers and members of a professional community of engineering and architects. This course is designed for 11th and 12th grade students only.

**Computer Animation 1, 2 (MVROP) 74126/74127 9-12 20 credits/year**  
 Create animation in 2D and 3D for web, TV and film. Create visual effects for video, movies, and TV. Collaborate with animators, videographers and sound designers and learn how real productions come together. Adobe After Effects, Adobe Flash, and Lightwave 3D.

**Computer Science & Software Engineering / Digital Electronics 74214/74212 9-12 g 20 credits/year**  
 This combination course combines one semester of the PLTW Digital Electronics curriculum and one semester of Computer Science and Software Engineering curriculum. This unique course allows students to investigate topics such as aerodynamics and astronautics, biological engineering and sustainability, and digital electronics and circuit design, giving students the opportunity to learn about different engineering disciplines before beginning post-secondary education or careers.

**Computer Support Specialist 1, 2 (I) 74130/74140 9-12 g 10 credits/year**  
 Mission College Credit for Year 1, Chabot & Ohlone College Credit for Years 1 & 2  
 This course uses Cisco Systems Inc., curriculum introducing students to the fundamentals of computer hardware and software, advanced concepts such as security, networking, and responsibilities common for an ICT professional. Emphasis is placed on developing essential troubleshooting and repair skills in preparation for the A+ certification exam. Second year students are given an introduction into the Linux operating system and network servers, and network security.  
*Ohlone College Credit.*

**Construction Technology 1, 2 (MVROP) 74150/74151 9-12 20 credits/year**  
 Diablo Valley College Credit  
 Train for entry level employment in residential and commercial construction; training and hands on projects in carpentry, electrical, plumbing; power tool use and safety. Introduction to “green” construction including roofing /solar systems installation, and energy efficient building materials.

**Culinary Arts 1 (A, K, I) 74170 9-12 10 credits/year**  
 Diablo Valley & Mission College Credit  
 This competency-based course is geared to introduce students to the Hospitality and Food Service Industry. Included in the course are sections on food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology and employment literacy.

**Culinary Arts 2 (A, K) 74180 9-12 10 credits/year**  
*Prerequisite Culinary Arts 1.* Students continue to focus on sanitation, safety, and knife skills. Students gain advanced skills in preparing stocks, soups, sauces and main entrees courses, nutrition, costing out recipes and menu and other culinary math skills, menu design and regional cooking.

**Cybersecurity (I) 331123 9-12 g 10 credits/year**  
 ICT Essentials 1 prepares students for a career in network administration, and technical support with a focus on cybersecurity. The course includes a series of technical subjects that provide hands-on knowledge and skills in computer hardware, operating systems, networking, and security concepts. Industry based curricula are utilized in a networked environment to assist in preparing students for industry recognized certifications. Students go through intricate problem solving exercises that mimic the technical challenges of the real world. The program targets students preparing for careers in Cybersecurity and Information and Communications Technology.

<b>Digital Imaging 1, 2 (I, M)</b>	<b>74240/74241</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital: painting, drawing, illustrating and graphic design.				
<b>Digital Photography 1, 2 (K, M)</b>	<b>74200/74201</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Mission College Credit Year 1 Study of digital photography encourages conceptual thinking and creativity. Students explore hands on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing.				
<b>Digital Photography 1, 2, 3 (A, I)</b>	<b>74200/74201/74202</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Study of digital photography encourages conceptual thinking and creativity. Explore hands on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing.				
<b>Digital Sound Design 1, 2 (MVROP)</b>	<b>74260/74261</b>	<b>9-12</b>		<b>20 credits/year</b>
Learn microphones, synthesizers, audio mixers and sound systems. Create music sound effects, sound effects for video, animation and CDs using Digidesign Pro Tools, Cakewalk Sonar and Adobe Audition.				
<b>Digital Storytelling (I)</b>	<b>74220</b>	<b>9-12</b>		<b>10 credits/year</b>
This course will combine competencies in film, video, computer, and live production, as well as foundational knowledge in design to introduce students to a variety of jobs in the multimedia/communications workforce. Instruction will focus on the interaction between media sources in live, recorded, and web-based productions. Students will develop skills in computer design, film and video production, lighting, sound, and projection design, and print media design.				
<b>Digital Video Arts Production 1 (I)</b>	<b>74230</b>	<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and “live TV”; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.)				
<b>Digital Video Arts Production 1, 2 (MVROP, K, W)</b>	<b>74230/74231</b>	<b>9-12</b>	<b>f</b>	<b>20 credits/year</b>
Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and “live TV”; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.)				
<b>Emergency Medical Responder (MVROP) (EMR)</b>	<b>74315</b>	<b>11-12</b>		<b>20 credits/year</b>
Las Positas and Mission College Credit Students in this course will learn EMR skills such as: first responder well-being, legal and ethical issues, lifting and moving patients, patient assessment, medical emergencies, EMS system and operations, special patient considerations, and managing multi-casualty incidents. Students who complete the EMR program will receive an American Heart Association CPR card and ASHI (American Health & Safety Institute) certificate.				
<b>Event Planning and Catering (K)</b>	<b>74280</b>	<b>11-12</b>		<b>10 credits/year</b>
Study the principles and practices of public relations, planning and organizing events, and preparation for employment opportunities with a variety of profit and non-profit organizations and corporations. Students must receive a grade of “B” or better to be eligible for internship opportunities.				
<b>Fire Technology 1 (MVROP)</b>	<b>74310</b>	<b>11-12</b>		<b>20 credits/year</b>
Las Positas and Mission College Credit Introductory course for careers in fire service; firefighting tactics/strategies, physical agility, fire safety, ladder, hose and nozzle operations, tools, equipment, and fire prevention. CPR certification and EMS First Responder certification available. Open to juniors and seniors; sophomores with instructor approval.				



<b>Geometry in Construction (K)</b>	<b>74360</b>	<b>10</b>	<b>c</b>	<b>10 credits/year</b>
Diablo Valley College Credit (for Construction portion) Students will learn mathematics through creativity and hands-on projects. This course articulates connections between geometric concepts and the creation of 3-dimensional wooden projects.				
<b>Internet Engineering 1, 2 (I)</b>	<b>74370/74380</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
Mission & Ohlone College Credit for Years 1 & 2, Chabot College Credit for Year 2 This course uses Cisco Systems Inc. curriculum introducing students to the architecture, structure, functions, components, and models of the Internet and computer networks. The course prepares students for the CISCO Certified Entry Level Network Technician (CCENT) industry certification. Second year student progress from basic networking to more complex enterprise and theoretical networking models. <i>UC "g" credit- Year 1. Ohlone College Credit- Years 1 &amp; 2.</i>				
<b>Introduction to Culinary Arts and Hospitality (K)</b>	<b>74390</b>	<b>9-12</b>		<b>10 credits/year</b>
Exploration of careers in several related industries including hospitality, culinary arts, travel, tourism, recreation and leisure industries. Introductory course for Culinary Arts.				
<b>Introduction to Engineering and Design (I) 74209</b>		<b>9-12</b>	<b>f</b>	<b>10 credits/year</b>
This Project Lead the Way (PLTW) course will expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students will make models and use 3D solid modeling design software to help them design solutions to solve proposed problems and will learn how to document their work and communicate solutions to peers and members of the professional community.				
<b>Game Design/Interactive Media Arts (MVROP) 74350</b>		<b>11-12</b>		<b>20 credits/year</b>
Prerequisites: <i>2 years of computer graphics or animation experience.</i> Learn to create 3D interactive games, simulations, and mobile applications using 3DS Max, Unreal 3, and Photoshop. Students will develop skills in level design, modeling, digital sculpting, character design, programming, animation and scripting.				
<b>Law Enforcement /Homeland Security 1,2 (MVROP)</b>	<b>74400/74401</b>	<b>9-12</b>		<b>20 credits/year</b>
Diablo Valley & Ohlone College Credit for Year 1 Students will learn legal vocabulary, general knowledge of the law, search and seizure procedures, law of arrest, judicial systems, specialized police practices and improvement in written and oral communication. Explore careers within the criminal justice system and job search procedures. Field trips are provided to local courts and law enforcement agencies.				
<b>Marketing 1 (A, W, I, M)</b>	<b>74421</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
Students will learn the basics of advertising, marketing, merchandising, and technology in preparation for entry-level marketing positions and college-level study. They will understand elementary business systems, functions; and practices, and business math. <i>Mission College credit.</i>				
<b>Medical Interventions / Biomedical Innovation</b>	<b>74218/74219</b>	<b>9-12</b>	<b>d &amp; g</b>	<b>20 credits/year</b>
UC "d" Credit for Med. Int. & UC "g" Credit for Biomed. Innov. Cal State East Bay Credit (When Coupled with a Passing Score on the CLEP Biology Exam) This unique MVROP PLTW course allows students to collaboratively: examine the structures and interactions of human body systems, explore the prevention, diagnosis, and treatment of diseases we currently face today and the future. Students address topics and complete projects with focuses ranging from: physiology, basic biology, medicine, research processes, public health, biomedical engineering to clinical medicine, and physiology.				
<b>Medical Assisting (MVROP)</b>	<b>74410</b>	<b>11-12</b>	<b>g</b>	<b>20 credits/year</b>
Learn medical terminology, anatomy and physiology, medical law and ethics, secretarial and clinical assisting skills; internship required at health care facility. Minimum age 16 for internship.				
<b>Motion Graphics 1, 2 (MVROP)</b>	<b>74424/74426</b>	<b>9-12</b>	<b>f</b>	<b>20 credits/year</b>
Learn how to create posters, original print, 2D & 3D animation, real time animation, retouch & manipulate photographs, game graphics, all created with cutting edge tools such as Adobe CS6, Photoshop, Illustrator, After Effects, Flash, large format printing scanning and more. <i>UC "f" Credit-Year 1.</i>				

<b>Nursing Assistant (MVROP)</b>	<b>74430</b>	<b>11-12</b>	<b>g</b>	<b>20 credits/year</b>
Career prep for Nursing/Health Care with personal patient care, systems review, safety principles, infection control, HIPAA, restorative care, body mechanics, nutrition and vital signs. Internship required at skilled nursing facilities. Qualified students sit for state certification. Minimum age 16 for internship. Legal photo identification required.				
<b>Pharmacy Technology 1 (MVROP)</b>	<b>74440</b>	<b>11-12</b>		<b>20 credits/year</b>
Career prep for pharmacy technician in pharmaceutical field; process prescriptions, inventory, compounding, making intravenous medications and other duties under direction of pharmacist. Internship opportunity for students that meet all class requirements.				
<b>Principles of Engineering (I)</b>	<b>74213</b>	<b>9-12</b>	<b>g</b>	<b>10 credits/year</b>
Las Positas College Credit This survey course of engineering exposes students to major concepts they will encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community.				
<b>Principles of BioMedical (MVROP)</b>	<b>74216/74217</b>	<b>9-12</b>	<b>d</b>	<b>20 credits/year</b>
<b>Science/ Human Body Systems</b> Cal State East Bay Credit (when coupled with a passing score on the CLEP Biology Exam) This PLTW course allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health and solve real-world medical cases.				
<b>Sports Therapy 1, 2 (I)</b>	<b>74470/74471</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
Chabot College Credit for Year 1 This is an entry-level course focusing on the area of sports medicine. Students will gain valuable hands-on experience by working with Irvington sports teams as student athletic trainers. Internship may qualify for up to 10 additional credits. <i>Ohlone College credit. (Sports Therapy 2 available in afternoon only)</i>				
<b>Sports Therapy 1, 2 (MVROP)</b>	<b>74460/74461</b>	<b>11-12</b>	<b>g</b>	<b>20 credits/year</b>
UC "g" Credit for Year 1   Chabot College Credit for Year 1 Fitness, physical therapy, athletic training; anatomy, physiology, musculoskeletal system, prevention, assessment, treatment, rehabilitation, first aid, CPR, nutrition. Minimum age 16 for internship. <i>Ohlone College Credit.</i>				
<b>Web Page Design (A)</b>	<b>74490</b>	<b>11-12</b>	<b>g</b>	<b>10 credits/year</b>
Ohlone College Credit. Explore web design as you incorporate graphics, sound, movies, and animation into HTML/CSS built web sites. Students will learn all phases of the design process form the idea state, through planning, production and testing while creating original web sites.				

# American High School

## On Campus ROP Course Descriptions

### **2-D Animation (74005)**

**UC “F” Credit | Ohlone College Credit**

Students learn the creative process for producing 2-dimensional digital animations. Students write short stories, draw sketches and storyboards; develop original characters, backgrounds and objects on two-dimensional software, to finally produce short animations.

### **Culinary Arts 1 (74170)**

**Diablo Valley & Mission College Credit**

This competency-based course is geared towards preparing students for entry positions in the restaurant baking and food service industry. Included in the course is a requirement for students to obtain the California State Food Handler certification. Training will cover basic culinary, knife skills, fundamentals of cooking which include basic cooking techniques, meat classification by animal type, grilling, soups, appetizers and hors d’oeuvres, Garde-Manager skills, pantry skills, coups and plate presentation. Integrated communication, interpersonal skills, problem-solving, workplace safety, technology, and employment literacy. All students are required to take and pass the California Food Handler’s exam. Students will be taking a career readiness credential test at the end of the year.

**Articulation Agreements with both Mission College and Diablo Valley College**

### **Culinary Arts 2 (74180)**

**Prerequisite: Successful completion of Culinary 1.** This competency-based course is geared toward accreditations set by the California Restaurant Association and American Culinary Federation to prepare students for entry and mid-level positions in the restaurant baking and food services industry. Included in the course is further investigation and training of basic culinary techniques and experience. These include knife skills, fundamentals of cooking which include basic cooking techniques, meat classification by animal type, grilling, soups, appetizers and hors d’oeuvres, Garde-Manager skills, pantry skills and plate presentation. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving workplace safety, technology, and employment literacy. This course focuses on production aspects and real workplace standards of final product. All students are required to take and pass the California Food Handler’s exam. Students will be taking a career readiness credential test at the end of the year.

### **Digital Photography 1, 2 (74200/74201)**

**UC “F” Credit for Years 1 & 2 | Mission College Credit for Year 1**

Study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Lab donation.

### **Marketing 1 (74421)**

**UC “g” Credit**

Students will learn the basics of advertising, marketing, merchandising, and technology in preparation for entry-level marketing positions and college-level study. They will understand elementary business systems, functions; and practices, and business math.

### **Web Page Design (74490)**

**UC “g” Credit | Ohlone College Credit**

Explore web design as you incorporate graphics, sound, movies, and animation into HTML/ CSS built websites. Students will learn all phases of the design process from the idea state, through planning, production and testing while creating original web sites.

# Irvington High School

## On Campus ROP Course Descriptions

### **Anatomy and Physiology (74007)**

#### **UC “g” Credit | Ohlone College Credit**

Students will gain a strong foundation in anatomy and physiology needed in the health care profession through lectures, guest speakers, field trips and labs. Lab skills include study of body systems and basic medical terminology.

### **Culinary Arts 1 (74170)**

#### **Diablo Valley & Mission College Credit**

This competency-based course is geared to introduce students to the Hospitality and Food Service Industry. Included in the course are sections on food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology and employment literacy.

### **Computer Support Specialist 1, 2 (74130/74140)**

#### **UC “g” Credit | Mission College Credit for Year 1, Chabot & Ohlone College Credit for Years 1 & 2**

This course uses Cisco Systems Inc., curriculum introducing students to the fundamentals of computer hardware and software, advanced concepts such as security, networking, and responsibilities common for an ICT professional. Emphasis is placed on developing essential troubleshooting and repair skills in preparation for the A+ certification exam. Second year students are given an introduction into the Linux operating system and network servers, and network security.

### **Cyber Security (331123)**

#### **UC “g” Credit**

ICT Essentials 1 prepares students for a career in network administration and technical support with a focus on cybersecurity. The course includes a series of technical subjects that provide hands-on knowledge and skills in computer hardware, operating systems, networking, and security concepts. Industry-based curricula are utilized in a networked environment to assist in preparing students for industry recognized certifications. Students go through intricate problem-solving exercises that mimic the technical challenges of the real world. The program targets students preparing for careers in Cybersecurity and Information and Communication Technologies.

### **Digital Imaging 1 (74240)**

#### **UC “f” Credit**

Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital painting, drawing, illustrating and graphic design.

### **Digital Photography 1, 2, 3 (74200/ 74201/74202)**

#### **UC “f” Credit for Years 1 & 2 | Mission College Credit for Year 1**

Study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing.

### **Digital Storytelling (74220)**

This course will combine competencies in film, video, computer, and live production, as well as foundational knowledge in design to introduce students to a variety of jobs in the multimedia/communications workforce. Instruction will focus on the interaction between media sources in live, recorded, and web-based productions. Students will develop skills in computer design, film and video production, lighting, sound, and projection design, and print media design.

### **Digital Video Arts Production 1 (74230)**

#### **UC “f” Credit**

Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and “live TV”; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.)

### **Internet Engineering 1, 2 (74370/ 74380)**

**UC “g” Credit | Mission & Ohlone College Credit for Years 1 & 2, Chabot College Credit for Year 2**

This course uses Cisco Systems Inc. curriculum introducing students to the architecture, structure, functions, components, and models of the Internet and computer networks. The course prepares students for the CISCO Certified Entry Level Network Technician (CCENT) industry certification. Second year students’ progress from basic networking to more complex enterprise and theoretical networking models.

### **Introduction to Engineering and Design (74209)**

**UC “f” Credit**

This Project Lead the Way (PLTW) course will expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students will make models and use 3D solid modeling design software to help them design solutions to solve proposed problems and will learn how to document their work and communicate solutions to peers and members of the professional community.

### **Marketing 1 (74421)**

**UC “g” Credit**

Students will learn the basics of advertising, marketing, merchandising, and technology in preparation for entry-level marketing positions and college-level study. They will understand elementary business systems, functions; and practices, and business math.

### **Principles of Engineering (74213)**

**UC “g” Credit | Las Positas College Credit**

This survey course of engineering exposes students to major concepts they’ll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community.

### **Sports Therapy 1 & 2 (74460/74461)**

**UC “g” Credit for Year 1 | Chabot College Credit for Year 1**

This is an entry-level course focusing on the area of sports medicine. Students will gain valuable hands-on experience by working with Irvington sports teams as student athletic trainers.

# John F Kennedy High School

## On Campus ROP Course Descriptions

Some classes available only in blocks indicated on the JFK Bell Schedule

### **Algebra 2/ Trigonometry in Construction 2 (74151) - Kennedy & Center Campus**

UC “c” Credit (for Alg. 2/Trig. section) | Diablo Valley College Credit (for Construction section)

This course combines the mathematics of Algebra 2/Trig with advanced, real-world engineering and construction techniques. Applications include designing and building advanced roofs for complicated structures, circuit board analysis and design, and general household electrical installation. Students will be prepared for college courses in engineering and applied sciences, as well as skills necessary to find work in the construction industry.

### **Anatomy and Physiology (74007) Block 2- Center Campus**

UC “g” Credit | Ohlone College Credit

Students will gain a strong foundation in anatomy and physiology needed in the health care profession through guest speakers, field trips and labs. Lab skills include study of body systems and basic medical terminology.

### **Auto Body Painting and Refinishing 1 & 2 (74020/74021) Block 2- Center Campus**

Certified Instructor will teach introduction to Auto Body and Refinishing. Identification of the use of tools, materials and techniques needed for entry level position.

### **Automotive Technology 1, 2 (74040/74041) Block 2- Center Campus**

Chabot College Credit for Year 2

General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service. Introduction to hybrid “green” technology. *Must earn a C or better in Auto Tech 1 to take Auto Tech 2.*

### **Computer Science & Software Engineering / Digital Electronics (74214/74212)- Center Campus**

UC “g” Credit

This combination course combines one semester of the PLTW Digital Electronics curriculum and one semester of Computer Science and Software Engineering curriculum. This unique course allows students to investigate topics such as aerodynamics and astronautics, biological engineering and sustainability, and digital electronics and circuit design, giving students the opportunity to learn about different engineering disciplines before beginning post-secondary education or careers.

### **Culinary Arts 1 (74170)**

Diablo Valley & Mission College Credit

This competency-based course is geared to introduce students to the Hospitality and Food Service Industry. Included in the course are sections on food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology and employment literacy.

### **Culinary Arts 2 (74180)**

*Prerequisite Culinary Arts 1.* Students continue to focus on sanitation, safety, and knife skills. Students gain advanced skills in preparing stocks, soups, sauces and main entrees courses, nutrition, costing out recipes and menu and other culinary math skills, menu design and regional cooking.

### **Digital Photography 1, 2, 3 (74200/74201/74202)**

UC “f” Credit for Years 1 & 2 | Mission College Credit Year 1

Study of digital photography encourages conceptual thinking and creativity. Students explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing.

### **Digital Video Arts Production 1 & 2 (74230/74231) Blocks 1 & 2- Center Campus**

#### **UC “F” Credit**

Video production including camera work, editing, DVD authoring and the production process of short fiction, documentary, commercial and “live TV”; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.)

### **Event Planning and Catering (74280)**

Study the principles and practices of public relations, planning and organizing events, and preparation for employment opportunities with a variety of profit and non-profit organizations and corporations. Students must receive a grade of “B” or better to be eligible for internship opportunities.

### **Geometry in Construction (74360) - Kennedy & Center Campus**

#### **UC “c” Credit (for Geometry portion) | Diablo Valley College Credit (for Construction portion)**

Students will learn mathematics through creativity and hands-on projects. This course articulates connections between geometric concepts and the creation of 3-dimensional wooden projects.

### **Introduction to Culinary Arts and Hospitality (74390)**

Exploration of careers in several related industries including hospitality, culinary arts, travel, tourism, recreation and leisure industries. Students will also be introduced to basic cooking skills, safety, and sanitation. Introductory course for Culinary Arts.

### **Principles of BioMedical Science/ Human Body Systems (74216/74217)- Center Campus**

#### **UC “d” Credit**

#### **Cal State East Bay Credit (when coupled with a passing score on the CLEP Biology Exam)**

This PLTW course allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health and solve real-world medical cases.

# Mission San Jose High School

## On Campus ROP Course Descriptions

### **Digital Imaging 1 (74240)**

#### **UC “f” Credit**

Students use digital tools and technologies as art and design mediums to visually articulate thoughts, ideas, and experiences. Technologies include digital: painting, drawing, illustrating and graphic design.

### **Digital Photography 1,2 (74200/74201)**

#### **UC “f” Credit | Mission College Credit for Year 1**

Study of digital photography encourages conceptual thinking and creativity. Explore hands-on digital photography fundamentals to include: Adobe Photoshop, lighting, set design, studio configuration, camera operation, software interfaces, color management, photo editing, and compositing. Digital camera needed.

### **Marketing 1 (74421)**

#### **UC “g” Credit**

Students will learn the basics of advertising, marketing, merchandising, and technology in preparation for entry-level marketing positions and college-level study. They will understand elementary business systems, functions; and practices, and business math.



# Washington High School

## On Campus ROP Course Descriptions

### **Auto Technology/Basic Car Care (74010)**

This course provides pre-entry level training in automotive service/maintenance and is designed to be the first course for students entering transportation technology career pathways. Instruction covers the following areas: engine systems, electrical systems, tires and brakes, lubrication service, cooling systems, ignition and emission device service.

### **Auto Technology 1 One-Hour Course (74050) / Auto Technology 2 Two-Hour Course (74041)**

#### **Chabot College Credit for Year 2**

General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service. *Must earn a C or better in Auto Tech 1 to take Auto Tech 2.*

### **Culinary Arts 1 (74170)**

#### **Diablo Valley & Mission College Credit**

This competency-based course is geared to introduce students to the Hospitality and Food Service Industry. Included in the course are sections on food safety and sanitation, basic culinary terms, hospitality standards, knife skills, fundamentals of cooking techniques, pantry, soups, and basic pastry. Integrated throughout the course are career preparation standards which include basic academic skills, communication, interpersonal skills, problem-solving, workplace safety, technology and employment literacy.

### **Culinary Arts 2 (74180)**

*Prerequisite Culinary Arts 1.* Students continue to focus on sanitation, safety, and knife skills. Students gain advanced skills in preparing stocks, soups, sauces and main entrees courses, nutrition, costing out recipes and menu and other culinary math skills, menu design and regional cooking.

### **Introduction to Culinary Arts and Hospitality (74390)**

Exploration of careers in several related industries including hospitality, culinary arts, travel, tourism, recreation and leisure industries. Students will also be introduced to basic cooking skills, safety, and sanitation. Introductory course for Culinary Arts.

# Mission Valley ROP – School Year 2017-2018

## High School Courses Available at MVROP Career Technical Training Center 5019 Stevenson Blvd, Fremont, CA 94538

### **Auto Body Painting and Refinishing 1 & 2 (74020/74021)**

Certified Instructor will teach introduction to Auto Body and Refinishing. Identification of the use of tools, materials and techniques needed for entry level position.

### **Automotive Technology 1 & 2 (74040/74041)**

#### **Chabot College Credit for Year 2**

General auto repair, brakes, steering and suspension, electrical systems, engine performance. Students receive hands-on experience in auto shop operations, tool usage, safety procedures, equipment operation and customer service. Introduction to hybrid “green” technology. *Must earn a C or better in Auto Tech 1 to take Auto Tech 2.*

### **Careers in Education 1 & 2 (74110/74112)**

#### **Chabot College Credit for Year 1, Ohlone College Credit for Years 1 & 2**

Proof of current TB test required. Develop skills in leadership, supervision of children, equipment operations, and curriculum development. Internship required.

### **Civil Engineering & Architecture (74120)**

#### **UC “g” Credit**

In this PLTW capstone course, students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. Students learn hand drafting, make architectural models and use 3D design software to design and document solutions for major course projects, will communicate and present solutions to their peers and members of a professional community of engineering and architects. This course is designed for 11th and 12th grade students only.

### **Computer Animation 1 & 2 (74126/74127)**

Create animation in 2D and 3D for web, TV and film. Create visual effects for video, movies, and TV. Collaborate with animators, videographers and sound designers and learn how real productions come together. Adobe After Effects, Adobe Flash, and Lightwave 3D.

### **Construction Technology 1 & 2 (74150/74151)**

#### **Diablo Valley College Credit**

Train for entry level employment in residential and commercial construction; training and hands on projects in carpentry, electrical, plumbing; power tool use and safety. Introduction to “green” construction including roofing/solar systems installation and energy efficient building materials.

### **Computer Science & Software Engineering / Digital Electronics (74214/74212)**

#### **UC “g” Credit**

This combination course combines one semester of the PLTW Digital Electronics curriculum and one semester of Computer Science and Software Engineering curriculum. This unique course allows students to investigate topics such as aerodynamics and astronautics, biological engineering and sustainability, and digital electronics and circuit design, giving students the opportunity to learn about different engineering disciplines before beginning post-secondary education or careers.

### **Digital Sound Design 1 & 2 (74260/74261)**

Learn microphones, synthesizers, audio mixers and sound systems. Create music sound effects, sound effects for video, animation and CDs using Digidesign Pro Tools, Cakewalk Sonar and Adobe Audition.

### **Digital Video Arts Production 1 & 2 (74230/74231)**

#### **UC “f” Credit**

Video production including camera work, editing, DVD authorizing and the production process of short fiction, documentary, commercial and “live TV”; analyze film scenes and sequences, develop production management skills. (Recommend prior class in fine arts, computer applications or digital graphics.)

### **Emergency Medical Responder (EMR) (74315)**

#### **Las Positas and Mission College Credit**

Students in this course will learn EMR skills such as: first responder well-being, legal and ethical issues, lifting and moving patients, patient assessment, medical emergencies, EMS system and operations, special patient considerations, and managing multi-casualty incidents. Students who complete the EMR program will receive an American Heart Association CPR card and ASHI (American Health & Safety Institute) certificate.

### **Fire Technology 1 (74310)**

#### **Las Positas and Mission College Credit**

Introductory course for careers in fire service; firefighting tactics/ strategies, physical agility, fire safety, ladder, hose and nozzle operations, tools, equipment, and fire prevention. CPR certification and EMS First Responder certification available. Open to juniors and seniors; sophomores with instructor approval.

### **Game Design/Interactive Media Arts (74350)**

*Recommend 2 years of computer graphics or animation experience.* Learn to create 3D interactive games, simulations, and mobile applications using 3DS Max, Unreal 3, and Photoshop. Students will develop skills in level design, modeling, digital sculpting, character design, programming, animation and scripting.

### **Law Enforcement/ Homeland Security 1,2 (74400/74401)**

#### **Diablo Valley & Ohlone College Credit for Year 1**

Students will learn legal vocabulary, general knowledge of the law, search and seizure procedures, law of arrest, judicial systems, specialized police practices and improvement in written and oral communication. Explore careers within the criminal justice system and job search procedures. Field trips are provided to local courts and law enforcement agencies.

### **Medical Assisting (74410)**

#### **UC “g” Credit**

Learn medical terminology, anatomy and physiology, medical law and ethics, and secretarial and clinical assisting skills. This course includes an internship at a health care facility.

### **Medical Interventions/ Biomedical Innovation (74218/74219)**

#### **UC “d” Credit for Med. Int. & UC “g” Credit for Biomed. Innov.**

#### **Cal State East Bay Credit (When Coupled with a Passing Score on the CLEP Biology Exam)**

This unique MVROP PLTW course allows students to collaboratively: examine the structures and interactions of human body systems, explore the prevention, diagnosis, and treatment of diseases we currently face today and the future. Students address topics and complete projects with focuses ranging from: physiology, basic biology, medicine, research processes, public health, biomedical engineering to clinical medicine, and physiology.

### **Motion Graphics 1 & 2 (74424/74426)**

#### **UC “f” Credit for Year 1**

Learn how to create posters, original print, 2D & 3D animation, real time animation, retouch & manipulate photographs, game graphics, all created with cutting edge tools such as Adobe CS6, Photoshop, Illustrator, After Effects, Flash, large format printing, scanning and more.

### **Nursing Assistant (74430)**

#### **UC “g” Credit**

Prerequisite Legal photo identification. Career prep for Nursing/Health Care with personal patient care, systems review, safety principles, infection control, HIPAA, restorative care, body mechanics, nutrition and vital signs. Internship at skilled nursing facilities.

### **Pharmacy Technology 1 (74440)**

Career prep for pharmacy technician in pharmaceutical field; process prescriptions, inventory, compounding, making intravenous medications and other duties under direction of pharmacist. Internship opportunity for students that meet all class requirements.

**Principles of Biomedical Science/ Human Body Systems-(74216/74217)**

**UC “d” Credit**

**Cal State East Bay Credit (when coupled with a passing score on the CLEP Biology Exam)**

This PLTW course allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health and solve real-world medical cases.

**Sports Therapy 1 & 2 (74470/74471)**

**UC “g” Credit for Year 1 | Chabot College Credit for Year 1**

Fitness, physical therapy, athletic training; anatomy, physiology, musculoskeletal system, prevention, assessment, treatment, rehabilitation, first aid, CPR, nutrition. Internship required.

**VISTA ALTERNATIVE SCHOOL  
COURSE LIST**

<b>Course Name</b>	<b>Course Name</b>
<b>ELECTIVES</b>	<b>FINE ARTS</b>
Computer Ops	Art Survey
Work Experience	Art Elective
Reading	Art
Drivers Education	
Film	<b>SCIENCE</b>
Careers	Integrated Science
Psychology	Biology
Geography	Chemistry
Sociology	
	<b>MATHEMATICS</b>
<b>PE</b>	Business Math
Physical Education 9	Algebra 1A-1
Physical Education 10	Algebra 1B-1
Physical Education 11-12	Algebra 2
	Discovering Geometry
<b>ENGLISH</b>	PreCalculus
English 9	Calculus
English 10	Personal Finance
English 11	Geometry
English 12	
	<b>HEALTH</b>
	<b>SOCIAL SCIENCE</b>
	World History
	US History
	American Government
	Economics

Students enrolled at VISTA may take classes at Ohlone College that are prearranged through VISTA counselors.

# High School Course Catalog Addendum

## 2017 - 2018

### Ohlone College Courses

Application for Admission to Ohlone College and completed permission forms are required each term.  
 Registration limited to 7 units per term.  
 Grades earned (with completed application and permission forms on file) become a part of the student's  
**permanent academic record** at Ohlone College.

For detailed information refer to: <http://www.ohlone.edu/org/admissions/k12admission.html>

[A=American, I=Irvington, K=Kennedy, M=Mission San Jose, R=Robertson, W=Washington]

#### BUSINESS AND TECHNOLOGY

<u>Ohlone Name/Number</u>	<u>Ohlone Course Title</u>	<u>FUSD Course Title</u>	<u>Location</u>	<u>Course Code</u>	<u>Grade(s)</u>	<u>"a-g" Fulfillment</u>	<u>Length of Course/Units</u>
BA-125	Introduction to Business	Introduction to Business	K	YBUS	10-12		10 credits (Fall only)
CNET-101	Intro. to Computers & Info. Technology	Intro. to Tech. (I)	I, R		10-12		5 credits (Fall & Spring)
CS-101	Intro. to Computers & Info. Technology	Intro. to Tech. (I)	I, R		10-12		5 credits (Fall & Spring)
CS-102	Intro. to C++		M		9-12		
<i>Prerequisite: MATH-152 or MATH-153</i>							

#### ENGLISH

ENGL-101A	Fundamentals of Composition		K	YENG	9-12		10 credits (Fall & Spring)
<i>Prerequisite: ENGL-151B and ENGL-163; ENGL-151RW; or appropriate skill level demonstrated through the placement test process</i>							

#### FINE ARTS: VISUAL AND PERFORMING

##### Visual Arts

ART-104A	2D Design		A		10-12		
ART-108	Perspective Drawing		A		10-12		
ART-139A	Beginning Digital Photography		A		10-12		
ID-154	Contemporary Home Design		A		10-12		

##### Performing Arts

MUS-352	Jazz Ensemble		M		10-12		
MUS-370	Symphonic Band		A,I,M		10-12		
MUS-371	Mixed Wind Ensemble		I,M		10-12		
MUS-374	Community Orchestra		M		10-12		
MUS-381	Musical Theatre Workshop II (Chorus)		I		10-12		
<i>Prerequisite: Audition and casting role in current musical</i>							
TD-116	Acting Laboratory		I		10-12		

TD-118	Survey of Acting Techniques		I		10-12		
TD-162	Stagecraft Lab		I		10-12		

## MATHEMATICS

MATH-101C	Calculus with Analytic Geometry	Multivariable Calculus	M	MVRHF	9-12	c	5
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*Prerequisite: MATH-101B*

## PHYSICAL EDUCATION

KIN-258	Exercise Prescription		I	YKNP	10-12		10 credits/year
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## SCIENCE

**2+2 Courses Taught by FUSD Instructor** – Student recognized as meeting requirement **IF** they attend Ohlone College.

BIOT-105	Intro. to Cell and Molecular Biology	Biotechnology	A	QHBP	10-12	g	10
CHEM-109	Biochemistry for Health Science and Biotechnology	Biochemistry	A	QCBP	9-12	d*	10

*Prerequisite: MATH-151*

## SOCIAL SCIENCE

PSY-101	General Psychology	Psychology 101	K	YPSY	10-12		10 credits (Fall & Spring)
SOC-101	Introduction to Sociology	Sociology 101	K	YSOC	10-12		10 credits (Fall & Spring)

## WORLD LANGUAGES

ASL-101A	Principals of ASL I	American Sign Language 1	A, I, W	GACP	10-12	e	8
ASL-102A	Principals of ASL II	American Sign Language 2	A, I, W	GAFP	10-12	e	8

*Prerequisite: ASL-101A or ASL-101B*

CHIN-101A	Elementary Mandarin Chinese	Chinese 1	I	GMCP	10-12	e	10
CHIN-101B	Elementary Mandarin Chinese	Chinese 2	I	GMFP	10-12	e	10

*Prerequisite: CHIN-101A or two years of high school Chinese*

CHIN-102A	Intermediate Mandarin Chinese	Chinese 3	I, M	GMIP	10-12	e	10
CHIN-102B	Intermediate Mandarin Chinese	Chinese 4	I	GMLP	10-12	e	10

*Prerequisite: CHIN-102A*

FREN-101B	Elementary French	French 2	I		10-12		
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*Prerequisite: FREN-101A or two years of high school French*

SPAN-101B	Elementary Spanish	Spanish 2	I		10-12		
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*Prerequisite: SPAN-101A or two years of high school Spanish*

SPAN-102A	Intermediate Spanish	Spanish 3	I, M	GSIP	10-12	e	10
SPAN-102B	Intermediate Spanish	Spanish 4	M	GSLP	10-12	e	10

*Prerequisite: SPAN-102A*

JPNS-102A	Intermediate Japanese	Japanese 3	M	GJIP	10-12	e	10
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*Prerequisite: JPNS-101B or three years of high school Japanese*

- NOTES -